Why the Supreme Court Issues Plurality Opinions

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WHY THE SUPREME COURT ISSUES PLURALITY OPINIONS

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Many of the Supreme Court’s most important decisions, such as those involving executive power and the constitutionality of abortion regulations, are decided by plurality decision. Plurality opinions result when five or more Justices agree on the result in a particular case but no single rationale or opinion garners five votes. Many Justices, including William Rehnquist and Ruth Bader Ginsburg, have addressed the problems created by plurality opinions, such as interpretive difficulties in determining the Court’s holding, but few scholars have addressed plurality decisions other than in passing.

In the first empirical analysis examining the occurrence of plurality decisions, the authors examine a variety of ideological, collegial, contextual, and legal factors to determine which factors are most likely to lead to plurality decisions. Drawing on data for every Supreme Court case decided between the 1953 and 2006 Terms of the Supreme Court, the results of the study are illuminating. For example, a case is more likely to result in a plurality decision if it involves an issue of constitutional interpretation with respect to a civil liberties issue and lower court conflict did not influence the decision to grant certiorari.

In addition, the authors estimate an individual Justice model that measures which factors are most likely to lead to votes by Justices to concur in the judgment, which is the key ingredient for a plurality opinion. A Justice’s distance from the majority (or plurality) opinion author and prior lack of cooperation with the opinion author, both play a large role in whether a Justice joins the majority and separately concurs or votes to concur in the judgment. Many of the same factors found influential in the case level model are also found to influence Justices’ decisions to concur in the judgment.

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Given the importance of plurality decisions to understanding the Supreme Court, this Article provides the basis for further normative evaluations of whether plurality decisions harm the development of the law and how such decisions should be interpreted by lower courts.

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INTRODUCTION

The Supreme Court of the United States has been at the forefront in deciding cases in areas such as the proper scope of Executive power, the constitutionality of various criminal punishments under the Eighth Amendment, and the appropriate scope of state abortion regulations. In each of these important areas, majority coalitions on the Court have broken down and

produced plurality opinions.\(^6\) Plurality opinions occur when a majority of Justices agree upon the result or judgment in a case but fail to agree upon a single rationale in support of the judgment.

The Justices have almost uniformly agreed that plurality opinions are problematic for a variety of reasons, but their frequency has increased over time. As then-Judge Ginsburg stated: “More unsettling than the high incidence of dissent is the proliferation of separate opinions with no single opinion commanding a clear majority.”\(^7\) Justice Powell agreed, explaining that plurality opinions “may promote disrespect for the Court as a whole and more emphasis on ‘vote counting.’ Failure of the Court to settle on a rationale for a decision invites perpetual attack and reexamination.”\(^8\)

Scholars and judges advance a variety of explanations for the occurrence of plurality opinions, but none have been empirically tested. Judge Frank Easterbrook proposes one prominent explanation based on the difficulty and salience of cases heard by the Supreme Court: “It is easy to reach agreement on easy cases, but the Court does not decide many easy cases. Its certiorari jurisdiction allows it to select cases that seem interesting or important, the very cases most apt to produce divisions.”\(^9\) Another explanation is that divergence among the ideological positions of the Justices on certain issues leads to deeply-fragmented coalitions.\(^10\) According to this idea, the Court essentially delays definitive resolution of a legal question instead of forging an “uneasy compromise between conflicting views of” Justices.\(^11\) This hypothesis could account for the repetitive occurrence of plurality opinions in cases involving the Eighth Amendment’s prohibition on “cruel and unusual punishments.”\(^12\) These explanations for the occurrence of plurality opinions, plus many more, will be empirically tested in this article.

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\(^6\) *Hamdi*, 542 U.S. at 508; *Ewing*, 538 U.S. at 14; *Harmelin*, 501 U.S. at 961; *Casey*, 505 U.S. at 843-44.


\(^11\) Ray, supra note 10, at 813.

\(^12\) U.S. Const. amend. VIII; *Ewing*, 538 U.S. at 14; *Harmelin*, 501 U.S. at 961; see also Note, *Plurality Decisions and Judicial Decisionmaking*, 94 Harv. L. Rev. 1127, 1142-43 (1981) (identifying death penalty cases as those that frequently result in plurality opinions).
Part I of this article introduces plurality opinions, including a discussion about the frequency of plurality opinions and which Justices are most responsible for their occurrence. Part II explains why identifying the factors that contribute to the issuance of plurality opinions is important to scholars who study the Supreme Court, as well as to lawyers and judges. Part III introduces the case-level model that explains which factors affect the occurrence of plurality opinions. Part IV presents the results of our individual Justice model to determine what influences an individual Justice’s decision to join the majority coalition, join the majority and concur, or concur in the judgment in any particular case, the latter of which is the decision that forms the basis for a plurality opinion. Finally, Part V summarizes our research findings, their broader significance, and explores other avenues for future research.

I. Introducing Plurality Opinions

Plurality decisions result when at least five Justices agree on the result in a particular case but no single rationale or opinion garners five votes. The opinion that receives the largest number of votes among those supporting the result favored by the majority of Justices is labeled as the plurality opinion. Any other opinion supporting that result, but not the plurality’s reasoning, is identified as an opinion concurring in the judgment.

Historically, plurality decisions by the Supreme Court have been relatively rare: during the 145 Terms between 1801 and 1955, the Supreme Court issued only 45 plurality decisions. However, during the 54 Terms from 1953 to 2006, the Supreme Court issued 195 plurality opinions, approximately 3.4% of the 5,711 total cases decided during the period.

While the frequency of plurality opinions dramatically increased in the 1940s and 1950s, the occurrence of plurality opinions between 1953 and 2006 has remained fairly steady with a moderate increase in plurality opinions during the 1970s when Warren Burger served as Chief Justice. During October Term 1970, for example, the Court produced 15 plurality decisions, or exactly 33% of the total number of such decisions during the 155-year period from 1801 through 1955. Nonetheless, the median number of plurality opinions per Term during the period from 1953 through 2006 equals three, and the mean number of plurality opinions is nearly identical at the beginning of this period.

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(1953 through 1962) as it is at the end (1997 through 2006), at 2.3 and 2.4 per Term, respectively. Figure 1 displays the percentage of cases resulting in plurality opinions per Term from 1953 to 2006.

Figure 1: Percentage of Cases with Plurality Opinions, 1953-2006 Terms

The presence of one or more concurring opinions, however, does not result in a plurality decision. To the contrary, a simple concurring opinion indicates that the Justice writing separately agrees with the legal rule and its application in the majority opinion but that there is some aspect of the case worthy of further discussion. Therefore, the binding rules in a case when there are no opinions concurring in the judgment and one or more concurring opinions is provided by the Opinion of the Court. In contrast, when four or fewer Justices agree to the rationale supporting a judgment and one or more Justices writes an opinion concurring in the judgment, the result is a plurality

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decision. That is because an opinion concurring in the judgment is the functional equivalent of a dissent from the plurality’s reasoning even if it represents agreement with the result reached in the case. The Court’s rule for interpreting plurality decisions, announced in the 1977 case of Marks v. United States, is consistent with the account of concurring opinions described above: “When a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, ‘the holding of the Court may be viewed as that position taken by those Members who concurred in the judgments on the narrowest grounds. . . .’” No comparable interpretive rule exists for decisions in which one or more Justices write a simple concurrence.

The foundation, therefore, of the plurality decision is the choice made by one or more of the nine Justices to write an opinion concurring in the judgment. The number of plurality opinions in any particular Term is thus dependent on the number of cases in which an opinion concurring in the judgment is written during that Term. Of course, the converse is not true. No plurality decision results, even if one or more of the Justices author an opinion concurring in the judgment, if five or more Justices are willing to join a single opinion. Nonetheless, no account of plurality decisions is complete without examining the frequency of and factors influencing a Justice’s decision to write an opinion concurring in the judgment. Although a Justice’s decision to join the majority, join the majority and concur, or write an opinion concurring in the judgment will be the focus of our individual Justice model in Part IV, it is useful as an initial step to graphically examine the frequency of both concurring opinions and opinions concurring in the judgment in each of the Terms between 1953 and 2006.

Figure 2: Percentage of Cases with Concurring Opinions, 1953-2006
Terms

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15 See Kornhauser & Sager, supra note 14, at 8 n.14.
Figure 2 depicts the frequency of both simple concurrences and opinions concurring in the judgment, and a few observations are of note. First, the rate of both types of separate opinions steadily increased between 1953 and the mid-1960s. Prior to 1959 the percentage of cases with concurrences in the judgment averaged 17.5% but increased to 26.2% thereafter. Second, simple concurrences were more prevalent than concurrences in the judgment prior to the mid-1960s but the disparity disappears by 1971. In fact, from 1971 through 2006, the number of cases with concurrences in the judgment (25.2%) is almost equivalent to those with simple concurrences (25.5%). Third, the degree of Term-to-Term variation does not evidence much change over the 1971-2006 time period.

In addition to these temporal patterns, Figure 3 shows that individual Justices joined or authored separate opinions at substantially different rates. The average Justice in Figure 3 concurs in the judgment in 5.5% of all cases decided by the Supreme Court. At the low end of the spectrum are Justices Warren, Clark, Whittaker, and Rehnquist, who concurred in the judgment 2.1%, 2.9%, 3.4%, and 4.3% of the time, respectively. Meanwhile, Justices
Thomas, Blackmun, Scalia, and Harlan concurred in the judgment in 7.7%, 7.8%, 8.9%, and 9.9% of cases, respectively.

A slightly different picture emerges when considering only the universe of 195 plurality decisions between 1953 and 2006. Each plurality decision contained approximately two opinions concurring in the judgment, as compared to .47 concurrences in the judgment in cases with a majority. On average, the Justices serving between 1953 and 2006 concurred in the judgment about 25.3% of the time in plurality decisions. Justice Thomas, who concurs in the judgment at the fourth-highest rate among members of the Supreme Court that have served since 1953, concurs in the judgment in 46.2% of all cases that resulted in a plurality decision, the highest rate of all Justices in the study. Chief Justice Rehnquist, by contrast, concurred in the judgment in only 14.6% of all cases resulting in a plurality decision during his service on the Court.

Figure 3: The Rate at which Justices Concur in the Judgment, 1953-2006 Terms

The data for this figure is derived from The Supreme Court Database, http://scdb.wustl.edu/index.php (last visited Apr. 8, 2009) [hereinafter Supreme Court Database], which identifies when each Justice authored or joined an opinion concurring in the judgment. A Justice must have participated in a minimum of ten plurality decisions to be included in this figure.
Even Figure 3, which displays the rate at which individual Justices concur in the judgment in plurality decisions and all cases more generally, does not fully indicate which Justices are most responsible for plurality decisions. Responsibility for a plurality decision cannot necessarily be assigned to a Justice who concurs in the judgment quite often, even when a plurality decision results, if other members of the Court also vote to concur in the judgment in those cases. By the same token, a Justice who rarely concurs in the judgment may bear disproportionate responsibility for plurality decisions if a large percentage of her votes result in pluralities and she is alone in concurring in the judgment. With that analysis in mind, Figure 4 applies a measure originally developed by Jeffrey Segal and Harold Spaeth, in which responsibility for a
plurality decision is defined as the degree to which a Justice contributes to such a decision.\textsuperscript{19} Under this measure, a Justice’s responsibility for a plurality opinion in a case is determined by counting the number of votes the majority coalition is short of achieving a majority (\textit{e.g.}, if the majority opinion coalition consisted of 4 Justices and 8 or 9 Justices participated in the case then this value would equal 1) divided by the total number of Justices in a particular case who concurred in the judgment.\textsuperscript{20} For instance, the responsibility score for a Justice in a case equals one if the majority was one vote short of a majority opinion coalition and only that Justice authored an opinion concurring in the judgment. The responsibility index, displayed in figure 4, is the median value of a Justice’s responsibility scores in all cases in which she participated in a plurality decision.

Figure 4: The Responsibility of Individual Justices for Producing Plurality Opinions, 1953-2006 Terms\textsuperscript{21}

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\textsuperscript{19} See Jeffrey Allan Segal & Harold J. Spaeth, The Supreme Court and the Attitudinal Model Revisited 394 (Cambridge Univ. Press 2002) [hereinafter Segal & Spaeth, Attitudinal Model].

\textsuperscript{20} See Segal & Spaeth, Attitudinal Model, supra note 19, at 389-90.

\textsuperscript{21} To be included in Figure 4, a Justice must have participated in at least ten plurality decisions.
Figure 4 presents a different picture than Figure 3 with respect to the responsibility of particular Justices for plurality decisions. Justice Thomas, who concurred in the judgment most often when plurality decisions resulted, has a responsibility index of .58, while Justice Ginsburg, who concurred in the judgment relatively rarely when plurality decisions resulted, has a responsibility index of 1. The responsibility index of 1 for Justices Ginsburg and Stevens means that, when they concurred in the judgment and a plurality decision resulted, only one additional vote was necessary for a majority coalition and they authored a solo opinion concurring in the judgment. Meanwhile, Justices Blackmun, Brennan, Burger, Frankfurter, Harlan, Marshall, Rehnquist, Souter,
and Whittaker have the lowest responsibility indexes of all Justices serving on the Supreme Court between 1953 and 2006 with a score of .5.

Finally, the assignment of opinions by the Chief Justice can theoretically play a role in the frequency of plurality decisions. If the Chief Justice does not carefully consider the positions of the other Justices at conference and assign the opinion to a colleague who is likely to apply a rationale in a case that can garner four other votes, a plurality decision is likely to result. In addition, some Justices are simply better than others at building and maintaining majority coalitions. In verbally announcing his plurality opinion in *Chavez v. Martinez*, Justice Thomas sarcastically joked that he was a “consensus builder.”

There is some truth to the underlying premise that particular Justices hold positions on some legal issues that are not compatible with the views of colleagues, rendering them poor opinion authors when those issues arise. If a prevailing norm on the Supreme Court is consensus when possible, as many commentators point out, a Chief Justice makes a poor strategic decision in assigning an opinion in a closely-divided case to a colleague who is deficient at holding together coalitions or would apply a rationale in a case that is incompatible with her colleagues. In view of the importance of opinion authors, Figure 5 identifies the Justices who most often authored plurality opinions.

