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Inferring the Winning Party in the Supreme Court from the Pattern of Questioning at Oral Argument

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ABSTRACT

It is no longer a secret that the lawyer in an oral argument in the Supreme Court who is asked more questions than his opponent is likely to lose the case. This paper provides rigorous statistical tests of that hypothesis and of the related hypothesis that the number of words per question asked, as distinct from just the number of questions asked, also predicts the outcome of the case. We use regression analysis to separate out the effect of questioning from other influences on judicial voting and thus determine how predictive of outcome questioning behavior is. Although the paper is primarily empirical, we also explore the theoretical basis for these hypotheses. Our analysis casts light on the role of deliberation in appellate courts and explains that because formal deliberation tends to be quite limited, judges use oral argument as an alternative venue for deliberation. The questions they ask at oral argument elicit information that is helpful to the judges asking the questions and signal the judges' views with the aim of trying to influence the other judges.

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1. THEORY

Chief Justice John Roberts, and others, have noticed that the lawyer in an oral argument in the Supreme Court who is asked more questions q1 than his opponent is likely to lose the appeal.[1] Our empirical analysis confirms his observation, and this raises the question—why?

The key lies, we think, in the nature of judicial deliberation. Although judges like to describe the appellate process as one in which judges deliberate carefully before rendering a decision, deliberation in most appellate courts tends to be quite limited (see Posner 2008, pp. 2–3, 302–4). It usually is limited to a brief conference shortly after the court has heard oral argument in several cases. The judges state their views q2 in a prescribed order—order of seniority in the U.S. Supreme Court, reverse order of superiority in a number of other courts. Often the statement consists simply of an indication of the judge's vote, and discussion among the judges is usually brief, even perfunctory; sometimes there is no discussion, but just a statement of desired outcome.

The limited value of judicial deliberation is suggested by the practice, until quite recently, of English judges. The judges were committed to the principle of "orality"—that everything a judge does must be done in public, to facilitate the monitoring of judicial behavior by the public. Consequently, they were forbidden to deliberate; instead, in an appeal, each judge at the end of the lawyers' arguments would state his view of

1. The chief justice examined 28 U.S. Supreme Court cases—14 from the 1980 term and 14 from 2003. In 24 of the cases, the justices asked more questions of the losing party, leading the chief justice to conclude that "the secret to successful advocacy is simply to get the Court to ask your opponent more questions" (Roberts 2005, p. 75). Three other studies reach roughly similar conclusions. Shullman (2004) analyzed oral arguments in 10 cases and found that the justices asked fewer and less hostile questions of the party that eventually won. Wrightsman (2008) examined 24 cases from the 2004 term—12 that were ideologically contested and 12 that were not. He concluded that the number of questions and the number of hostile questions are good predictors of case outcome. Finally, Johnson et al. (2009) analyzed oral arguments in cases decided in the 1979–95 terms. After controlling for other factors that might affect outcome, they found that the Court tended to rule against the party asked more questions. Although their paper is similar to ours in a number of respects, we analyze 12 more terms (1979–2007) and thus include the later years of the Rehnquist Court and the first few of the Roberts Court, incorporate more controls in our multivariate models (that is, we expand the number of factors besides question patterns that may affect the Court's decision, participation by the United States, and case importance and add term and issue dummy variables), explain differences in the number of questions or words, predict the votes of the individual justices on the basis of questions asked by all justices and by individual justices at oral argument and embed our empirical analysis in a theoretical model of judicial behavior.

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the case. Yet the English judiciary was very highly regarded; it seemed to have lost little or nothing by not deliberating.

The reason for the limited value and significance of judicial deliberation in the American legal system has partly to do with the indeterminacy of many cases that reach the appellate level; when the outcome of a case cannot be determined by a cogent, objective method of inquiry, deliberation may have little or no influence on the vote. In addition, judges are not selected by their colleagues, or even by higher judges, but by politicians or, in many state courts, by elections. Hence, a judiciary tends to be heterogeneous, and this retards easy communication; contrast a university faculty or a committee in a business firm.

Then too, a strong norm of equality within each court, and the limited power that a judge (even a chief judge) has over his colleagues, promotes a norm of collegiality, one aspect of which is a judge's treating his colleagues with kid gloves and so avoiding sharp debate. This is related both to heterogeneity—judges with an academic background are likely to be more aggressive in debate, and they mask this tendency to avoid ruffling the feathers of colleagues with a different background—and to the emotional sensitivity of many of the issues that come before a court, such as issues involving abortion rights, sexual discrimination and religious liberty. Judges are uncomfortable arguing with a colleague about issues that stir the colleague's emotions.

Oral argument provides an alternative venue for judicial deliberation. The opportunity cost is zero because judges have to attend oral argument. (In contrast, conferences do not have a fixed length, so judges incur a cost if they spend a lot of time at the conference wrangling with each other.) Concern with sharp-edged confrontational debate is alleviated because the judges are talking directly to the lawyers and only indirectly to their colleagues. Oral argument precedes the postargument
q3 conference and so gives judges an idea to try to persuade a colleague before the colleague, in advance of conference, decides how to vote. It also gives a judge an opportunity to signal a colleague who is likely to respect the judge's view of the case. Without that signal, the colleague might vote the "wrong" way at conference—before the other judge had a chance to speak, if the colleague spoke before him in the prescribed order of discussion.

