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# HOW JUDGES JUDGE


## ABSTRACT

This Article offers a new approach to understanding judicial behavior which recognizes judicial heterogeneity, behavior along different dimensions, and interconnectedness among judges at different levels within the judiciary. As a result, it calls into question those fundamental premises of the predominant theories of judicial decisionmaking utilized by legal and political science scholars. This study utilizes a unique dataset of over 30,000 judicial votes from eleven federal courts of appeals in 2008. Utilizing independent measures of judicial activism, ideology, independence, and partisanship, statistical cluster analysis identifies nine distinct judging styles: Trailblazing, Consensus Building, Stalwart, Regulating, Steadfast, Collegial, Incrementalist, Minimalist, and Error Correcting. These judicial style types offer a fuller and more accurate account of judicial behavior than any of the prior models utilized by scholars. Further, the typology of judging styles, when subject to rigorous empirical testing using separate data, far outperforms conventional theories in predicting and explaining judicial behavior.

# HOW JUDGES JUDGE

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## INTRODUCTION

On June 29, 2011, a Sixth Circuit Court of Appeals panel issued its eagerly awaited opinion in a case concerning the constitutionality of the Patient Protection and Affordable Care Act (ACA).[1] In a two-to-one decision, Judges Boyce Martin and Jeffrey Sutton held that the ACA was constitutional under existing precedent related to the Commerce and Necessary and Proper Clauses.[2] Most scholars, pundits, and other court watchers, thought that Judge Sutton's opinion was completely unexpected because he voted to uphold the "liberal" law even though he was a prominent conservative judge appointed by a Republican President.[3]

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[1] Thomas More Law Center, et. al v. Obama, 651 F.3d 529 (6th Cir. June 29, 2011).

[2] *Id*. at 529, 549. Judge James Graham dissented and held that the insurance mandate in the ACA was an unconstitutional exercise of federal power. *Id.* at 566.

[3] *See, e.g.*, Dan Horn, *Cincinnati Appeals Court Upholds Obama's Health-Reform Plan*, CINCINNATI ENQUIRER, June 30, 2011 ("Sutton's decision to join Martin in the majority was to some observers the most surprising aspect of the ruling. Appointed by President George W. Bush, Sutton is among the most reliably conservative of the 6th Circuit's 15 judges."); Linda Greenhouse, *A Supreme Court Scorecard*, N.Y. TIMES BLOGS (July 13, 2011), http://opinionator.blogs.nytimes.com/2011/07/13/a-supreme-court-scorecard/ ("It would be inaccurate to say that Judge Sutton is a rising star in the conservative legal firmament; the 50-year-old former law clerk to Justice Scalia and the late Justice Lewis F. Powell Jr. is fully risen, on anyone's short list for the next time a Republican president gets the chance to make a Supreme Court nomination."); Ilya Somin, *Regulating Inactivity: A Radical Constitutional Departure*, JURIST (July 1, 2011), http://jurist.org/forum/2011/07/ilya-somin-sixth-circuit-ruling.php ("Before this decision, judges in these cases had split along ideological and partisan lines…. Judge Jeffrey Sutton, however, a well-known conservative jurist, has now become the first exception to the trend."); Robyn Blumner, *A Vote for Upholding Health Reform*, ST. PETERSBURG TIMES, July 17, 2011, at 5P ("You may not have heard of Sutton, but he's a fixture in conservative legal circles. Sutton clerked for U.S. Supreme Court Justice Antonin Scalia. As a lawyer, he was an active member of the Federalist Society and a persistent advocate for states' rights before the U.S. Supreme Court. After Sutton was nominated to the federal appellate bench by President George W. Bush, he won only two Democratic votes in his Senate

Indeed, Professor Arthur Hellman stated: "Of all the federal appeals judges, Sutton is one of the last I would have expected to uphold this."[4]

The confusion of commentators based upon qualitative impressions of Judge Sutton was mirrored by the three dominant models utilizing quantitative evidence espoused by political science and legal scholars.[5] The attitudinal model, which contends that political ideology guides judicial votes,[6] could not reconcile the "liberal" vote from a "conservative" judge regardless of the measure of ideology used.[7] The strategic model, which holds that judges issue opinions based upon institutional and personal considerations,[8] was similarly stifled because Judge Sutton had seemingly sacrificed his chance of being nominated to the Supreme Court by a Republican President.[9] And the formal model, which argues that neutral judges render decisions by determinate rules,[10] could not easily explain why all three judges wrote separately in a split panel decision utilizing the same body of precedent.[11] So, why were all of the empirical models "wrong?"[12]

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confirmation. Yet Sutton, in a stroke of uncompromising objectivity, became the first judge appointed by a Republican president to rule in favor of the constitutionality of the Affordable Care Act."); Joan Biskupic, *Appeals Court Upholds Insurance Mandate*, USA TODAY, June 30, 2011, at 7A ("Sutton's stance was also important because he is one of the most high-profile conservative judges nationwide.").

[4] Horn, *supra* note 3.

[5] Frank B. Cross, *Decisionmaking in the U.S. Circuit Courts of Appeals*, 91 CALIF. L. REV. 1457, 1461–90 (2003) [hereinafter "Cross Decisionmaking"]. Cross also discussed a fourth model for judicial decisionmaking: the litigant-driven theory. *Id.* at 1490. However, the litigant-driven theory has not been widely studied and, as Cross noted, evidence that litigants drive decision-making in the courts of appeals has been very limited. *Id.* at 1514.

[6] *See infra*, Section I.A.

[7] Using a simple party of the appointing President proxy measure, Judge Sutton would score as a 1, which is the same as every other judge appointed by a Republican President. Using the more refined Common Space Scores which incorporate Senatorial politics at the time of confirmation, Judge Sutton had a 0.2260 which placed him as a moderate conservative. In neither instance was a liberal vote in a seemingly ideologically-charged case expected from Judge Sutton according to the traditional attitudinal model.

[8] *See infra*, Section I.A.

[9] Greenhouse, *supra* note 3.

[10] *See infra*, Section I.A.

[11] Christopher H. Schroeder, *The Law of Politics: Deliberative Democracy's Attempt to Turn Politics into Law*, 65 LAW & CONTEMP. PROB. 95, 108 (2002) ("… the demands of public reasoning diverge from the legal model. In law, judges who have deliberated and yet continue to disagree form themselves into majorities, pluralities, concurrences, and dissents. In separate opinions, judges develop the divergent reasoning of their separate positions."). This is not to say that the formal model predicts no dissents by judges. Rather, for judges below the Supreme Court, the formal model must necessarily integrate explanations from alternative theories to explain why judges disagree about the application of specific precedent.

[12] "[W]rong" is used in the sense that Judge Sutton's vote is not consistent with the expected results of the three dominant theories. Of course, no theory of judicial

The fault lay in that the dominant models of judicial[13] decisionmaking rely on three basic, dubious assumptions that have neither been empirically tested nor validated:

1) Homogeneity – judges should be understood as a monolithic group that utilizes similar, if not identical, approaches to judging.[14]
2) Unidimensionality – judges decide cases based upon [politics, strategy, law] and [politics, strategy, law] should be measured along a single continuum.[15]
3) Isolation – each judge or level of judges should be gauged independently of other actors in the judicial system.[16]

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decisionmaking approaches 100% accuracy. The story of Judge Sutton's vote is, thus, intended to illustrate the shortcomings of the dominant models, but not to provide a statistical proof of the failure of those theories.

[13] Although the introduction uses as examples the Justices of the Supreme Court, the words "judges" and "judicial" in this article refer to judges other than the Justices. Although some of the criticisms of the dominant approaches in this article apply to Supreme Court studies, far more research of the Court has been done that meets the challenges outlined in this Article. Indeed, in some cases, the excellent empirical research of the Justices has inspired some of the measures described and utilized in this Article. *See, e.g.*, Andrew D. Martin & Kevin M. Quinn, *Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953-1999*, 10 POL. ANALYSIS 134, 139-40 (2002).

[14] *See, e.g.*, Daniel Klerman, *Jurisdictional Competition and the Evolution of the Common Law*, 74 U. CHI. L. REV. 1179, 1203 (1997) ("The jurisdictional competition model assumes that judges are homogeneous. Of course, they were not. Introducing heterogeneity would complicate the model without substantially altering the conclusions.").

[15] This assumption has been most often made in studies of judicial ideology. Carolyn Shapiro, *Coding Complexity: Bringing Law to the Empirical Analysis of the Supreme Court*, 60 HASTINGS L. J. 477, 501 (2009) ("These scholars assume that in deciding a case, the Justices need only consider their preferences about a single question and that the Justices' preferences can be arrayed along a single ideological dimension.") (internal quotation marks omitted). Although some scholarship has tested and validated the unidimensionality assumption at the Supreme Court level, *see*, Tonja Jacobi & Matthew Sag, *Taking the Measure of Ideology: Empirically Measuring Supreme Court Cases*, 98 GEO. L.J. 1, 8 (2009) ("…there is considerable evidence that a single dimension captures the vast majority of judicial behavior. The fact that one dimension captures most judicial behavior does not imply that legal analysis is simplistic, only that most judicial considerations are generally quite highly correlated."), no similar studies have been done for the courts of appeals. *See*, Joshua B. Fischman & David S. Law, *What is Judicial Ideology, and How Should We Measure It?*, 29 WASH. U. J.L. & POL'Y 133, 168-170 (2009) ("At the same time, the assumption of unidimensional ideology may not hold as well for other courts as it does for the United States Supreme Court. Very little is known about the dimensionality of ideology on other courts, and further investigation is surely warranted.").

[16] A notable exception to this general rule has been the work regarding panel effects. *See, e.g.*, Frank B. Cross & Emerson H. Tiller, *Judicial Partisanship and Obedience to*

Based upon those assumptions, existing research presumes that Judge Sutton would behave like every other judge based upon the single dimension of ideology, strategy, or law without any regard to the particulars of the district court judgment being reviewed. The reason for these tenuous premises to be at the center of empirical research of judges has been, in large part, because of the available data. There simply has not been a publicly accessible dataset that could be effectively used to study relationships between diverse judges while concurrently utilizing multiple behavioral metrics.[17] However, the assumptions of homogenous judicial decisionmaking, unidimensional measuring options, and limited interconnectedness have gained scholarly momentum beyond simple data availability concerns.

This study, based upon a unique dataset of over 30,000 judicial votes, seeks to rectify the shortcomings of the previous attempts to empirically explain and predict judicial behavior by integrating federal trial and appellate decisionmaking into one database yielding behavioral metrics of the traits associated with judicial activism, independence, partisanship, and ideology.[18] The study then applies statistical cluster analysis and objective criteria to construct a typology of judicial styles based upon the four dimensions of behavior measured. This analysis yields nine distinctive

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*Legal Doctrine: Whistleblowing on the Federal Courts of Appeals*, 107 YALE L.J. 2155, 2168-75 (1998); Richard L. Revesz, *Environmental Regulation, Ideology, and the D.C. Circuit*, 83 VA. L. REV. 1717, 1751-56 (1997); Pauline T. Kim, *Deliberation and Strategy on the United States Courts of Appeals: An Empirical Exploration of Panel Effects*, 157 U. PA. L. REV. 1319 (2009). However, even within the very valuable scholarship regarding panel effects, research has been limited to judges operating on the same panels. There has not been an exploration of interrelations between judges working at different levels in the judicial system. This omission is particular notable given the rigid hierarchal structure of the judicial systems in the United States wherein review of lower courts is the primary function of higher courts.

[17] Previous empirical research concerning federal appellate judges has relied primarily upon the United States Courts of Appeals Database ("Songer Database"), which includes more than 18,000 opinions from 1925 to 1996. ASHLYN K. KUERSTEN & DONALD R. SONGER, DECISIONS ON THE U.S. COURTS OF APPEALS 1 (2001). For reasons discussed later in this Article, the Songer Database cannot be used to test the three basic assumptions targeted herein. *See infra*, Section I.A.

[18] Corey Rayburn Yung, *Flexing Judicial Muscle: An Empirical Study of Judicial Activism in the Federal Courts*, 105 NW. U. L. REV. 1 (2011) [hereinafter "Yung Activism"]; Corey Rayburn Yung, *Judged by the Company You Keep: An Empirical Study of the Ideologies of Federal Judges*, 51 B.C. L. REV. 1133 (2010) [hereinafter "Yung Ideology"]; Corey Rayburn Yung, *Beyond Ideology: An Empirical Study of Partisanship and Independence in the Federal Courts*, 80 G.W. L. REV. __ (forthcoming 2012) [hereinafter "Yung Partisanship"].

decisionmaking styles of judges on the United States Courts of Appeals supported by quantitative evidence and statistical analysis:

- Trailblazing – shaping circuit law along ideological lines while being relatively unconcerned with district court review;
- Consensus Building – maintaining strong ideological commitments while effectively encouraging panel unanimity;
- Stalwart – exhibiting partisan and ideological leanings;
- Regulating – keeping district courts in line based upon ideological preferences;
- Steadfast – acting as polarizing lightning rods to judges of all ideologies;
- Collegial – strongly valuing norms of consensus with all other judges;
- Incrementalist – exhibiting some ideology, but having few battles with co-panelists;
- Minimalist – deciding in a highly deferential manner to district courts often provoking disagreements with other circuit judges; and
- Error Correcting – not acting deferentially, ideologically or as a partisan toward district courts.

This typological approach effectively incorporates other theorized sources of judicial votes to offer the most in-depth explanation of judicial behavior based upon empirical data. Returning the example of Judge Sutton's vote in the ACA case, the empirically-based judicial style model is entirely consistent with Judge Sutton's decision to uphold the law. According to the judicial typology, Judge Sutton is a Regulating Moderate judge. This means that Judge Sutton is not particularly concerned with ideological battles on the appellate court and is more focused on the particular issues in the district court opinions being reviewed. His Ideology Score (-1.8 on a scale from -100 to 100), in contrast to popular perception, places him almost at the ideological center point. Notably, his Independence Score (65.1 on a scale from 0 to 100) indicated he is well above average in dissenting and concurring from judges of all political backgrounds which fits well with his decision to write separately from both of the other judges on the panel. Although no single case either proves or disproves a larger theory, it is worth noting that, among the competing qualitative and quantitative approaches, only the model described in this Article is consistent with one of the highest profile decisions of a Court of Appeals panel in recent memory.

Further, this Article examines whether the judicial style types identified are correlated with background characteristics of the judges studied. Notably, a judge's decisionmaking style is correlated with, among other factors, ranking of law school attended, whether a judge had taken senior

status, and the appointing President's political party. Of particular note, judges of the most contentious types (Steadfast, Stalwart, and Trailblazing) on average attended law schools ranked nearly thirty places higher than those judges associated with collaborative styles (Collegial and Consensus Building). Certain styles are also strongly associated with the party of the appointing President. Steadfast judges are much more likely to have been appointed by Democratic Presidents whereas Incrementalist and Trailblazing judges are primarily appointed by Republicans.

Section I of this Article briefly discusses existing research and the dominant views pertaining to judicial decisionmaking, particularly for judges on the courts of appeals. In Section II, the underlying study design, data, and four behavioral measures (activism, ideology, independence, and partisanship) are described in detail. Section III outlines the statistical process used to identify the differing judicial styles and discusses the salient traits of each type that are supported by the data. In Section IV, background and demographic characteristics of individual judges are analyzed to determine if they predict judge decisionmaking styles. Consistent with the mission of making empirical legal studies about law and courts more accessible to a broader audience,[19] this Article avoids empirical research jargon whenever possible and utilizes graphical representations whenever possible.[20] However, the statistical information traditionally found in empirical legal studies is located in the footnotes and appendixes at the end of this Article.

## I. UNDERSTANDING JUDICIAL DECISIONMAKING

Judges have been objects of study for decades, but there has been an explosion in recent years of empirical research about how judges decide cases.[21] In political science and law, there has been a particular focus on the role of political ideology in shaping judicial decisions.[22] The Supreme Court

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[19] Lee Epstein, Andrew D. Martin, & Matthew M. Schneider, *On the Effective Communication of the Results of Empirical Studies, Part I*, 59 VAND. L. REV. 1811, 1814 (2006); Fischman & Law, *supra* note 15, at 135-36.

[20] Lee Epstein, Andrew D. Martin, & Christina L. Boyd, *On Effective Communication of the Results of Empirical Studies, Part II*, 60 VAND. L. REV. 801, 804-05 (2007).

[21] Gregory C. Sisk, *The Quantitative Moment and the Qualitative Opportunity: Legal Studies of Judicial Decisionmaking*, 93 CORNELL L. REV. 873, 874 (2008); Jeffrey M. Chemerinsky & Jonathan L. Williams, *Measuring Judges and Justice*, 58 DUKE L.J. 1173, 1174 (2009); Jack Knight, *Are Empiricists Asking the Right Questions about Judicial Decisionmaking?*, 58 DUKE L.J. 1532, 1535 (2009).

[22] Gregory C. Sisk & Michael Heise, *Judges and Ideology: Public and Academic Debates about Statistical Measures*, 99 NW. U. L. REV. 743, 744 (2005); Fischman & Law, *supra* note 15, at 168-170.

has been the primary judicial body studied,[23] often to the neglect of courts which have a greater net impact on the development of American law.[24] As Judge Posner noted, "[T]he Supreme Court reviews only a minute percentage … of court of appeals decisions. Entire fields of law are left mainly to the courts of appeals to shape."[25]

Unfortunately, despite their enormous differences, there has been a tendency by scholars to assume that the theories and models of Supreme Court decisionmaking should be applied to describe the behavior of judges in general.[26] The modern Supreme Court has been highly atypical in many ways and studies have shown that what has held true for the Justices was largely inapplicable to lower courts like the courts of appeals.[27] With approximately seventy-five cases reviewed per year,[28] the amount of law reviewed by the Supreme Court is very limited.[29] Further, actions by Supreme Court Justices are essentially unconstrained; Justices are free to vote in any manner based on any rationale, with very limited repercussions.[30] When a person is appointed to the Court, he or she has life tenure with almost no possibility of impeachment based upon judicial performance[31] and has no realistic chance of promotion to incentivize, and therefore constrain, her behavior. In contrast, the courts of appeals continue to review an enormous number of cases from varied areas of law;[32] are constrained by the Supreme Court, *en banc* review, and other panel decisions;[33] and, can be evaluated based upon performance before being

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[23] Frederick Schauer, *Incentives, Reputation, and the Inglorious Determinants of Judicial Behavior*, 68 U. CIN. L. REV. 615, 621 (2000).

[24] Richard A. Posner, *Judicial Behavior and Performance: An Economic Approach*, 32 FLA. ST. U. L. REV. 1259, 1273 (2005).

[25] *Id.*

[26] Tracey E. George, *Developing a Positive Theory of Decisionmaking on U.S. Courts of Appeals*, 58 OHIO ST. L.J. 1635, 1665 (1998) ("The attitudinal and strategic theories of judicial behavior described above have been developed almost entirely through a consideration of the behavior of U.S. Supreme Court justices.").

[27] Richard A. Posner, *The Role of the Judge in the Twenty-First Century*, 86 B.U.L. REV. 1049, 1054 (2006) [hereinafter "Posner 21st"]; Schauer, *supra* note 23, at 621.

[28] FRANK B. CROSS, DECISION MAKING IN THE U.S. COURTS OF APPEALS 2 (2007).

[29] *See id.*

[30] Posner 21st, *supra* note 27, at 1054.

[31] *See, e.g.*, Philip D. Oliver, S*ystematic Justice: A Proposed Constitutional Amendment to Establish Fixed, Staggered Terms for Members of the United States Supreme Court*, 47 OHIO ST. L.J. 799, 800 (1986) (explaining that, under the Constitution, Justices enjoy life tenure and can only be removed by impeachment proceedings, and pointing out that no Justice has ever been successfully impeached).