Figure 5: Percentage of Opinions Resulting in a Plurality Decision by Majority Opinion Author, 1953-2006 Terms

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25 A Justice must have written at least 10 majority opinions to be included in Figure 5.
The results from Figure 5 are fascinating, if not extraordinary. First, Justice Ginsburg, who is tied with Justice Stevens with the highest responsibility index for plurality decisions, has a perfect record through 2006 at building and maintaining majority coalitions when she is the majority opinion author. Meanwhile, Justice Frankfurter, who has frequently been described as a prototypical judicial minimalist, was one of the worst Justices in recent history at maintaining majority coalitions, as 7.1% of his 84 opinions after 1953 resulted in plurality decisions. Finally, those popularly referred to as the “swing votes” on recent Courts, such as Justices Powell, Kennedy, and O’Connor, are collec-

tively slightly below average in maintaining majority coalitions with plurality decisions in 4.7%, 3.2%, and 4.0%, respectively, of their writing assignments for the Court. Of course, the relatively high proportion of plurality opinions for “swing Justices” might be a result of the well-known strategic practice by opinion assigners (typically the Chief Justice) of assigning majority opinions to Justices ideologically close to the median member of the Court when the Court is closely divided in a case.  

The foregoing figures and discussion demonstrate that plurality decisions are complicated and poorly-understood events. No existing research empirically identifies the conditions under which plurality opinions are most likely to occur, despite many authors proposing a variety of possible causes. It is also unclear why certain Justices play a prominent role in producing plurality decisions, either as the lead opinion author or the Justice concurring in the judgment, while others are particularly skillful at building or maintaining coalitions. It is to these questions and others that we will turn later in the paper.

II. Why Study Plurality Decisions?

The foregoing discussion raises an obvious question: if only 3.4% of the cases before the Supreme Court result in plurality decisions then why study them? Though plurality decisions are relatively rare events, especially as the Supreme Court’s plenary docket has declined precipitously over the past twenty years, plurality decisions provide a rare window into the breakdown of bargaining and coalition-building among Justices. In addition, plurality decisions tend to occur in difficult and highly-salient cases such as in the areas of civil rights and civil liberties, areas in which the law is often unclear and the Justices’ ideological proclivities are most relevant. Of course, civil liberties and civil rights cases are also the fodder of numerous scholarly articles in the legal literature, so a better understanding of how those cases are decided can


yield important insights about a hotly-debated field among scholars. For those who study judicial decision making, in particular, an understanding of why coalitions fracture can be useful in understanding how bargaining occurs and coalitions form in the first place.

Ever since Walter Murphy posited in his seminal 1964 book, *Elements of Judicial Strategy*, that the majority opinion author exercises substantial control over the final opinion produced by the Supreme Court, both political scientists and legal scholars have studied the formation of coalitions on multi-member courts, including the Supreme Court. Coalition formation and maintenance refers to the stage of a court’s decision making process between opinion assignment and the final vote regarding a case. During this time, “the majority opinion writer attempts to write an opinion that will attract a majority of the Justices’ votes; other Justices may write concurring or dissenting opinions for which they may also seek support.” A sophisticated opinion author has two goals: (1) to craft an opinion that is as close to possible to the author’s preferred legal rule or policy; and (2) to author an opinion that is acceptable to at least four other Justices so that it becomes a majority opinion. Though these goals are sometimes in tension, a strategic opinion author knows that other Justices “are likely to have some tolerance for opinions that, while preferable to the legal status quo, diverge from their most preferred policies.” As several recent studies demonstrate, both the majority opinion author and pivotal Justices on the Court (especially the median Justice in the majority coalition) have substantial influence over the policy location of the final opinion and thus whether the opinion is a majority or plurality opinion.

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32 Id.
34 Bonneau et al., supra note 33, at 891.
A study of plurality decisions examines the flip side of coalition formation: the breakdown or failure of coalitions. If every Justice insisted that an opinion drafted by a colleague be perfectly consistent with his or her own ideological preferences then the result would be a plurality decision in a substantial proportion of the Supreme Court’s plenary docket.\textsuperscript{36} Undoubtedly the norm of consensus, though considerably weaker than it once was,\textsuperscript{37} plays a role in minimizing plurality decisions. Justice Powell pointed out this relationship to his law clerks, telling them that “each Justice has a responsibility to the Court as an institution to help form a majority wherever this can be done without sacrifice of principle or conviction. The Court is not best served by plurality or fractionated opinions.”\textsuperscript{38} The bargaining among the opinion author and other members of the tentative majority coalition also helps determine whether the Court’s final opinion is a majority or plurality decision. Indeed, as Jeffrey Segal, Harold Spaeth, and Sara Benesh have argued, when the opinion author fails to hold together a majority coalition, the author may be to blame for “failing to bargain effectively because he or she gives primacy to his or her own policy preferences,” or because he or she is “unable to effect the necessary compromises” with other Justices.\textsuperscript{39}

A sophisticated empirical study of plurality decisions will disclose the conditions under which coalitions on the Supreme Court are most likely to fracture and dissolve. By definition, plurality opinions result when some conditions crucial to coalition formation or maintenance are absent. Discovering and explaining those conditions will lead to greater refinement and understanding of the various models of coalition formation and bargaining.

Yet another reason to study plurality opinions stems from their indeterminacy and lack of clarity. Clear, understandable precedent is necessary to “reduce transaction costs and wasted judicial effort, and encourages like cases to be treated alike—the bedrock of equality and fairness.”\textsuperscript{40} By creating multiple rationales in favor of a single judgment, a plurality decision by the Supreme Court leaves lower courts without ample guidance. An example is

\textsuperscript{36} See id. at 891.
\textsuperscript{37} See Epstein et al., supra note 24.
\textsuperscript{38} Law Clerks Briefing Notes from Lewis F. Powell, Jr., Justice, U.S. Supreme Court 18 (Sept. 10, 1984) (on file with Washington and Lee University Law School).
\textsuperscript{39} SEGAL ET AL., supra note 33, at 350.
\textsuperscript{40} Michael L. Eber, When the Dissent Creates the Law: Cross-Cutting Majorities and the Prediction Model of Precedent, 58 EMORY L.J. 207, 243 (2008).
the Court’s recent decision in *Rapanos v. United States*, in which the Court split 4-1-4 on the proper standard to apply to determine if wetlands are “waters of the United States” under the Clean Water Act. Justice Scalia, writing for three other Justices, reversed and remanded on the ground that “only those wetlands with a continuous surface connection to bodies that are ‘waters of the United States’ in their own right, so that there is no clear demarcation between ‘waters’ and wetlands, are ‘adjacent to’ such waters and covered by the Act.”

Justice Kennedy, on the other hand, wrote an opinion concurring in the judgment in which he stated that a wetland need only have “significant nexus” with a navigable body of water to be covered by the Act. Lower courts, not surprisingly, have struggled to find the controlling legal rule in *Rapanos*. The First and Eighth Circuits have interpreted *Rapanos* to permit regulation under the Clean Water Act if either the plurality’s or Justice Kennedy’s standard is met. Meanwhile, the Seventh, Ninth, and Eleventh Circuits have held that Justice Kennedy’s opinion in *Rapanos* provides the controlling legal standard because it constitutes the “narrowest grounds” for decision under the *Marks* rule.

In other words, a plurality decision in a seminal case can have a profound impact on the development of law in a particular area. In a recent study, Pamela Corley found that “plurality decisions distort the signaling function of the Supreme Court, creating uncertainty regarding the precedential value of the decision.” In an empirical model examining 63 plurality decisions and 110 non-plurality decisions by the Supreme Court between 1976 and 1986, Professor Corley found that “the probability of positive treatment” decreases by 28% and the “the probability of negative treatment” increases by 42% over the baseline when a lower court is interpreting a plurality opinion issued by the Supreme Court. One reason for this effect is that a plurality decision may be

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42 *Id.* at 742.
43 *Id.* at 779.
44 *See* United States v. Bailey, 571 F.3d 791, 799 (8th Cir. 2009); United States v. Johnson, 467 F.3d 56, 66 (1st Cir. 2006); *see also* United States v. Lucas, 516 F.3d 316, 325 & n.8 (5th Cir. 2008) (discussing a jury instruction using both the plurality’s and Justice Kennedy’s approach in *Rapanos*).
45 *See* United States v. Robison, 505 F.3d 1208, 1221 (11th Cir. 2007); United States v. Gerke Excavating, Inc., 464 F.3d 723, 724 (7th Cir. 2006); N. Cal. River Watch v. City of Healdsburg, 457 F.3d 1023, 1029 (9th Cir. 2006).
46 Corley, *supra* note 24, at 40.
47 *See id.* at 43.
perceived by lower courts as less authoritative than a majority decision.\textsuperscript{48} Another is that plurality opinions, especially those like \textit{Rapanos}, “create confusion by failing to provide clear guidance to the lower courts.”\textsuperscript{49} Some scholars have gone so far as to suggest that plurality opinions do “more to confuse the current state of the law than to clarify it.”\textsuperscript{50} Ultimately, the ambiguity and confusion created by plurality decisions can lead lower courts to “experiment with alternative rules and outcomes based on their own criteria,” which can lead to varying rules and an altered evolution of the law.\textsuperscript{51}

Finally, the study of plurality decisions has practical implications too. Although there are various models of Supreme Court decision making, a burgeoning literature presents clear support for the strategic or rational choice model.\textsuperscript{52} As mentioned previously, a strategic Chief Justice will want to know what type of cases are most likely to lead to fractured results so that he can be especially careful in assigning those opinions. Similarly, a strategic opinion author will be better prepared for division if he or she knows that a case before the Court has characteristics that make it especially likely to result in a plurality decision. As Epstein and Knight explain, the Justices are “strategic actors who realize that their ability to achieve their goals depends on a consideration of the preferences of others, of the choices they expect others to make, and of the institutional context in which they act.”\textsuperscript{53}

Similarly, strategic attorneys can use the results of our empirical models to identify in which cases they should be particularly sensitive to division on the Court. When the universe of judges who will hear a case is known ahead of time, strategic attorneys will craft their legal arguments in an attempt to get a majority of a court to agree to their position.\textsuperscript{54} That often means directing arguments in a brief to influence certain members of the Court, especially

\textsuperscript{48} See id. at 40.
\textsuperscript{49} See id.
\textsuperscript{50} Davis & Reynolds, supra note 10, at 77.
\textsuperscript{51} Id.
\textsuperscript{52} See Epstein & Knight, supra note 33; Maltzman, Spriggs, & Wahlbeck, supra note 33 (describing the constraints on the coalition-building process provided by the viewpoints of other Justices); David R. Stras, \textit{The Incentives Approach to Judicial Retirement}, 90 Minn. L. Rev. 1417, 1425-29 (2006) (discussing the rational choice model).
\textsuperscript{53} Epstein & Knight, supra note 33, at xiii.
\textsuperscript{54} See id. at 1541 (describing how pitching a case differently can lead to five votes for those familiar with the Supreme Court); Richard J. Lazarus, \textit{Advocacy Matters Before and Within the Supreme Court: Transforming the Court by Transforming the Bar}, 96 Geo. L.J. 1487, 1496 (2008) (describing the reasons for the success of the United State Solicitor General before the Supreme Court).
those that are likely to be the key or “swing” votes in an appeal. A rational litigant before the Supreme Court will also seek the filing of various amici briefs to sway the Justices in favor of one position or another.\textsuperscript{55} In other words, if a skilled Supreme Court advocate knows that the characteristics of his or her case are particularly vulnerable to produce deep divisions on the Court, legal strategy in a case might be altered. For example, rather than risk a deeply-fractured Court, a skilled advocate might advance a less aggressive legal theory that is likely to garner five votes and thus lead to clear, binding precedent.

Accordingly, while plurality decisions constitute a small percentage of the Supreme Court’s plenary docket in any given Term, there is much to be gained from studying them both as an academic matter and for purposes of practical application. In the next part, we will introduce our case-level model, which identifies the case characteristics that contribute the most to coalitional breakdowns and the issuance of plurality opinions by the Supreme Court.

III. The Case Level Model

The objective of this article is to test the argument that certain ideological, legal, collegial, and contextual factors lead to plurality decisions. The unit of analysis for the case-level empirical model is each case decided by the Court. The dependent variable, \textit{Plurality Opinion}, in this model is dichotomous and equals one if the case was decided by a plurality decision and zero otherwise. Most of the data in the model come from the United States Supreme Court Database created by Harold Spaeth.\textsuperscript{56} The dataset in this paper includes all orally-argued cases decided between the 1953 and 2006 Terms that resulted in a signed opinion.\textsuperscript{57} Of the 5,711 cases in the dataset, the Court decided 195 (3.4\%) by plurality decision. We estimate this model with logistic regression, as is appropriate for dichotomous dependent variables, and use robust standard errors.\textsuperscript{58}

\textsuperscript{55} See Epstein \& Knight, \textit{supra} note 33, at 1544 (discussing the importance of amicus briefs in closely-divided cases).

\textsuperscript{56} Supreme Court Database, \textit{supra} note 18.

\textsuperscript{57} Per curiam opinions were excluded from the model because it is impossible to measure the majority opinion author’s ideological position in instances in which the per curiam opinion author is unknown, which is the case for many such opinions released between 1953 and 2006.

\textsuperscript{58} See J. Scott Long, \textit{Regression Models for Categorical and Limited Dependent Variables} 34-84 (Sage 1997). We note that the statistical results are comparable in a rare events logit model, which
A. Research Design and Hypotheses

Many aspects of the Supreme Court’s decision making processes have been studied extensively by political scientists and legal scholars. Scholars, for instance, have examined how the Supreme Court sets its agenda through the certiorari process. Others have studied the bargaining and negotiation among the Justices in plenary cases, including the formation and maintenance of coalitions. Still others have studied the influence of oral argument sessions on the eventual decisions made by the Justices in plenary cases. The case-level model considers the factors employed in the foregoing studies, as well as others, in determining which are most likely to contribute to a plurality decision by the Supreme Court. In doing so, four general categories of factors are considered in the model: ideological, collegial, legal, and contextual. Table 1 provides summary statistics for all variables in the case-level model, as well as the effect we hypothesize each to have on the dependent variable.