The analysis has implications for theories of judicial behavior. One prominent theory, which we call the legalistic theory, claims that judges, including Supreme Court justices, create and apply legal rules by using techniques of legal reasoning that are objective, impersonal and politi-

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cally neutral. The other, which we call the realistic theory, claims that judges, especially those who sit on supreme courts and so both deal with the more indeterminate cases and are not constrained by the threat of reversal by a higher court, often behave strategically and politically. The legalistic theory suggests two possible explanations for why the losing party might be asked more questions at the oral argument.[2] Suppose a judge asks a question of one of the lawyers and gets an unsatisfactory answer. So he asks a follow-up question, and again he gets an unsatisfactory answer. The longer the string of such answers, the likelier it is that the judge believes the lawyer has a weak case, and so the likelier the judge is to rule against the lawyer's client. The second legalistic explanation is that a judge who, coming into the argument, is leaning against one party on the basis of the judge's reading of the briefs and other preargument study of the case will direct most questions at the lawyer for that party in order to test whether his case is indeed as weak as the judge has inferred from the briefs.

The realistic theory, which is based in part on the indeterminacy of many appeals, is that judges often make up their mind before oral argument, since the benefits of argument are fewer the less the decision is likely to be based on a careful weighing of contentions and evidence. Indeed, in the case of judges who have discretion to decide which cases to hear, such as the justices of the U.S. Supreme Court, their minds may be made up when they decide whether to vote to hear the case, in which case they are likely to use oral argument to try to persuade the other judges, and this implies asking more questions of the lawyer for the party they plan to vote against in order to punch holes in the lawyer's case and perhaps prevent him from articulating his best arguments. Hostile questions to a lawyer resemble cross-examination at trial and are more effective than friendly, "softballs" to the side that the judge favors. Still, judges do ask some questions of the party they are leaning in favor of—friendly questions designed to elicit information or argument that will advance the party's cause.

Now if all the judges have made up their mind before oral argument, none is persuadable and therefore there is no point in asking questions intended to sway another judge. But what we are calling making up one's mind before oral argument is more realistically understood as just forming a prior probability (prior to hearing oral argument) that one

2. We thank Chris Nosko for suggesting the first explanation. The second was suggested by Justice Ruth Bader Ginsburg to Linda Greenhouse.

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will vote for a particular side, and this is consistent with being persuadable by facts or contentions elicited at the oral argument.

We do not expect the data to refute either the legalistic or the realistic model of judicial behavior. The reason is that the models are compatible, or more precisely that the legalistic model is a special case of the realistic. Supposing—realistically—that judges have utility functions similar to those of nonjudges in similar professions and thus value leisure (especially since they cannot increase their incomes by working harder), prestige, self-expression, power and so forth, one can see that behaving legalistically in many, probably most, cases would be utility maximizing. Decision in accordance with statutory language and with precedent, for example, both economizes on judicial time and creates the politically
q7 valuable impression that judges merely follow or apply law and do not just make it up as they go along to promote their political preferences.

But how exactly does asking questions of the lawyer against whom a judge is predisposed to vote help that judge persuade other judges? One possibility is that the judge is recognized by his colleagues as especially expert in the type of case being argued, so questioning that conveys his view of the case influences them before they vote. This is more likely to be factor in a lower appellate court, with its heavier caseload, larger range of cases and higher proportion of cases in which the judges do not have an emotional or ideological stake, than in the U.S. Supreme Court.

Another possibility is that the judge's questions will contain argument or information that sways other judges on the panel (as in, "Is it not true that . . . ?") or that his questions will elicit information (as distinct from just acknowledgment of the information in a question) that indicates the weakness of the lawyer's case. This too is more likely to be an effective strategy in a lower court. Because of the Supreme Court's light caseload, high ratio of law clerks to opinions and relative specialization (a heavy concentration in constitutional law), Supreme Court justices are unlikely to defer to any supposed superior expertise possessed by another justice in some type of case.

Just as students of free speech distinguish between instrumental and expressive functions of speech, so should we recognize the possibility that tendentious questioning—questioning that signals a judge's view of the merits of the case being argued—provides expressive utility to the judge. This is especially likely in the case of the Supreme Court, because the views expressed by justices in open court are newsworthy, and so tendentious questioning gives a justice an opportunity to express himself

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to a potentially large audience other than just in a judicial opinion, speech or interview, settings in which judicial ethics constrain a judge's freedom to express himself about the merits of a case, especially a case that has not yet been decided.

2. THE DATA

Our source for case characteristics is Harold J. Spaeth's U.S. Supreme Court Database. For data on the number of questions and words, we began with a data set created by Johnson, Black, and Wedeking (forthcoming), who downloaded all available oral argument transcripts and then used a computer program to count the number of questions and words.[3] We updated the data through the 2007 term using similar procedures. The earliest data we use are for the 1979 term of the Supreme Court because data for earlier terms are not available in a form that we can analyze. Our data on questions asked by individual justices come from transcripts of oral arguments in the 2004–7 terms; the transcripts for earlier terms do not reveal which justice was asking which questions.

3. PRELIMINARY ANALYSIS

It is unclear a priori whether number of questions or number of words in questions is a better proxy for how a justice may be leaning at the time of the oral argument and hence how he may ultimately vote in the case. Both measures are subject to the idiosyncrasies of a particular justice. Suppose Justice A is wordy and ponderous whereas Justice B is precise and efficient. Then A might consume more of one party's time even though he asked fewer questions than B. It turns out, however, that there is a strong positive correlation between number of questions and number of words in questions (the correlation is .78 both between questions and words addressed to the petitioner's lawyer and between questions and words addressed to the respondent's lawyer), so our empirical results do not depend on which measure we use.

3.1. Descriptive Statistics

Figure 1 presents frequency distributions of the number of words contained in questions to the petitioner and respondent at oral argument

3. We conducted a reliability analysis on a randomly drawn sample of the data (10 percent), recalculating the number of questions and words. The counts are quite accurate.