[32] *See* CROSS, DECISION MAKING, *supra* note 28, at 2.

[33] *See* Posner, *supra* note 30, at 1054; *see also* Charlie Savage, *Uncertain Evidence for 'Activist' Label on Sotomayor*, N.Y. TIMES, June 20, 2009, at A10.

elevated to the Supreme Court.[34] Nonetheless, the major decisionmaking models used to describe lower court behavior have been simply transplanted from empirical research of the Supreme Court.[35]

### *A. Law, Strategy, and Politics*

Three basic models have defined the debate regarding judicial decisionmaking among legal and political science scholars. The attitudinal model has contended that judicial choices are best explained by ideology.[36] The strategic model has identified institutional and personal incentives as the explanation of judicial behavior.[37] The formal model has viewed doctrine, precedent, and interpretation of codified law as central to decisions by judges.[38]

The dominance of the attitudinal, strategic, and formal models of decisionmaking can best be understood through a brief history of their origins. Much of the modern empirical research about judges was initially derived from political science models of legislatures.[39] Such conceptions of decisionmaking relied on spatial models which sought to identify ideological distance among individual legislators.[40] The early studies of the courts viewed judicial decisions as policy choices similar to those made by legislators.[41] The legislative roots in the modern judicial decisionmaking research helped spawn the attitudinal model.[42]

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[34] *See* Stephen Choi & Mitu Gulati, *A Tournament of Judges?*, 92 CALIF. L. REV. 299, 303 (2004).

[35] George, *supra* note 26, at 1665.

[36] *See generally*, JEFFREY A. SEGAL & HAROLD J. SPAETH, THE SUPREME COURT AND THE ATTITUDINAL MODEL REVISITED (2002).

[37] Posner 21st, *supra* note 27, at 1056.

[38] *See generally*, Harry T. Edwards & Michael A. Livermore, *Pitfalls of Empirical Studies that Attempt to Understand the Factors Affecting Appellate Decisionmaking*, 58 DUKE L.J. 1895 (2009); Harry T. Edwards, *The Effects of Collegiality on Judicial Decision Making*, 151 U. PA. L. REV. 1639, 1656 (2003); Harry T. Edwards, *Collegiality and Decision Making on the D.C. Circuit*, 84 VA. L. REV. 1335, 1336 (1998); Harry T. Edwards, *Public Misperceptions Concerning the "Politics" of Judging: Dispelling Some Myths About the D.C. Circuit*, 56 U. COLO. L. REV. 619, 625 (1985).

[39] Knight, *supra* note 21, at 1536.

[40] *Id.* ("The models were standard spatial models that sought to analyze legislative votes as a function of the ideological distance between a legislator's ideal preference point and the utility point of the proposed piece of legislation under consideration."); WALTER F. MURPHY & JOSEPH TANENHAUS, THE STUDY OF PUBLIC LAW 12 (1972).

[41] Knight, *supra* note 21, at 1537 ("In these early studies judicial choices were operationalized, not as dispositional votes, but rather as measures of the substantive policy consequences of the decisions.").

[42] GLENDON SCHUBERT, THE JUDICIAL MIND: THE ATTITUDES AND IDEOLOGIES OF SUPREME COURT JUSTICES, 1946-1963 6 (1965).

The attitudinal model was contrasted with the formal model of law which was more strawman than actual position taken by scholars.[43] Modern adherents to the formal theory of decisionmaking have not argued that every case has been decided solely by mechanical application of the law, but have contended that the large majority of legal disputes have been resolved by determinate rules utilized by neutral judges.[44] The formalists have cited the differences between the Supreme Court and other courts to explain the varying centrality of law and ideology in decisionmaking.[45]

The strategic model addressed the deficiency concerning personal and institutional goals of judges that was missing from both the formal and attitudinal models. As Judge Richard Posner explained:

> Judges have a utility function, as economists refer to a person's system of preferences, just like everybody else…. I think most judges (I have in mind particularly federal appellate judges, the slice of the judiciary that I know best) are guided in their judicial performance primarily by two objectives that are different from and more interesting than a desire for leisure or a thirst for celebrity. One is a desire to change the world for the better (which to the cynical is simply a desire to exercise power - and the ability to exercise even modest power is indeed a perk of being a judge). The other is to play the judicial game.[46]

Generally, advocates of the strategic model have not embraced a strong version of the theory that incentives have dictated all judicial decisions. Instead, like those who have supported the attitudinal and formal models, concessions have been made to incorporate the other theories.[47]

With the three global theories of decisionmaking in place, much of recent scholarship in the area has focused on determining the degree to which each one has explained greater portions of decisionmaking in different court settings.[48] Regarding the courts of appeals, Professor Frank Cross gave the most comprehensive treatment of the three theories and found some evidence to support the attitudinal model, more to indicate formal constraints on decisionmaking, and almost no corroboration for the strategic theory.[49] Because Cross's study was the first to systematically assess the three models as applied to the courts of appeals, its value in this area has been substantial. In many ways, it was the pinnacle of what could

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[43] H. Jefferson Powell, *A Response to Professor Knight*, Are Empiricists Asking the Right Questions about Judicial Decisionmaking?, 58 DUKE L.J. 1725, 1725 (2009).

[44] Edwards, *supra* note 38, at 1897.

[45] *Id.*

[46] Posner 21st, *supra* note 27, at 1056.

[47] *Id*. at 1054-56.

[48] *See, e.g*., George, *supra* note 26 (testing a combination of the attitudinal and strategic models in Fourth Circuit en banc cases).

[49] Cross Decisionmaking, *supra* note 5, at 1514.

be done with existing data and the three major models in studying federal appellate judges.

However, it also illustrated how data and model limitations have fundamentally constrained the study of decisionmaking in the courts of appeals. Cross, like most every other researcher engaged in comprehensive study of those courts, used the United States Courts of Appeals Database ("Songer Database"), which included more than 18,000 opinions from 1925 to 1996.[50] Because the database covered the full range of circuits over such a long time frame, there were just a handful of opinions from each circuit in a given year. As a result, it was virtually impossible to use the Songer Database for individualized quantitative study of judges. Further, although the coding was very extensive in some areas (such as case issues), it was not able to be utilized at all for the ideology, activism, independence, and partisanship metrics described in this Article.[51] While the Songer Database has been an extremely valuable resource, research based upon it has epitomized the untested homogeneity, unidimensionality, and isolation assumptions of judicial decisionmaking.

More recently, there has been an emergence of perspectives from other fields that have pushed the discussion beyond the three models which have reigned supreme in scholarly debates.[52] Particularly notable has been Judge Posner's attempt to give readers a peak into judicial chambers in *How Judges Think* which identified nine theories of decisionmaking from a range of academic disciplines.[53] In addition to the three major models, Posner discussed sociological, organizational, psychological, economic, pragmatist, and phenomenological theories.[54] However, the additional theories investigated by Posner have not been subject to the rigor of empirical analysis at the level applied to the political science models.[55]

### *B. Studies of Judicial Methods, Similarity, and Interrelations*

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[50] KUERSTEN & SONGER, *supra* note 17, at 1.

[51] It is theoretically possible that the Songer Database would have allowed for the Independence measure, but the difficulties created by the addition of the passing of time and small sample sizes for judges with limited times on the bench would problematize any results. Although the Songer Database included a field for standard of review, which was essential to the measures in this article, coding of it was limited to instances of agency review and not lower court review.

[52] *See, e.g.*, Dan Simon, *A Psychological Model of Judicial Decisionmaking*, 30 RUTGERS L.J. 1 (1998).

[53] RICHARD A. POSNER, HOW JUDGES THINK (2008) [hereinafter "POSNER – HOW JUDGES THINK"].

[54] *Id*. at 19.

[55] *Id*. at 19-56.

While the three models described above have predominated empirical research by political science and legal scholars, there has also been a separate strain of inquiry over the last thirty years which has targeted the diversity of types of judges. In 1981, Professor J. Woodford Howard published a study based upon surveys of judges sitting on three federal courts of appeals.[56] Howard identified three types of judges: 1) innovators who sought to inject new ideas into the law; 2) interpreters who believed that the role of the judge was limited to discerning meaning; and 3) realists that embraced portions of the other two theories.[57] More recently, Professor David Klein's survey of federal appellate judges did not construct a formal typology, but acknowledged the diversity of approaches used.[58] Jeffrey Professors Berger and Tracey George found a particular type of judges, judicial entrepreneurs, at the federal appellate level by utilizing citations of judges by the Supreme Court.[59]

Professors Frank Cross and Stefanie Lindquist recently summarized the prevailing evidence concerning diverse judging styles that has not been interwoven into most empirical research about how judges render decisions:

> Judges are a diverse lot, like any group of humans. They value different things in the course of rendering their decisions. Some may be more ideological in their judgments. Some may be more traditionally legalistic in their decisionmaking. Others may be pragmatic. As the surveys show, different judges view their roles differently. Judges place different emphases on the tradeoff between their roles as "generators of precedents" and resolvers of disputes.[60]

It is not at all revolutionary to recognize that judges from varied backgrounds, living in different geographic locations, nominated under distinct political conditions, and having a range of ideological and legal views, have different decisionmaking methodologies. However, empirical research of judicial decisionmaking has done little to build upon the recognized differences among individual judges.

Similar to work described above that questions the homogeneity assumption, some efforts have been made to test the unidimensionality

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[56] J. WOODFORD HOWARD, JR., COURTS OF APPEALS IN THE FEDERAL JUDICIAL SYSTEM (1981).

[57] *Id*. at 160-62.

[58] DAVID E. KLEIN, MAKING LAW IN THE UNITED STATES COURTS OF APPEALS 21-23 (2002).

[59] Jeffrey A. Berger & Tracey E. George, *Judicial Entrepreneurs on the U.S. Courts of Appeals: A Citation Analysis of Judicial Influence*, (Vand. L. & Econ. Research Paper No. 05-24, Aug. 2005), *available at* http://ssrn.com/abstract=789544.

[60] Frank B. Cross & Stefanie Lindquist, *Judging the Judges*, 58 DUKE L.J. 1383, 1416 (2009).

premise when possible for Supreme Court Justices.[61] Further, panel effects research has also been extremely valuable in breaking down the idea that judges have been separate islands rendering independent decisions.[62] However, such research has yet to incorporate multiple levels of the judiciary and only has examined the interrelations between judges on small panels.[63] The study described in this Article attempts to expand upon the work of scholars that have recognized judicial heterogeneity, multidimensionality, and interconnectedness. In doing so, four separate measures of federal appellate judge behavior were created that rendered individual judge scores based upon interactions with co-panelists and district court judges.

## II. BEHAVIORAL MEASURES

The primary method of measuring traits of the judges on the federal courts of appeals has been static proxy techniques. For example, studies of judicial ideology have most commonly used the appointing President's political party as a proxy for the judge's ideology.[64] Utilizing such a measure treats all Republican and all Democratic appointees as identical, does not incorporate any decisions by the judges, and assumes a President makes appointments solely upon ideological concerns. There has been a growing call by some scholars to move from such static proxy measures of judges to metrics derived from the actual decisions of judges.[65] This study answers that call by utilizing multiple behavioral metrics based upon judicial votes to form a typology of judicial styles. In order to move beyond traditional proxies of judicial traits and provide sufficient information about individual judges throughout the federal court system, a new dataset that addressed the shortcomings of the Songer Database was essential.

### *A. Data Gathering and Database Construction*

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[61] *See, e.g.*, Paul H. Edelman and Jim Chen, *The Rehnquist Court in Empirical and Statistical Retrospective: The Most Dangerous Justice Rides into the Sunset*, 24 CONST. COMMENTARY 199, 200 (2007) ("To account for and accommodate these alternative dimensions, our earlier research constructed a method for identifying the most powerful Justice without relying on the assumption of unidimensional policy preferences. Instead, earlier efforts focused on the unique policy coalitions formed by the Justices in non-unanimous cases.").

[62] *See, e.g.*, Cross & Tiller, *supra* note 16, at 2168-75; Revesz, *supra* note 16, at 1751-56; *see generally*, Kim, *supra* note 16.

[63] *Id*.

[64] Fischman & Law, *supra* note 15, at 168-170.

[65] *Id*. at 170.

The underlying data outlined in this study has been used in related research,[66] but several important changes have been made that are noted below. Data were gathered from published and unpublished 2008 opinions issued by the First, Second, Third, Fourth, Fifth, Sixth, Seventh, Eighth, Ninth, Tenth, and Eleventh Circuit Courts of Appeals. The analyzed dataset ("Case Database") from those circuits included over 10,000 panel decisions and, as a result, over 30,000 votes by judges sitting on the courts of appeals.[67] The Case Database was created from searches of LexisNexis databases of the courts of appeals that included standard of review language,[68] and excluded immigration[69] and habeas corpus[70] cases, which contained unique standard of review issues. Among other variables, cases were coded for: judges on the panel, whether individual judges were sitting by designation, appellate disposition, appellant, appellee, type of case (e.g., criminal or environmental), prevailing party, circuit, district court judge, district court, whether the case involved review of an executive agency decision, and standard of review used. In analyzing each case, the vote of each judge on the panel was coded separately, and thus a dissent by a judge in a case was coded so that the dissenting judge had the opposite view and disposition as the panel majority. This allowed for each judge's behavior to be studied independently and collectively. The more recent version of the dataset was re-coded using off the shelf computer software[71] and scripting

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[66] *See generally*, Yung Activism, *supra* note 18; Yung Ideology, *supra* note 18; Yung Partisanship, *supra* note 18.

[67] The normal assumption that there would be three judicial votes for each panel in the dataset slightly overestimates the number of actual votes. There were a few instances where only two judges issued an opinion due to a death or recusal of a panel member. There were also instances when a single judge would issue an order without sitting on a three-judge panel.

[68] For each of the courts of appeals databases in LexisNexis, the following search was executed and all of the results were downloaded and coded: "date aft 1/1/2008 and date bef 1/1/2009 and ("De Novo" or Clear! Erro! or (Arbitrar! w/3 Capricious!) or (Abus! w/3 Discretion) or "Substantial Evidence" or "Standard of Review"")) and not immigration and not habeas."

[69] *See* Hiroshi Motomura, *Immigration Law and Federal Court Jurisdiction Through the Lens of Habeas Corpus*, 91 CORNELL L. REV. 459, 474 (2006) (discussing how large portions of immigration case review—those by the Board of Immigration Appeals—are based upon a collateral review model, which affords a very high level of deference because "[t]he regulations . . . revise the standard of review to require greater deference to an immigration judge's findings of fact.").

[70] *See* Brandon Scott, *When Child Abuse Becomes Child Homicide: The Case of* Gilson v. Sirmons, 34 OKLA. CITY U. L. REV. 281, 293-94, 305 (2009) (discussing the "unique" standard of review in federal habeas cases due to the Antiterrorism and Effective Death Penalty Act).

[71] TextConverter 3, available at: http://simx.com/.

in Visual Basic.[72] The automated coding process searched for over 100 relevant variables in the header fields and text of opinions. Human coding was used to supplement, quality check, and ensure reliability of the automated coding.[73]

### *B. Decisionmaking Metrics*

Instead of merely focusing on ideology as the determining factor in judicial decisionmaking, this study sought to understand and measure how

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[72] In the prior studies, the coding of the data was performed exclusively by law student research assistants and the Author. Due to inconsistencies among and within the courts of appeals in formatting opinions, the automated coding was not foolproof. However, quality checking has indicated that the automated coding for every variable used in this study was superior to the human coding done in prior editions of the dataset.

Because the prior human coding had already been performed for over 96% of the cases in the new dataset, the human and computer coding were integrated. In particular, because some circuits have not regularly or ever reported the identity of district court judge whose judgment was reviewed, human coding was essential in that area. When there were discrepancies in coding between the two systems, the differences were resolved by the Author. The automated coding also allowed for coding of many new fields, primarily in the area of case issues. This provided more detailed information that could be used in adjusting various behavioral scores based upon differing case issue mixes of judges and circuits. Other changes in the coding, which may have accounted for some of the different scores used in this study included: separation of decisions to vacate, reverse, remand, and reverse in part, coding of concurrences, to the degree possible determining which standard of review was actually applied when multiple standards were listed, corrections of errors in the source data downloaded from LexisNexis, further quality checking, coding of the actual opinion writer (as opposed to merely including them in the majority), and removal of votes recorded on the decision to not hear a case en banc.

[73] Reliability is the degree to which the measurement would yield the same results when applied by others. Lee Epstein & Gary King, *The Rules of Inference*, 69 U. CHI. L. REV. 1, 83 (2002). Because this study is the first to systematically identify judicial styles for judges on the courts of appeals, it is impossible to compare the results directly with other research. Instead, reliability can only be evaluated by the quality of the coding and analysis. Since this is not the first study using some version of this dataset, some of the discussion here is abbreviated.

Case data were downloaded from LexisNexis for each of the Circuits studied which provided a stable platform for replication by other researchers. Many of the variables were coded by computer software which should provide a high level of consistency among studies. The remaining data were coded by law students and recent law school graduates. On both the computer and human coded variables, quality checking was performed by other student and graduate coders as well as the Author. Accepted inter-coder reliability was achieved for every variable used in this study. In addition, a variety of checks were performed to ensure internal consistency of variables that were necessarily interconnected. For example, the party labels in the coding include "criminal defendant." Such a party label precluded "civil plaintiff" or "civil defendant" from appearing in the outcome variable. Many cross-checks were employed to ensure quality and correct errors within the dataset.

judges vote along several dimensions. Because the decisionmaking measures discussed below have been expounded upon in prior scholarship,[74] the discussion below is limited to the necessary elements of each and the basic methodologies used for their computation. In some instances, notes about the modifications to previously used methodologies have been included as well. The four dimensions isolated and measured in this recent research were activism, ideology, independence, and partisanship.

1. Activism

One of the most commonly used words to describe judicial behavior in public discourse is "activism."[75] The trait associated with activism has been exhibited when a judge has failed to defer when expected.[76] In the aggregate, a more activist judge will more often place his or her views above legislatures, executive branches, and other judges.[77] When viewed in this way, "activism" can be thought of as a concept that is morally-neutral.[78] Activism is something in which all judges engage – it is just a question of degree. The measurement of activism described below was designed as a relative assessment of how likely a judge was to defer compared to other judges studied.

The precise definition used for this empirical study was as follows:

> *Activism occurs when judges do not defer to constitutionally significant actors when a formal model of legal decisionmaking would predict otherwise.*[79]

Although it has been generally difficult to reach anything approaching consensus on what a formal model of law would predict, there is a useful analytical tool of the courts of appeals that provides an effective baseline.[80]

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[74] *See* Yung Activism, *supra* note 18; Yung Ideology, *supra* note 18; Yung Partisanship, *supra* note 18.

[75] Keenan D. Kmiec, *The Origin and Current Meanings of "Judicial Activism,"* 92 CALIF. L. REV. 1441, 1443-44 (2004).

[76] Yung Activism, *supra* note 18, at 21.

[77] *Id.*

[78] Ernest A. Young, *Judicial Activism and Conservative Politics*, 73 U. COLO. L. REV. 1139, 1144 (2002); Robert Justin Lipkin, *We Are All Judicial Activists Now*, 77 U. CIN. L. REV. 181, 203 (2008).

[79] Yung Activism, *supra* note 18, at 19.