Table 1: Summary Statistics for Variables in the Case-Level Model of Plurality Opinions on the U.S. Supreme Court, 1953-2006 Terms

is appropriate for some skewed dependent variables. See Gary King & Langche Zeng, Logistic Regression in Rare Events Data, 9 POL. ANALYSIS 137 (2001).

See, e.g., H.W. Perry, Deciding to Decide: Agenda Setting in the United States Supreme Court 8-11 (1992); Barbara Palmer, The “Bermuda Triangle?”: The Cert Pool and Its Influence over the Supreme Court’s Agenda, 18 CONST. COMMENT. 105, 111–12 (2001); Stras, supra note 28, at 985-86.

See supra notes 30-Error! Bookmark not defined. and accompanying text.


In the “hypothesized effect” column of Figure 1, a “+” indicates that we predict that the likelihood of a plurality opinion will increase as the independent variable increases, while a “-” predicts the opposite effect. The model does not contain a hypothesized effect for the three control variables, but they are included because they may correlate with other independent variables of interest in the model and thus minimize the possibility of biased coefficients.
### Variable	Mean	Std. Dev.	Minimum	Maximum	Hypothesized
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Opinion Author Distance from Coalition	1.45	1.43	0	7.78	+
Ideological Heterogeneity of Coalition	1.92	0.57	0.21	4.13	+
Author’s Lack of Cooperation	0.0004	0.04	-0.1	0.14	+
 Constitutional Interpretation	0.38	0.48	0	1	+
Common Law/Review of Administrative Action	0.11	0.31	0	1	+
Case Involves Lower Court Conflict	0.2	0.4	0	1	-
Case Decided After *Marks v. U.S.*	0.53	0.5	0	1	+
Chief Justice Opinion Author	0.11	0.31	0	1	-
Opinion Invalidates Federal Law as Unconstitutional	0.01	0.11	0	1	+
Amicus Briefs in Case	0.04	1.04	-1.1	9.99	+
Civil Liberties	0.53	0.5	0	1	+
Multidimensionality of a Case	2.29	0.8	1	11	+
Case Reargued	0.03	0.16	0	1	+
Time Until End of Term	167.6	69	0	793	N.A.
Size of the Plenary Docket	123.2	27.7	65	163	N.A.
Term of Court	1978.8	14.1	1953	2006	N.A.

### 1. Ideological Factors

The ideology of Justices makes a difference as to the positions they advance in cases. Proponents of the attitudinal model posit that the Justices will decide cases in alignment with their ideology and sincerely-held voting preferences. In other words, Justices will act to advance their ideological preferences, regardless of other constraints such as precedent, text, or legislative constraints. While the strategic model, which has become the dominant paradigm for studying the decision making of Supreme Court Justices, emphasizes that institutional rules constrain the Justices’ decisions, it still recognizes the primacy of the ideological preferences of the Justices in explaining the choices they make. Empirical studies demonstrate that the ideological preferences of Justices influence nearly every aspect of decision making on the

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63 See Lawrence Baum, Judges and Their Audiences: A Perspective on Judicial Behavior 20 (2006) (empirical research demonstrates that the “differences in the positions that the nine justices take in the same cases are best understood as a product of the differences in their policy preferences”).

64 See Segal et al., supra note 33, at 35; Jeffrey A. Segal, Separation-of-Powers Games in the Positive Theory of Congress and Courts, 91 AM. POL. SCI. REV. 28, 28 (1997).

Court, including the decision on the merits of a case, voting to grant certiorari, bargaining and negotiating over legal doctrine, overruling precedent, and whether to join a majority opinion.

It would be surprising, therefore, if ideological factors did not also play some role in plurality decisions. Consistent with the coalition-building literature our hypothesis is that the greater the ideological distance between the author of the majority (or plurality) opinion and the rest of the putative majority coalition, the greater the probability that a plurality opinion will result. The ideological locations of the Justices are identified using the ideal point estimates created by Andrew Martin and Kevin Quinn, who used a dynamic Bayesian item response model to estimate the relative ideological location of each Justice in each year of his or her service on the Court. The independent variable in the case-level model, Opinion Author Distance from Coalition, is the absolute value of the difference in the Martin-Quinn scores between the majority (or plurality) opinion author and the median of the final majority voting coalition. The median Justice of the voting coalition is used to measure the coalition’s ideological location because recent research indicates the median Justice is particularly influential in determining outcomes and the content of opinions.

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66 See Segal & Spaeth, Attitudinal Model, supra note 19, at 433.
68 See Epstein & Knight, supra note 33, at 70; Maltzman, Spriggs, & Wahlbeck, supra note 33.
72 The majority voting coalition includes all Justices voting for the majority outcome, including Justices who concurred in the judgment. See Bonneau et al., supra note 33; Carrubba et al, supra note 35 (showing the median of the majority coalition is more important than the median on the Court; Charles Cameron, Shaping Supreme Court Policy Through Appointments, 93 MINN. L. REV. 1820, 1844 (2009) (describing the majority median approach); Frank B. Cross & Stefanie Lindquist, The Decisional Significance of the Chief Justice, 154 U. PA. L. REV. 1665, 1679-80 (2006); see also Neal Devins, Ideological Cohesion and Precedent (Or Why the Court Only Cares About Precedent When Most Justices Agree With Each Other), 86 N.C. L. REV. 1399, 1438 (2008) (suggesting that “the preferences of the median member
The coalition-building and bargaining literature also suggest that ideologically-polarized or heterogeneous coalitions slow coalition formation\textsuperscript{73} and produce more separate opinions.\textsuperscript{74} In a recent article, Nancy Staudt, Barry Friedman, and Lee Epstein argue that consequential decisions\textsuperscript{75} are more likely to occur in ideologically homogeneous coalitions in part because “[t]he authority of a majority coalition of ideologically dispersed Justices is further minimized by the ability of each Justice to write his or her own opinion explaining the judgment. When the preferences are homogeneous, indeed identical, there is little incentive to write separately.”\textsuperscript{76} In other words, “ideological dispersion will result in a muddled explanation or fragmented majority.”\textsuperscript{77} Based on this growing literature, our hypothesis is that the greater the ideological heterogeneity in the majority voting coalition, the greater the likelihood of a plurality decision. The independent variable, \textit{Ideological Heterogeneity of Coalition}, is the standard deviation of the Martin-Quinn scores\textsuperscript{78} for the Justices in the majority voting coalition in each case.\textsuperscript{79}

2. Collegial Factors

Scholars recognize that decision making on the Supreme Court is best characterized as a “collegial game,” meaning Justices pursue their preferred

\textsuperscript{73} See Maltzman, Spriggs, and Wahlbeck., \textit{supra} note 33, at 143.
\textsuperscript{75} The authors use the term consequential “to indicat[e] that certain cases, as a relative matter, make or change the law in significant ways.” See Nancy Staudt et al., \textit{On the Role of Ideological Homogeneity in Generating Consequential Constitutional Decisions}, 10 U. Pa. J. Const. L. 361, 364-65 (2008).
\textsuperscript{76} Id. at 370.
\textsuperscript{77} Id. at 371.
\textsuperscript{78} See \textit{supra} note 71.
\textsuperscript{79} In order to estimate properly the effect of the ideological heterogeneity variable, controls are included for the size of the final majority voting coalition because there is a strong correlation between coalition size and ideological heterogeneity. For example, unanimous voting coalitions will have high heterogeneity because they include all Justices on the Court. To ensure that the variable for ideological heterogeneity is not picking up the effect of coalition size, we include two dichotomous variables drawn from the Supreme Court Database, \textit{supra} note 18: \textit{Minimum Winning Coalition} equals one if the final majority voting coalition was the minimum coalition necessary to avoid an equally divided Court (e.g., 5-4), and \textit{Unanimous Coalition} equals one if the final majority voting coalition included all Justices voting in a case (e.g., 9-0). These two variables are coded as zero for all other coalition sizes.
legal and policy goals but do so within the constraints imposed by the institutional rules and norms of the Court.\textsuperscript{80} Judicial decision making is interdependent in the sense that one Justice’s decision in a case is often influenced by the preferences and anticipated choices of her colleagues. This idea is referred to as the “Collective Decision-Making Postulate,” which posits that “Justices will try to secure opinions that are as close as possible to their policy positions by basing their decisions in part on the positions and actions of their colleagues.”\textsuperscript{81} Bargaining, negotiation, and compromise are therefore involved as the Justices maneuver through the various stages of judicial decision making in an attempt to secure favorable legal and policy outcomes. Research shows that all aspects of decision making on the Court, including voting on certiorari,\textsuperscript{82} voting at conference,\textsuperscript{83} bargaining with majority opinion authors,\textsuperscript{84} accommodating Justices’ concerns in draft majority opinions,\textsuperscript{85} joining majority opinions,\textsuperscript{86} and writing separately,\textsuperscript{87} are influenced by strategic concerns.

Drawing on this literature, our hypothesis is that the occurrence of a plurality opinion will depend on the prior relationship between the Justice writing for the Court and other Justices. If the author has previously been uncooperative with her colleagues—specifically by writing concurrences in the judgment frequently—then other Justices in the majority voting coalition are more likely to write separately and generate a plurality decision. \textit{Author’s Lack of Cooperation} is determined by first calculating the percentage of cases for a Term in which each individual Justice wrote a concurrence in the judgment when voting with a majority coalition. Because this percentage is likely to depend in part on a Justice’s ideology, ideological influence is purged by regressing the percentage on the absolute value of the distance between a given Justice and

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{80} See Maltzman, Spriggs \& Wahlbeck, \textit{supra} note 33, at 148; Epstein \& Knight, \textit{supra} note 33, at 96.
\item \textsuperscript{81} Maltzman, Spriggs \& Wahlbeck, \textit{supra} note 33, at 17.
\item \textsuperscript{85} See Maltzman, Spriggs \& Wahlbeck, \textit{supra} note 33, at 100; Wahlbeck, Spriggs \& Maltzman, \textit{supra} note 70.
\item \textsuperscript{86} See Maltzman, Spriggs \& Wahlbeck, \textit{supra} note 33, at 148.
\item \textsuperscript{87} See Collins, \textit{infra} note 111, at 164; Wahlbeck, Spriggs \& Maltzman, \textit{infra} note 111, at 496–97.
\end{itemize}
\end{footnotesize}
the median member of the Court (using Martin-Quinn scores\textsuperscript{88}) in a particular Term. The residual from the regression model—which is equivalent to a Justice’s lack of cooperation in a given Term that is not explained by ideology—is then lagged one Term in order to derive the Author’s Lack of Cooperation.\textsuperscript{89} Larger values for this variable indicate an opinion author who, for reasons unrelated to her ideological extremity, more frequently wrote concurrences in the judgment in cases decided during the Term before.

3. Legal Factors

While ideology and collegiality play an important role in determining the outcome of cases, so too do legal norms and constraints.\textsuperscript{90} Legal scholars have long maintained that judges are constrained by such legal factors as text, legal reasoning, and precedent.\textsuperscript{91} Of course, legal factors such as stare decisis operate differently depending on the specific circumstances of a case. Many scholars and judges maintain, for instance, that stare decisis has greater influence in statutory cases than in cases involving matters of constitutional interpretation.\textsuperscript{92} Because of the strong form of stare decisis applied in cases of statutory construction, our hypothesis is that the Court will be less likely to issue plurality opinions in statutory cases. The case-level model empirically tests this hypothesis by including two dummy variables from the Supreme Court Database.\textsuperscript{93} Constitutional Interpretation equals one for cases involving

\textsuperscript{88}Martin & Quinn, supra note 71.

\textsuperscript{89} Since this variable is lagged one Term, there is no value for a Justice’s first Term on the Court. In other words, an Author’s Lack of Cooperation is set at 0 for his or her first Term on the Court (which is slightly above the median value for this variable).


\textsuperscript{91} See Stras, supra note 52, at 1419.


\textsuperscript{93} See Supreme Court Database, supra note 18. Specifically, the “authdec1” and “authdec2” variables are used to determine the interpretational basis for a case. Any case labeled as both constitutional
constitutional interpretation and Common Law/Review of Administrative Action equals one for a case involving common law adjudication or the review of an administrative action. Each variable is coded 0 for statutory cases.

A second legal variable examines whether the Supreme Court granted certiorari in order to resolve a lower court conflict. Two of the three considerations for granting certiorari in Supreme Court Rule 10 are whether “a United States court of appeals has entered a decision in conflict with the decision of another United States court of appeals on the same important matter” and whether “a state court of last resort has decided an important federal question in a way that conflicts with the decision of another state court of last resort or of a United States court of appeals.”\textsuperscript{94} Because conflict among the lower courts is a somewhat objective criterion for granting certiorari, it is likely that a Justice’s vote to grant in such a circumstance is based less on ideological preferences and more on a desire to maintain uniform, national legal standards.\textsuperscript{95} In other words, it is less likely that a Justice has voted strategically to grant certiorari when a circuit split exists. For example, a recent study demonstrates that Justices are less likely to grant certiorari based on ideological concerns when a case involves lower court conflict.\textsuperscript{96} Our hypothesis, therefore, is that plenary cases involving lower court conflict will be less likely to result in plurality decisions. The independent variable in the case-level model, \textit{Case Involves Lower Court Conflict}, is a dummy variable equaling one if lower court conflict was the reason for granting certiorari and zero otherwise.\textsuperscript{97}

A third legal variable relates to the Court’s treatment of plurality opinions. Prior to the Supreme Court’s opinion in \textit{Marks v. United States},\textsuperscript{98} the precedential value of plurality opinions was ambiguous. In interpreting plurality decisions, many courts concluded prior to \textit{Marks} that only the result reached in the case, rather than the opinion’s rationale, was binding in future

\textsuperscript{94} Sup. Ct. R. 10(a), (b).
\textsuperscript{96} See Black & Owens, \textit{supra} note 95, at 1071, 1073.
\textsuperscript{97} This variable is derived from the Supreme Court Database, see \textit{supra} note 18, which codes a case as having conflict if the Court’s opinion identifies federal court conflict (or federal court conflict and the resolution of an important question) as the reason for granting certiorari.
\textsuperscript{98} 430 U.S. 188 (1977).
cases.\textsuperscript{99} Frankly, as Part II of this article demonstrates, prior to the late 1940s the precedential value of plurality decisions was not of great concern given how few plurality decisions existed. As the Court began to issue more plurality opinions, however, the problem of interpretation and precedential value of such opinions became more acute. Thus, in \textit{Marks}, the Court stated that “[w]hen a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, ‘the holding of the Court may be viewed as that position taken by those Members who concurred in the judgments on the narrowest grounds. . . .’\textsuperscript{100} It is an understatement to say that courts have struggled mightily to find the controlling legal rule by applying the \textit{Marks} rule. \textit{Rapanos}, discussed above, is but one example among many.\textsuperscript{101}

Despite the shortcomings of the \textit{Marks} rule, it potentially “incentivize[s] separate opinions.”\textsuperscript{102} In particular, a strategic Justice knows that a separate opinion concurring in the judgment has the potential to provide a binding legal rule under \textit{Marks}. Although a norm of consensus (though much weaker than in the early 20\textsuperscript{th} century) exists on the Court, Justices can potentially enhance their policy influence by writing separately rather than compromising their preferences by joining a majority opinion that does not fully reflect their preferred legal approach. In other words, other than collegiality and institutional legitimacy concerns, what incentive does a Justice have for compromise when he or she knows that under \textit{Marks} there is a substantial probability that his or her separate opinion will be construed as controlling in future cases?\textsuperscript{103} Our hypothesis, therefore, is that for cases decided after \textit{Marks}, the probability of a plurality decision rises because of the potentially perverse incentive it creates to write separately. The independent variable, \textit{Case Decided After Marks v. U.S.}, is a dichotomous variable taking on a value of one in any case decided


\textsuperscript{100} See \textit{Marks}, 430 U.S. at 193.