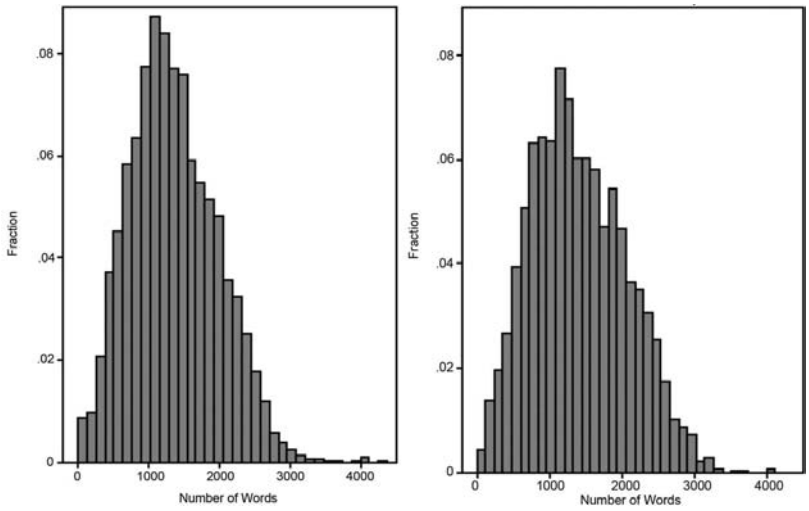

Figure 1. Words in questions asked of the petitioner (left) and respondent (right), 1979–2007 terms.

in the 1979–2007 terms, and Figure 2 presents the same distributions for the number of questions. The mean numbers of words and questions to both parties combined are 2,770.8 and 112.5, respectively; the average number of words per question is therefore about 25. The means for the petitioner and respondent are 1,358.1 and 1,412.7, respectively, for words and 56.1 and 56.4 for questions. The standard deviations are large—618.2 (petitioner) and 658.3 (respondent) for words and 22.1 (petitioner) and 23.0 (respondent) for questions. The difference in means is statistically significant for words ($t = 5.10$) but not for questions ($t = .64$).

Figures 1 and 2 mask an important difference in the questions asked the petitioner and the respondent: the identity of the winning and losing parties.[4] As Figures 3 and 4 show, the losing party is asked more questions (in terms of both numbers and words) than the winning party, and these differences are always highly significant. There are 159 more words on average in questions to the petitioner when the respondent wins and

4. We rely on Spaeth's U.S. Supreme Court Database's "win" variable to determine whether the Court held for the respondent or for the petitioner. Generally, Spaeth codes "affirm" and "petition dismissed" as wins for the respondent and "reversed," "reversed and remanded," "vacated and remanded" and "vacated" as wins for the petitioner. He does, however, make exceptions to this rule based on his reading of the cases.

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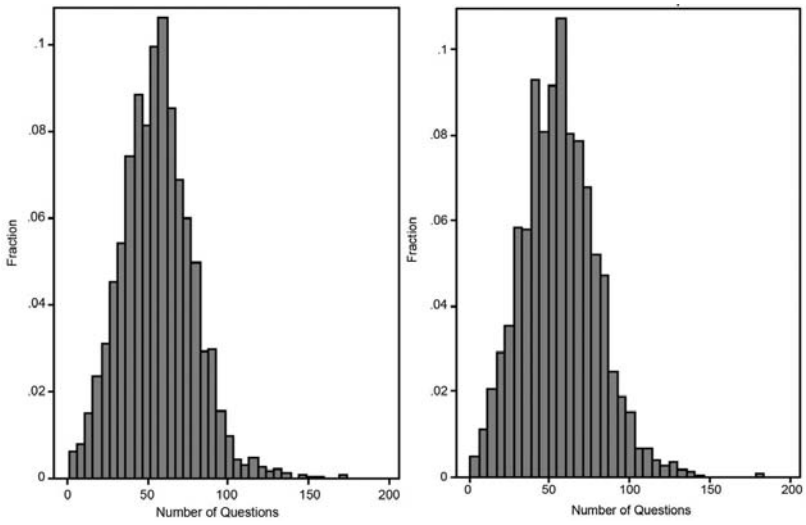

Figure 2. Questions asked of the petitioner (left) and respondent (right), 1979–2007 terms

185 more words on average to the respondent when the petitioner wins. The corresponding figures for questions are 6.6 and 4.5.[5]

3.2. Questions and Outcomes

Petitioners won 62 percent and respondents 38 percent of the 2,952 cases in our sample. These figures change significantly once we take account of the questions the justices ask the parties. If the total number of words in questions asked the petitioner is less than the number in questions asked the respondent, the petitioner's win rate increases from .62 to .72 (a 16 percent increase) and the respondent's decreases from .38 to .28 (a 26 percent decrease). Alternatively, if the number of words in questions asked the petitioner is greater than the number of words in questions asked the respondent, the petitioner's success rate falls from .62 to .50 (a 19 percent decrease) and the respondent's increases from .38 to .50 (a 32 percent increase). Similarly, when the petitioner is asked relatively fewer questions, his win rate increases from .62 to .71 (a 15 percent increase) and the respondent's decreases from .38 to .29 (a 24 percent decrease). And if the petitioner is asked relatively more questions,