[80] For a discussion of the general neglect of baselines in empirical legal research and the problems it has created, *see generally* Brian Z. Tamanaha, *Devising Rule of Law Baselines: The Next Step in Quantitative Studies of Judging*, THE LEGAL WORKSHOP (Mar. 25, 2010), http://legalworkshop.org/2010/03/25/2667 (submitted by DUKE L.J.).

Standards of review have been used by federal appellate courts to indicate when they should defer to lower court judgments and when no deference is required.[81] A judge who has regularly discounted deferential standards of review by reversing lower court judgments can be said to be more activist in the aggregate than a judge who has reversed less often in such situations.

However, to remove ideological differences and other strategic motivations from the concept of "activism," it was necessary to compare a judge's behavior when using deferential and non-deferential standards of review. When applying a *de novo* (non-deferential) standard, judges were expected to reveal their true preferences. In contrast, it was expected that those preferences would be suspended from time to time when applying a deferential standard. Based upon those premises, the basic measurement for activism used in this study was:

> *Raw Activism Differential = Reversal rate using deferential standard – Reversal rate using de novo standard*[82]

Thus, a judge with a higher Activism Differential exhibited greater activism because he or she was reversing lower court decisions using a deferential standard more often relative to reversing in unconstrained situations. The Raw Activism Differential was adjusted to reflect the particular circuit on which a judge sat, the mix of case issues each judge had, any "super-panel" effects[83] that might have been experienced by the judge, and scaling to a common system. Greater detail about these adjustments can be found in Appendix A.[84]

2. Ideology

Judicial ideology has been the primary target of those seeking to measure, explain, and predict judicial behavior.[85] Although there has been some variation in definitions of ideology,[86] there has been substantially less controversy about the concept than there has been concerning activism. The very basic definition used in this study was:

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[81] Cross Decisionmaking, *supra* note 619, 1502-03.

[82] Yung Activism, *supra* note 18, at 22.

[83] *Id.*

[84] The mean Activism Score was 51.3 and the standard deviation was 16.7. The data was scaled linearly where a 0 score corresponded with a -32.4% adjusted Raw Activism Differential and a 100 score indicated a +23.2% adjusted Raw Activism Differential.

[85] Fischman & Law, *supra* note 15, at 135.

[86] *Id.*

> *Judicial ideology is the set of political beliefs that guide judicial decisions in some cases*.[87]

This study utilized what has become known as an agnostic measure.[88] Such measures have relied on the idea that those who have similar ideologies would vote together more often and those who have dissimilar ideologies will disagree more often. If enough data is gathered, a researcher could identify groups with similar ideologies. With some prior assessments about who is more likely to be conservative and liberal, agnostic scoring systems can be applied. Agnostic measures have the advantage that they can be applied to large populations of data far more easily than other behavioral techniques. A researcher could merely identify the disposition of an appellate panel's judgment (e.g., affirmed, reversed, etc.) and any voting blocs among the panelists. However, at the courts of appeals, almost 98% of panels in recent years have voted unanimously which, because of the lack of observable differences, has prevented the use of agnostic measures entirely for those courts.

By including the district court judge in the "super-panel" of judges, greater information was gained and the unanimity problem resolved. Unlike dissents on appellate panels, reversals of district court judgments have been far more common. As a result, integrating disagreements between appellate judges and district court judges gave the study more points of comparison for the creation of an accurate ideology scoring system. When a judge on a federal appellate court reviewed the judgment of district court judge, the appellate judge had three interactions which potentially yielded information about the appellate judge's ideology (two interactions with co-panelists and one with the district judge). Using this agnostic coding system, the basic measurement of a judge's ideology was as follows:

> *Raw Ideology Score = Rate of Agreement with Judges Appointed by Republican Presidents – Rate of Agreement with Judges Appointed by Democratic Presidents*

A judge with a lower Raw Ideology Score was more liberal judge than a judge with a higher Raw Ideology Score (matching the traditional left to right spectrum). Numerous adjustments were made to the Raw Ideology Score to provide a valid measure. Most significantly, because the district judge was situated in a different role than co-panelists, the rate of agreement with district judge was measured separately. As a result, agreements with the district judge in the form of affirmances were adjusted by standard of

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[87] Yung Ideology, *supra* note 18, at 1140-44.
[88] Fischman & Law, *supra* note 15, at 135.

review used and type of case (criminal or civil). A Raw Ideology Score was then computed for both the panel and district judge interactions. Those scores were combined based upon the rate of disagreement at each level and further adjusted to include specific circuit adjustments, further case issue mix adjustments, any "super panel" effects experienced by the judge, and scaling to a common system. These later adjustments are described in greater detail in Appendix A.[89]

3. Independence

Independence is the idea that judges would be more likely to "stick to their guns" and less likely to reach compromises with other judges.[90] Notably, like activism and ideology, independence was not viewed as a positive or negative quality for a judge – it was simply another trait that described tendencies in behavior. This basic definition of judicial independence was used:

> *A more independent judge is one that is more apt to provoke minor and major disagreements with other judges beyond what ideological differences would predict.*[91]

Two types of disagreements were incorporated in the measurement applying the definition: concurrences and dissents. In both instances, a judge is assumed to be writing separately because she could not find common ground with other written opinions.

The following formula was used to determine the Raw Independence Score:

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[89] The mean Ideology Score was 2.9 and the standard deviation was 20.9. The data was linearly scaled where a -100 corresponded with a -21.4% adjusted Raw Ideology Score and a 100 indicated a 15.5% adjusted Raw Ideology Score.

[90] Independence has been identified in recent studies as a characteristic of judicial behavior worthy of empirical investigation. *See, e.g.*, Stephen Choi & G. Mitu Gulati, Essay, *A Tournament of Judges?*, 92 CAL. L. REV. 299 (2004) [hereinafter "Choi & Gulati Essay"]; Stephen J. Choi & G. Mitu Gulati, *Choosing the Next Supreme Court Justice: An Empirical Ranking of Judge Performance*, 78 S. CAL. L. REV. 23 (2004); Stephen J. Choi & G. Mitu Gulati, *Mr. Justice Posner? Unpacking the Statistics*, 61 N.Y.U. ANN. SURV. AM. L. 19 (2005). This study conceived of and measured independence in a similar, but distinguishable manner, from prior attempts. Unlike prior research, this study recognized that when other judges dissented from or concurred with a studied judge, that action was also an indicator of the studied judge's independence. After all, the difference between dissenting and being dissented against is simply how the third judge on the panel voted.

[91] Yung Partisanship, *supra* note 18, at __.

*Independence Score = Rate of Dissents (including co-panelist dissents) + Rate of Concurrences (including co-panelist concurrences) – Expected Rate of Dissents (including co-panelist dissents) – Expected Rate of Concurrences (including co-panelist concurrences)*

To remove disagreements based upon ideological differences, it was necessary to determine the rate at which ideological variance accounted for concurrences and dissents so that the Independence Score could be properly untangled from the Ideology Score (yielding expected rates of dissent and concurrence). The projected dissent and concurrence rates for each judge were computed based upon the degree to which a judge's Ideology Score differed from the mean of the circuit on which the judge was appointed. The projected disagreement rates were subtracted from the observed rates. Three additional adjustments were made to the Raw Independence Scores. The values were adjusted so that each judge the scores were based upon an average criminal and civil case mixes, placed on a logarithmic scale (to create a normal distribution), and scaled to a common system.[92] The case mix and common scaling adjustments are further explained in Appendix A.[93]

4. Partisanship

Partisanship has not been considered a separate trait from ideology and activism in the rare instances that it has been referenced in empirical research. When it has been used to describe or study judicial behavior, it has normally been a negative attribute indicating ideological decisionmaking.[94] As with the other measures, the goal of this study was to treat partisanship (and its opposite, indifference) as morally neutral behavior exhibited by judges on a relative scale. However, like the word "activism," "partisanship" has carried significant negative connotations. Despite that shortcoming, "partisanship" and its opposite, "indifference," were chosen because they best reflected the behavior being studied. Partisanship, unlike ideology, focuses more on party loyalty than ideological outcomes of cases.

The basic definition of partisan behavior used in the study was:

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[92] Because of limited population sizes for judges traveling to other circuits when concurrences and dissents were issued, a separate circuit adjustment was not performed for the Independence Scores.

[93] The mean Independence Score was 44.1 and the standard deviation was 15.3. The data was logarithmically scaled, but before scaling a 0 corresponded with a -10.0% adjusted Raw Independence Score and a 100 indicated a 24.9% adjusted Raw Independence Score.

[94] *See, e.g.*, Daniel E. Ho & Kevin M. Quinn, *How Not to Lie with Judicial Votes: Misconceptions, Measurement, and Models*, 98 CALIF. L. REV. 813, 817 (2010).

> *A judge is acting in a more partisan manner when he or she applies a neutral legal rule in a manner that indicates greater deference to members of a particular political party.*[95]

Notably, partisanship does not require conscious thought by a judge. It is simply a measure of whether a judge is more apt to defer to those of the same appointing party, whether the judge is aware of it or not. Like the Activism Score, the Partisanship Score focused on the standard of review as the baseline for identifying partisan behavior. If a judge deferred more often to a district judge appointed by the same political party, he or she was more partisan than a judge who deferred at the same rate. And similar to the Activism Score, the focus of the partisanship measure was exclusively based upon appellate and district court interactions. The following formula provided the Raw Partisanship Score:

> *Partisanship Score = (Deferential Reversal Rate of Democratic District Judges – Deferential Reversal Rate of Republican District Judges) – (Non-Deferential Reversal Rate of Democratic District Judges – Non-Deferential Reversal Rate of Republican District Judges)*[96]

Several adjustments were made to the Raw Partisanship Score. The one unique alteration was related to the inclusion of the appointing party of the Court of Appeals judge so that a Democratic appellate judge who favored Republican district judges (not partisan) would be scored differently than a Democratic appellate judge who favored Democratic district judges (partisan). The Raw Partisanship Score was adjusted to reflect the particular circuit on which a judge sat, the mix of case issues each judge had, any "super-panel" effects that might have been experienced by the judge, and then scaled to a common system. Greater detail about these adjustments can be found in Appendix A.[97]

5. Differences among Scores

There was some concern that there would be some overlap between the Ideology, Activism, and Partisanship Scores because they might be viewed as measuring similar, related behavior. Because the terms sometimes have

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[95] Yung Partisanship, *supra* note 18, at __.

[96] *Id*., at __.

[97] The mean Partisanship Score was 44.8 and the standard deviation was 15.3. The data was linearly scaled and a 0 corresponded with -73.7% adjusted Raw Partisanship Score and a 100 indicated an 89.8% adjusted Raw Partisanship Score.

been used interchangeably, the concern was even more significant if the inferences drawn from this study were to be valid. As a result, the three Scores that some might believe to be too intertwined to provide separate dimensions of study were tested to determine statistical relationships. Notably, the study identified judges of all combinations of high and low Partisanship, Activism, and Ideology Scores. For example, Justice, then-Judge, Sonia Sotomayor had a moderate Ideology Score (17.3), a low Activism Score (39.3), and a Partisanship Score nearly one standard deviation above the mean (57.2). Further, based upon robust linear regression, the Activism, Partisanship, and Ideology Scores were not correlated in a statistically significant manner.[98] So, the data indicated that the Partisanship, Ideology, and Activism Scores were describing separate behavior.

## III. JUDICIAL STYLE TYPOLOGY

Richard Eberhart once stated that, "Style is the perfection of a point of view."[99] That is, the manner in which someone acts or presents herself reveals her perspective on the world. "Style" might seem an odd word to apply to what judges do because it lacks the grandiosity of "philosophy" and seriousness of "methodology." However, because this study is focused on measuring the behavior of judges as manifested in outputs (judicial opinions and votes), it is the appropriate label to use. Judges might have elaborate decisionmaking methods and/or committed judicial philosophies, but that does not mean such perspectives are consistently exhibited in opinions and votes. This can occur for several reasons. Judges may not practice what they preach. Their decisionmaking technique might only be applicable in some cases. The methods or philosophy might point in conflicting directions. Further, there are just a handful of judges with public records about their philosophies or methodologies from which any information can reliably and validly be inferred.

In contrast, the concept of a judicial "style" focuses exclusively on the outward appearances of the judicial decisionmaking. No references to or inferences about the decisionmaking process are made by the label "style." Instead, the term stays true to the study methodology which only considers the end result of the decisionmaking process and does not attempt to

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[98] For Activism and Ideology Scores, $p = 0.6530$; Activism and Partisanship Scores, $p = .1754$; Ideology and Partisanship Scores, $p = 0.4057$. Robust regressions were also done to compare the Ideological Scores (absolute value of the Ideology Scores) with the Partisanship Scores. For Activism and Ideological Scores, $p = 0.7443$; Partisanship and Ideological Scores, $p = 0.8418$.

[99] RICHARD EBERHART, THE QUARRY 111 (1964).

determine how such decisions were reached beyond the opinions published. As a result, an individual judge may be wholly unaware of his or her style and disagree with the label applied in this study. Nonetheless, the data ultimately supports the application of the particular style type to those judges.

### *A. Multidimensional Clusters of Judges*

To construct a viable typology of judges, the 178 studied judges with adequate data needed to be sorted into groups based upon common traits. The technique by which this is done is cluster analysis. Cluster analysis is a data analysis tool which categorizes data from one variable based upon similarities and differences across a set of other variables.[100] In this case, judges are grouped according to their Activism, Ideological, Independence, and Partisanship Scores. The Ideological Scores are simply the absolute values of the Ideology Scores such that a judge with a -60 score would be treated the same as one with a 60 score. This is done to find commonalities in judicial style among persons on opposite ends of the ideological spectrum. All four Scores are on a scale of 0 to 100, with 100 indicating the highest level of that trait within the 178 judges and 0 reflecting the lowest.

The particular cluster analysis technique used is Ward cluster analysis.[101] The Ward technique focuses on minimizing variance when placing a judge in one group as opposed to another.[102] Because the clusters are formed along four separate dimensions, it is impossible to include a visual depiction of the shapes that envelop the various clusters in a two dimensional medium such as this Article. However, the commonalities among judges within each group can be seen in Appendix B where all of the judge scores are listed.

To decide if a particular cluster is indeed a distinctive group and not merely statistical noise, a basic objective test is applied. Each identified cluster's average Scores has to deviate from every other cluster in at least one of the four behavioral Scores by a standard deviation. Ultimately, nine separate style clusters are identified using that test. Figure 1 below indicates

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[100] *See generally*, BRIAN S. EVERITT, SABINE LANDAU & MORVEN LEESE, CLUSTER ANALYSIS (4th ed. 2001); Cross & Lindquist, *supra* note 60, at 1425 ("Cluster analysis is a statistical tool that enables like items to be grouped based on similarities and dissimilarities across a set of variables…. The procedure identifies the cases (individual judges) who share similarities with respect to certain variables ... and groups them into categories, creating a sort of taxonomy of judges.").

[101] For a prior example of the use of Ward cluster analysis in a judicial decisionmaking study, *see* Cross & Lindquist, *supra* note 60, at 1425-30. Ward cluster analysis in this Article was performed using the software Stata.

[102] CHARLES ROMESBURG, CLUSTER ANALYSIS FOR RESEARCHERS 129-35 (2004).

the number of average Scores (Activism, Ideology, Independence, and Partisanship) each cluster differs by at least one standard deviation from every other cluster.

**Figure 1 - Differences between Clusters (Number of Scores Different by at Least One Standard Deviation)**

| Cluster | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| **1** | -- | 1 | 4 | 3 | 3 | 3 | 3 | 1 | 3 |
| **2** | 1 | -- | 3 | 4 | 3 | 2 | 1 | 3 | 3 |
| **3** | 4 | 3 | -- | 3 | 4 | 3 | 3 | 4 | 3 |
| **4** | 3 | 4 | 3 | -- | 2 | 2 | 1 | 2 | 3 |
| **5** | 3 | 3 | 4 | 2 | -- | 2 | 3 | 2 | 1 |
| **6** | 3 | 2 | 3 | 2 | 2 | -- | 1 | 1 | 1 |
| **7** | 3 | 1 | 3 | 1 | 3 | 1 | -- | 2 | 1 |
| **8** | 1 | 3 | 4 | 2 | 2 | 1 | 2 | -- | 1 |
| **9** | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | -- |

These groups are then labeled according to the traits exhibited by their mean average Scores. Insofar as any selection effects by the parties are relatively equal across the courts of appeals or accounted for in the study,[103]

[103] Because this is a study of the federal appellate courts, there is an inevitable concern about selection effects. Keith N. Hylton, *Asymmetric Information and the Selection of Disputes for Litigation*, 22 J. LEGAL STUD. 187 (1993); George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1 (1984); Cass R. Sunstein, *Judging National Security Post-9/11: An Empirical Investigation*, 2008 SUP. CT. REV. 269, 271. A selection effect occurs when a party other than those being studied (e.g., a litigant) makes a decision (e.g., settlement) which is not accounted for by the study methods, but should be. Kate Stith, *The Risk of Legal Error in Criminal Cases: Some Consequences of the Asymmetry in the Right to Appeal*, 57 U. CHI. L. REV. 1, 19 n.55 (1990). There were various moments when a selection effect could have occurred in the data for this study including: pre-filing, pretrial, during trial, pre-verdict, post-verdict, pre-appeal, during appeal, and post-appeal.

However, the significance of selection effects in this study is more limited than other analyses of the courts of appeals because of the nature of the project. The underlying measures used to create the judicial typology are all relative in nature. They do not attempt to state that a judge is, for example, "liberal" by some external objective scale. Instead, the judicial type model merely states that relative to the other judges studied, one is, for example, more Steadfast in their approach. As a result, the key concern with selection effects is whether they are relatively equal across the judicial population or accounted for in the model. As long as judges have comparable selection effects or the study accounts for uneven selection effects in some way, the selection effects should not limit the inferences drawn from the study.

Nonetheless, it is helpful to appreciate the ways that selection effects might complicate the judicial typology. The classic model of selection effects relies on the incentives of

there are nine judicial types identified: Trailblazing, Consensus Building, Stalwart, Regulating, Steadfast, Collegial, Incrementalist, Minimalist, and Error Correcting. Individual judges in each group might have Scores which deviate by a reasonable margin from the category mean Scores, but the cluster analysis technique used places them in the appropriate group to minimize the variation versus placing the judge in an alternate group. Notably, as illustrated in Figure 2 below, the distribution among the judge style types is far from even.