\textsuperscript{101} See supra notes 41-45 and accompanying text; see also United States v. Heron, 564 F.3d 879, 884 (7th Cir. 2009) (declining to apply the \textit{Marks} rule to \textit{Missouri v. Seibert}, 542 U.S. 600 (2002) because Justice Kennedy’s opinion in that case was not a narrower ground than that adopted by the plurality).


\textsuperscript{103} That observation, of course, assumes that the opinion concurring in the judgment is clearly “narrower” than the plurality opinion and the other opinions concurring in the judgment, and that lower courts will give equivalent stare decisis value when a plurality decision results, neither of which are certain in many cases. See supra notes 46-51 and accompanying text.
after *Marks* and zero otherwise. Though this variable is categorized as legal in our model because it resulted from a change in the law, we view it more as a “law as opportunity” effect—meaning the Justices can use law as a vehicle to advance their policy preferences—rather than a “law as constraint” effect—in which law, among other things, serves to limit the available, legally-defensible alternatives in a case.104

4. Contextual Factors

The final group of independent variables in the case-level model are contextual factors. The conceptual linkage among these variables is that they relate either to the context of the case in terms of either the difficulty of deciding a case or to the institutional position occupied by the opinion author. Contemporary models of Court decision making generally recognize that these case- and Justice-specific contextual attributes influence the process of decision making and the outcomes of cases.105

Our first contextual variable relates to the Chief Justice’s institutional position on the Court. As the Court’s task leader, he is responsible for such duties as assigning most majority opinions,106 facilitating the discussion of cases at conference,107 and generally maintaining a collegial and efficient work environment.108 Most scholars thus conclude that the Chief Justice acts in ways to “enhance the legitimacy of the Court’s opinions, promote harmony on the bench, and ensure that the Court completes its work in a timely fashion.”109 Others also point out one of the Chief’s main institutional responsibilities is the promotion of “Court cohesion.”110 Consistent with these claims, research shows, for instance, that the Chief Justice is less likely to write separate opin-
ions, is less prone to bargain aggressively with majority opinion authors, and is more inclined to preemptively accommodate colleagues’ legal positions in the first draft of his majority opinions. One of the clearest pieces of empirical evidence for the Chief’s pursuit of goals beyond policy-based concerns is the strong influence of organizational needs (such as the efficient processing of cases and the equitable distribution of majority opinions) on his assignment of majority opinions. Indeed, the Chief’s pursuit of these institutional needs exert a more pronounced influence on his opinion assignment decisions than ideological concerns. We therefore hypothesize that when the Chief Justice is the author of the opinion for the Court, he will be less likely to produce a plurality opinion, because he will go to greater lengths than other members of the Court to forge consensus and avoid a fractured majority. We code Chief Justice Opinion Author as one when the Chief Justice is the author of the final majority (or plurality) opinion, as taken from the Supreme Court Database, and code it zero for Associate Justices.

A common theme in prior discussions of plurality opinions is that they are a necessary and justifiable symptom of the difficult cases before the Supreme Court. A case may be “difficult” for several non-ideological reasons, including its political or legal salience, legal complexity, or multidimensionality. Research indicates that the foregoing factors affect Supreme Court decision making in a variety of respects. For instance, in salient and complex cases, studies show that Justices are more likely to write separately, take longer to join majority opinions, rely more on their ideological predispositions, and

112 See MALTZMAN, SPRIGGS & WAHLBECK, supra note 33, at 84, 90.
113 See MALTZMAN, SPRIGGS & WAHLBECK, supra note 33, at 119.
115 Id, at 559-61.
116 See Supreme Court Database, supra note 18.
117 See Easterbrook, supra note 9.
118 See Collins, supra note 111, at 162-64; Wahlbeck et al, supra note 70, at 502-03.
119 See MALTZMAN, SPRIGGS & WAHLBECK, supra note 33, at 146-47.
120 See Issac Unah & Ange-Marie Hancock, U.S. Supreme Court Decision Making, Case Salience, and the Attitudinal Model, 28 LAW & POL’Y 295, 305-09 (2006); Paul M. Collins, Jr., The Consistency of Judicial Choice, 70 J. POL. 861 (2008);
are less responsive to stare decisis.\footnote{See Timothy R. Johnson et al., Oral Advocacy Before the United States Supreme Court: Does It Affect the Justices’ Decisions?, 85 WASH. U. L. REV. 457, 492 (2007).} We thus expect plurality opinions will be more prevalent in difficult cases.

Five variables common to the judicial politics literature are used to capture different aspects of case difficulty. The first variable, \textit{Amicus Brief Filings}, assesses the volume of amicus curiae activity in a case. It captures case difficulty because the number of amicus briefs relate to the legal complexity, legal ambiguity, and political salience of a case.\footnote{See MALTZMAN, SPRIGGS \\& WAHLBECK, supra note 33, at 22; Collins, supra note 111, at 151-52.} Prior research demonstrates that the number of amicus briefs filed by interest groups “influences litigation success,” by shaping doctrinal change and in persuading the Court to grant plenary review at the certiorari stage.\footnote{Collins, supra note 111, at 144;} In particular, Paul Wahlbeck, James Spriggs, and Forrest Maltzman, in addition to Paul Collins, show that cases with more amicus briefs are accompanied by a larger number of separate opinions.\footnote{See id. at 146; Wahlbeck, Spriggs \\& Maltzman, supra note 70, at 503.} Consistent with prior studies, our hypothesis is that the more amicus briefs filed in a particular case, the greater the likelihood of a plurality decision. Because amicus brief filings have been steadily rising over time, the independent variable in this study, \textit{Amicus Brief Filings}, is calculated by taking the number of amicus briefs filed in a given case, subtracting the average number of briefs filed during the Term in which the case was decided, and dividing that number by the standard deviation of the number of briefs filed during that Term.\footnote{In other words, \textit{Amicus Brief Filings} = (# of briefs filed in Case X \textendash; Average Number of Briefs Filed in the Term in which Case X was decided)/Standard Deviation of Number of Briefs Filed in Term of Case X). For a given case and the number of amicus briefs filed in it, this measure denotes the number of standard deviations above or below the mean number of briefs filed in a given Term. Data on the number of amicus briefs filed per case are taken from HANSFORD \\& SPRIGGS, supra note 90, for cases decided between the 1953 and 1999 Terms. Data for later cases are from Thomas G. Hansford \\& Kristen Johnson, Interests and Institutions: The Causes and a Consequence of Organized Interest Activity at the U.S. Supreme Court, Paper presented at the Annual Meeting of the American Political Science Association (2008) (on file with authors). We thank Professor Hansford for providing us with these updated data on amicus brief filings.}

Whether reargument is ordered by the Supreme Court in a plenary case is another way to measure case difficulty.\footnote{See Valerie Hoekstra \\& Timothy R. Johnson, Delaying Justice: The Supreme Court’s Decision to Hear Rearguments, 56 POL. RES. Q. 351, 355-57 (2003).} Though a decision by the Supreme Court to order reargument can be a product of a number of considerations,
including the addition of a new Justice on the Court, the Supreme Court tends to grant reargument in the most legally complicated, highly salient, and politically contentious cases. An example of a politically salient case that has been reargued during the October 2009 Term is *Citizens United v. Federal Election Commission*, in which the Court asked the parties to brief an additional question relating to the continued viability of two of its election law opinions governing corporate contributions to political candidates: *Austin v. Michigan Chamber of Commerce* and *McConnell v. FEC*. *Citizens United* is one of the most important and highly-salient cases before the Supreme Court during the 2009 Term. Accordingly, our hypothesis is that if a case is reargued, it is more likely to result in a plurality decision. The independent variable in the model, *Case Reargued*, is a dichotomous variable that equals one if the case was reargued and zero otherwise.

The next variable for case difficulty is *Multidimensionality of a Case*, which measures the number of legal issues and provisions in a case. The variable is the sum of the number of legal provisions and legal issues dealt with in the opinion. Our hypothesis is that the larger the number of legal issues and provisions involved in a case, the greater the likelihood that a plurality decision will result. The hypothesis is premised upon the fact that, all else equal, the greater the number of issues and legal provisions in a case, the more room for disagreement among the Justices.

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127 See id. at 356.
130 We realize that *Case Reargued* may suffer from endogeneity with our dependent variable, a plurality decision from the Supreme Court, because the Court often orders reargument in cases where the Court is already closely divided. See Hoekstra & Johnson, supra note 127, at 356 (2003) (finding that a case with a minimum winning coalition is more likely to be reargued).
131 See Supreme Court Database, supra note 18. The “LAW” variable is used to determine the number of constitutional provisions, statutes, or court rules at issue in a case, while the “ISSUE” variable counts the number of distinct legal issues in a decision. One commentator suggests that the Supreme Court Database undercounts the number of legal issues and provisions in a case. See Carolyn Shapiro, *Coding Complexity: Bringing Law to the Empirical Analysis of the Supreme Court*, 60 HASTINGS L. J. 477 (2009). Assuming measurement error in the Supreme Court Database’s coding of issue categories is random and is uncorrelated with our other independent variables then the only statistical effect is to attenuate the coefficient on the *Multidimensionality* variable.
132 Prior research shows, for instance, that Justices are more likely to change their minds about the outcome of complex cases between the conference and final vote in a case. Forrest Maltzman & Paul J. Wahlbeck, *Strategic Policy Considerations and Voting Fluidity on the Burger Court*, 90 AM. POL. SCI. R. 581 (1996). Measuring the relationship between voting fluidity and a range of variables, the study found
A variable is also included for whether a case involves civil liberties or civil rights. Pamela Corley has noted that “plurality decisions are important to study because they tend to occur in highly salient issue areas such as civil liberties and civil rights.”\footnote{Corley, supra note 24, at 32.} The \textit{Supreme Court Compendium}, a useful source of Supreme Court-related statistics, has identified this phenomenon too.\footnote{Lee Epstein et al., \textit{The Supreme Court Compendium: Data, Decisions, and Developments} 223-24 (4th ed. 2007).} Some scholars argue that cases involving hot-button political or social issues, such as those involving civil liberties, are more likely to result in plurality decisions because the ideological preferences of the Justices are most likely to drive their decisions in these areas.\footnote{See Maltzman, Spriggs & Wahlbeck, supra note 52, at 89; Collins, supra note 111, at 164-65 (2008); Collins, supra note 120, at 868-70.} Our hypothesis, therefore, is that if a case involves civil liberties, it is more likely to result in a plurality decision. The independent variable, \textit{Civil Liberties Case}, is derived from the Supreme Court Database and equals one if a case is in the area of civil liberties or civil rights and zero otherwise.\footnote{See supra note 18.} Specifically, this article uses the “value” variable from the Supreme Court Database, which categorizes any case involving criminal procedure, civil rights, First Amendment, Due Process, or privacy as a civil liberties case.

The final measure of case difficulty in the case-level model is whether the Supreme Court invalidated a federal statute as unconstitutional. Though a post-hoc measure, our hypothesis is that cases in which the Court strikes down a federal statute tend to be legally controversial and difficult, which will increase the likelihood of a plurality decision. The independent variable, \textit{Opinion Invalidates Federal Law as Unconstitutional}, is a dichotomous variable which equals one if the Court strikes down a federal statute on constitutional grounds and zero otherwise.

Finally, the case-level model includes three control variables. The first, \textit{Size of the Plenary Docket}, accounts for the astounding drop in the Supreme Court’s plenary docket since October Term 1986 to determine if the drop in plenary cases has had any impact on the frequency of plurality decisions.\footnote{See Stras, supra note 28, at 950. The number of plenary cases before the Supreme Court has plunged from 153 signed opinions in 1986 to just seventy-four such opinions in 2002 and 2003. \textit{See id.}} This variable equals the number of orally-argued cases producing a written opinion in a Term. The second control variable, \textit{Time Until End of Term},
captures whether the pressures at the end of the Term affect the prevalence of plurality decisions. It is measured by the number of days from oral argument to July 1, the traditional date by which the Court finishes all of its business in any given Term. To control for any remaining effects stemming from the passage of time we include the variable, Term of Court, which assumes the numeric value for the Term in which the Court decided a case. The data for these variables is from the United States Supreme Court Database. As control variables, we do not hypothesize whether they increase or decrease the occurrence of plurality decisions, and they are included because they ensure that the coefficients of the independent variables of interest in the model are not biased.

**B. Results**

The case-level model predicts that the occurrence of plurality opinions is due to ideological, collegial, legal, and contextual factors. This section of the article discusses the results of our statistical analysis, which shows whether and to what extent each of the independent variables in the model is associated with plurality opinions. The last column of Table 1 provides a summary of our predictions. The results of our statistical analysis are reported in Tables 2 and 3, with the former presenting the coefficient and standard error for each independent variable and the latter indicating the magnitude of the effect of each statistically significant variable in terms of predicted probabilities.