5. All of the differences are statistically significant at $p < .05$.

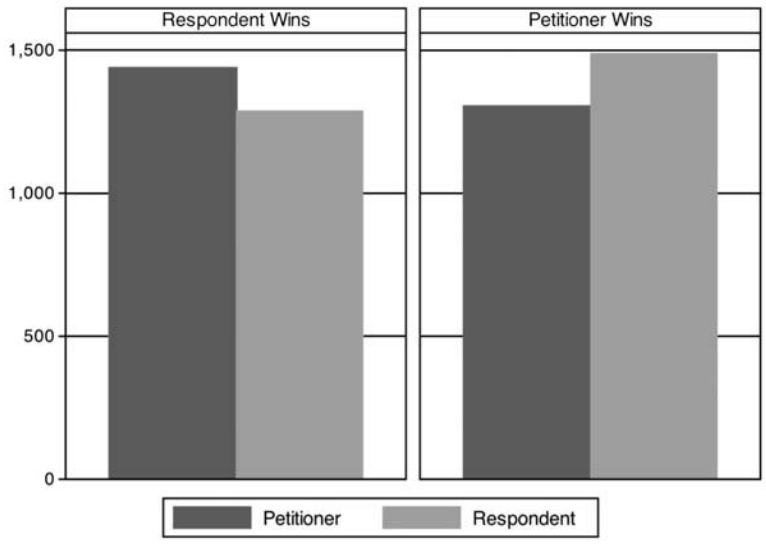

Figure 3. Mean number of words in questions asked of each party, by the winning party, 1979–2007 terms.

his win rate decreases from .62 to .53 (a 15 percent decease) and the respondent's increases from .38 to .47 (a 24 percent increase). All of these results are statistically significant. In the small number of cases (52) in which the parties are asked the same number of questions, the petitioner and respondent success rates are not significantly different from their overall success rates.[6] Of course other factors besides which party is asked more questions, such as whether the federal government participates in the case as a party or as an amicus curiae, the subject matter of the case or the term in which the case is decided, may also influence which side wins. We correct for these factors later in the paper.

3.3. Questions and The Closeness of the Vote

We might expect that the smaller the difference in the number of questions (or words in questions) asked of the two parties, the closer the outcome of the case. Table 1 supports this hypothesis. Columns 4 and 7 show the ratio of the number of questions asked the petitioner to the

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6. Because there was only one case in the sample in which the same number of words occurred in the justices' questions to both parties, we cannot study win rates for such cases.

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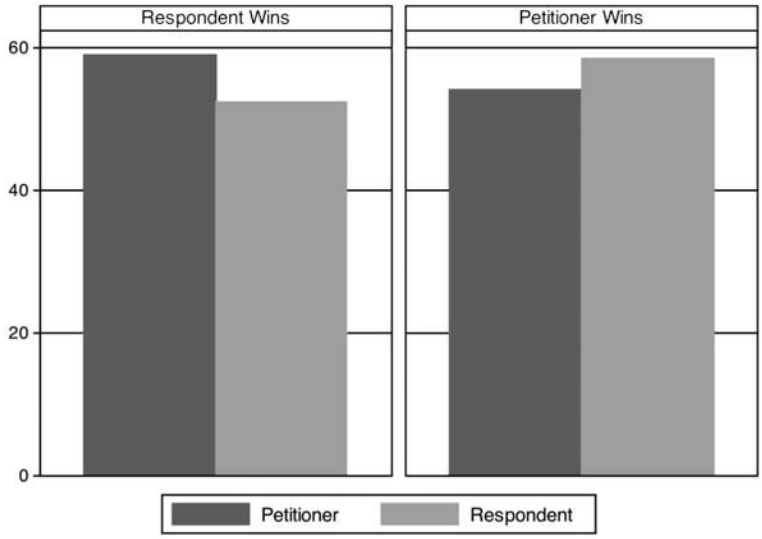

Figure 4. Mean number of questions asked of each party, by the winning party, 1979–2007 terms

number asked the respondent as (moving down the columns) the vote becomes increasingly one-sided. The more one-sided the votes in favor of the petitioner, the fewer questions he is asked, and likewise the fewer questions asked the respondent, the more one-sided the votes in his favor.[7]

3.4. Trends over Time

In 1970, well before the first term in our sample, the Court formally reduced the time allocated to each side from 1 hour to a half hour.[8] There are exceptions, but they are rare. We would not expect a trend in the number of questions or words in questions during the period of our study. Yet as Figure 5 shows, both numbers increased. The average number of questions per case increased by about 8 percent (from 112.4 to 121.8) in the 1979–2007 time period, total words in questions per case by nearly 100 percent (from 2,154.2 to 4,222.2), and words per

7. We have excluded from Table 1 cases in which not all nine justices participated (about 12 percent of cases in our sample) because the number of questions is likely to depend on the number of justices who participate in the oral argument.

8. This rule change apparently formalized the existing norm, which was a half hour per side for most cases (see Gressman, Stern, and Shapiro 2007, pp. 672–73).

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Table 1. Number of Questions to Petitioner and Respondent and the Closeness of the Vote, 1979–2007 Terms

		Petitioner Wins			Respondent Wins		
	Cases (1)	Petitioner Questions (2)	Respondent Questions (3)	Ratio (4)	Petitioner Questions (5)	Respondent Questions (6)	Ratio (7)
5–4	574	57.5	57.5	1.000	60.8	59.8	1.017
6–3	443	58.7	58.7	1.000	60.6	55.0	1.102
7–2	337	58.6	63.7	.920	63.2	54.3	1.164
8–1	224	53.6	60.0	.893	59.9	51.8	1.156
9–0	1,021	51.4	59.0	.871	59.0	49.1	1.202
All votes	2,599	54.2	58.7	.923	59.3	52.6	1.127

Note. Cases in which one or more justices did not participate (for example, 8–0 or 7–1 votes) are excluded. For this reason, the number of cases is less than the total number of cases in our data set (2,952).

question per case by more than 80 percent (19.2 to 34.7). The number of words increased much more rapidly than the number of questions; the justices got wordier. Figure 5 also shows that the number of argued cases per term decreased by around 30 percent.