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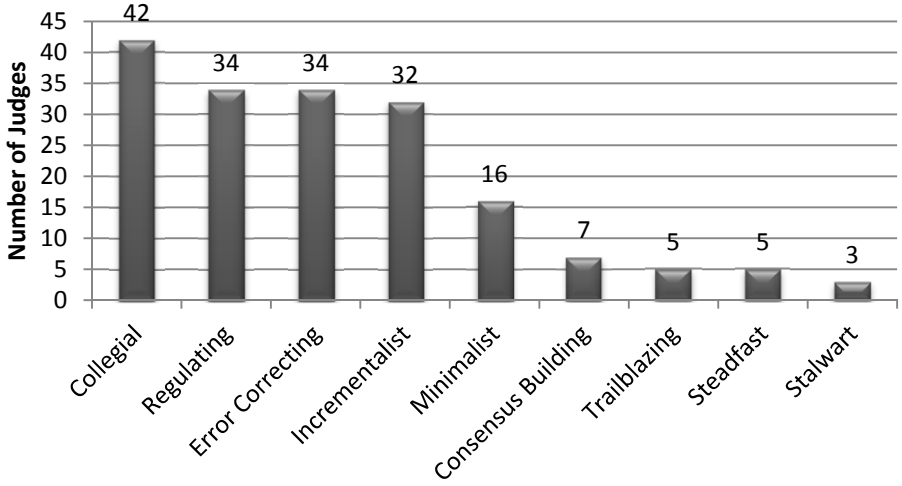
litigants. The Priest-Klein hypothesis predicted that, if parties had perfect information, case outcomes would split evenly (50%) between affirmances and reversals since the parties would settle as needed to avoid other outcomes. Priest & Klein, *supra*, at 4-5. Numerous studies have examined whether empirical evidence supports the Priest-Klein hypothesis. *See, e.g.*, Theodore Eisenberg, *Testing the Selection Effect: A New Theoretical Framework with Empirical Tests*, 19 J. LEGAL STUD. 337 (1990); Randall S. Thomas & Kenneth J. Martin, *Litigating Challenges to Executive Pay: An Exercise in Futility?*, 79 WASH. U. L. Q. 569, 590-91 (2001); Robert E. Thomas, *The Trial Selection Hypothesis Without the 50 Percent Rule: Some Experimental Evidence*, 24 J. LEGAL STUD. 209, 222-26 (1995).This study, and consistent with prior examinations, provides ample reason to doubt the simple Priest-Klein hypothesis because the rate of affirmances is far higher than 50% (regardless of standard of review used) in civil and criminal cases. Notably, the Priest-Klein model was limited to civil cases because the settlement structure, plea bargaining, in criminal cases creates radically different incentives such that nothing close to a 50% affirmance rate is exhibited.

Beyond the traditional Priest-Klein model, there is still a substantial area of selection effects. However, at the federal appellate level, the marginal cost of an appeal is very little compared to that of a trial. *See* Meehan Rasch, *Not Taking Frivolity Lightly: Circuit Variance in Determining Frivolous Appeals Under Federal Rule of Appellate Procedure 38*, 62 ARK. L. REV. 249, 264 (2009). This means that the chance of settlement before the appeal is considered to be quite low. Uncertainty about appellate outcomes also creates an environment where parties cannot reach agreement about the potential risks and costs. The legal issues are usually close in civil cases, Brian Z. Tamanaha, *The Distorting Slant in Quantitative Studies of Judging*, 50 B.C. L. REV. 685, 748 (2009), and the parties do not know which judges will decide the appellate case until right before oral argument. By that time, the briefing has been completed, Richard L. Revesz, *Litigation and Settlement in the Federal Appellate Courts: Impact of Panel Selection Procedures on Ideologically Divided Courts*, 29 J. LEGAL STUD. 685, 688 (2000), settlement is unrealistic, and the marginal cost of oral argument is low.

The typology ultimately accounted for the differing selection effects in criminal and civil cases by adjusting individual judge scores to assume each judge had the average proportion of criminal and civil cases. Beyond that, it is unclear if there are any uneven selection effects among the judge population. To the degree that the parties know the substantive and procedural law of a circuit and make the same basic risk assessments (which is what a selection effects model would generally predict), one would expect that regardless of differences among the circuits and judges, that the projected odds in individual cases would be similar. As a result, while selection effects inherently limit such studies, it is difficult to discern if such effects had a prominent role in shaping the data and results of this particular study.

**Figure 2 - Distribution of Judges among Style Categories**

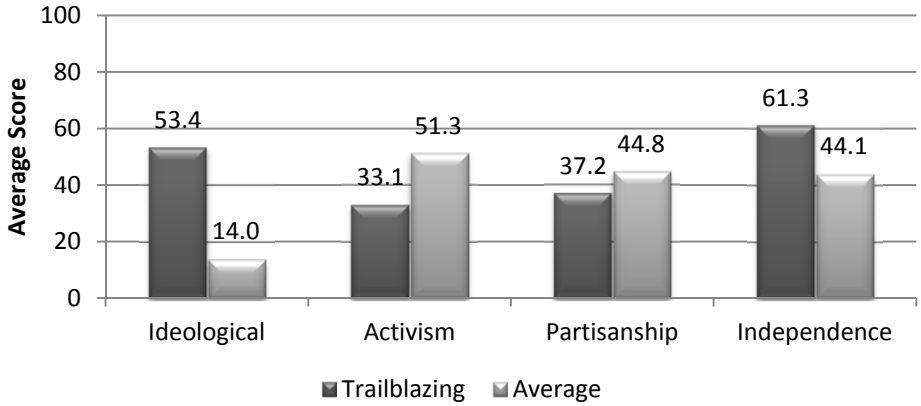



Each of the nine judging styles and the quantitative aspects that define each type are discussed in more detail below.

### *B. Judicial Styles*

Among the nine judicial types, there are some groups which have greater similarities than others. When possible, efforts are made to explain the critical differences among relatively similar groups. The descriptions are at times intentionally sparse in order to prevent making inferences beyond what is supported by the data.

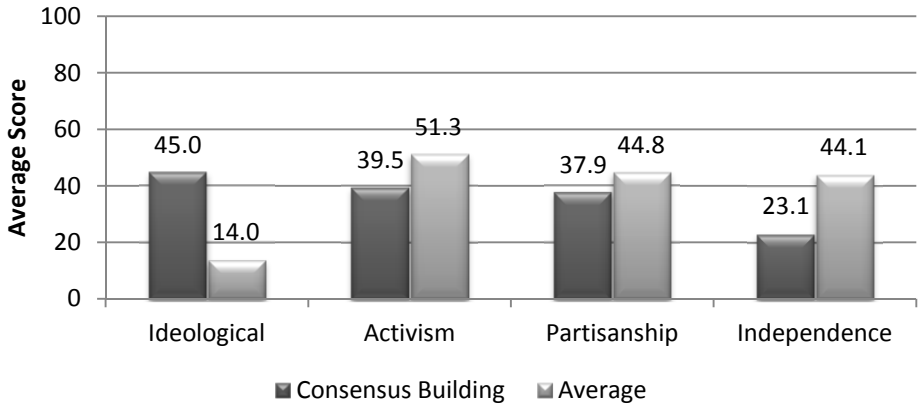
**Figure 3 - Average Trailblazing Judge Scores**




Trailblazers are primarily in the business of carving out ideological decisions that shape circuit law and invite opposition by co-panelists. Yet, the review of district courts is less significant to these judges. As exhibited

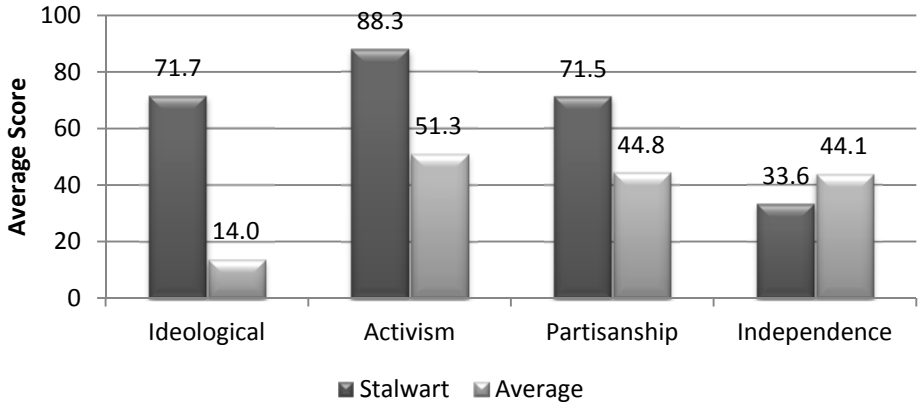
in Figure 3, Trailblazers exhibit higher Ideological Scores (usually over two standard deviations from zero), higher Independence Scores, lower Activism Scores, and lower Partisanship Scores. They have the second highest Ideological Scores of any group, but, in contrast to the conventional wisdom of the attitudinal model, their behavior is less partisan and activist toward the district courts than the average judge.

**Figure 4 - Average Consensus Building Judge Scores**



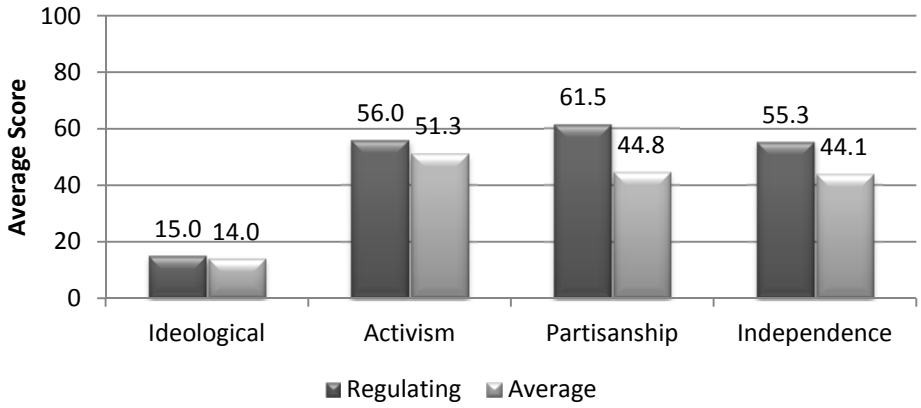

Consensus Builders are judges with strong ideological commitments who manage to encourage unanimity among appellate panelists with little partisan or activist review of the district courts. Figure 4 indicates that Consensus Builders, like Trailblazers, have very high Ideological Scores. Yet, again contrasting with traditional perspectives on decisionmaking, they have the lowest Independence Scores (with typically below average Activism and Partisanship Scores). If conventional theories regarding the role of judicial politics were applied, it is expected that very ideological judges would be more likely to dissent, concur, and invite concurrences and dissents. That this group maintains strong ideology while having the least disagreement among the appellate judges indicates that they might be better at building voting blocs between ideologically diverse judges.

**Figure 5 - Average Stalwart Judge Scores**




Stalwart judges are the ideological and partisan leaders who take an active role in shaping circuit law and partisanly reviewing district court judgments. Stalwart judges have the highest Ideological, Activism, and Partisanship Scores of any judge type as demonstrated in Figure 5. Interestingly, though, their Independence Scores are usually below the mean. Stalwarts are heavily involved in the review of district court judgments in a manner indicating a partisan bent. Yet, despite the clearest ideological convictions of any judge type, they do not draw dissents and concurrences at rates expected by such strong ideological views. Stalwarts appear to be the judges most consistent with the classic attitudinal model.

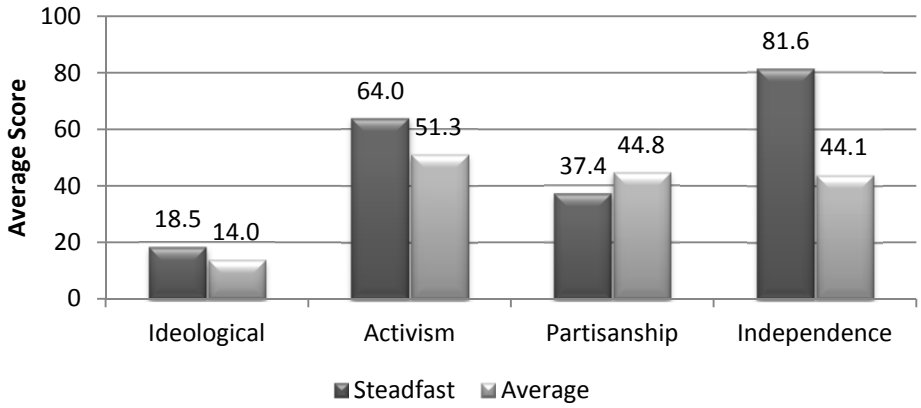
**Figure 6 - Average Regulating Judge Scores**




Regulating judges are focused on the reviewing district court judges in a more partisan manner than the average judge. Regulating judges, as illustrated in Figure 6, typically have Activism, Partisanship, and Independence Scores above the mean and average ideological scores. The partisanship ratings are usually the highest Score for such judges. This

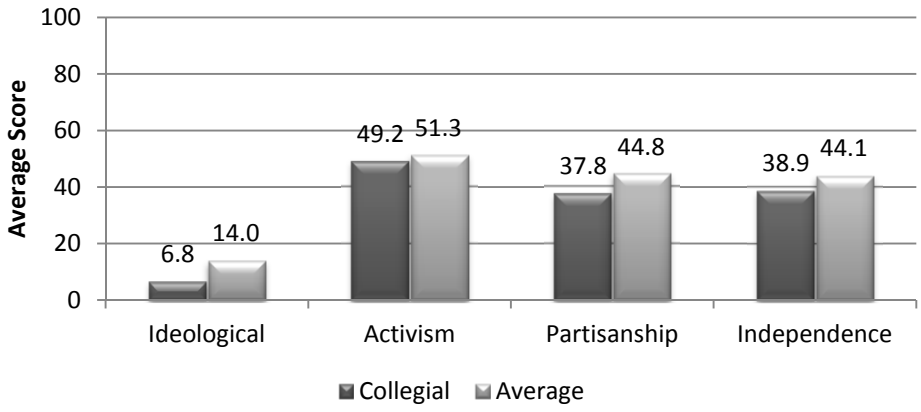
means that Regulating judges are typically more likely to reverse the judgments of district court judges in situations where deference might be expected. And when such judges substitute their judgments in place of the district judge's, the appellate judge typically did so reflecting partisanship in the aggregate.

**Figure 7 - Average Steadfast Judge Scores**



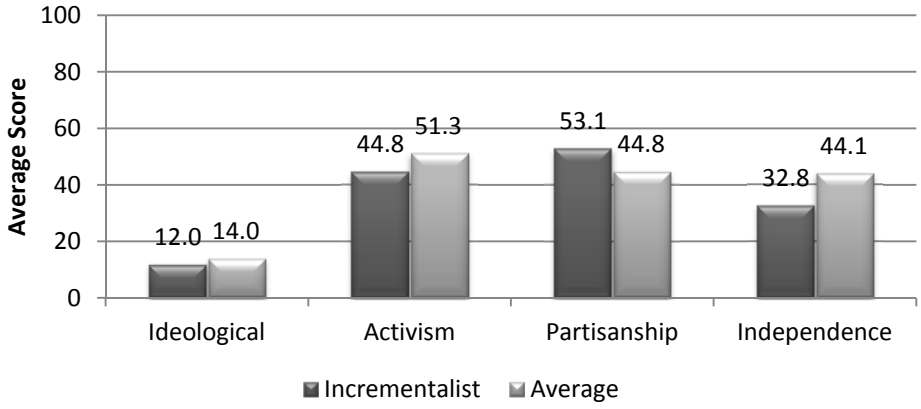

Steadfast judges are those that maintain their convictions, regularly drawing disagreements with co-panelists and not exhibiting deference to district courts. Notably, these convictions do not appear to be particularly ideological or partisan. As Figure 7 indicates, Steadfast judges have the highest Independence Scores of any type, elevated Activism Scores, and average Ideological and Partisanship Scores. Steadfast judges might be thought of as the relative lightning rods of the federal appellate courts because they are more likely to disagree with or invite disagreement by other judges (including district judges). Yet, surprisingly, there is no indication that such judges did so in a particularly ideological manner or that ideology is the source of disagreement with other judges. The judges are Steadfast because their numerous disagreements apparently stem from other sources or are derived from limited willingness to compromise their points of view.

**Figure 8 - Average Collegial Judge Scores**




Collegial judges are those that exhibit the strongest adherence to the norm of consensus in the appellate courts.[104] These judges, on average, exhibit scores below the mean in every category as seen in Figure 8. Their regulation of the district courts is relatively modest. Because their overall profile might indicate a preference for less disagreement and conflict among federal judges, they represent ideal Colleagues. This group includes the highest number of judges of any of the nine types.

**Figure 9 - Average Incrementalist Judge Scores**

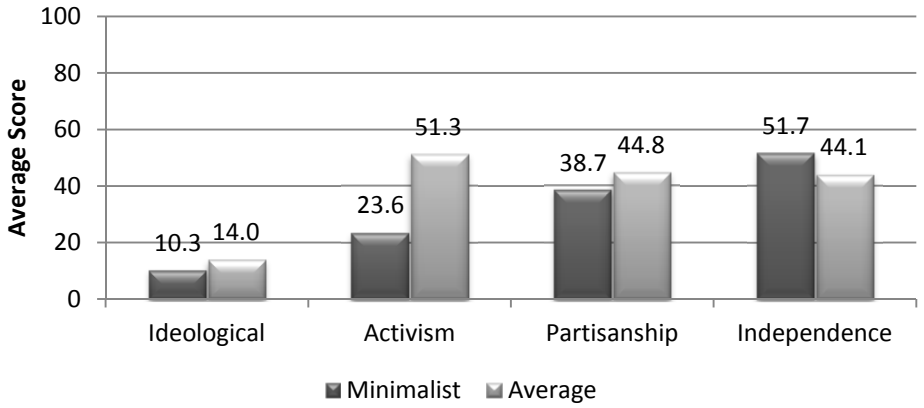



Incrementalist judges are those that do not often fight ideological conflicts at the appellate level, but do push the district courts in a slightly more partisan direction. These judges, whose Scores are in Figure 9,

[104] *See generally*, Joshua B. Fischman, *Decision-Making Under a Norm of Consensus: A Structural Analysis of Three-Judge Panels*, (1st Annual Conference on Empirical Legal Studies Paper, Jan. 4, 2008), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=912299.

typically have elevated Partisanship scores and Activism, Ideological, and Independence Scores that are slightly lower than or at the mean. Incrementalists are not true ideological or partisan moderates, but their overall profile indicates a relatively restrained stance in ideological disputes. Their lower Independence Scores indicates that they do not pursue conflict if it can be avoided. Unlike Regulating judges, Incrementalist judges are not typically as partisan and are far less activist. Whatever goals (strategic, legal, or otherwise) these judges have, they apparently approach them from the perspective of an pragmatist that seeks evolution and not revolution.

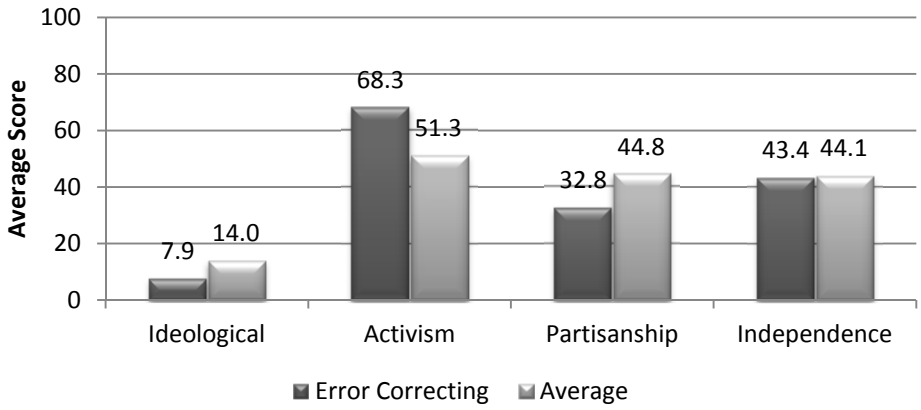
**Figure 10 - Average Minimalist Judge Scores**




Judicial Minimalists are those that are most deferential to the judgments of the district courts. Judicial minimalism is the one style discussed in this Article that has received significant theoretical attention by scholars.[105] Although it has been taken to mean different things in varied contexts, the essential idea of minimalism is that judges act in a restrained manner. In this study, as demonstrated in Figure 10, such judges have the lowest Activism Scores, slightly higher Independence Scores, and close-to-average Ideological and Partisanship scores. Because the behavior of Minimalists shows the strongest adherence to norms of deference in place of partisanship and ideology, their behavior exhibits the essence of Minimalism. Because most judges are far more aggressive in exercising judicial power, the Minimalists have higher Independence Scores indicating disagreements in judicial perspectives with most other judges at the appellate level.