Our hypotheses regarding the ideological variables suggest that the occurrence of plurality opinions is dependent in part on the ideological composition of the majority coalition. First, we hypothesized that plurality decisions occur more often when majority (or plurality) opinion authors are ideologically distant from the remainder of the majority coalition and when the coalition is ideologically heterogeneous.

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138 See Supreme Court Database, *supra* note 18.
139 All predicted probabilities in this paper were calculated using CLARIFY (as implemented in STATA 9), which uses simulation analysis to account for both estimation and fundamental uncertainty in a data analysis. This program is available at [http://gking.harvard.edu/](http://gking.harvard.edu/) (last visited Sept. 25, 2009). See Gary King, Michael Tomz & Jason Wittenberg, *Making the Most of Statistical Analyses: Improving Estimation and Interpretation*, 44 AM. J. POL. SCI. 347 (2000).
The results of our statistical analysis do not support either hypothesis. This result is somewhat surprising, given that nearly all of the research examining the outputs of the Court’s decision making—from which cases get selected for review to how the Court interprets precedent—find a pronounced ideological component. The results of the case-level model indicate that ideological variables do not systematically influence when, or how often, plurality decisions occur, but it does not mean that ideological forces play no role in producing plurality decisions. Part IV will show that examining the individual votes of the Justices is necessary to uncover ideological effects, and Part V addresses whether the effect of ideological distance may depend on the context of a case. The case-level model also does not support our collegiality hypothesis, but as with the ideological variables, convincing support is found for it in our Justice-level model.

Table 2: Logistic Regression of the Case-Level Determinants of Plurality Opinions on During the 1953-2006 Terms

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140 While we are confident that our measure of ideological distance is the most appropriate given our hypothesis, we explored three alternative measures. First, an author’s ideological distance from the most ideologically extreme Justice in the majority coalition (regardless of that Justice’s ideological proximity to the author) was examined. Second, the largest value of ideological distance between the (majority or plurality) opinion author and each Justice in the majority coalition was considered. Third, the absolute value of the author’s ideological position was used. None of these measures provided results different from those reported in Table 2.

141 See supra notes 63–70.

142 The dependent variable in the case-level model is a dummy variable, which equals 1 if a case resulted in a plurality decision and zero otherwise. This table omits two control variables included in the statistical model relating to the size of the final majority coalition. See supra note 79. The coefficient and standard error for each are: Minimum Winning Coalition .957 (.160) and Unanimous Coalition -2.156 (.401).
In Part III.A.2, we hypothesized that the following three legal variables would have an effect on the frequency of plurality decisions: the type of legal issue presented in a plenary case, whether certiorari was granted because of a split among lower courts, and whether a case was decided after *Marks v. United States*.

First, the results show that, consistent with the idea that precedent presents a greater constraint in statutory cases, plurality opinions are less likely to occur in statutory cases, as compared to either cases interpreting the Constitution or involving common law adjudication or review of administrative agency action. This effect is observed in the positive coefficients for *Constitutional Interpretation* and *Common Law/Review of Administrative Action*. The model predicts that the Court issues a plurality opinion 1.9% of the time in statutory cases, but that percentage increases to 3.5% and 5.7% in common law/agency review and
constitutional cases, respectively. These numbers may seem inconsequential in absolute terms, given the infrequency of plurality decisions, but the change in probability is substantial. For instance, constitutional cases are 200.0% more likely to result in plurality decisions than statutory cases.

Table 3: The Effects of Independent Variables on the Likelihood of a Plurality Opinion

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Predicted Probability</th>
<th>95% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline Scenario</td>
<td>0.019</td>
<td>[.011, .030]</td>
</tr>
<tr>
<td>Constitutional Interpretation</td>
<td>0.057</td>
<td>[.039, .080]</td>
</tr>
<tr>
<td>Common Law/Review of Administrative Action</td>
<td>0.035</td>
<td>[.018, .061]</td>
</tr>
<tr>
<td>Case Involves Lower Court Conflict</td>
<td>0.012</td>
<td>[.005, .022]</td>
</tr>
<tr>
<td>Amicus Briefs in Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Filings</td>
<td>0.017</td>
<td>[.010, .026]</td>
</tr>
<tr>
<td>High Filings</td>
<td>0.023</td>
<td>[.013, .038]</td>
</tr>
<tr>
<td>Not Civil Liberties Case</td>
<td>0.012</td>
<td>[.007, .019]</td>
</tr>
<tr>
<td>Case Reargued</td>
<td>0.036</td>
<td>[.015, .073]</td>
</tr>
</tbody>
</table>

Second, we hypothesized that cases involving lower court conflict would be less likely to result in plurality decisions because the Court is more prone to place such cases on the plenary docket as a result of legal needs rather than ideological preferences. The results of the case-level model are consistent with this hypothesis, as the chance of a plurality decision decreases from 1.9% when conflict is not present to 1.2% when lower court conflict is involved. This shift represents a 58.3% decrease in the probability of a plurality decision.

Finally, the case-level model tests our hypothesis that plurality decisions are more likely to occur after *Marks v. United States* because the “narrowest grounds” principle enunciated in that case for determining the holding of the

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143 See *supra* note 139 for an explanation of how the predicted probabilities were calculated. All other independent variables are held constant at their means (for continuous variables) or modes (for dummy variables), and then the independent variable of interest is varied.

144 Each of the independent variables in Table 3 are set at their mean (or modal value for a dummy variable) to calculate the probability under the Baseline Scenario. For purposes of the simulation, the variable *Amicus Briefs in Case* is varied two standard deviations about its mean to determine the predicted probabilities of a plurality decision for the low and high amicus brief filings scenarios. Any variable that was not statistically significant at *p* ≤ .05 (one-tailed test) was excluded from this table.

145 See Lindquist & Klein, *supra* note 95; Black & Owens, *supra* note 95.
Court may give Justices an enhanced incentive to concur in the judgment. The data do not support our hypothesis that plurality decisions are more likely to result after *Marks*, as there is virtually no difference in the rate of plurality opinions before and after *Marks*.

The fourth set of factors are case characteristics relating to the difficulty of a case. Our hypothesis is that plurality decisions are more likely to occur in difficult cases, and our model employs five variables common to the judicial politics literature to capture different aspects of case difficulty. The significance of three of the five contextual variables are supported by the statistical analysis. First, the greater the number of *Amicus Brief Filings* in a case (relative to the other cases filed in the same Term), the higher the likelihood of a plurality decision. The incidence of a plurality decision increases from 1.7% to 2.3% in cases of low, rather than high, amicus brief filings. Second, cases that are reargued are 89.5% more likely to result in plurality decisions, with those reargued having a 3.6% chance of a plurality decision and those not reargued falling at the Baseline probability of 1.9%. Third, a case involving civil liberties or civil rights is 58.3% more likely than a case involving other issue areas to result in a plurality decision. Meanwhile, the two other variables for case difficulty, *Opinion Strikes Federal Law as Unconstitutional* and *Multidimensionality of Case*, appear unrelated to the occurrence of plurality decisions.

The model also tests for whether an opinion authored by the Chief Justice is less likely to result in a plurality decision. Our hypothesis was that when the Chief Justice is the author for the majority coalition, a plurality decision would be less likely to occur because of the Chief Justice’s institutional role within the Court. The data, however, do not support that hypothesis, nor are any of the other control variables included in the model for time-related effects correlated with the frequency of plurality decisions. ¹⁴⁶

¹⁴⁶ The case-level model also tests for two other possible contextual effects related to the institutional positions of certain members of the Court. First, we examined whether freshman opinion authors (those who are in their first or second Term on the Court) were more or less likely to author plurality opinions, finding no difference between them and their more senior colleagues. Additionally, we looked beyond the so-called freshman effect to see if Justices who have been on the Court longer author plurality opinions at different rates than other Justices (we used a quadratic formulation that included a variable for the number of years a Justice has been on the Court and the square of this variable). Both institutional variables relating to the tenure of Justices were unrelated to plurality decisions. Second, we examined whether plurality decisions are more or less likely to occur during Terms in which there is a larger number of newer Justices on the Court. We included a variable in our model for the number of freshman Justices on the Court, finding that it had no effect on plurality opinions. An alternative measure, the
An additional way to examine the degree to which the independent variables influence the occurrence of plurality opinions appears in Figure 6. Rather than consider each of the variables in isolation, as in Table 3, this figure presents three hypothetical case scenarios combining various independent variables identified as having a significant relationship to plurality decisions in the statistical analysis. Scenario 1 represents a case in which the case-level results predict a plurality decision is unlikely to occur, while Scenario 3 is one in which the statistical model predicts a plurality opinion is likely to occur. Scenario 2, by contrast, depicts an average case. Figure 6 demonstrates that the independent variables exert a sizable effect on whether a majority coalition fails to form. Cases falling under Scenario 1, for instance, result in pluralities only 0.7% of the time, while those falling under Scenario 3 do so 12.8% of the time. The change in the likelihood of a plurality decision across these two scenarios is sizable, with the percentage changing by 1,729%.

In short, the case-level model shows that the occurrence of plurality opinions is strongly influenced by the legal and contextual features of a case. To adumbrate the individual Justice analyses in part IV, the Justices’ ideological positions and collegial interactions also play a role in producing plurality opinions because they influence whether and when Justices cast votes concurring in the judgment.

Figure 6: The Combined Influence of Independent Variables on the Probability of a Plurality Opinion

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147 Scenario 1 is a statutory, non-civil liberties case with lower court conflict, a small number of amicus briefs, and no reargument. Scenario 3, by contrast, is a constitutional, civil liberties case with lower court conflict, a large number of amicus briefs, and reargument. All other variables were set at their means for continuous variables or modes for dichotomous variables.
C. Case-Level Model with Oral Argument Data

Other than judicial opinions, oral arguments are one of the most visible aspects of the Supreme Court’s decisional process. Many scholars dismiss oral arguments as mere window dressing, but recent studies demonstrate that they matter. According to one study, a Justice is more likely to vote for the litigant whose lawyer delivered a stronger oral argument, even after controlling for a host of other variables related to case outcomes. Other research shows that the Justices’ votes can be predicted by the questions they ask at oral argu-

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148 See Segal & Speth, Attitudinal Model, supra note 19, at 280; Thomas G. Walker & Lee Epstein, The Supreme Court of the United States: An Introduction 106 (1993) (suggesting that oral arguments may be relevant but “[p]robably few [of the Justices’] minds are significantly changed”).

149 See Johnson et al., supra note 61.

ments,\textsuperscript{151} and that Justices use oral arguments to gather information relevant to deciding a case.\textsuperscript{152}

Drawing on political science and cognitive psychology literature, a recent paper by Timothy Johnson and Ryan Black develops a measure of case salience based on the level of engagement by individual Justices at oral argument sessions.\textsuperscript{153} They argue that the arguments are essentially information-harvesting opportunities for the Justices and that the number of questions asked during an oral argument is a valid measure of salience because it will distinguish cases with “broader policy implications” and those involving a greater number of external actors from those that are less important.\textsuperscript{154} Adjusting their data to the varying membership of the Court and the nonparticipation of Justices in some cases, Johnson and Black introduce the first actor-based approach to case salience.\textsuperscript{155}

Following their lead, the independent variable, \textit{Number of Words at Oral Argument}, is incorporated into the case-level model using the Johnson and Black data.\textsuperscript{156} The specific measure is the average number of words spoken per Justice at oral arguments for a given case. This variable has a mean of 448 words and a standard deviation of 112.8. The oral argument data cover a sample of cases decided between the 1998 and 2006 Terms, and thus the variable’s relationship to plurality opinions is estimated for the 643 cases for which we have data. The other variables from Table 2 are retained, except for those that were excluded due to methodological reasons.\textsuperscript{157} Given the small number of cases in this estimation sample, the results are somewhat tentative.

Consistent with other measures of case difficulty, our hypothesis is that the greater the number of words spoken by members of the Court, the greater the likelihood that a plurality opinion will result. The data support our expecta-

\textsuperscript{151} See Johnson et al., \textit{supra} note 61.
\textsuperscript{152} See \textsc{Timothy R. Johnson, Oral Arguments and Decision Making on the United States Supreme Court} (2004); Johnson et al., \textit{supra} note 61.
\textsuperscript{153} See Ryan Black & Timothy R. Johnson, \textit{Salient to Whom: Rethinking the Measurement of Issue Salience} (unpublished manuscript on file with authors).
\textsuperscript{154} \textit{Id.} at 12.
\textsuperscript{155} \textit{Id.} at 12-13.
\textsuperscript{156} \textit{Id.} at 12. We would like to specially thank Timothy Johnson and Ryan Black, who shared their oral argument data with us for purposes of writing this article.
\textsuperscript{157} Due to collinearity and perfect prediction, we had to drop a number of variables from this version of the model. Specifically, we excluded \textit{Unanimous Opinion, Common Law/Review of Administrative Action, Opinion Invalidates Federal Law as Unconstitutional, Case Reargued, and Case Decided After Marks v. U.S.}
tion, and the coefficient is positive and statistically significant at $p \leq .05$ (one-tailed test). Substantively speaking, the model predicts that cases in which the number of words spoken by the Justices at oral argument sessions is two standard deviations above the mean for a given Term have a 1.6% chance of resulting in a plurality decision, while those falling two standard deviations below the mean result in a plurality decision only .3% of the time.\(^{158}\)

IV. The Individual Justice Model

The case level model tells only part of the story about plurality decisions. As *Marks* implicitly acknowledges, a plurality decision occurs only if one or more Justices write separately to concur in the judgment and four or fewer of the remaining Justices agree on a single rationale for the judgment.\(^{159}\) By examining what causes individual Justices to make the decision to join the majority, join the majority and concur, or concur in the judgment in particular types of cases and under certain conditions, the individual Justice model studies the decision that ultimately leads to a plurality decision: the decision by one or more Justices to write or join an opinion concurring in the judgment.\(^{160}\)

The individual Justice model includes the votes of every Justice who voted with the majority voting coalition for each of the 5,711 cases in the study.\(^{161}\) The dependent variable in the model is categorical based on the alternative votes available to each Justice to join the majority, join the majority and concur, or author an opinion concurring in the judgment in every case.\(^{162}\) Given the categorical nature of the dependent variable, the study employs a multinomial logit model in which the baseline dependent variable category is each Justice’s decision to concur in the judgment,\(^{163}\) and each of the coefficients

\(^{158}\) As with our other predicted probabilities, we use CLARIFY. *See supra* note 139.