We also regressed the number of questions and words in questions (averaged by case and term) on both a time (term) variable and a variable for number of cases per term. All variables other than time are in logarithms,[9] and so the regression coefficients are percentage changes in response to a 1 percent change in cases or a unit change in time. In both regressions, the number of cases has a significant negative effect. For example, a 10 percent decline in the number of cases leads to a 4.8 percent increase in questions and a 6.5 percent increase in the number of words. We conjecture that as the caseload decreases, the justices have more time to prepare for each oral argument and, being thus better prepared, engage the lawyers more by asking more questions. We find no significant change in the relative number of questions and words to

9. The regressions are as follows:

$$\ln Q = \underset{(1.43)}{12.96} - \underset{(3.85)}{.481 \ln \text{Cases}} - \underset{(.70)}{.003\text{Term}}, \qquad R^2 = .63,$$

and

$$\ln W = \underset{(4.43)}{-1.46} - \underset{(4.43)}{.645 \ln \text{Cases}} - \underset{(2.63)}{.013\text{Term}}, \qquad R^2 = .90,$$

where Q is the mean number of questions per case per term, W is the mean number of total words in questions per case per term, Cases is the number of cases per term in the Spaeth database and Term is the term of the court. Numbers in parentheses are t-statistics. Each regression contains 29 observations covering the 1979–2007 terms.

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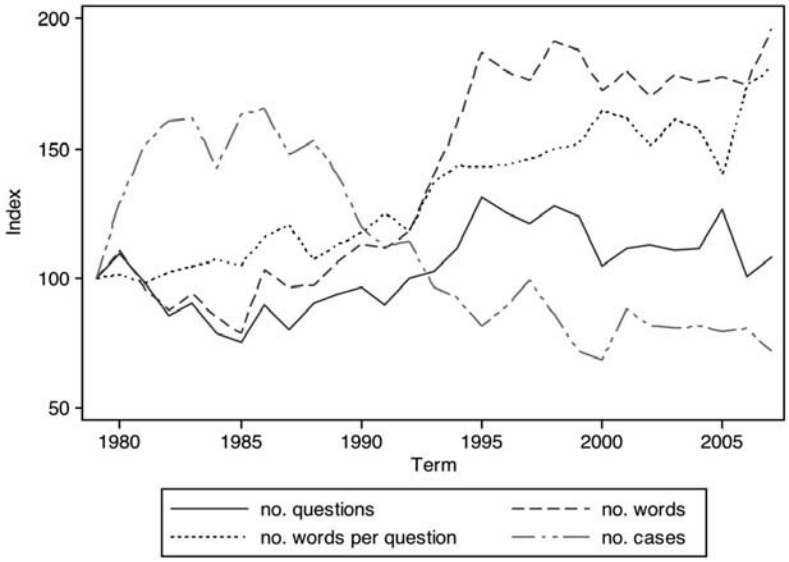

Figure 5. Questions and words in questions, 1979–2007 (1979 = 100)

petitioners versus respondents and no significant time trend in those ratios.

We find a significant positive time trend (a growth rate of about 1.3 percent per year) in the total number of words (holding constant the number of cases) but no significant time trend in the number of questions. A possible interpretation for the increase in words is a "law professor" effect related to the appointment of Ginsburg, who replaced Justice Byron White in 1993, and of Justice Stephen Breyer, who replaced Justice Harry Blackmun the following term. Until then, only Justice Antonin Scalia was a former professor. Our conjecture is supported by the fact that Breyer utters more words at oral argument than any other justice—an average of 860, which is almost 200 words more than Scalia, who ranks second with 688 words. Ginsburg, however, ranks only fifth. Scalia and Roberts ask the most questions, followed closely by Breyer; Ginsburg again ranks fifth. We do not have individual data for White and Blackmun, but if their numbers are merely average, Breyer's appointment would be sufficient to explain the positive time trend in the number of words in questions since the early 1990s. To test this hypothesis, we added a dummy variable for 1994 (Breyer's first term) to

the regressions; the variable is positive and statistically significant.[10] Although we do not reproduce the results here, we find no significant change in the relative number of questions and words to petitioners versus respondents and no significant time trend in those ratios.[11]

4. MULTIVARIATE ANALYSIS OF QUESTIONS PREDICTING THE WINNING PARTY

Our regression equations take the following general form:

$$\text{Win} = f(Q, T, \text{U.S.}, I, A, u). \tag{1}$$

The term Win is a dummy variable that takes the value one if the petitioner wins and zero if the respondent wins; Q represents a set of question variables, such as number of questions, or number of words in questions, or average number of words per question, that the justices ask the petitioner and respondent; T is a series of dummy variables for the Court's term; U.S. stands for dummy variables identifying the federal government as a petitioner or respondent in the case; I denotes a set of dummy variables for four issue areas in our sample (civil liberties, economics, judicial power and federalism);[12] A is a series of variables relating to amicus curiae participation, including the number of briefs filed in support of the respective parties and whether the solicitor general

q9

10. The regression results are as follows:

$$\ln Q = \underset{(2.82)}{23.46} - \underset{(2.55)}{.312}\ln \text{Cases} - \underset{(-2.16)}{.009}\text{Term} + \underset{(3.33)}{.205}\text{Dummy94}, \qquad R^2 = .72,$$

and

$$\ln W = \underset{(.26)}{-2.12} - \underset{(2.85)}{.426}\ln \text{Cases} - \underset{(1.50)}{.006}\text{Term} + \underset{(3.47)}{.266}\text{Dummy94}, \qquad R^2 = .94.$$

Notice that when we add the 1994 dummy variable to the regressions, the time trend is significant in the ln$Q$ but not the ln$W$ regression.