[105] *See, e.g.*, CASS R. SUNSTEIN, ONE CASE AT A TIME: JUDICIAL MINIMALISM ON THE SUPREME COURT (1999).

**Figure 11 - Average Error Correcting Judge Scores**




Error correctors are judges who seem to be primarily concerned with fixing "wrong" decisions by the district court judges without a partisan or ideological bent. Figure 11 outlines the Scores of Error Correctors, who exhibit higher levels of activism than average, slightly lower partisanship and ideology levels, and independence measures that are close to the mean. As a group, they are less likely to defer to district judge judgments, but generally more likely to apply deferential rules in a party-neutral manner. They are similar to Regulating judges, but are significantly less partisan in reviewing district court judges.

The judicial types for each judge studied with adequate data are listed in Appendix C at the conclusion of this Article. Discussions of the style types of high profile judges are in Section III.C. However, before reviewing the application of the typology to individual judges, it is helpful to consider certain relationships among the different judicial styles and other data collected.

### *C. Evaluating the Judicial Typology*

While the identification of distinctive judging styles might be worthwhile in its own right, the question remains as to what the typology of styles really tells us. Testing, qualitative and quantitative, is necessary, as much as possible,[106] to ensure that the style typology is a valid indicator of judicial decisions.[107]

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[106] There are several limitations to the data used and results included in this study. As a result, it is essential to be absolutely clear about the proper scope of inferences that should be drawn from this study and in future research. All of the data studied in this Article were from 2008 opinions. As a result, the labels given to judges in this article are only representative of that time period. Studies in other areas have shown the potential for drift over time which is not accounted for by the limited time frame used here. *See* Lee Epstein,

Unfortunately, the most straightforward way to determine the meaningfulness of the nine identified judicial styles toward understanding judicial behavior would be to test how well they predict judicial behavior. Unfortunately, in order to do so would require a dataset wholly separate from the one that is used to create the underlying measures of activism, ideology, independence, and partisanship. Otherwise, the test results would be entirely circular because the input cases would be the same as those used to judge the efficacy of the output values.[108] As noted earlier, there simply is no publicly available data that has been coded to properly test the judicial styles.

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Andrew D. Martin, Kevin M. Quinn, & Jeffrey A. Segal, *Ideological Drift Among Supreme Court Justices: Who, When, and How Important?*, 101 NW. U. L. REV. 1483 (2007) (finding in their study that an ideological drift among Supreme Court Justices occurred over time). Further, the population of 178 judges examined here is not representative of judges from other time periods. This group was largely composed of nominees of Presidents Clinton and George W. Bush. And the nominees from older Presidents were not necessarily a representative sample of all nominees by those Presidents. Particularly in this era where there are enormous political fights about nominations to the courts of appeals, it is unclear if any results here can be generalized across time. Lastly, even assuming that the nine identified styles account for the extent of modern judge types, there is no reason to believe that those styles encapsulate the possible approaches of judges used throughout time.

[107] "A *measure is facially valid if it is consistent with prior evidence*, including all quantitative, qualitative, and even informal impressionistic evidence." Epstein & King, *supra* note 73, at 89. Validity is determined by whether the measurements used in an empirical study reflects the concept(s) measured. *Id.* at 87. Generally, validity can be understood along several dimensions. Lee Epstein and Gary King previously identified three possible ways to view validity: "facial validity, unbiasedness, and efficiency." *Id.* at 89. Although establishing validity in each of those categories is not strictly required, *Id.* ("[N]o one of these is always necessary, and together they are not always sufficient, even though together they are often helpful in understanding when a measure is more or less valid."), this article considers each type in turn. Because validity of the four underlying judicial traits has been considered in prior scholarship, the validity discussion in this Article focuses solely on the nine judicial types. If there were validity problems with the underlying measures, however, those would certainly affect the validity of the results of this further study.

The metric method is unbiased if it produces results that are consistent through repetitive analysis. *Id.* at 92 (emphasis removed). There is an area where the methodology of this study excels. Relying on computer coding, quantitative analysis, and excluding judges with insufficient population sizes provides a stable, unbiased measurement methodology. There is some potential for bias in the decision as to the appropriate number of judicial types, but that is inevitable in the use of cluster analysis. The last validity concern is "the basic idea being to choose the one with the minimum variance." *Id*. at 95. Treating the judges studied in 2008 as the population instead of a sample of a larger body of cases diminishes the level of variance in the study. Further, the data was analyzed with frequentist statistics which have no variance outside of a sampling structure.

[108] Fischman & Law, *supra* note 15, at 179.

Nonetheless, the typology model can be effectively evaluated using conventional wisdom based upon qualitative assessments. In the dataset, there are at least fourteen judges that might be deemed to have sufficient notoriety such that qualitative assessments of their judicial types might be made. Figure 19 below includes a list of such judges, their component scores, and resultant type (including appointing President and ideological status based upon the Ideology Score):

**Figure 19 – Notable Judges**

| **Judge** | Ideo. | Act. | Part. | Ind. | Overall Type |
|---|---|---|---|---|---|
| Danny J. Boggs | 40.1 | 20.7 | 34.7 | 64.0 | Trailblazing Conservative Republican |
| Deborah L. Cook | 34.5 | 60.2 | 65.2 | 60.7 | Regulating Conservative Republican |
| Frank H. Easterbrook | 9.8 | 50.0 | 57.8 | 43.6 | Incrementalist Moderate Republican |
| Edith H. Jones | 15.6 | 51.0 | 21.3 | 51.5 | Error Correcting Moderate Republican |
| Michael W. McConnell | -3.2 | 29.4 | 45.1 | 58.5 | Minimalist Moderate Republican |
| Diarmuid F. O'Scannlain | 45.2 | 38.2 | 55.1 | 33.4 | Consensus Building Conservative Republican |
| Richard A. Posner | 18.7 | 49.0 | 44.9 | 36.4 | Incrementalist Moderate Republican |
| Stephen R. Reinhardt | -20.4 | 61.2 | 24.6 | 72.4 | Steadfast Liberal Democrat |
| Sonia Sotomayor | -17.3 | 39.3 | 57.2 | 48.1 | Regulating Moderate Democrat |
| Sidney R. Thomas | -2.9 | 61.7 | 32.4 | 57.0 | Error Correcting Moderate Democrat |
| Kim M. Wardlaw | -17.5 | 36.8 | 71.8 | 46.2 | Regulating |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | Moderate Democrat |
| J. Harvie Wilkinson III | 7.0 | 49.8 | 37.5 | 39.0 | Collegial Moderate Republican |
| Ann C. Williams | -12.5 | 60.8 | 35.2 | 38.5 | Error Correcting Moderate Democrat |
| Diane P. Wood | -28.0 | 48.9 | 53.5 | 26.5 | Incrementalist Liberal Democrat |

The judges listed above either have "celebrity" status as public intellectuals or judicial lightning rods, have been mentioned as possible Supreme Court Justices, or, in one case, actually been appointed to the Supreme Court.

Among the notable judges, there are a lot of good fits in terms of similarities between impressionistic and quantitative categorization. Judge Wilkinson, a judge who has long championed collegiality among judges is designated as a Collegial Moderate Republican.[109] While some might be surprised at the "Moderate" categorization, his rebuke of what he saw as conservative judicial activism in the Supreme Court's *Heller*[110] opinion gives credence to the designation.[111]

Many of the notable judges sit on the Seventh Circuit including Judges Easterbrook, Posner, Williams, and Wood. Despite their occasional publicized disagreements,[112] there is nothing obvious in either Judge Posner or Easterbrook's history that would conflict with the Incrementalist Moderate Republican grouping where they are both found. Similarly, Judge Wood is an Incrementalist Liberal Democrat which coincides well with the impressions of her given when President Obama considered her for the Supreme Court.[113] There are not as many public assessments of Judge Williams, but Error Correcting Moderate Democrat seems to be an acceptable label based upon available information.[114]

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[109] J. Harvie Wilkinson III, *The Drawbacks of Growth in the Federal Judiciary*, 43 EMORY L.J. 1147, 1170 (1994).

[110] District of Columbia v. Heller, 128 S. Ct. 2783 (2008).

[111] J. Harvie Wilkinson III, *Of Guns, Abortions, and the Unraveling Rule of Law*, 95 VA. L. REV. 253, 274, 322 (2009).

[112] *See, e.g.*, Ameet Sachdev, *Blagojevich Jury Names Create Rift among Judges*, CHI. TRIB., July 16, 2010, at C26.

[113] *See, e.g.*, *Cross-Court Shot*, INVESTOR'S BUSINESS DAILY, Apr. 29, 2010, at A10.

[114] Christi Parsons & Bob Secter, *2nd Chicago Judge in Mix for High Court; Ex-Federal Prosecutor Was Named to Bench by Reagan*, CHI. TRIB., Apr. 22, 2010, at C7.

Justice, then Judge, Sotomayor is considered a Regulating Moderate Democrat. Because she was a Supreme Court nominee, the public record concerning her judging qualities is necessarily filled with hyperbolic vitriol[115] and praise.[116] Nonetheless, her background (having been originally nominated to the district court by President H.W. Bush) and general record on the bench are indicators of moderation.[117] And her designation as a Regulating judge befits a judge who at least has some reasonable partisan applications of the law that might have provided some basis for objecting to her appointment to the Supreme Court.

Judge O'Scannlain is considered a Consensus Building Conservative Republican. Ninth Circuit court watchers would probably not quibble with the "Conservative" label, but might be surprised by the Consensus Building designation.[118] However, as the results of this study indicate, there is no strong connection between exhibiting higher levels of ideology and drawing or engaging in dissents. There is nothing in the public record which discounts Judge O'Scannlain as a Consensus Builder. Two of Judge O'Scannlain's foils on the Ninth Circuit, Judges Reinhardt and Wardlaw, were typed as a Steadfast Liberal Democrat and Regulating Moderate Democrat, respectively. Judge Reinhardt's classification fits perfectly with his public reputation.[119] Similarly, Judge Wardlaw is often considered quite liberal on some issues, but conservative on others.[120] Because she is Regulating judge, she does exhibit a higher-than-average level of partisanship in reviewing lower court judgments. So, it is possible that her liberal nature primarily surfaces in her interactions with the district courts, but her overall profile is moderate by virtue of her combined liberal and conservative views. Judge Thomas, another Ninth Circuit judge, was a relative unknown until some progressive groups championed him as a potential nominee to the Supreme Court.[121] That seems to be an odd fit with his type, Error Correcting Moderate Democrat. However, many commentators noted that there was nothing particularly ideologically liberal

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[115] *See, e.g.*, Tom LoBianco, *Lawyers Tag Sotomayor as "Terror on the Bench"*, WASH. TIMES, May 29, 2009, at A01.

[116] Robert Barnes, *Battle Lines Are Drawn on Sotomayor Nomination*, WASH. POST, May 28, 2009, at A1.

[117] Savage, *supra* note 33, at A10.

[118] Bob Egelko, *Court to Review Recall Ruling; Makeup of 11-Judge Panel Suggests Oct. 7 Election Likely to be Approved*, S.F. CHRON., Sept. 20, 2003, at A1.

[119] David G. Savage, *Did Victim's Photo Prejudice a Jury?; Another Ruling by the Liberal-Leaning 9th Circuit Comes under Supreme Court Review*, L.A. TIMES, Sept. 18, 2006, at A1.

[120] Howard Mintz, *Two California Latino judges emerge as candidates for Supreme Court*, SAN JOSE MERCURY NEWS, May 16, 2009, at A1.

[121] John Schwartz, *Long Shot for Court Has Reputation for Compassion and Persuasion*, N.Y. TIMES, May 6, 2010, at A17.

in Judge Thomas' record other than a couple timely high-profile decisions which caught the attention of progressive advocacy groups.[122]

Judges Cook and Jones were both floated as potential nominees for the Supreme Court by President George W. Bush.[123] Judge Cook's categorization as a Regulating Conservative Republican would explain why she would be a popular choice in some conservative circles.[124] In contrast, Judge Jones is listed as an Error Correcting Moderate Republican, but her reputation is generally of a strong conservative judge.[125] However, the public record is limited on Judge Jones and it is unclear if the type given is far off the mark.

Judge Boggs, of the Sixth Circuit, has been at the forefront of many of the judicial battles on that Circuit.[126] Viewing Judge Boggs as a Trailblazing Conservative Republican certainly fits with his role as a strong conservative voice in the federal judiciary. Judge McConnell, who was a law professor, became a federal judge, and is now a law school dean has been a vocal supporter of a philosophy of judicial restraint.[127] Thus, his categorization as a Minimalist Moderate Republican is an appropriate designation.

Overall, the categorizations represent fairly reasonable assessments of the notable judges based upon qualitative public impressions of them. There are, however, some designations with which some will surely disagree. Nonetheless, that is, in part, the value of the typology system. If the categories merely confirm what is already known, they do not add much to our collective understanding of decisionmaking. That the categorizations provide an acceptable level of agreement with qualitative evidence for the highest profile judges provides facial validity for the study.

## IV. PREDICTING JUDICIAL STYLES

A logical question that follows from the identification of separate judging styles is whether any background or demographic characteristics of judges are correlated with their style. For example, a judge who attended a particular law school, served first as a district judge, or is from a certain

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[122] *Id.*

[123] Renee Montagne, *Possible Supreme Court Nominees*, NATIONAL PUBLIC RADIO, July 8, 2005 (noting that Judge Jones had made the shortlist, but Judge Cook had not).

[124] *Id.* (noting Judge Cook's "firmly conservative credentials").

[125] Peter Wallsten & Richard B. Schmitt, *Vacancy on the Supreme Court*, L.A. TIMES, July 2, 2005, at A03.

[126] David Hawpe, *Clearing the Air on Sixth Circuit Judges' Junkets and Jousts*, THE COURIER-JOURNAL, Oct. 1, 2006, at 2H.

[127] Emily Bazelon & David Newman, *The Supreme Court Shortlist*, SLATE.COM, July 1, 2005.

circuit might exhibit different decisionmaking behavior in a statistically significant manner. Because there are 178 judges spread across nine judicial styles (an average of approximately 19.9 judges per style), the population sizes involved in various regression analyses are expected to find little or no evidence to find such connections. And because the distribution among the categories is highly uneven, it is worth noting that future research based upon larger populations of judges might identify more correlations. Nonetheless, using multinomial logistic regression, some background traits are found to be correlated with certain judicial styles.

### *A. Data for Background Factor Testing*

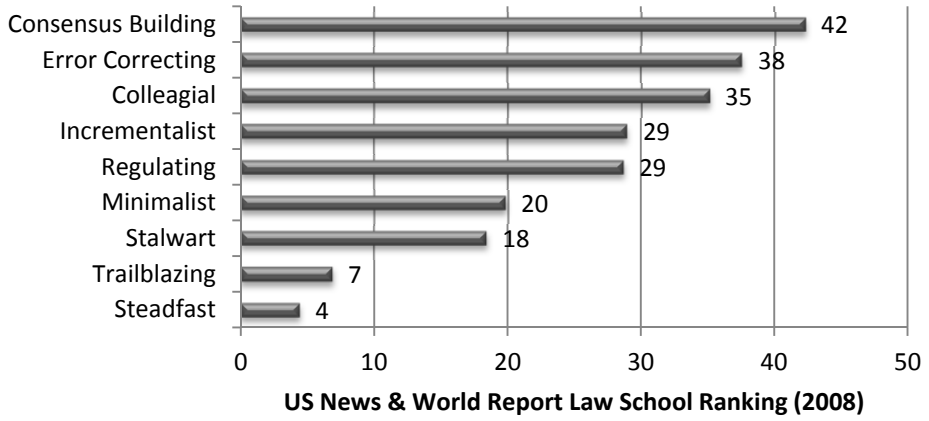
In addition to the Case Database, a separate database ("Judge Database") was constructed which included biographical and other data about individual judges. In the Judge Database, judges were coded for, among other variables: appointing president, presidential party, age at the time of appointment, age in 2008, composition of the Senate at the time of appointment, gender, race, law school attended, prior work experience, whether the president and majority of the Senate were of the same party at the time of appointment, and whether the judge took senior status during or before 2008. The Judge Database included data for all federal appellate judges that served on panels as well as district judges who had opinions reviewed in the Case Database. In all, background trait information was accumulated for over 1,500 federal judges. Data in the Judge Database was entirely human coded from publicly available information about the judges studied.

### *B. Law School Attended*

There has been little or no empirical study of whether a judge or lawyer's professional decisions are correlated with the law school that he or she attended. However, the data in this study shows that two significant correlations between a judge's law school and his or her judicial type. First, the ranking of the law school attended[128] is correlated with which judicial type a judge belongs. Figure 12 below indicates the average law school rank for judges in each category.

[128] Based upon the 2008 U.S. News and World Report law school rankings.

**Figure 12 - Average Law School Ranking by Judge Type (*p*=0.0369)**

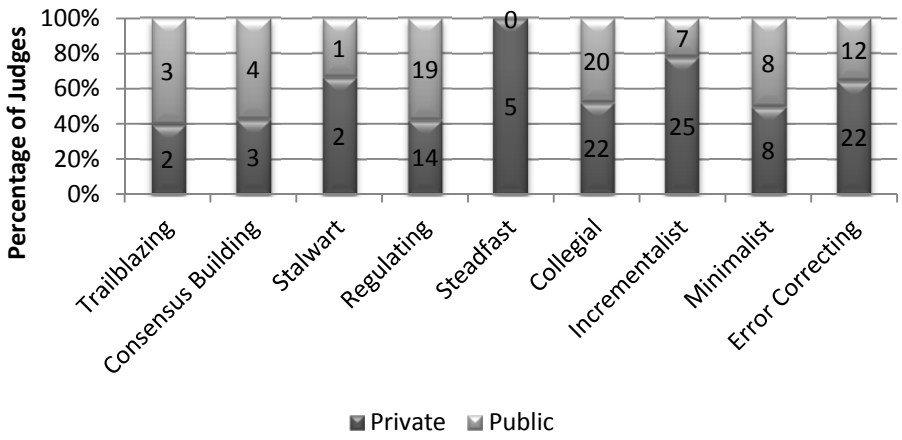



Perhaps most interesting is the judicial styles most strongly associated with contentiousness (Steadfast, Trailblazing, and Stalwart), on average, attended law schools that were much higher ranked (meaning they had a lower numerical ranking). In contrast, the types that epitomized collegiality (Consensus Building and Collegial) have among the lowest average law school ranking. In total, judges of the most contentious types (Steadfast, Stalwart, and Trailblazing) on average attended law schools ranked nearly thirty places higher than those judges associated with collaborative styles (Collegial and Consensus Building). Although these results do not mean, for example, that a law graduate from Yale or Harvard is destined to be a Trailblazer or Steadfast judge, some connection to law school education is clearly supported by the data.[129] Although the reason for this difference is unclear, it might be that judges with elite credentials are more confident in and committed to their particular legal perspectives. In contrast, judges from lower ranked schools might place other values, such as collegiality, before an unrelenting commitment to a judicial philosophy. Nonetheless, Consensus Builders are known for having strong ideological commitments without drawing conflict in the same way that their brethren from, on average, much higher ranked law schools.

A second correlation is found based upon whether the law school attended was public or private.[130] Figure 13 shows the breakdown of public and private law school graduates among the different judicial types.

[129] $p = 0.0369$; pseudo $R^2 = 0.0243$.
[130] $p = 0.0319$; pseudo $R^2 = 0.0249$.

**Figure 13 - Private versus Public Law School Attendance and Judicial Style (*p*=0.0319)**




A few categories stand out as having unusual distributions of private and public law school graduates. All five Steadfast judges attended private school. Over 78% of Incrementalist judges also graduated from private law schools. However, Trailblazing, Regulating, and Consensus Building judges more often matriculated from public law schools.