\(^{159}\) *See supra* notes 14-17 and accompanying text.

\(^{160}\) The Supreme Court Database contains the individual votes of each of the Justices in every case from October Term 1953 through October Term 2006. *See Supreme Court Database, supra* note 18. Of course, the majority (or plurality) opinion author is excluded in the individual Justice model.

\(^{161}\) The exclusion of dissenting Justices from the individual Justice model does not appreciably affect the statistical results or result in selection bias (because the statistical model used, the multinomial logit, is effectively a series of linked logit models). *See J. SCOTT LONG, REGRESSION MODELS FOR CATEGORICAL AND LIMITED DEPENDENT VARIABLES* 148-50 (Sage Publications, Inc. 1997).

\(^{162}\) For the 5,711 cases in the model, each Justice’s vote was obtained from the Supreme Court Database, *supra* note 18, and the unit of analysis was case citation and split vote.

\(^{163}\) The individual Justice model makes an assumption known as the “independence of irrelevant alternatives” (IIA). That concept refers to the multinomial logit model’s assumption that the odds of an
represents the effect of an independent variable on a Justice’s decision to concur in the judgment rather than choose an alternative disposition. Of the 34,865 votes of individual Justices in the model, 2,793 or 8.0% of them were votes to join or author an opinion concurring in the judgment.

A. Research Design and Hypotheses

Similar to the case level model, the individual Justice model examines the effect of various ideological, collegial, legal, and contextual factors on the decision by Justices to concur in the judgment. The independent variables in the model are identical to those examined in the case level model with several exceptions.

First, the model includes two new ideological variables to replace Opinion Author Distance from Coalition and Ideological Heterogeneity of Coalition. Because the goal of the individual Justice model is to explain the votes of each Justice, rather than those of the Court as a whole, the appropriate focus of the model is a given Justice’s ideological orientation. The first new ideological variable, Justice’s Ideological Distance from Opinion Author, is measured as the absolute difference in the Martin-Quinn scores between the ideological locations of the majority (or plurality) opinion author and the Justice whose vote is being examined. In their book analyzing the “collegial game” on the Supreme Court, Forrest Maltzman, James Spriggs, and Paul Wahlbeck show

outcome occurring do not depend on the other outcomes in the model. The multinominal logit model is appropriate for a dependent variable if the outcome categories of the dependent variable “can plausibly be assumed to be distinct and weighed independently in the eyes of the decision maker.” J. SCOTT LONG & JEREMY FRESEE, REGRESSION MODELS FOR CATEGORICAL DEPENDENT VARIABLES USING STATA 243 (2006). In the individual Justice model, we assume that Justices do not view joining the majority, concurring, concurring in the judgment, and dissenting as representing close substitutes for one another. In other words, each choice represents a distinct legal alternative to the Justices. While there are several ways to test for violations of this assumption, they are not reliable. According to two prominent methodologists, “these tests . . . often give inconsistent results and provide little guidance to violations of the IIA assumption.” J. SCOTT LONG & JEREMY FRESEE, REGRESSION MODELS FOR CATEGORICAL DEPENDENT VARIABLES USING STATA 191 (Stata Press 2001). One could alternatively estimate a stereotype logistic regression model, which relaxes the IIA assumption. We estimated a stereotype logistic model on the data and found that the results for the comparison of concurring in the judgment rather than joining the majority were quite similar to those reported in Table 5 (the main difference was that Cases Decided After Marks v U.S. was statistically significant and Freshman Justice was not.) In addition, a comparison of the AIC’s between the stereotype and multinomial models indicates that the multinomial logit fits the data better. For a discussion of the stereotype logistic regression model, see J. SCOTT LONG & JEREMY FRESEE, REGRESSION MODELS FOR CATEGORICAL DEPENDENT VARIABLES USING STATA 277-291 (2d ed., Stata Press 2006).
that the “ideological proximity” of a Justice to the author of an opinion influences a Justice’s decision regarding whether and how to bargain with the opinion author and even the choice of whether to join the majority coalition.164 Others show that Justices are more likely to write separately when they are ideologically distant from the opinion author.165 Consistent with the coalition-building literature, our hypothesis is that the greater the ideological distance between the author of the majority (or plurality) opinion and a particular Justice, the greater the probability that the Justice will write or join a separate opinion, including a concurring opinion or an opinion concurring in the judgment.

The other ideological variable, Justice’s Ideological Extremity, measures the absolute value of the difference between a particular Justice’s Martin-Quinn score and the score for the median Justice in the majority voting coalition in a case.166 As Tom Clark explains, existing empirical work suggests that ideologically-divergent Justices will be less likely to agree to a single opinion.167 Meanwhile, others have shown that the median Justice in the majority coalition is the pivotal Justice on the Court for the development of legal doctrine, meaning that Justices close to the median should be less likely to concur in the judgment.168 Thus, our hypothesis is that the greater the value of Justice’s Ideological Extremity, the higher the likelihood that he or she will author an opinion concurring in the judgment.

Second, the collegiality variable from the case level model is modified to examine the author’s relationship with each Justice voting in a case. In calculating this variable, each pairing of two Justices is examined to determine the percentage of time each concurred in the judgment when the other authored the opinion for the Court. Because the resulting percentage undoubtedly depends on the ideological affinity between the two Justices, the ideological component of the variable can be eliminated by regressing the initial percentage on the absolute value of the difference in the Justices’ Martin-Quinn scores.169 The residual from the regression—which is the proportion of concurrences in the judgment not due to ideological distance—is then lagged one Term in order to

164 MALTZMAN, SPRIGGS & WAHLBECK, supra note 33, at 81-82, 86-87, 143.
165 See Wahlbeck et al., supra note 111; Collins, supra note 111.
166 See supra note 35 for why the median of the majority voting coalition is used for this variable.
167 See Clark, supra note 74, at 147.
168 See Carrubba et al., supra note 35.
169 See Martin & Quinn, supra note 71.
derive Author’s Lack of Cooperation. Larger values for this variable indicate an opinion author who, for reasons unrelated to ideological distance, more frequently wrote concurrences in the judgment in cases when the other Justice authored an opinion for the Court.

Third, two variables are added to account for the institutional position of certain Justices on the Court. Based on the argument regarding the Chief Justice’s desire to promote the institutional integrity of the Court, it is our prediction that the Chief Justice will be less likely to concur in the judgment than other members of the Court in order to maintain consensus and avoid the issuance of plurality opinions. Chief Justice is coded as one if the Chief Justice casts the vote and zero otherwise. The second variable incorporating institutional position, Freshman Justice, is coded as 1 if a Justice is in the first two Terms of service on the Court and zero otherwise. Scholars have long argued that Justices require a few years to adjust to the Court and thus initially take on a “following rather than a leading” role. Studies show, for example, that freshman Justices are less likely to write separate opinions, more likely to change their votes on the outcome of cases during the writing of opinions, more likely to manifest inconsistency in their voting patterns, and more likely to follow precedent. We thus hypothesize that a freshman Justice will be less likely to concur in the judgment than his or her more senior colleagues.

As with the case level model, an Author’s Lack of Cooperation is set at 0 for his or her first Term on the Court. An alternative way to measure this variable would be to examine an author’s cumulative level of cooperation in all Terms prior to the one in question, but this measure’s results are comparable to those that are reported here.

See supra notes 106-116 and accompanying text.


See Collins, supra note 111, at 162.

See Maltzman & Wahlbeck, supra note 27, at 589.

See Collins, supra note 120, at 868.


The results are largely invariant to including control variables for the size of the final majority voting coalition (i.e., adding a dummy variable for unanimous coalitions and one for minimum winning coalitions). In minimum winning coalitions, Justices are more likely to join the majority than concur in the judgment, and they are more likely to concur than concur in the judgment. In a unanimous coalition, by contrast, they are less likely to concur than concur in the judgment. Each of these results is statistically significant at p ≤ .05.
B. Results

Table 4: Summary Statistics for each Justice’s Decision to Concur in the Judgment in Cases Decided During the 1953-2006 Terms

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Hypothesized Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justice’s Ideological Distance from Opinion Author</td>
<td>2.33</td>
<td>1.82</td>
<td>0</td>
<td>10.63</td>
<td>+</td>
</tr>
<tr>
<td>Justice’s Ideological Extremity</td>
<td>1.4</td>
<td>1.38</td>
<td>0</td>
<td>7.78</td>
<td>+</td>
</tr>
<tr>
<td>Author's Lack of Cooperation</td>
<td>0.003</td>
<td>0.125</td>
<td>-0.248</td>
<td>0.94</td>
<td>+</td>
</tr>
<tr>
<td>Constitutional Interpretation</td>
<td>0.36</td>
<td>0.48</td>
<td>0</td>
<td>1</td>
<td>+</td>
</tr>
<tr>
<td>Common Law/Review of Administrative Action</td>
<td>0.1</td>
<td>0.31</td>
<td>0</td>
<td>1</td>
<td>+</td>
</tr>
<tr>
<td>Case Involves Lower Court Conflict</td>
<td>0.21</td>
<td>0.4</td>
<td>0</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Case Decided After Marks v. U.S.</td>
<td>0.55</td>
<td>0.5</td>
<td>0</td>
<td>1</td>
<td>+</td>
</tr>
<tr>
<td>Chief Justice</td>
<td>0.11</td>
<td>0.32</td>
<td>0</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Freshman Justice</td>
<td>0.09</td>
<td>0.28</td>
<td>0</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Opinion Strikes Down Federal Law as Unconstitutional</td>
<td>0.01</td>
<td>0.11</td>
<td>0</td>
<td>1</td>
<td>+</td>
</tr>
<tr>
<td>Amicus Briefs in Case</td>
<td>0.03</td>
<td>1.03</td>
<td>-1.09</td>
<td>9.99</td>
<td>+</td>
</tr>
<tr>
<td>Civil Liberties Case</td>
<td>0.52</td>
<td>0.5</td>
<td>0</td>
<td>1</td>
<td>+</td>
</tr>
<tr>
<td>Multidimensionality of a Case</td>
<td>2.29</td>
<td>0.82</td>
<td>0</td>
<td>11</td>
<td>+</td>
</tr>
<tr>
<td>Case Reargued</td>
<td>0.02</td>
<td>0.15</td>
<td>0</td>
<td>1</td>
<td>+</td>
</tr>
<tr>
<td>Time Until End of Term</td>
<td>167.3</td>
<td>69.4</td>
<td>0</td>
<td>793</td>
<td>N.A.</td>
</tr>
<tr>
<td>Size of the Plenary Docket</td>
<td>122.9</td>
<td>27.8</td>
<td>65</td>
<td>163</td>
<td>N.A.</td>
</tr>
<tr>
<td>Term of Court</td>
<td>1979.1</td>
<td>14.2</td>
<td>1953</td>
<td>2006</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

The central decisional choice for Justices who agree with the result reached by the majority is whether to join the majority opinion (and possibly write a simple concurring opinion) or to author (or join) a separate opinion concurring in the judgment. As evident in column 2 of Table 5, every factor linked to the occurrence of plurality opinions in the case level model also is related to why Justices concur in the judgment. In addition, the individual Justice model uncovers several contextual factors that were not statistically significant in the case-level analysis, such as the fact that the Chief Justice is less likely to concur in the judgment than join the majority opinion. Of particular significance, a Justices’ ideological orientation is one of the key factors influencing the prevalence of concurrences in the judgment.

Table 5: Multinomial Logit Regression of Each Justice’s Decision to Join the Majority Opinion or Concur, as opposed to Concur in the Judgment, in Cases Decided During the 1953-2006 Terms

As before, we do not propose directional hypotheses for the three control variables. See supra note Error! Bookmark not defined.
The dependent variable in this model is the decision of each Justice in the majority coalition to join the majority or write separately, and the voting data is obtained from the Supreme Court Database. See Supreme Court Database, supra note 18. The coefficients for each of the independent variables represent the effect of that variable on the likelihood of a Justice taking the action labeled at the top of the column (e.g., join majority) as opposed to concurring in the judgment.

The Baseline Scenario in Table 6 is one in which each independent variable is set at its mean (or modal value for a dummy variable). Any variable that was not significantly related to a Justice’s decision to concur in the judgment (rather than choice one of the other voting options) at p ≤0.05 was excluded from this table. CLARIFY was used to generate these predicted probabilities. See supra note 139.