11. Others have noticed the trends we document. Roberts (2009) suggested not only that the side receiving more questions tends to lose (see note 1) but also that the justices are more active at oral argument, sometimes getting a little too "carried away." Johnson et al. (2009) also observed an increase in the number of questions from the bench and that the likelihood of a party's winning decreased as the number of questions increased, holding constant the number asked the other party.

12. Civil liberties include criminal procedure, civil rights, First Amendment rights, and rights to due process, privacy and an attorney; economics includes economic activity, unions and taxation; judicial power is its own category plus 15 miscellaneous cases; and federalism includes federalism and interstate relations (only one case in our sample).

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Table 2. Summary of Variables in Regression Analysis of Petitioner Win Rate, 1979–2007 Terms

Variable	Mean	SD	Min	Max
Petitioner win rate	.62	.49	0	1
Questions to petitioner	56.1	22.1	1	174
Questions to respondent	56.4	23	1	184
Words to petitioner	1,358.1	618.3	1	4,375
Words to respondent	1,412.9	658.2	1	4,123
Words per question to petitioner	24.3	7.1	1	61.9
Words per question to respondent	25.2	7.4	1	67.5
U.S. petitioner	.17	.38	0	1
U.S. respondent	.14	.35	0	1
Civil liberties	.56	.5	0	1
Economics	.25	.43	0	1
Judicial power	.13	.34	0	1
Federalism	.05	.22	0	1
Amicus briefs for petitioner	1.73	2.43	0	34
Amicus briefs for respondent	1.74	2.34	0	21
Solicitor general amicus for petitioner	.17	.38	0	1
Solicitor general amicus for respondent	.09	.29	0	1

Note. $N = 2{,}952$ except for the variables denoting amicus curiae participation. For those variables, $N = 2{,}507$ because the data cover five fewer terms (1979–2001).

filed an amicus curiae brief in support of the petitioner or the respondent; [13] and u is the residual. Table 2 summarizes the variables.[14]

We have no predictions for the time (T) and issue (I) dummy variables but include them because they might influence the likelihood that the petitioner will prevail. For example, although the petitioner win rate is similar across issue areas—it is .64 in civil liberties cases, .60 in economics cases, .57 in judicial power cases and .64 in federalism cases—the results of the regression require us to reject the null hypothesis (at the .05 level) that the win rate is equal across areas.

The dummy variables indicating when the federal government is a party are highly correlated with the win rate. When the government is

13. We thank Paul Collins for supplying data on amicus curiae participation. For his data set, see Paul Collins, Replication Data (http://www.psci.unt.edu/~pmcollins/data.htm).

14. In addition to the variables summarized in Table 2, we also considered the role of ideology in affecting outcomes. To equations (3.1)–(3.3) in Table 3, we added three variables: the ideology of the median justice (as measured by Martin and Quinn, Martin-Quinn Scores [http://mqscores.wustl.edu/index.php]), whether the lower court reached a liberal or a conservative decision and an interaction term between ideology and the lower court's outcomes. The estimates of all the question and word variables remain significant ($p < .001$) and correctly signed. The ideological variables become an important factor when we look at the voting of the individual justices in Section 6.

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Table 3. Logit Regression of the Probability That the Petitioner Wins, 1979–2007 Terms

Independent Variable	(3.1)	(3.2)	(3.3)
Questions to petitioner	−.019* (9.13)		−.025* (10.62)
Questions to respondent	.019* (9.02)		.025* (10.90)
Words to petitioner		−.001* (11.72)	
Words to respondent		.001* (12.21)	
Words per question to petitioner			−.057* (7.12)
Words per question to respondent			.065* (8.21)
U.S. petitioner	.619* (5.25)	.657* (5.48)	.667* (5.54)
U.S. respondent	−.867* (7.52)	−.902* (7.63)	−.905* (7.68)
Civil liberties	.149 (.84)	.129 (.72)	.132 (.74)
Economics	−.081 (.44)	−.090 (.47)	−.079 (.42)
Judicial power	−.158 (.79)	−.161 (.79)	−.175 (.87)
Constant	.367 (1.17)	.298 (.96)	.168 (.42)

Note. The regression is on the log of $P/(1 - P)$, where P equals the probability that the petitioner wins. All models include term dummies. Numbers in parentheses are t-statistics. $N = 2{,}952$.

*$p < .001$.

the petitioner, it wins about 76 percent of the time, compared to the overall petitioner win rate of 62 percent, and when the government is the respondent, it wins nearly 58 percent of the time, compared to the overall respondent win rate of 38 percent. We need to consider whether the higher government win rate is the main reason that we observe a negative correlation between the win rate and number of questions (or words in questions).

We expect the filing of an amicus brief in support of a party's position to have a positive effect on the likelihood that that party wins. There is some cost to preparing a brief, so a party could be expected to write one only if it expects the brief to influence the outcome of the case, although an alternative possible motivation is a desire to express solidarity with a party that may belong to the organization filing the amicus brief or just a desire to draw attention to oneself or express a view publicly. The government is a repeat player in the Supreme Court and may hope to increase its win rate by persuading the justices that it is a responsible litigator, and this may make it reluctant to file an amicus brief on the losing side.

q11 Tables 3 and 4 present our regression results, with Table 4 adding the amicus curiae variables to the analysis of the 1979 to 2001 terms, the only terms for which we have the requisite data. These are logit regressions that transform Win into the logarithm of the odds that the petitioner wins ($= \log P/(1 - P)$) as a linear function of the independent variables, where P is the probability the petitioner wins. The regression coefficient of a particular independent variable equals the percentage

Table 4. Logit Regression of the Probability That the Petitioner Wins, 1979–2001 Terms