Certainly, there is overlap between the correlations identified with law school ranking and the type of law school (public or private). For example, the average ranking of a law school for Steadfast judges is approximately fourth overall. Because private law schools dominate the top of the rankings, it is, thus, unsurprising that Steadfast judges all attended private school. It is difficult to be confident in identifying the basis for these correlations without further exploration, but the results support the proposition that where a judge attended law school is not just an insignificant biographical note in understanding their decisionmaking.

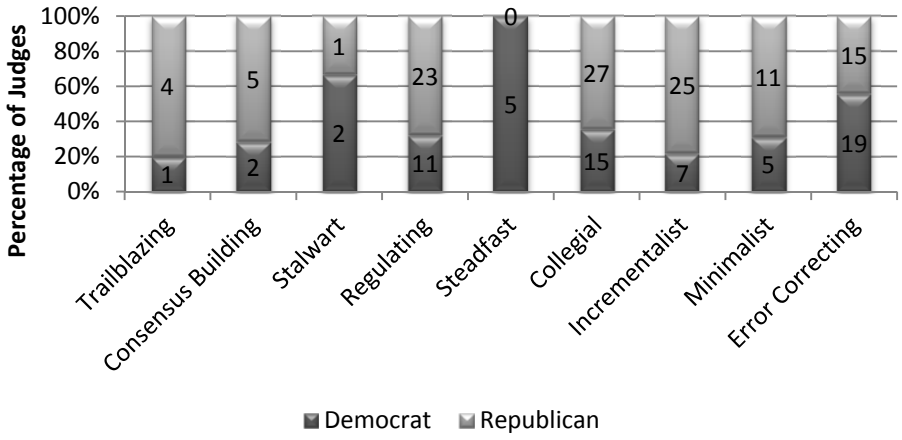
### *C. Appointing President's Political Party*

Although ideology is an important component of the judicial types, only the absolute value of Ideology Score was used (yielding the Ideological Score). This means that a strong conservative and liberal often are sorted into the same category. As a result, it does not necessarily follow that the party of the appointing President would correlate with the judicial type of the judge. Nonetheless, such a correlation is found based upon multinomial regression analysis of the data.[131] Figure 14 below shows the breakdown

[131] $p = 0.0075$; pseudo $R^2 = 0.0309$.

among each judging style of which appointing President's party nominated the judge.

**Figure 14 - Judge Type by Appointing President's Party (*p*=0.0075)**




Certain groups, such as Steadfast judges, demonstrate an ideological makeup outside of the normal distribution. In the case of Steadfast judges, their ranks are exclusively from those appointed by Democratic Presidents. In contrast, over 78% of Incrementalist and 80% of Trailblazing judges were appointed by Republican Presidents. It is difficult to know if some of these trends would hold with a larger population of judges in certain groups, but regression does show statistical significance of the types collectively based upon appointing party. Notably, perhaps due to population sizes in some sub-groups, the specific appointing President is not correlated with the type of judge.[132]

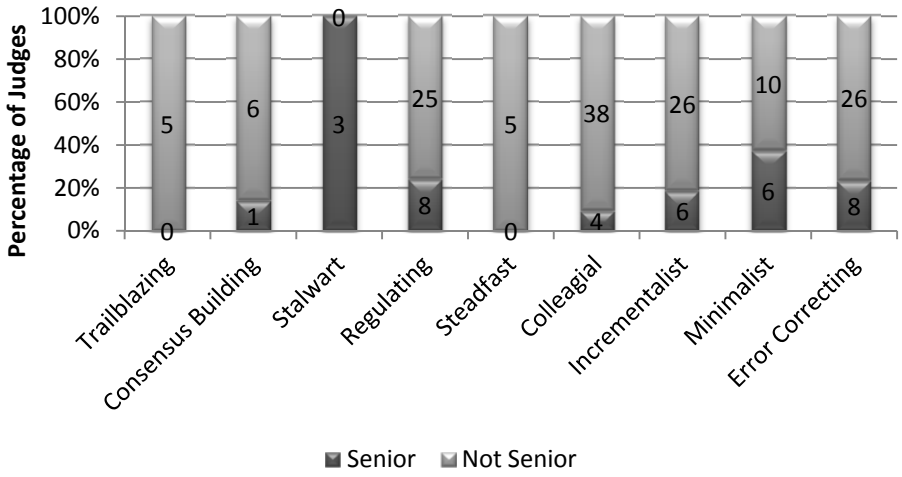
Because the appointees of Democratic Presidents are the minority in the courts of appeals, the domination of the Steadfast category follows. Such a judge often finds herself outside the mainstream perspectives embodied in existing law and might become Steadfast against such political worldviews. Similarly, a majority party would necessarily contain more Incrementalists and Trailblazers. Because the majority party could have shaped the law in a worldview largely consistent with that party, many judges would not meddle with reshaping appellate law and instead keep the district courts from straying too far outside of the dominant political perspective in the appellate world. However, the majority party will always have some members who want to push the law even further in a particular ideological direction. These judges naturally fall within the Trailblazing category.

[132] $p = 0.6084$.

### *D. Senior Status*

A third background trait that is correlated with the judicial categorization system was whether the judge had taken senior status at any time in or prior to 2008.[133] Figure 15 below shows the distribution of judges who had taken senior status among the nine judicial styles.

**Figure 15 - Senior Status and Judging Style (*p*=0.0076)**




A judge's self-selection offered one possible explanation for why certain judicial styles are overrepresented among judges who had taken senior status. In order for a senior judge to appear in this study, he or she must have decided not to retire and still hear enough cases to qualify. Because senior judges can normally retire and receive the same pay as they would by continuing to work, many of those that stayed on the bench were clearly not motivated by financial gain.[134] Further, to hear a docket equivalent in size to active status judges was a decision made by the individual judge. It might follow, then, that the three Stalwart judges were understandably all senior status judges who were firmly committed to strong ideological and partisan positions.[135]

### *E. Circuit*

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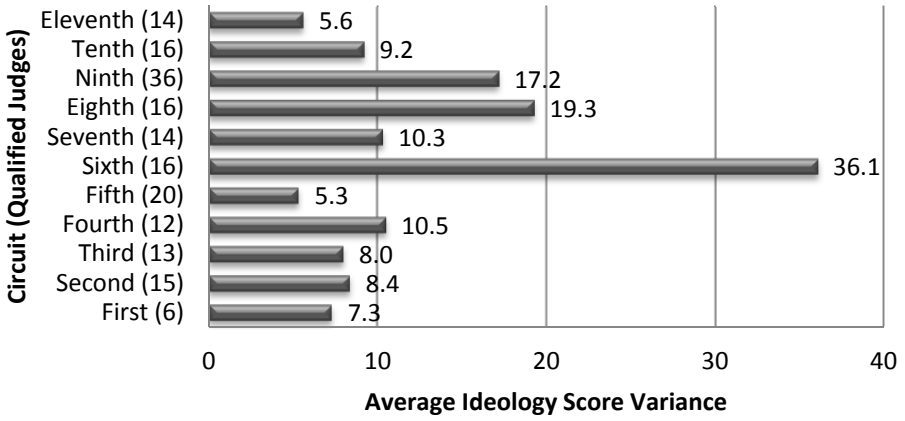
[133] $p = 0.0076$; pseudo $R^2 = 0.0309$.

[134] Stephen J. Choi, G. Mitu Gulati & Eric A. Posner, *Are Judges Overpaid? A Skeptical Response to the Judicial Salary Debate*, 1 J. OF LEGAL ANALYSIS 47, 57-58 (2009).

[135] Of possible note, among senior status judges, the date at which they took senior status was uncorrelated with judge type. $p = 0.0722$.

The last background trait associated with judge type is the circuit on which the judge was appointed.[136] It is worth noting one prime example here. The Sixth Circuit, as illustrated in Figure 16 below is marked by a much higher level of ideological division than the other courts of appeals.[137]

**Figure 16 - Average Ideological Variance by Circuit ($p$ < 0.0001)**




As measured by the Ideology Scores, of the 178 judges in the sample, an average Sixth Circuit judge has an Ideology Score that is 36.1 points from the mean for that circuit. The next most divided circuit is the Eighth, with an average variation of 19.3 points. Eight of the eleven circuits studied have average variations less than 11 points. Needless to say, the Sixth Circuit is an outlier among the circuits in terms of ideological divide. Such statistical findings are further supported by media and scholarly coverage of the opinions issued from that court.[138]

Based upon such sharp ideological differences, it is expected that the Sixth Circuit has a disproportionate amount of the judging types associated with high ideology and independence. Figure 21 below includes a list of all of the Sixth Circuit judges in the 178 judge sample and their identified type.

**Figure 17 - Sixth Circuit Judging Types**

| Judge | Overall Type |
|---|---|
| Eric L. Clay | Trailblazing Liberal Democrat |
| Danny J. Boggs | Trailblazing Conservative Republican |

[136] $p < 0.0001$; pseudo $R^2 = 0.2338$.

[137] The chart was created using the 2008 Case Database and not the 2009 Testing Database.

[138] Dan Horn, *6th Circuit's Infighting Gets Personal*, CIN. ENQ., Oct. 16, 2008, at 1A.

| | |
|---|---|
| Richard A. Griffin | Trailblazing Conservative Republican |
| John M. Rogers | Trailblazing Conservative Republican |
| David W. McKeague | Trailblazing Conservative Republican |
| Gilbert S. Merritt, Jr. | Stalwart Liberal Democrat |
| Jeffrey S. Sutton | Regulating Moderate Republican |
| Deborah L. Cook | Regulating Conservative Republican |
| Eugene E. Siler, Jr. | Regulating Conservative Republican |
| Alice M. Batchelder | Regulating Conservative Republican |
| Karen N. Moore | Steadfast Liberal Democrat |
| Ransey G. Cole, Jr. | Steadfast Moderate Democrat |
| Martha C. Daughtrey | Steadfast Moderate Democrat |
| Ronald L. Gilman | Steadfast Conservative Democrat |
| Julia S. Gibbons | Minimalist Moderate Republican |
| Boyce F. Martin, Jr. | Error Correcting Liberal Democrat |

The Sixth Circuit had sixteen total judges with sufficient population sizes. Among those, there are five Trailblazing, one Stalwart, and four Steadfast judges. Thus, ten of the judges are of the most types prone to conflict. In the other ten circuits, there are only nineteen more judges of those three types. It is unclear if the judicial types in the Sixth Circuit are a partial product or cause of the ongoing situation there, but there is evidently a strong correlation exhibited between judge type and conflict within that Circuit.

## CONCLUSION

Judges are like any other group of people – they differ in their approaches at work, can be assessed in a multitude of ways, and do not perform in isolation. This study highlights the shortcomings of existing studies and models of judicial behavior which reject those basic ideas. The nine judge categories identified in this Article illustrate that our vocabulary and empirical understanding of judicial decisionmaking has grown stagnant. Instead of merely referring to and studying judges as "activist" or "conservative," there is a need to recognize that such simple categorizations are woefully inadequate. There is strong empirical evidence that a complete account of judicial decisionmaking cannot rely on such simplistic assumptions. By limiting the scope of our inquiry and methods, we have missed tremendous opportunities to provide valuable quantitative information about some of the most important actors in our constitutional system.

There are numerous advantages to the style typology created in this Article versus the dominant modes of understanding judicial

decisionmaking. First, it opens up entirely new avenues for research. For example, does the presence of a Consensus Builder on a panel offset ideological and stylistic differences among co-panelists to increase unanimity? Does changing the stylistic makeup of a circuit have a significant effect on how often that circuit reverses district court judgments or registers a dissent? Are certain judicial styles related to higher rates of substantive outcome such as a Steadfast judge being more apt to find for a criminal defendant? The typological approach described in this Article warrants a reimagining of empirical scholarship of judicial decisionmaking that opens lines of inquiry that were previously impossible.

Second, the approach provides a data-based outsider perspective on the differing ways judicial decisions are reached so that, as Judge Richard Posner commented, we do not rely on the metaphorical cats (judges) to tell us about feline psychology (judicial decisionmaking of individual judges).[139] Third, the style typology integrates and moves beyond the attitudinal model that has dominated empirical research of judges for decades. Fourth, the typology unites qualitative and quantitative understandings of judicial behavior instead of relying wholly on either statistical or impressionistic accounts. Ultimately, the typology described and studied herein provides valuable data-based information to scholars examining judicial behavior, politicians engaged in judicial nomination debates, and a public increasingly concerned about the role of judges in American society. In doing so, this project hopefully marks a new direction in how we understand the entirety of the essential third branch of the federal government that has been too often neglected in empirical research.

* * *

[139] POSNER – HOW JUDGES THINK, *supra* note 53, at 2 ("Biographies are more reliable than autobiographies, and cats are not consulted on the principles of feline psychology.").

## APPENDIX A – COMMON ADJUSTMENT METHODOLOGY

As noted in the discussion of the four scores, there were several common adjustments made to the raw scores to incorporate specific factors that might explain portions of the underlying variance measured by the scores. The four possible common adjustments were for a judge's circuit (applied to Ideology, Activism, and Partisanship Scores), "super-panel" effects (applied to Ideology, Activism, and Partisanship Scores, case issue mix (applied to all four measures), and common scaling (applied to all four measures).

The circuit adjustment relied on two basic premises: 1) a variety of differences between the circuits might explain variance in behavior; and 2) judges traveling between circuits would provide a means to calculate the amount of variance that was due to circuit differences. The first premise was likely to be non-controversial, but it should be noted that the adjustments made to the Activism and Partisanship Scores were very minor because of limited differences in behavior observed by traveling judges. The second contention concerning senior status judges sitting on panels in different circuits warrants further explanation.

There were 26 senior status judges who were on panels that issued opinions in 2008 in more than one circuit. Combined, they accounted for votes on 2,482 panels in the Case Database. Because each of those panels afforded up to three possible interactions with other judges (two for co-panelists and one for the district judge), there were potentially nearly 7,500 data points derived from these judges. The assumption was made that whatever trait was studied would remain constant in any circuit that the judge sat. So, when Judge Pasco Bowman heard cases in the Eighth and Eleventh Circuits, he would have the same activism, ideology, and partisanship traits. Thus, any change in his behavior between the two circuits would be due to unidentified differences in the circuits.

Because the distribution of the traveling votes was not evenly spread among the circuits, the 26 judges had their collective scores aggregated weighted according to how many votes each one issued in a particular circuit. Doing that allowed an expected traveling judge value to be determined for each circuit. That was computed using this formula (Ideology is used in the example, but the principal is the same for each score):

*Expected Ideology Score = (Judge A votes in Circuit X * Judge A Ideology Score + Judge B votes in Circuit X * Judge B Ideology Score + Judge C votes in Circuit X * Judge C Ideology Score) / (Judge A votes in Circuit X + Judge B votes in Circuit X + Judge C votes in Circuit X)*

The actual scores were then computed collectively (as one hypothetical traveling judge) for all of the traveling judges within a circuit.[140] The difference between the expected and actual scores was the basis for the circuit adjustment. The raw adjustment number was then divided by the number of traveling votes in the circuit so that the circuit differential could be determined on a per-vote basis. Then each judge within the circuit would have the circuit adjustment applied based upon the number of votes he or she issued.[141]

"Super-panel" effects were the expected variance in voting caused by the political background of co-panelists and district judge being reviewed. Unlike the results in other panel effects studies, the integration of the district judge created new values which warranted different adjustments. It was determined that the party of the appointing President on the "super-panel" affected individual judge's decisions to dissent and reverse. Figures 19 and 20 below indicate the magnitude of those differences based upon the results from the Case Database.

[140] The collective treatment of traveling judges was necessary because individual judges often had too few votes in particular circuits. As a result, combining the scores was the only means to ensure that the majority of the traveling judge information was not discounted entirely. If more data were available, a more complex adjustment system could be utilized.

[141] Prior versions of the Ideology and Activism Scores were computed using circuit adjustments that were made on a per-judge basis. The switch to a per-vote basis explains a substantial portion of the changes in the Scores used in this study.

**Figure 19 - Panel Disagreement Rate by Appointing President's Party of Co-Panelists and District Judge**

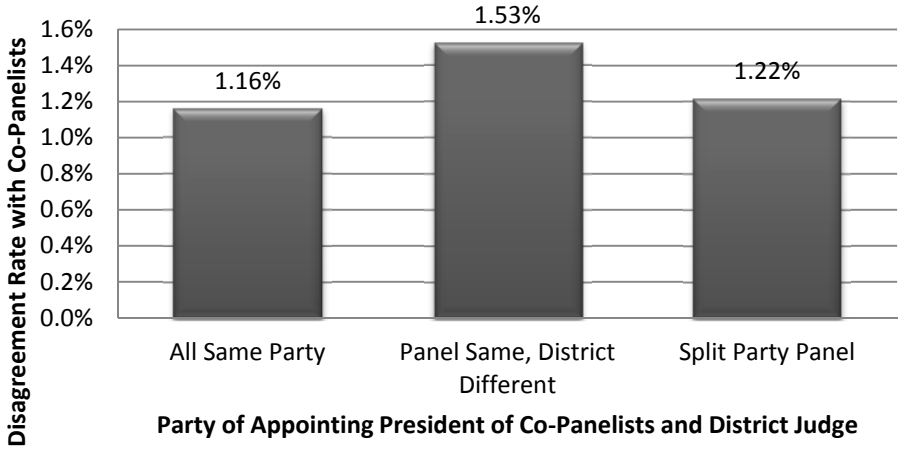
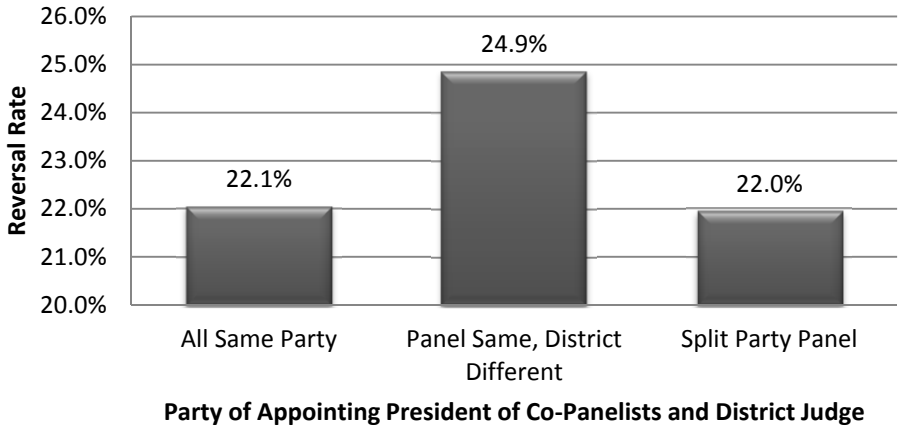



**Figure 20 - Reversal Rate by Appointing President's Party of Co-Panelists and District Judge**




Consequently, totals were tallied for each judge based upon the six possible political configurations for a judge's two co-panelists and district court judge being reviewed. Those potential arrangements were: 1) two Republican co-panelists, Republican district judge ("RR-R"); 2) two Republican co-panelists, Democratic district judge ("RR-D"); 3) one Republican and one Democratic co-panelist, Republican district judge ("RD-R"); 4) one Republican and one Democratic co-panelist, Democrat district judge ("RD-D"); 5) two Democratic co-panelists, Republican district judge ("DD-R"); and 6) two Democratic co-panelists, Democratic district judge ("DD-D"). Based upon the data in Figures 26 and 27, it was

determined how much variance in the judge scores could be explained by sitting on panels with the above six configurations. For example, if a judge sat on 30 RR-R panels and 10 DD-D panels, it was assumed that the 10 DD-D panels would cancel out the effects of 10 RR-R panels. However, the remaining 20 RR-R panels would pull the studied judge in a conservative direction and lower his or her reversal rate. As a result, the judge's respective scores were adjusted based upon the expected magnitudes of those effects.