Table 6: The Effects of Independent Variables on the Probability of a Justice Concurring in the Judgment

<table>
<thead>
<tr>
<th>Variable</th>
<th>Join Majority</th>
<th>Concur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justice’s Ideological Distance from Opinion Author</td>
<td>-0.171* (.012)</td>
<td>0.093* (.017)</td>
</tr>
<tr>
<td>Justice’s Ideological Extremity</td>
<td>-0.066* (.014)</td>
<td>-0.024 (.021)</td>
</tr>
<tr>
<td>Author’s Lack of Cooperation</td>
<td>-0.755* (.139)</td>
<td>-0.631* (.214)</td>
</tr>
<tr>
<td>Constitutional Interpretation</td>
<td>-0.621* (.050)</td>
<td>-0.089 (.071)</td>
</tr>
<tr>
<td>Common Law /Review of Administrative Action</td>
<td>-0.392* (.074)</td>
<td>-0.137 (.108)</td>
</tr>
<tr>
<td>Case Involves Lower Court Conflict</td>
<td>0.184* (.060)</td>
<td>0.027 (.084)</td>
</tr>
<tr>
<td>Case Decided After Marks v. U.S.</td>
<td>-0.075 (.076)</td>
<td>-0.435* (.111)</td>
</tr>
<tr>
<td>Chief Justice</td>
<td>0.454* (.074)</td>
<td>-0.037 (.109)</td>
</tr>
<tr>
<td>Freshman Justice</td>
<td>0.187* (.080)</td>
<td>0.213 (.109)</td>
</tr>
<tr>
<td>Opinion Invalidates Federal Law as Unconstitutional</td>
<td>-0.190 (.154)</td>
<td>-0.061 (.204)</td>
</tr>
<tr>
<td>Amicus Briefs in Case</td>
<td>-0.109* (.018)</td>
<td>0.032 (.022)</td>
</tr>
<tr>
<td>Civil Liberties Case</td>
<td>-0.478* (.047)</td>
<td>0.004 (.068)</td>
</tr>
<tr>
<td>Case Reargued</td>
<td>-0.624* (.119)</td>
<td>0.242 (.144)</td>
</tr>
<tr>
<td>Multidimensionality of a Case</td>
<td>-0.062* (.024)</td>
<td>-0.012 (.034)</td>
</tr>
<tr>
<td>Time Until End of Term</td>
<td>-0.001* (.000)</td>
<td>-0.000 (.000)</td>
</tr>
<tr>
<td>Size of the Plenary Docket</td>
<td>-0.003* (.001)</td>
<td>-0.002* (.001)</td>
</tr>
<tr>
<td>Term of Court</td>
<td>-0.003 (.003)</td>
<td>0.027* (.004)</td>
</tr>
<tr>
<td>Constant</td>
<td>9.907 (5.607)</td>
<td>-52.368* (8.120)</td>
</tr>
</tbody>
</table>

Number of Observations: 34,865

* p ≤ .05 (one-tailed test for directional hypotheses and two-tailed test for non-directional controls)
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Predicted Probability</th>
<th>95% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline Scenario</td>
<td>0.075</td>
<td>[.067, .083]</td>
</tr>
<tr>
<td>Justice’s Ideological Distance from Opinion Author</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximate</td>
<td>0.052</td>
<td>[.046, .058]</td>
</tr>
<tr>
<td>Distant</td>
<td>0.129</td>
<td>[.113, .144]</td>
</tr>
<tr>
<td>Justice’s Ideological Extremity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximate</td>
<td>0.069</td>
<td>[.061, .077]</td>
</tr>
<tr>
<td>Distant</td>
<td>0.088</td>
<td>[.078, .098]</td>
</tr>
<tr>
<td>Author’s Lack of Cooperation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperative</td>
<td>0.063</td>
<td>[.055, .070]</td>
</tr>
<tr>
<td>Uncooperative</td>
<td>0.089</td>
<td>[.079, .10]</td>
</tr>
<tr>
<td>Constitutional Interpretation</td>
<td>0.126</td>
<td>[.115, .137]</td>
</tr>
<tr>
<td>Common Law /Review of Administrative Action</td>
<td>0.105</td>
<td>[.091, .122]</td>
</tr>
<tr>
<td>Case Involves Lower Court Conflict</td>
<td>0.063</td>
<td>[.056, .071]</td>
</tr>
<tr>
<td>Chief Justice</td>
<td>0.05</td>
<td>[.042, .058]</td>
</tr>
<tr>
<td>Freshman Justice</td>
<td>0.063</td>
<td>[.052, .075]</td>
</tr>
<tr>
<td>Amicus Briefs in Case</td>
<td></td>
<td></td>
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<td>Fewer than Average Case</td>
<td>0.067</td>
<td>[.059, .075]</td>
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<tr>
<td>More than Average Case</td>
<td>0.09</td>
<td>[.081, .10]</td>
</tr>
<tr>
<td>Not Civil Liberties Case</td>
<td>0.049</td>
<td>[.044, .054]</td>
</tr>
<tr>
<td>Case Reargued</td>
<td>0.124</td>
<td>[.099, .155]</td>
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<tr>
<td>Multidimensionality of Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narrow</td>
<td>0.071</td>
<td>[.063, .080]</td>
</tr>
<tr>
<td>Broad</td>
<td>0.083</td>
<td>[.073, .094]</td>
</tr>
<tr>
<td>Time Till End of Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Few Days</td>
<td>0.065</td>
<td>[.057, .074]</td>
</tr>
<tr>
<td>Many Days</td>
<td>0.086</td>
<td>[.075, .097]</td>
</tr>
<tr>
<td>Size of Plenary Docket</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>0.064</td>
<td>[.055, .073]</td>
</tr>
<tr>
<td>Large</td>
<td>0.086</td>
<td>[.076, .097]</td>
</tr>
</tbody>
</table>

In contrast to the case level model, the ideological and collegial variables are statistically significant and correctly signed in the individual Justice model. Justices who are ideologically distant from the majority opinion author are dramatically more likely to concur in the judgment. Moreover, as Table 6 shows, the frequency of a Justice concurring in the judgment increases by 148.1% (from 5.2% to 12.9%) when an author is ideologically proximate to a
Justice rather than ideologically distant.\textsuperscript{181} The role of ideology is further illustrated by Figure 7, which graphs the probability of a Justice concurring in the judgment for the full range of values for the ideological distance variable. The figure demonstrates that as ideological distance between a Justice and the opinion author increases, the greater the likelihood that the Justice will concur in the judgment.

Figure 7: The Effect of a Justice’s Ideological Distance from the Majority Opinion Author on the Decision to Concur in the Judgment\textsuperscript{182}

\textsuperscript{181} In Table 6, “ideologically proximate” is defined as two standard deviations below the mean and “ideologically distant” as two standard deviations above the mean. In determining predicted probabilities for each independent variable, all other variables are set to their average values (mean values for continuous variables and modal value for dummy variables).

\textsuperscript{182} The x-axis is a Justice’s ideological distance from the majority (or plurality) opinion author, which is measured as the absolute value of the difference between each Justice’s ideological location and the author’s ideological position.
The second ideological variable, *Justice’s Ideological Extremity*, shows that Justices who are ideologically distant from the median Justice in the majority coalition concur in the judgment more often. Justices who are ideologically proximate to the median Justice in the coalition concur in the judgment in approximately 6.9% of their votes, while those more distant do so 8.8% of the time. Figure 8 illustrates the effect of ideological extremity by plotting the probability of a concurrence in the judgment as a function of a Justice’s ideological extremity. In comparing Figures 7 and 8, it is clear that the effect of ideological extremity, while meaningful, is smaller in magnitude than that produced by a Justice’s ideological distance from the opinion author. In short, the results indicate that plurality opinions—which are a direct result of one or more concurrences in the judgment—are related to ideological forces.

Figure 8: The Effect of a Justice’s Ideological Extremity on the Decision to Concur in the Judgment

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183 We define proximate and distant Justices as, respectively, those who are two standard deviations below and above the mean on this variable.

184 The x-axis represents the degree to which a Justice is ideologically extreme on the Court, as measured by the absolute value of the difference between that Justice’s ideological position and the ideological position of the median Justice in the majority voting coalition.
In addition, the variable included to test past collegial interaction between the opinion author and each of the other Justices individually in the majority coalition—Author’s Lack of Cooperation—has a pronounced effect on the frequency of concurrences in the judgment. When a Justice encounters an opinion author who has previously been uncooperative with her—that is, where the opinion author has frequently written concurrences in the judgment when that Justice was authoring the Court’s opinion—she concurs in the judgment 8.9% of the time. That percentage decreases to 6.3% if the author has previously been cooperative.\textsuperscript{185} This effect appears in Figure 9, where a healthy correlation is observed between past cooperation and the probability of a concurrence in the judgment.

\textsuperscript{185} A cooperative author is defined as a Justice who is two standard deviations below the mean on Author’s Lack of Cooperation variable. Meanwhile, an author is defined as uncooperative if she is two standard deviations below the mean on this variable.
Table 5 also indicates that nearly all of the contextual and legal factors in the individual Justice model correlate with why Justices concur in the judgment rather than join the majority. In fact, only two variables, whether an opinion invalidates a federal statute as unconstitutional and whether a case was decided after *Marks*, fail to provide evidence for our hypotheses. While there is variation in the magnitude of their substantive effects, these variables, indi-
individually and collectively, have a pronounced relationship with concurrences in the judgment. The substantive magnitude of each independent variable’s effect on a Justice concurring in the judgment is shown in Table 6. For example, consider the variables related to the difficulty of a case—in cases that are reargued, have more amicus briefs, involve a civil liberties issue, or deal with a wider array of legal issues, the probability of a Justice concurring in the judgment increases by 65.3% (from .075 to .124), 34.3% (from .067 to .090), 53.1% (from .049 to .075), and 16.9% (from .071 to .083), respectively.

The data also indicate that the institutional position of a Justice influences whether he or she concurs in the judgment rather than joins the majority opinion. While the case level model shows that the Chief Justice is not better at avoiding plurality decisions as an opinion author, the individual Justice model indicates he is less likely to concur in the judgment. Many scholars and Justices have argued that the Chief Justice behaves differently than other members of the Court due to his role as leader and administrator of the Court, causing him to more closely consider institutional concerns such as maintaining majority coalitions in rendering decisions. The empirical results support that suggestion: the Chief Justice concurs in the judgment only 5.0% of the time, while other Justices concur in the judgment in 7.5% of cases. Though smaller in its effect size, freshman Justices are also less likely to concur in the judgment, doing so only 6.3% of the time, as compared to 7.5% for Justices who have been on the Court for more than two Terms.187

In addition, the model demonstrates that legal factors also play a strong role in whether Justices concur in the judgment. In constitutional cases and common law cases (as compared to statutory cases), the probability that a Justice will concur in the judgment increases by 68.0% (from .075 to .126) and 40.0% (from .075 to .105), respectively. Moreover, in cases involving lower court conflict, the Justices concur in the judgment about 6.3% of the time, and do so about 7.5% of the time when appellate court conflict is absent.

Examining each of these variables in isolation from one another (looking at changes in one variable while holding all others constant at their average values), is a bit artificial in that Justices do not encounter each of the factors separately in the cases that they decide. Instead, they vote in cases involving

187 In running our model, we also investigated whether Justices wrote opinions concurring in the judgment more often when a freshman Justice authors the majority opinion. The results suggest that Justices are slightly more likely to concur in the judgment than either join the majority or join the majority and concur when the majority opinion is authored by a freshman Justice. The remaining results in the model are not altered in a substantive way after including this variable.
various combinations of these factors. Figure 10 therefore depicts the predicted probability of a Justice concurring in the judgment for three hypothetical case scenarios. Scenario 1 depicts a freshman Chief Justice who is ideologically close to the majority author and not ideologically extreme; has cooperated with other Justices in the past; and is voting in a case that involves statutory interpretation, a non-civil liberties issue, low case difficulty (i.e., few legal issues and provisions, low amicus filings, and not reargued), lower court conflict, and was orally argued near the end of a Term with a relatively small docket size. It is, in other words, a situation in which the model would predict that Justices will not be likely to concur in the Judgment. Scenario 3, by contrast, illustrates a setting in which a Justice would be likely to concur in the judgment. Scenario 3 involves a non-freshman Associate Justice who is ideologically distant from the majority author and ideologically extreme; faces an author who has been uncooperative with her in the past; and is voting in a case involving constitutional interpretation of a civil liberties issue that is difficult (i.e., numerous legal issues and provisions, many amicus briefs, and was reargued), without lower court conflict, and argued near the beginning of a Term with a large docket size. Scenario 2 is an average case, for which the model would predict a middling rate of concurring in the judgment.

Figure 10: The Combined influence of Independent Variables on a Justice’s Probability of Concurring in the Judgment

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188 In Scenario 1, the two ideological distance measures and lack of cooperation are set at two standard deviations below the mean, while they are set at two standard deviations above the mean for Scenario 3. Any variable not mentioned in the accompanying paragraph was set at its mean for a continuous variable or its mode for a dummy variable.

189 Scenario 2 involves a non-freshman Associate Justice who is of average ideological distance from the opinion author and is voting in a statutory, non-civil liberties case with average case difficulty not involving lower court conflict that was orally argued at the average time till the end of a Term with an average docket size.
The combined influence of the variables in Figure 10 is striking. In Scenario 1, in which few votes to concur in the judgment are expected, the model predicts that Justices will cast such a vote only .70% of the time. In Scenario 3, in which Justices are expected to concur in the judgment at a higher rate, they concur in the judgment 47.8% of the time. These comparisons provide further convincing evidence that ideological, collegial, legal, and contextual factors play an important role in the critical decision made by Justices of whether and when to concur in the judgment.

Column 3 of Table 5 also answers another relevant question as to why plurality opinions occur: if a Justice wishes to write separately, then why concur in the judgment rather than join the majority and write or join a simple concurrence? In answering this question, the task is to lay bare the correlates of Justices choosing to concur in the judgment, and Justices in the majority coalition have two other possible voting choices—to join the majority or to join the majority and concur. As discussed above, the hypothesized ideological, legal, collegial, and contextual factors manifest a strong relationship with a Justice’s decision to concur in the judgment rather than join the majority. But do those
same factors discriminate between Justices who concur and join the majority as opposed to those who concur in the judgment?

The results of the individual Justice model reveal that the most important factors influencing why a Justice concurs in the judgment rather than concurs are ideological differences and collegial interactions among the Justices. Political forces dominate this choice. The relative risk\(^\text{190}\) of a Justice concurring in the judgment, rather than writing or joining a simple concurrence, is 1.21 when a Justice is ideologically proximate to the majority (or plurality) opinion author and increases sizably to 2.11 when the Justice is ideologically distant from the author.\(^\text{191}\) Thus, when the author is ideologically proximate to a Justice, for example, the Justice is 1.21 times more likely to concur in the judgment than write or join a simple concurrence, but that statistic jumps to 2.1 with ideological distance between the two. Figure 11 illustrates the relative risks of the two options for a Justice as a function of his or her ideological distance from the Justice writing for the Court.

Figure 11: The Relative Risk of a Justice Concurring in the Judgment, Rather than Writing or Joining a Simple Concurrence, Due to Ideological Distance from the Opinion Author

\(^\text{190}\) See Long, supra note 58, at 81 for a discussion of relative risks ratios, which are basically relative probabilities. One can see how they work by observing the predicted probabilities of concurring and concurring in the judgment for Justice's Ideological Distance from Opinion Author. When a Justice is ideologically proximate to the author (two standard deviations below the mean on the variable), the model predicts the probability that the Justice will concur in the judgment and concur as .052 and .043, respectively. The relative risk of concurring in the judgment, as opposed to concurring, is therefore .052/.043, which equals 1.21. Meanwhile, if a Justice is ideologically distant from the author (two standard deviations above the mean on this variable), the model predicts that Justices concur in the judgment and concur with a probability, respectively, of .129 and .061. This latter relative risk is .129/.061, for a relative probability of 2.11.