Independent Variable	(4.1)	(4.2)	(4.3)
Questions to petitioner	−.020* (8.46)		−.025* (9.67)
Questions to respondent	.022* (9.43)		.026* (10.56)
Words to petitioner		−.001* (10.34)	
Words to respondent		.001* (11.41)	
Words per question to petitioner			−.055* (5.83)
Words per question to respondent			.053* (5.86)
U.S. petitioner	.811* (6.06)	.840* (6.20)	.835* (6.16)
U.S. respondent	−1.018* (7.41)	−1.073* (7.65)	−1.069* (7.65)
Amicus briefs for petitioner	.100* (4.01)	.104* (4.14)	.101* (4.05)
Amicus briefs for respondent	−.148 (6.37)	−.153* (6.50)	−.151* (6.43)
Solicitor general amicus for petitioner	.700* (4.97)	.667* (4.67)	.652* (4.58)
Solicitor general amicus for respondent	−.809* (5.03)	−.782* (4.77)	−.782* (4.79)
Constant	.478 (1.40)	.470 (1.40)	.515 (1.17)

Note. Amicus curiae data are available only for the 1979–2001 terms. The regression is on the log of $P/(1 - P)$, where P equals the probability that the petitioner wins. All models include issue dummies and term dummies. Numbers in parentheses are t-statistics. $N = 2{,}507$.

*$p < .001$.

change in the odds ratio brought about by a unit change in that variable; the coefficient of a dummy independent variable equals the percentage change in the odds as the dummy changes from zero to one. All regressions include separate dummy variables for each term of the Court (the excluded variable is the 1979 term), three issue dummy variables (the excluded variable is federalism) and variables denoting whether the United States is a petitioner or a respondent. We use three alternative specifications of the question variables: the number of questions to the petitioner and to the respondent, the total number of words in questions to the petitioner and to the respondent, and both the number of questions to the petitioner and to the respondent and the average number of words per question to each party. The results are unaffected by which of the three specifications is used. The regression coefficients are highly significant (with t-ratios greater than 7 and many greater than 9) and in the predicted direction. The lower the number of questions or words in questions that the justices ask party A, holding constant the number of questions or words asked party B, the higher the probability that A wins. Notice that it makes no difference whether the winning party is the petitioner or the respondent. This suggests that we could have used just one question variable (namely, the ratio of questions asked the petitioner to those asked the respondent). We have estimated several regressions using the one-variable specification, and the results are materially the same as in Tables 3 and 4.

The effects of number of questions or words are large. When the

justices ask the same number of questions of each party, the petitioner prevails in about 63 percent of the cases. But the petitioner's advantage quickly dissipates as the justices ask the petitioner more and more questions relative to the respondent. For example, holding the number of questions to the respondent constant at 56 (the mean number of questions asked a respondent), we see that if the petitioner is asked 25 more (that is, 81) questions, his probability of prevailing drops to .52 (the 95 percent confidence interval is .48–.56).[15] Were the justices to be especially inquisitive and ask the petitioner 125 questions, our regression analysis predicts that the probability of his winning would fall to .33. And if the justices asked the petitioner 56 questions and the respondent only half as many, the probability of the respondent's winning would rise to .51. The results are similar for the other specifications.

The two U.S. dummy variables and the four amicus curiae variables (Table 4) are highly significant. When the federal government is the
q12 petitioner, the regression coefficient in equation (3.1) implies that the probability of the petitioner's winning increases from an average of .62 to .76 (holding constant the value of the other variables in the regression).[16] And when the United States is the respondent, the probability of its winning increases from .38 to .60. Simulations of various scenarios produce even more dramatic results. When the government is the petitioner and the Court asks its lawyer many questions (say, 125) and its opponent just the mean number, the government has a .53 probability of losing. In the reverse situation, the government has a .93 probability of winning.

q13 Table 5 presents separate regressions for the United States as petitioner, as respondent and as neither. The coefficients in these regressions indicate that the proportionate change (or elasticity) in the petitioner win rate for a given percentage change in the number of questions is greater for the federal government. (The elasticities are −.42 for the petitioner and .27 for the respondent in equation [5.1] and −.57 for the petitioner and 1.29 for the respondent in equation [5.2].) Why the justices' questions to the United States appear to matter more than questions asked the other party is a puzzle, but maybe the explanation is that the

15. We calculated these predicted probabilities (using SPost) for an abbreviated version of equation (3.1): instead of adding dummy variables for each term, we clustered on term. The results for the variables of interest are virtually identical.

16. The change in the probability of winning with respect to a unit change in an independent variable ($\partial Pw/\partial X$, where P denotes the probability and X an independent variable) can be written as $\beta(1 - P)P$.

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Table 5. Logit Regression of the Probability That the Petitioner Wins, by Whether the United States Is a Party, 1979–2007 Terms

Independent Variable	U.S. Petitioner (5.1)	U.S. Respondent (5.2)	U.S. Not a Party (5.3)
Questions to petitioner	−.034** (5.40)	−.014* (2.43)	−.019** (7.39)
Questions to respondent	.021** (3.44)	.038** (6.08)	.016** (6.56)
Civil liberties	.521 (.92)	−.303 (−.51)	.135 (.68)
Economics	.157 (.27)	−.239 (.39)	−.105 (.50)
Judicial power	.100 (.16)	.043 (.07)	−.248 (1.10)
Constant	1.511 (1.79)	−1.571 (−1.66)	.415 (1.11)
N	516	412	2,024

Note. The regression is the log of $P/(1 - P)$, where P equals the probability that the petitioner wins. All models include term dummies. Numbers in parentheses are *t*-statistics.

*$p < .05$.

**$p < .001$.

justices respect the solicitor general's competence and probity. If the government's lawyer cannot dispel the doubts reflected in the justices' questions, this is strong evidence that the government's case is weak; if the government's case seems strong, the justices ask few questions rather than thinking it necessary to probe for possible weaknesses. This conjecture supports the legalistic theory (see Section 1) of the effect of questions on outcomes.