The courts of appeals studied here reviewed different sets of cases from different sets of district judges based upon geography.[142] Within each circuit, each judge was randomly assigned to hear cases usually on panels of three judges. As a result, any given judge studied could have had a vastly different mix of issues to rule upon than the average judge. Consequently, an adjustment was made based on differences in dockets of judges in order to decrease the degree to which any unobserved variables would affect the results.[143] In the Case Database, one particular distinction in case types proved significant in both dissent and reversal rates. In criminal cases, judges on panels agreed 99.1% of the time and affirmed the judgment of the lower court in 83.2% of cases. In contrast, the panel disagreement rate in civil cases was 98.5% and the affirmance rate was 73.3%. There were also intersecting differences when deferential and non-deferential standards of review were applied in civil and criminal cases. As a result, each judge's criminal and civil cases were grouped and had scores calculated separately. When sample sizes for individual subcategories were too low (i.e., deferential standard criminal cases), then the scores were interpolated based upon expected and actual scores with that judge's case mix. The criminal and civil scores were then weighted according to the distribution of the average judge.

The last common adjustment was much simpler. Each score was adjusted to a similar scale. There were 178 studied judges who had at least 200 interactions with other judges. Scaling was done so that those 178 judges would define the extent of the scales. For the Activism, Partisanship, and Independence Scores were placed from 0 to 100 and the Ideology Score was scaled from -100 to 100. In the former case, this was done by moving

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[142] With the exception of the Federal Circuit, which was not included in this study, the remaining circuits have geographic and not subject-matter based jurisdiction. Paul R. Michel, Foreword, *Assuring Consistency and Uniformity of Precedent and Legal Doctrine in the Areas of Subject Matter Jurisdiction Entrusted Exclusively to the U.S. Court of Appeals for the Federal Circuit: A View from the Top*, 58 AM. U. L. REV. 699, 702 (2009).

[143] *See* David C. Vladeck, *Keeping Score: The Utility of Empirical Measurements in Judicial Selection*, 32 FLA. ST. U. L. REV. 1415, 1433-34 (2005) (discussing, in the context of the Choi and Gulati study, the need to account for differences among circuit caseloads in creating empirical measures).

the lowest observed raw score to the 0 and then multiplying all of the values by a constant needed for the highest score to reach 100. In the latter case (Ideology), the multiplier chosen was the value that would either move the highest score to 100 or lowest score to 100. It was determined that there was no reason to force symmetry by making one judge have a score of -100 and another 100.

## APPENDIX B – COMPONENT SCORES OF JUDGES

The following table includes Ideology, Activism, Partisanship, and Independence Scores for judges with at least 200 interactions with other judges.

| **Judge** | **Cir.** | **N**[144] | **Id.** | **Act.** | **Part.** | **Ind.** |
|---|---|---|---|---|---|---|
| Ambro, Thomas L. | 3 | 398 | 4.4 | 70.4 | 42.1 | 48.0 |
| Anderson, Robert L., III | 11 | 1007 | 0.4 | 47.0 | 43.1 | 35.4 |
| Anderson, Stephen H. | 10 | 332 | 7.0 | 39.8 | 67.5 | 19.7 |
| Baldock, Bobby R. | 10 | 352 | 5.1 | 44.8 | 45.0 | 53.9 |
| Barkett, Rosemary | 11 | 949 | 2.5 | 56.5 | 45.4 | 41.7 |
| Barksdale, Rhesa H. | 5 | 678 | 20.4 | 54.1 | 58.1 | 31.7 |
| Barry, Maryanne T. | 3 | 387 | 0.5 | 73.2 | 25.7 | 31.1 |
| Batchelder, Alice M. | 6 | 305 | 54.9 | 63.7 | 53.5 | 66.7 |
| Bauer, William J. | 7 | 389 | 8.9 | 67.2 | 47.5 | 47.0 |
| Bea, Carlos T. | 9 | 393 | 9.5 | 93.7 | 76.6 | 49.8 |
| Beam, Clarence A. | 8 | 276 | 36.3 | 47.4 | 50.6 | 56.2 |
| Beezer, Robert R. | 9 | 219 | 6.3 | 46.2 | 35.2 | 28.5 |
| Benavides, Fortunato P. | 5 | 717 | 1.6 | 65.9 | 41.2 | 26.9 |
| Benton, William D. | 8 | 659 | 5.5 | 33.7 | 48.5 | 46.8 |
| Berzon, Marsha S. | 9 | 370 | 47.7 | 33.2 | 24.1 | 21.2 |
| Birch, Stanley F., Jr. | 11 | 1005 | 9.6 | 36.9 | 45.0 | 36.0 |
| Black, Susan H. | 11 | 1044 | 0.4 | 53.5 | 37.4 | 33.6 |
| Boggs, Danny J. | 6 | 235 | 40.1 | 20.7 | 34.7 | 64.0 |
| Boudin, Michael | 1 | 233 | 1.7 | 53.0 | 61.7 | 53.8 |
| Bowman, Pasco M., II | 8 | 201 | 15.8 | 86.8 | 49.5 | 25.2 |
| Bright, Myron H. | 8 | 217 | 72.9 | 100.0 | 69.1 | 0.0 |
| Briscoe, Mary B. | 10 | 501 | 10.8 | 26.4 | 40.2 | 67.6 |
| Brorby, Wade | 10 | 230 | 2.2 | 42.1 | 59.0 | 23.2 |
| Bybee, Jay S. | 9 | 357 | 2.9 | 61.8 | 74.7 | 55.8 |
| Bye, Kermit E. | 8 | 559 | 3.8 | 56.2 | 43.2 | 46.2 |
| Cabranes, Jose A. | 2 | 474 | 6.6 | 62.2 | 29.6 | 24.4 |

[144] N refers to the number of interactions the listed judge had with other judges (district and appellate) in the dataset.

| | | | | | | |
|---|---|---|---|---|---|---|
| Calabresi, Guido | 2 | 267 | 14.8 | 34.4 | 51.7 | 26.9 |
| Callahan, Consuelo M. | 9 | 372 | 4.3 | 65.2 | 36.7 | 41.9 |
| Canby, William C., Jr. | 9 | 324 | 13.3 | 67.6 | 0.0 | 50.5 |
| Carnes, Edward E. | 11 | 1028 | 2.5 | 55.6 | 48.1 | 34.4 |
| Chagares, Michael A. | 3 | 363 | 8.4 | 55.5 | 66.7 | 36.7 |
| Clay, Eric L. | 6 | 379 | 30.4 | 36.2 | 20.1 | 65.9 |
| Clement, Edith B. | 5 | 693 | 0.0 | 52.5 | 57.9 | 37.2 |
| Clifton, Richard R. | 9 | 306 | 10.3 | 66.9 | 65.3 | 47.1 |
| Cole, Ransey G., Jr. | 6 | 419 | 13.0 | 62.4 | 46.8 | 75.7 |
| Colloton, Steven M. | 8 | 591 | 2.6 | 63.3 | 42.6 | 54.9 |
| Cook, Deborah L. | 6 | 266 | 34.5 | 60.2 | 65.2 | 60.7 |
| Cudahy, Richard D. | 7 | 221 | 13.8 | 69.8 | 69.6 | 54.7 |
| Daughtrey, Martha C. | 6 | 313 | 7.0 | 53.4 | 39.1 | 80.0 |
| Davis, W. Eugene | 5 | 672 | 6.2 | 37.8 | 51.0 | 37.6 |
| Demoss, Harold R., Jr. | 5 | 267 | 5.1 | 44.5 | 33.6 | 65.3 |
| Dennis, James L. | 5 | 702 | 0.4 | 48.2 | 44.6 | 46.2 |
| Dubina, Joel F. | 11 | 1020 | 5.2 | 54.2 | 55.8 | 33.0 |
| Duncan, Allyson K. | 4 | 633 | 0.4 | 53.7 | 26.4 | 51.4 |
| Easterbrook, Frank H. | 7 | 369 | 9.8 | 50.0 | 57.8 | 43.6 |
| Ebel, David M. | 10 | 381 | 2.9 | 27.1 | 30.3 | 77.3 |
| Edmondson, James L. | 11 | 384 | 9.6 | 40.8 | 53.7 | 53.4 |
| Elrod, Jennifer W. | 5 | 534 | 1.1 | 68.3 | 43.9 | 33.0 |
| Evans, Terence T. | 7 | 483 | 3.3 | 72.6 | 43.8 | 53.1 |
| Fay, Peter T. | 11 | 408 | 11.0 | 38.7 | 49.1 | 38.0 |
| Fernandez, Ferdinand F. | 9 | 246 | 42.3 | 86.4 | 100.0 | 39.5 |
| Fisher, D. Michael | 3 | 448 | 9.0 | 61.0 | 81.1 | 42.5 |
| Fisher, Raymond C. | 9 | 426 | 12.5 | 31.1 | 50.6 | 55.9 |
| Flaum, Joel M. | 7 | 480 | 7.3 | 47.0 | 70.7 | 31.5 |
| Fletcher, Betty B. | 9 | 416 | 8.6 | 46.3 | 64.9 | 67.9 |
| Fletcher, William A. | 9 | 323 | 22.8 | 22.6 | 30.9 | 29.7 |
| Fuentes, Julio M. | 3 | 350 | 7.3 | 73.3 | 39.3 | 32.9 |
| Garza, Emilio M. | 5 | 672 | 16.9 | 43.1 | 34.2 | 39.1 |
| Gibbons, Julia S. | 6 | 363 | 3.2 | 35.5 | 33.9 | 62.3 |
| Gibson, John R. | 8 | 344 | 42.6 | 49.0 | 31.1 | 14.0 |
| Gilman, Ronald L. | 6 | 411 | 23.9 | 77.1 | 45.0 | 79.9 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Gorsuch, Neil M. | 10 | 430 | 3.9 | 45.6 | 56.2 | 72.3 |
| Gould, Ronald M. | 9 | 395 | 24.8 | 57.7 | 54.0 | 56.7 |
| Graber, Susan | 9 | 438 | 44.0 | 48.7 | 35.0 | 35.2 |
| Gregory, Roger L. | 4 | 663 | 10.7 | 51.9 | 49.8 | 65.6 |
| Griffin, Richard A. | 6 | 425 | 56.5 | 36.8 | 30.6 | 59.6 |
| Gruender, Raymond W. | 8 | 598 | 46.9 | 41.4 | 50.9 | 32.1 |
| Hall, Cynthia H. | 9 | 225 | 5.9 | 58.5 | 59.3 | 30.7 |
| Hall, Peter W. | 2 | 451 | 9.5 | 36.1 | 28.3 | 20.9 |
| Hamilton, Clyde H. | 4 | 495 | 0.3 | 70.5 | 46.2 | 46.7 |
| Hansen, David R. | 8 | 213 | 6.6 | 33.0 | 28.8 | 61.7 |
| Hardiman, Thomas M. | 3 | 359 | 22.6 | 61.6 | 65.2 | 33.2 |
| Hartz, Harris L. | 10 | 454 | 11.6 | 23.2 | 36.5 | 69.2 |
| Hawkins, Michael D. | 9 | 369 | 22.1 | 42.9 | 49.7 | 31.4 |
| Haynes, Catharina | 5 | 339 | 2.8 | 46.2 | 17.6 | 35.4 |
| Higginbotham, Patrick E. | 5 | 615 | 4.1 | 55.0 | 36.6 | 32.0 |
| Holmes, Jerome A. | 10 | 453 | 6.7 | 38.9 | 35.4 | 32.3 |
| Howard, Jeffrey R. | 1 | 340 | 1.2 | 64.6 | 76.5 | 46.2 |
| Hull, Frank M. | 11 | 1053 | 0.5 | 45.5 | 38.3 | 30.3 |
| Ikuta, Sandra S. | 9 | 350 | 28.9 | 53.7 | 60.7 | 44.0 |
| Jacobs, Dennis G. | 2 | 336 | 6.3 | 53.0 | 39.5 | 43.5 |
| Jolly, E. Grady | 5 | 689 | 10.4 | 47.6 | 35.1 | 43.5 |
| Jones, Edith H. | 5 | 437 | 15.6 | 51.0 | 21.3 | 51.5 |
| Jordan, Kent A. | 3 | 432 | 2.2 | 47.4 | 60.1 | 52.1 |
| Kanne, Michael S. | 7 | 420 | 4.0 | 48.3 | 51.4 | 41.5 |
| Katzmann, Robert A. | 2 | 354 | 4.7 | 52.9 | 28.0 | 36.9 |
| Kelly, Paul J., Jr. | 10 | 492 | 4.8 | 58.2 | 58.7 | 59.9 |
| King, Carolyn D. | 5 | 737 | 4.8 | 43.3 | 45.7 | 47.0 |
| King, Robert B. | 4 | 699 | 2.5 | 54.9 | 37.6 | 36.2 |
| Kleinfeld, Andrew J. | 9 | 285 | 25.9 | 65.2 | 69.6 | 15.5 |
| Kravitch, Phyllis A. | 11 | 384 | 6.3 | 36.5 | 47.9 | 37.5 |
| Leavy, Edward | 9 | 264 | 3.7 | 64.0 | 41.3 | 32.2 |
| Lipez, Kermit V. | 1 | 300 | 2.5 | 78.7 | 20.4 | 51.0 |
| Livingston, Debra A. | 2 | 419 | 6.7 | 52.3 | 46.2 | 34.0 |
| Loken, James B. | 8 | 360 | 0.4 | 48.3 | 45.8 | 58.6 |
| Lucero, Carlos F. | 10 | 444 | 8.0 | 21.7 | 40.1 | 60.2 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Lynch, Sandra L. | 1 | 353 | 14.8 | 60.3 | 18.2 | 51.7 |
| Manion, Daniel A. | 7 | 444 | 4.4 | 46.4 | 41.5 | 56.6 |
| Marcus, Stanley | 11 | 1026 | 8.7 | 41.2 | 46.5 | 29.2 |
| Martin, Boyce F., Jr. | 6 | 334 | 24.3 | 75.2 | 13.0 | 37.7 |
| Mcconnell, Michael W. | 10 | 442 | 3.2 | 29.4 | 45.1 | 58.5 |
| Mckay, Monroe G. | 10 | 322 | 6.0 | 39.1 | 1.8 | 36.6 |
| Mckeague, David W. | 6 | 383 | 72.3 | 36.3 | 53.4 | 52.2 |
| Mckee, Theodore A. | 3 | 331 | 10.4 | 71.0 | 38.9 | 40.9 |
| Mckeown, M. Margaret | 9 | 359 | 11.6 | 21.6 | 40.4 | 45.2 |
| Melloy, Michael J. | 8 | 445 | 16.1 | 73.2 | 57.7 | 49.4 |
| Merritt, Gilbert S., Jr. | 6 | 212 | 100.0 | 78.6 | 45.5 | 61.4 |
| Michael, M. Blane | 4 | 650 | 36.0 | 49.9 | 44.6 | 25.0 |
| Miner, Roger J. | 2 | 219 | 11.5 | 73.5 | 45.4 | 28.6 |
| Moore, Karen N. | 6 | 433 | 28.1 | 66.0 | 31.5 | 100.0 |
| Motz, Diana G. | 4 | 570 | 3.0 | 60.0 | 48.2 | 42.8 |
| Murphy, Diana E. | 8 | 653 | 19.9 | 55.4 | 49.1 | 42.5 |
| Murphy, Michael R. | 10 | 467 | 9.6 | 56.6 | 14.2 | 56.9 |
| Nelson, Thomas G. | 9 | 249 | 9.0 | 37.7 | 70.6 | 54.1 |
| Niemeyer, Paul V. | 4 | 675 | 21.4 | 44.9 | 43.4 | 36.6 |
| O'brien, Terrence L. | 10 | 338 | 46.5 | 28.5 | 40.0 | 20.9 |
| O'scannlain, Diarmuid F. | 9 | 393 | 45.2 | 38.2 | 55.1 | 33.4 |
| Owen, Priscilla R. | 5 | 668 | 3.1 | 35.8 | 45.9 | 42.3 |
| Paez, Richard A. | 9 | 392 | 21.3 | 70.0 | 46.8 | 51.2 |
| Parker, Barrington D., Jr. | 2 | 382 | 3.7 | 33.4 | 30.1 | 34.2 |
| Pooler, Rosemary S. | 2 | 363 | 17.6 | 47.9 | 45.2 | 22.5 |
| Posner, Richard A. | 7 | 380 | 18.7 | 49.0 | 44.9 | 36.4 |
| Prado, Edward C. | 5 | 738 | 2.3 | 48.9 | 44.4 | 30.2 |
| Pregerson, Harry | 9 | 260 | 16.7 | 86.1 | 11.6 | 49.4 |
| Pryor, William H., Jr. | 11 | 992 | 4.6 | 53.2 | 47.3 | 36.3 |
| Raggi, Reena | 2 | 444 | 2.1 | 34.9 | 46.4 | 30.8 |
| Rawlinson, Johnnie B. | 9 | 281 | 5.0 | 81.4 | 77.6 | 84.5 |
| Reavley, Thomas M. | 5 | 512 | 3.5 | 42.9 | 28.2 | 54.9 |
| Reinhardt, Stephen R. | 9 | 239 | 20.4 | 61.2 | 24.6 | 72.4 |
| Rendell, Marjorie O. | 3 | 324 | 13.6 | 88.8 | 42.0 | 61.0 |
| Riley, William J. | 8 | 579 | 41.8 | 37.7 | 28.9 | 5.1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Ripple, Kenneth F. | 7 | 416 | 3.6 | 55.3 | 55.6 | 52.8 |
| Rogers, John M. | 6 | 370 | 67.6 | 35.5 | 47.1 | 65.1 |
| Roth, Jane R. | 3 | 393 | 4.9 | 39.0 | 52.8 | 37.0 |
| Rovner, Ilana D. | 7 | 429 | 6.6 | 57.9 | 46.2 | 51.9 |
| Rymer, Pamela A. | 9 | 312 | 26.9 | 82.2 | 35.3 | 56.0 |
| Sack, Robert D. | 2 | 377 | 2.9 | 32.1 | 56.1 | 29.0 |
| Schroeder, Mary M. | 9 | 315 | 10.2 | 55.7 | 61.1 | 51.0 |
| Scirica, Anthony J. | 3 | 293 | 2.0 | 57.0 | 31.6 | 46.2 |
| Selya, Bruce M. | 1 | 254 | 9.5 | 71.7 | 63.0 | 52.2 |
| Shedd, Dennis W. | 4 | 633 | 2.9 | 49.6 | 42.8 | 51.1 |
| Shepherd, Bobby E. | 8 | 605 | 5.5 | 49.0 | 36.5 | 55.5 |
| Siler, Eugene E., Jr. | 6 | 358 | 39.6 | 59.3 | 56.8 | 64.2 |
| Silverman, Barry G. | 9 | 354 | 15.7 | 52.6 | 29.3 | 24.0 |
| Sloviter, Dolores K. | 3 | 354 | 4.3 | 66.6 | 36.7 | 51.0 |
| Smith, David B. | 3 | 358 | 19.8 | 52.4 | 29.3 | 29.1 |
| Smith, Jerry E. | 5 | 684 | 6.6 | 45.8 | 26.5 | 50.8 |
| Smith, Lavenski R. | 8 | 618 | 1.1 | 74.4 | 60.2 | 27.6 |
| Smith, Milan D., Jr. | 9 | 345 | 26.3 | 53.9 | 45.5 | 26.5 |
| Smith, Norman R. | 9 | 330 | 7.5 | 45.7 | 55.5 | 42.3 |
| Sotomayor, Sonia | 2 | 360 | 17.3 | 39.3 | 57.2 | 48.1 |
| Southwick, Leslie | 5 | 660 | 1.6 | 30.7 | 45.3 | 39.1 |
| Stewart, Carl E. | 5 | 764 | 7.6 | 36.1 | 36.8 | 38.0 |
| Straub, Chester J. | 2 | 296 | 8.7 | 18.6 | 32.3 | 32.2 |
| Sutton, Jeffrey S. | 6 | 305 | 1.8 | 60.4 | 67.8 | 65.1 |
| Sykes, Diane S. | 7 | 389 | 17.4 | 23.5 | 35.2 | 46.6 |
| Tacha, Deanell R. | 10 | 388 | 22.4 | 24.8 | 50.9 | 41.8 |
| Tallman, Richard C. | 9 | 279 | 33.0 | 63.2 | 12.6 | 27.2 |
| Tashima, A. Wallace | 9 | 435 | 5.9 | 79.9 | 23.2 | 44.5 |
| Thomas, Sidney R. | 9 | 536 | 2.9 | 61.7 | 32.4 | 57.0 |
| Tinder, John D. | 7 | 263 | 8.2 | 14.1 | 44.7 | 27.5 |
| Tjoflat, Gerald B. | 11 | 885 | 23.5 | 54.8 | 30.0 | 23.6 |
| Torruella, Juan R. | 1 | 345 | 22.2 | 46.5 | 43.2 | 47.4 |
| Traxler, William B., Jr. | 4 | 714 | 9.3 | 57.9 | 46.1 | 36.3 |
| Trott, Stephen S. | 9 | 204 | 9.7 | 12.0 | 55.7 | 44.5 |
| Tymkovich, Timothy M. | 10 | 531 | 9.3 | 49.0 | 47.5 | 51.1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Walker, John M., Jr. | 2 | 211 | 13.0 | 0.0 | 40.4 | 37.9 |
| Wallace, J. Clifford | 9 | 291 | 8.7 | 39.1 | 51.2 | 50.4 |
| Wardlaw, Kim M. | 9 | 378 | 17.5 | 36.8 | 71.8 | 46.2 |
| Wesley, Richard C. | 2 | 427 | 6.8 | 42.4 | 33.1 | 33.8 |
| Wiener, Jacques L., Jr. | 5 | 738 | 13.5 | 36.5 | 43.5 | 35.0 |
| Wilkins, William W. | 4 | 279 | 8.3 | 85.8 | 25.0 | 21.8 |
| Wilkinson, J. Harvie, III | 4 | 617 | 7.0 | 49.8 | 37.5 | 39.0 |
| Williams, Ann C. | 7 | 384 | 12.5 | 60.8 | 35.2 | 38.5 |
| Williams, Karen J. | 4 | 221 | 26.9 | 46.4 | 79.3 | 59.3 |
| Wilson, Charles R. | 11 | 1111 | 0.7 | 49.0 | 47.1 | 40.7 |
| Wollman, Roger L. | 8 | 692 | 13.7 | 48.8 | 38.2 | 42.8 |
| Wood, Diane P. | 7 | 420 | 28.0 | 48.9 | 53.5 | 26.5 |