\(^\text{191}\) To calculate the predicted probabilities we used CLARIFY, and held other variables constant at their means (for continuous variable) or modes (for dichotomous variable). See supra note 139 for a discussion of CLARIFY.
The foregoing decision is also influenced by a Justice’s ideological extremity and past collegial interaction with the opinion author. With respect to ideological extremity, the relative risk for an ideologically extreme Justice to concur in the judgment rather than write or join a simple concurrence is 1.6, while that figure drops to 1.47 for non-ideologically extreme Justices. The effect of Justice’s Ideological Extremity is illustrated in Figure 12, in which the upward sloping line indicates a Justice is slightly more likely to concur in the judgment than concur as she becomes more of an ideological outlier, but the substantive magnitude of this effect is considerably smaller than for Justice’s Ideological Distance from Author.

192 For those Justices who are not ideologically extreme (two standard deviations below the mean on Justice’s Ideological Extremity) the probabilities for concurring and concurring in the judgment are .047 and .069, respectively. For Justices who are extreme (two standard deviations above the mean), those probabilities jump to .055 and .088.
Figure 12: The Relative Risk of a Justice Concurring in the Judgment, Rather than Writing or Joining a Simple Concurrence, Due to the Ideological Extremity of a Justice

The relative probability of a Justice concurring in the judgment rather than writing or joining a simple concurrence also increases considerably due to the author’s past level of cooperation with a Justice. The relative risk for a Justice that encounters a cooperative author is 1.29, but this figure jumps to 1.78 when a Justice encounters a non-cooperative author.\textsuperscript{193} Figure 13 graphically displays the relationship between collegiality and the relative risk of concurring in the judgment rather than writing or joining a simple concurrence.

\textsuperscript{193} For cooperative authors (2 standard deviations below the mean on \textit{Author’s Lack of Cooperation}), a Justice has a .049 probability of concurring and a .063 probability of concurring in the judgment, whereas these probabilities increase, respectively, to .050 and .089 when an author has not been cooperative (2 standard deviations above the mean on the variable) with a Justice in the past.
In contrast, few of the legal or contextual characteristics associated with the presence of plurality opinions or with a Justice’s decision to concur in the judgment rather than join the majority opinion appear to matter for why Justices choose to concur in the judgment rather than write or join a simple concurrence. The only exceptions are that Justices are more likely to concur in the judgment in cases decided after *Marks v. United States* and less likely to do so if they are freshman Justices. Substantively speaking, the probability of a Justice concurring in the judgment rather than writing or joining a simple concurrence is 1.5 times greater after *Marks* whereas the probabilities are nearly equal before *Marks*. Meanwhile, freshman Justices are only 1.2 times...
more likely to concur in the judgment than write or join a simple concurrence, while Justices who have been on the Court longer are 1.5 times more likely to do so. Most of the legal and contextual variables in the individual Justice model therefore help in understanding the decision of Justices to concur in the judgment rather than join the majority, but fail to illuminate why Justices concur in the judgment rather than concur. In sum, the model demonstrates that ideological forces and past collegial interactions are the dominant reasons why a Justice concurs in the judgment rather than writes or joins a simple concurrence.

C. Individual Justice Model with Oral Argument Data

As discussed in Part III.C., oral arguments are an important part of the decisional process at the Supreme Court. Scholars, for example, have shown that oral arguments are an important way for the Justices to gather information about a case for use in making decisions. Ryan Black and Timothy Johnson, meanwhile, have demonstrated that the number of words spoken by a Justice during oral argument is a reliable method to measure the salience of a case to that given Justice. They make the intuitive claim that the more a Justice speaks during oral argument, the higher the Justice’s interest in the case. Using the data gathered by Black and Johnson, the \textit{Number of Words Spoken by a Justice at Oral Argument} counts the number of words each Justice spoke during the oral argument in a case. The oral argument data cover only a portion of the cases in our individual Justice model, so the estimation sample includes only the 4,007 Justice votes in the cases for which they provide oral argument data.

The statistical analysis supports the expectation that the greater the number of words spoken by a Justice during oral argument, the greater the probability that he or she will concur in the judgment. The coefficient on the \textit{Number of Words Spoken by a Justice at Oral Argument} is negative and statis-

\textit{Marks} the model predicts that Justices concur in the judgment and concur 7.5% and 5.0% of the time, respectively, for a relative risk of 1.5.

\textit{Freshman} Justices concur in the judgment and concur, respectively, with a probability of 0.063 and 0.052, while those probabilities for non-freshmen are 0.075 and 0.5.

\textit{See Johnson et al., supra note 61; Johnson et al., supra note 150.}

\textit{Black & Johnson, supra note 153.}

\textit{The variable, Case Decided After Marks v. U.S., is excluded from the analysis due to multicollinearity. All other independent variables from Table 5 are again included in the model.}
tically significant when comparing whether Justices join the majority rather
than concur in the judgment. In other words, Justices are more likely to concur
in the judgment rather than join the majority as the number of words spoken by
them at oral argument increases.\textsuperscript{199} Thus, holding all other variables in the
model constant, Justices who speak quite often during oral argument are nearly
twice as likely to concur in the judgment than those who speak far less often.\textsuperscript{200}

V. Discussion of Empirical Results

This Article began with a straightforward but as of yet unanswered ques-
tion: Why does the Supreme Court reach a plurality decision in some of the
most high-profile and significant cases on its plenary docket? While relatively
infrequent at 3.4\% of the cases between October Term 1953 and October Term
2006, plurality decisions are unsurprisingly understudied and poorly under-
stood. Nonetheless, the question is important. As Chief Justice William
Rehnquist stated: “There must be an effort to get an opinion for at least a
majority of the Court in every case where that is possible, in order that lower
court judges and the profession as a whole may know what the law is with-
out having to go through an elaborate head-counting process.”\textsuperscript{201} One of the
Court’s principal functions is to set binding, uniform precedent, and the Court
has arguably failed in that mission when it releases a plurality decision in
which it is difficult, if not impossible, to find the controlling rationale for the
Court.

Given the importance of plurality decisions, the question is when, and
under what circumstances, they occur. Answering this question yields new
insights into the dynamics of judicial decision making and the building and
maintenance of coalitions on the Court. Both issues have been of keen inter-
est to the judicial politics movement over the past several decades. The relevance
of the question is also of practical concern to legal practitioners, who can use
the information to better understand what conditions are likely to lead to a

\textsuperscript{199} However, the variable is not statistically significant when comparing the probability that a Jus-
tice will concur in the judgment rather than join or write a simple concurrence.

\textsuperscript{200} All variables are held constant at their means for continuous variables or modes for dummy va-
riables, and the oral argument variable is varied by two standard deviations about and below its mean to
calculate the predicted probabilities. At two standard deviations above the mean, the predicted probabil-
ity for Justices who speak often is .069, while that statistic drops to .039 at two standard deviations below
the mean for \textit{Number of Words Spoken by a Justice at Oral Argument}.

\textsuperscript{201} See William H. Rehnquist, \textit{Remarks on the Process of Judging}, 49 Wash. \& LEE L. REV. 263,
deeply-divided Court and tailor their arguments accordingly. Justices too can use the information in the opinion-drafting process in order to attain consensus, perhaps by authoring a narrow opinion to avoid a plurality decision. Finally, by explaining the causes of plurality decisions, it can lead to a better understanding of their legal consequences. The interpretive rule for plurality decisions, as enunciated in the 1977 cases of *Marks v. U.S.*, is difficult to apply at best and even impenetrable at times. Determining which opinion constitutes the “narrowest grounds” when there are numerous opinions from which to choose has not only perplexed the lower courts, but it has led to frustration for the Court as well. In writing for the Court in *Grutter v. Bollinger*, Justice O’Connor declined to determine the controlling opinion from *Regents of Univ. of California v. Bakke*202 because the issue had “so obviously baffled and divided the lower courts that have considered it.”203 In short, this Article provides an answer to a question that has bedeviled legal scholars, lawyers, judges, and political scientists for some time.

Drawing on the extant political science and legal literatures, determining the causes of plurality decisions requires evaluating hypotheses relating to ideological, collegial, legal, and contextual factors. Moreover, rather than just evaluating these hypotheses at the case level to determine the systematic contributors to plurality decisions, a comprehensive study must also examine those factors in light of an individual Justice’s decision to concur in the judgment, which is the key ingredient in creating plurality decisions. Only when one or more Justices write separately to advance a different rationale for the result can a plurality decision occur.

Examining both the case level and individual Justice data from a variety of sources, this Article estimates statistical models to determine the degree to which the hypothesized factors correlate with two dependent variables: a case-level variable for whether a case resulted in a plurality opinion and an individual Justice-level variable for whether each Justice voted to join the majority opinion, write or join a simple concurrence, or concur in the judgment. The statistical results provide considerable evidence for our hypotheses and yield novel and interesting insights about plurality decisions.

The case level model reveals that legal and contextual factors are reasonably predictive of plurality decisions. Plurality opinions are less likely to occur in statutory cases, which is logical result given that nearly all Justices agree

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that stare decisis plays a more robust role in such cases. Furthermore, cases involving lower court conflict—which are likely placed on the plenary docket due to concerns about uniformity rather than the correctness of the lower court decision or the future course of the law—are less likely to result in plurality decisions. In the contextual realm, the measures of case salience and complexity, such as number of amicus briefs and words spoken at oral argument, increase the likelihood of plurality opinions. In contrast to the individual Justice model, however, ideological and collegial factors do not influence the occurrence of plurality opinions at the case level.

The individual Justice model—which examines the factors underlying the decision of Justices to concur in the judgment rather than the join the majority or join the majority and concur separately—provides considerable empirical support for our hypotheses. In this model, ideological incompatibility between the opinion author and a Justice, a Justice’s ideological extremity, and an opinion author’s lack of cooperation with a Justice, all influenced whether, and how often, a Justice concurs in the judgment. In fact, they represent the predominant factors that explain a Justice’s decision to concur in the judgment rather than join the majority and separately concur. Similar to the case level model, nearly all of the legal and contextual variables also influence whether Justices concur in the judgment. For instance, the difficulty of a case, as embodied by the number of amicus briefs filed in a case, whether a case is reargued, whether it involves a civil liberties issue, and whether it has multiple legal issues or provisions involved, increases a Justice’s propensity to concur in the judgment. Similarly, the decision to concur in the judgment is influenced by legal factors such as whether a case involves issues of constitutional interpretation or lower court conflict.

The results are both illuminating and novel, but they fail to uncover why ideological and collegial factors are statistically significant predictors of the decision of Justices to concur in the judgment but not as to the occurrence of plurality opinions. One possibility is that while ideological forces are influential in the bargaining and compromise between individual Justices, as evidenced by the strong relationship of collegiality and ideology to opinions concurring in the judgment, they are not alone sufficient to generate a plurality decision. For example, consider a case that has a majority coalition consisting of six Justices. In order for a plurality decision to arise, at least two Justices must concur in the judgment. Ideological forces may lead one or more of the Justices to concur in the judgment, but it does not happen often enough for a plurality decision to occur. Therefore, it is possible that the effect of ideology may differ depending on the characteristics of particular cases, which is why
both models include contextual and legal factors in addition to ideology and collegiality. While the analysis in the case level model tested for whether ideology matters generally in the occurrence of plurality decisions, it did not isolate whether ideology may be more important to plurality decisions in some types of cases rather than others. For instance, it is possible that ideological distance between the opinion author and the other Justices is significant in cases involving a minimum winning coalition, but not those involving lower court conflict. Indeed, research shows that the relationship between ideology and voting patterns for Justices depends on the salience and complexity of the case and the quality of oral argument. It thus follows that the influence of ideology on plurality decisions may be greater under some case conditions but not others. While interesting, resolution of the role of ideology in producing plurality decisions must await further examination.

CONCLUSION

Chief Justice Rehnquist and Justices Lewis Powell and Ruth Bader Ginsburg have spoken to the serious problems created by plurality decisions. As this Article shows, plurality decisions often arise in the most important and divisive cases before the Supreme Court, such as those involving abortion regulations and the scope of executive power. This Article provides the first empirical treatment of the factors influencing the occurrence of plurality decisions by the Supreme Court. While other scholars have examined in passing the interpretive rule governing plurality decisions found in Marks v. U.S. or treated the subject in discussing particular plurality decisions, no other Article systematically examines them in this fashion. As discussed above, the findings

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204 See Unah & Hancok, supra note 120; Collins, supra note 120.
205 See Johnson et al., supra note 121; Johnson et al., supra note 61.
206 Interacting the ideological distance variable across the full range of independent variables in the case level model, see Thomas Brambor, William Roberts Clark & Matt Golder, Understanding Interaction Models: Improving Empirical Analyses, 14 POL. ANALYSIS 63 (2006) and Robert J. Friedrich, In Defense of Multiplicative Terms in Multiple Regression Equations, 26 AM. J. POL. SCI. 787 (1982), shows that ideological distance is significant when the case involves a minimum winning coalition. With a minimum winning coalition, the probability of a plurality decision is .04 when Opinion Author Distance from Coalition is set at its mean value. When the author’s distance from the coalition is increased to two standard deviations above its mean, then the probability of a plurality decision jumps to .29. This result indicates that while ideological distance has a strong influence on an individual Justice’s decision to concur in the judgment, it has enough force to yield plurality opinions only when the majority coalition is small.
in this Article address an issue that judicial politics scholars have been pursuing for decades: how coalitions form and why they tend to break down.

The Article’s novel findings also open a multitude of avenues for further research. For instance, further work should be done on the precedential value of plurality opinions in the lower courts, both at the state and federal levels. The difficulty of finding the “narrowest grounds” of many plurality opinions has been recognized by the many courts, including the Supreme Court. But are plurality decisions systematically accorded less precedential value, or even ignored altogether by the lower courts? Similarly, determining the factors influencing the occurrence of plurality decisions is undoubtedly relevant, perhaps even essential, to comprehensively evaluating the normative ramifications of plurality decisions for the Court and the development of federal law. In other words, should plurality decisions be discouraged by changing the institutional rules and norms of the Court? Those questions, and many others, can now be explored.