## APPENDIX C – TYPES FOR ALL STUDIED JUDGES

The following table includes judicial types for judges with at least 200 interactions with other judges.

| **Judge** | **Cir.** | **N**[145] | **Overall Judge Type** |
|---|---|---|---|
| Ambro, Thomas L. | 3 | 398 | Error Correcting Moderate Democrat |
| Anderson, Robert L., III | 11 | 1007 | Collegial Moderate Democrat |
| Anderson, Stephen H. | 10 | 332 | Incrementalist Moderate Republican |
| Baldock, Bobby R. | 10 | 352 | Collegial Moderate Republican |
| Barkett, Rosemary | 11 | 949 | Collegial Moderate Democrat |
| Barksdale, Rhesa H. | 5 | 678 | Incrementalist Conservative Republican |
| Barry, Maryanne T. | 3 | 387 | Error Correcting Moderate Democrat |
| Batchelder, Alice M. | 6 | 305 | Regulating Conservative Republican |
| Bauer, William J. | 7 | 389 | Error Correcting Moderate Republican |
| Bea, Carlos T. | 9 | 393 | Regulating Moderate Republican |
| Beam, Clarence A. | 8 | 276 | Regulating Conservative Republican |
| Beezer, Robert R. | 9 | 219 | Collegial Moderate Republican |
| Benavides, Fortunato P. | 5 | 717 | Error Correcting Moderate Democrat |
| Benton, William D. | 8 | 659 | Incrementalist Moderate Republican |
| Berzon, Marsha S. | 9 | 370 | Consensus Building Liberal Democrat |
| Birch, Stanley F., Jr. | 11 | 1005 | Incrementalist Moderate Republican |
| Black, Susan H. | 11 | 1044 | Collegial Moderate Republican |
| Boggs, Danny J. | 6 | 235 | Trailblazing Conservative Republican |
| Boudin, Michael | 1 | 233 | Regulating Moderate Republican |

[145] N refers to the number of interactions the listed judge had with other judges (district and appellate) in the dataset.

| | | | |
|---|---|---|---|
| Bowman, Pasco M., II | 8 | 201 | Error Correcting Moderate Republican |
| Bright, Myron H. | 8 | 217 | Stalwart Liberal Democrat |
| Briscoe, Mary B. | 10 | 501 | Minimalist Moderate Democrat |
| Brorby, Wade | 10 | 230 | Incrementalist Moderate Republican |
| Bybee, Jay S. | 9 | 357 | Regulating Moderate Republican |
| Bye, Kermit E. | 8 | 559 | Collegial Moderate Democrat |
| Cabranes, Jose A. | 2 | 474 | Error Correcting Moderate Democrat |
| Calabresi, Guido | 2 | 267 | Incrementalist Moderate Democrat |
| Callahan, Consuelo M. | 9 | 372 | Error Correcting Moderate Republican |
| Canby, William C., Jr. | 9 | 324 | Error Correcting Moderate Democrat |
| Carnes, Edward E. | 11 | 1028 | Collegial Moderate Republican |
| Chagares, Michael A. | 3 | 363 | Incrementalist Moderate Republican |
| Clay, Eric L. | 6 | 379 | Trailblazing Liberal Democrat |
| Clement, Edith B. | 5 | 693 | Incrementalist Moderate Republican |
| Clifton, Richard R. | 9 | 306 | Regulating Moderate Republican |
| Cole, Ransey G., Jr. | 6 | 419 | Steadfast Moderate Democrat |
| Colloton, Steven M. | 8 | 591 | Error Correcting Moderate Republican |
| Cook, Deborah L. | 6 | 266 | Regulating Conservative Republican |
| Cudahy, Richard D. | 7 | 221 | Regulating Moderate Democrat |
| Daughtrey, Martha C. | 6 | 313 | Steadfast Moderate Democrat |
| Davis, W. Eugene | 5 | 672 | Incrementalist Moderate Republican |
| Demoss, Harold R., Jr. | 5 | 267 | Minimalist Moderate Republican |
| Dennis, James L. | 5 | 702 | Collegial Moderate Democrat |
| Dubina, Joel F. | 11 | 1020 | Incrementalist Moderate Republican |
| Duncan, Allyson K. | 4 | 633 | Error Correcting Moderate Republican |

| | | | |
|---|---|---|---|
| Easterbrook, Frank H. | 7 | 369 | Incrementalist Moderate Republican |
| Ebel, David M. | 10 | 381 | Minimalist Moderate Republican |
| Edmondson, James L. | 11 | 384 | Regulating Moderate Republican |
| Elrod, Jennifer W. | 5 | 534 | Error Correcting Moderate Republican |
| Evans, Terence T. | 7 | 483 | Error Correcting Moderate Democrat |
| Fay, Peter T. | 11 | 408 | Incrementalist Moderate Republican |
| Fernandez, Ferdinand F. | 9 | 246 | Stalwart Conservative Republican |
| Fisher, D. Michael | 3 | 448 | Regulating Moderate Republican |
| Fisher, Raymond C. | 9 | 426 | Regulating Moderate Democrat |
| Flaum, Joel M. | 7 | 480 | Incrementalist Moderate Republican |
| Fletcher, Betty B. | 9 | 416 | Regulating Moderate Democrat |
| Fletcher, William A. | 9 | 323 | Minimalist Liberal Democrat |
| Fuentes, Julio M. | 3 | 350 | Error Correcting Moderate Democrat |
| Garza, Emilio M. | 5 | 672 | Collegial Moderate Republican |
| Gibbons, Julia S. | 6 | 363 | Minimalist Moderate Republican |
| Gibson, John R. | 8 | 344 | Consensus Building Conservative Republican |
| Gilman, Ronald L. | 6 | 411 | Steadfast Conservative Democrat |
| Gorsuch, Neil M. | 10 | 430 | Regulating Moderate Republican |
| Gould, Ronald M. | 9 | 395 | Regulating Liberal Democrat |
| Graber, Susan | 9 | 438 | Consensus Building Liberal Democrat |
| Gregory, Roger L. | 4 | 663 | Regulating Moderate Democrat |
| Griffin, Richard A. | 6 | 425 | Trailblazing Conservative Republican |
| Gruender, Raymond W. | 8 | 598 | Consensus Building Conservative Republican |
| Hall, Cynthia H. | 9 | 225 | Incrementalist Moderate Republican |
| Hall, Peter W. | 2 | 451 | Collegial Moderate Republican |
| Hamilton, Clyde H. | 4 | 495 | Error Correcting Moderate Republican |

| | | | |
|---|---|---|---|
| Hansen, David R. | 8 | 213 | Minimalist Moderate Republican |
| Hardiman, Thomas M. | 3 | 359 | Incrementalist Conservative Republican |
| Hartz, Harris L. | 10 | 454 | Minimalist Moderate Republican |
| Hawkins, Michael D. | 9 | 369 | Incrementalist Liberal Democrat |
| Haynes, Catharina | 5 | 339 | Collegial Moderate Republican |
| Higginbotham, Patrick E. | 5 | 615 | Collegial Moderate Republican |
| Holmes, Jerome A. | 10 | 453 | Collegial Moderate Republican |
| Howard, Jeffrey R. | 1 | 340 | Regulating Moderate Republican |
| Hull, Frank M. | 11 | 1053 | Collegial Moderate Democrat |
| Ikuta, Sandra S. | 9 | 350 | Regulating Conservative Republican |
| Jacobs, Dennis G. | 2 | 336 | Collegial Moderate Republican |
| Jolly, E. Grady | 5 | 689 | Collegial Moderate Republican |
| Jones, Edith H. | 5 | 437 | Error Correcting Moderate Republican |
| Jordan, Kent A. | 3 | 432 | Regulating Moderate Republican |
| Kanne, Michael S. | 7 | 420 | Collegial Moderate Republican |
| Katzmann, Robert A. | 2 | 354 | Collegial Moderate Democrat |
| Kelly, Paul J., Jr. | 10 | 492 | Regulating Moderate Republican |
| King, Carolyn D. | 5 | 737 | Collegial Moderate Democrat |
| King, Robert B. | 4 | 699 | Collegial Moderate Democrat |
| Kleinfeld, Andrew J. | 9 | 285 | Incrementalist Conservative Republican |
| Kravitch, Phyllis A. | 11 | 384 | Incrementalist Moderate Democrat |
| Leavy, Edward | 9 | 264 | Error Correcting Moderate Republican |
| Lipez, Kermit V. | 1 | 300 | Error Correcting Moderate Democrat |
| Livingston, Debra A. | 2 | 419 | Collegial Moderate Republican |
| Loken, James B. | 8 | 360 | Collegial Moderate Republican |
| Lucero, Carlos F. | 10 | 444 | Minimalist Moderate Democrat |
| Lynch, Sandra L. | 1 | 353 | Error Correcting Moderate Democrat |
| Manion, Daniel A. | 7 | 444 | Collegial Moderate Republican |
| Marcus, Stanley | 11 | 1026 | Incrementalist Moderate |

| | | | |
|---|---|---|---|
| | | | Republican |
| Martin, Boyce F., Jr. | 6 | 334 | Error Correcting Liberal Democrat |
| Mcconnell, Michael W. | 10 | 442 | Minimalist Moderate Republican |
| Mckay, Monroe G. | 10 | 322 | Collegial Moderate Democrat |
| Mckeague, David W. | 6 | 383 | Trailblazing Conservative Republican |
| Mckee, Theodore A. | 3 | 331 | Error Correcting Moderate Democrat |
| Mckeown, M. Margaret | 9 | 359 | Minimalist Moderate Democrat |
| Melloy, Michael J. | 8 | 445 | Regulating Moderate Republican |
| Merritt, Gilbert S., Jr. | 6 | 212 | Stalwart Liberal Democrat |
| Michael, M. Blane | 4 | 650 | Incrementalist Liberal Democrat |
| Miner, Roger J. | 2 | 219 | Error Correcting Moderate Republican |
| Moore, Karen N. | 6 | 433 | Steadfast Liberal Democrat |
| Motz, Diana G. | 4 | 570 | Collegial Moderate Democrat |
| Murphy, Diana E. | 8 | 653 | Regulating Moderate Democrat |
| Murphy, Michael R. | 10 | 467 | Error Correcting Moderate Democrat |
| Nelson, Thomas G. | 9 | 249 | Regulating Moderate Republican |
| Niemeyer, Paul V. | 4 | 675 | Incrementalist Conservative Republican |
| O'brien, Terrence L. | 10 | 338 | Consensus Building Conservative Republican |
| O'scannlain, Diarmuid F. | 9 | 393 | Consensus Building Conservative Republican |
| Owen, Priscilla R. | 5 | 668 | Incrementalist Moderate Republican |
| Paez, Richard A. | 9 | 392 | Regulating Liberal Democrat |
| Parker, Barrington D., Jr. | 2 | 382 | Collegial Moderate Republican |
| Pooler, Rosemary S. | 2 | 363 | Incrementalist Moderate Democrat |
| Posner, Richard A. | 7 | 380 | Incrementalist Moderate Republican |
| Prado, Edward C. | 5 | 738 | Collegial Moderate Republican |
| Pregerson, Harry | 9 | 260 | Error Correcting Moderate Democrat |

| | | | |
|---|---|---|---|
| Pryor, William H., Jr. | 11 | 992 | Collegial Moderate Republican |
| Raggi, Reena | 2 | 444 | Incrementalist Moderate Republican |
| Rawlinson, Johnnie B. | 9 | 281 | Regulating Moderate Democrat |
| Reavley, Thomas M. | 5 | 512 | Error Correcting Moderate Democrat |
| Reinhardt, Stephen R. | 9 | 239 | Steadfast Liberal Democrat |
| Rendell, Marjorie O. | 3 | 324 | Error Correcting Moderate Democrat |
| Riley, William J. | 8 | 579 | Consensus Building Conservative Republican |
| Ripple, Kenneth F. | 7 | 416 | Regulating Moderate Republican |
| Rogers, John M. | 6 | 370 | Trailblazing Conservative Republican |
| Roth, Jane R. | 3 | 393 | Incrementalist Moderate Republican |
| Rovner, Ilana D. | 7 | 429 | Collegial Moderate Republican |
| Rymer, Pamela A. | 9 | 312 | Error Correcting Conservative Republican |
| Sack, Robert D. | 2 | 377 | Incrementalist Moderate Democrat |
| Schroeder, Mary M. | 9 | 315 | Regulating Moderate Democrat |
| Scirica, Anthony J. | 3 | 293 | Error Correcting Moderate Republican |
| Selya, Bruce M. | 1 | 254 | Regulating Moderate Republican |
| Shedd, Dennis W. | 4 | 633 | Collegial Moderate Republican |
| Shepherd, Bobby E. | 8 | 605 | Collegial Moderate Republican |
| Siler, Eugene E., Jr. | 6 | 358 | Regulating Conservative Republican |
| Silverman, Barry G. | 9 | 354 | Collegial Moderate Democrat |
| Sloviter, Dolores K. | 3 | 354 | Error Correcting Moderate Democrat |
| Smith, David B. | 3 | 358 | Collegial Moderate Republican |
| Smith, Jerry E. | 5 | 684 | Error Correcting Moderate Republican |
| Smith, Lavenski R. | 8 | 618 | Error Correcting Moderate Republican |
| Smith, Milan D., Jr. | 9 | 345 | Incrementalist Liberal Republican |

| | | | |
|---|---|---|---|
| Smith, Norman R. | 9 | 330 | Incrementalist Moderate Republican |
| Sotomayor, Sonia | 2 | 360 | Regulating Moderate Democrat |
| Southwick, Leslie | 5 | 660 | Incrementalist Moderate Republican |
| Stewart, Carl E. | 5 | 764 | Collegial Moderate Democrat |
| Straub, Chester J. | 2 | 296 | Minimalist Moderate Democrat |
| Sutton, Jeffrey S. | 6 | 305 | Regulating Moderate Republican |
| Sykes, Diane S. | 7 | 389 | Minimalist Moderate Republican |
| Tacha, Deanell R. | 10 | 388 | Minimalist Conservative Republican |
| Tallman, Richard C. | 9 | 279 | Collegial Conservative Democrat[146] |
| Tashima, A. Wallace | 9 | 435 | Error Correcting Moderate Democrat |
| Thomas, Sidney R. | 9 | 536 | Error Correcting Moderate Democrat |
| Tinder, John D. | 7 | 263 | Minimalist Moderate Republican |
| Tjoflat, Gerald B. | 11 | 885 | Collegial Conservative Republican |
| Torruella, Juan R. | 1 | 345 | Regulating Liberal Republican |
| Traxler, William B., Jr. | 4 | 714 | Collegial Moderate Democrat |
| Trott, Stephen S. | 9 | 204 | Minimalist Moderate Republican |
| Tymkovich, Timothy M. | 10 | 531 | Collegial Moderate Republican |
| Walker, John M., Jr. | 2 | 211 | Minimalist Moderate Republican |
| Wallace, J. Clifford | 9 | 291 | Regulating Moderate Republican |
| Wardlaw, Kim M. | 9 | 378 | Regulating Moderate Democrat |
| Wesley, Richard C. | 2 | 427 | Collegial Moderate Republican |
| Wiener, Jacques L., Jr. | 5 | 738 | Incrementalist Moderate Republican |
| Wilkins, William W. | 4 | 279 | Error Correcting Moderate Republican |

[146] Judge Tallman was actually known to be a Republican when appointed by President Clinton. Henry Weinstein, *Court to Consider Delay of Recall Vote*, L.A. TIMES, Sept. 20, 2003, at A1. His nomination was part of a package of judges that was brokered with key Senators in order to get several Democratic judges confirmed. Nonetheless, for consistency in application of the terminology, he is referred to as a "Democrat" in the table.

| | | | |
|---|---|---|---|
| Wilkinson, J. Harvie, III | 4 | 617 | Collegial Moderate Republican |
| Williams, Ann C. | 7 | 384 | Error Correcting Moderate Democrat |
| Williams, Karen J. | 4 | 221 | Regulating Conservative Republican |
| Wilson, Charles R. | 11 | 1111 | Collegial Moderate Democrat |
| Wollman, Roger L. | 8 | 692 | Collegial Moderate Republican |
| Wood, Diane P. | 7 | 420 | Incrementalist Liberal Democrat |