The filing of an additional amicus brief in support of one of the parties significantly increases the likelihood that the party will win. For example, the regression coefficient of .100 on the number of petitioner amicus briefs in equation (4.1) indicates that an additional brief increases the petitioner's probability of winning by .024 (= .100(.62)(.38)), which is 1.6 percent above the mean petitioner win rate of .62. Curiously, however, the coefficient of −.148 on the number of respondent amicus briefs increases the respondent's probability of winning by .035 (= .148(.62)(.38)), which is a 9.2 percent increase over the mean respondent win rate of .38.[17] This large difference in favor of the respondent may reflect an informational advantage. Amicus briefs supporting the petitioner are filed first, which enables the respondent and his potential amici to observe not only the number and content of the amicus briefs supporting the petitioner but also the identity of the filers before having to decide whether to submit amicus

17. The change in the probability of winning per unit change in the independent variable equals the regression coefficient in the logit equation multiplied by $P(1 - P)$, where P is the probability that the plaintiff wins.

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briefs on the respondent's behalf or how many.[18] Because the respondent and his allies thus have more information about the petitioner's case than the petitioner and his allies have about the respondent's case, the respondent's amici can file more effective briefs. And they have the last word, so far as amicus participation is concerned, because, while the petitioner can file a reply brief, his amici curiae cannot.

This discussion would lead one to expect that there would be more amicus briefs filed in support of the respondent than in support of the petitioner. But the average number of amicus briefs filed in support of the petitioner and the respondent are statistically indistinguishable (1.73 for the petitioner and 1.74 for the respondent). And the more amicus briefs that support the petitioner, the more there are likely to be that support the respondent. For example, no amicus briefs were filed for the petitioner in 914 cases, and in nearly 80 percent of them (713 cases) there were no amicus briefs or just one supporting the respondent. In 906 of the 1,477 cases in which between one and five amicus briefs were filed in support of the petitioner (61 percent), there were between one and five amicus briefs supporting the respondent, while in 56 of the 146 cases in which six or more amicus briefs were filed for the petitioner (38 percent), six or more amicus briefs were filed in support of the respondent. Overall, there is a statistically significant positive correlation (= .49) between the number of amicus briefs filed on each side of the case.

A possible reconciliation of the higher marginal benefit of an amicus brief supporting the respondent than of one supporting the petitioner is that the respondent's marginal cost of producing another amicus brief is greater than the petitioner's. Petitioners often begin their search for amici soon after they lose in the court of appeals, which gives them a considerable head start over a respondent who assumes that the petition is unlikely to be granted and so, to economize, holds off on seeking amicus support until later. The respondent may also fear that enlisting amici to oppose the petition for certiorari will call attention to the case and therefore make it more likely that the Court will take it. In addition, amici are reluctant to be associated with losers, and respondents lose

18. Rule 37(3)(a) of the Supreme Court Rules requires that the amicus brief be filed within 7 days after the brief of the party (in a case accepted for oral argument) that the amicus is supporting is filed. Rule 25(3) gives the respondent 35 days after the petitioner has filed his brief to file the respondent's brief. So a potential amicus has plenty of time to decide whether to file a brief in support of the respondent. By the same token, the respondent has plenty of time to line up amicus briefs in support of his position.

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more frequently in the Supreme Court than petitioners do, which may make it more difficult (costly) to induce the filing of amicus briefs in favor of the respondent. In equilibrium, therefore, the respondent's higher cost of enlisting amici could offset the informational advantage of a higher marginal product, so the number of respondent and petitioner amicus briefs would be about the same.[19]

An amicus curiae brief filed by the solicitor general has 5–8 times the impact of an amicus brief filed by another party. For example, in equation (4.1) the regression coefficients are .700 and −.809 on amicus briefs filed by the solicitor general in support of the petitioner and respondent, respectively, compared to .100 and −.148 on those filed by other groups. This result is consistent with the hypothesis that the solicitor general as a repeat player in the Supreme Court has a strong interest in maintaining his reputation with the justices and so will be more selective in filing an amicus brief than will trade associations or public interest groups that may have strong ties to a particular party.

5. EXPLAINING VARIATIONS IN THE NUMBER OF QUESTIONS OR WORDS IN QUESTIONS

Our focus thus far has been on differences in the number of questions or words in questions in oral argument in the Supreme Court as significant predictors of who will win the case. We now turn the question around and try to explain variations in the number of (N) and total words (W) in questions. We offer several hypotheses:

Hypothesis 1. The more justices who attend the oral argument, the greater N and W will be. Although we do not know the number of justices present at any given oral argument in our sample, the number of justices voting will closely approximate the number present. In 2,599 cases (88 percent) in our sample nine justices voted; in 314 cases, eight; in 33 cases, seven; and in six cases, six.

Hypothesis 2. The closer the case, the more questions the justices are likely to ask. We proxy closeness as follows: Unanimous equals one if the vote is unanimous (9–0, 8–0, 7–0 or 6–0, but notice that 98 percent of the 1,193 unanimous decisions in our sample are either 9–0 or 8–0) and zero otherwise; Close equals one if the vote is close, which occurred in

19. We thank David Strauss for this point.

Table 6. Summary of Variables in Regression Analysis of Questions, 1979–2007 Terms

Variable	Mean	SD	Min	Max
Questions	112.5	37.7	16	322
Words in questions	2,770.8	1,137.5	175	8,134
Judges voting	8.87	.39	6	9
Close vote	.22	.41	0	1
Unanimous vote	.40	.49	0	1
Other vote	.38	.48	0	4
U.S. party	.31	.46	0	4
NYT	.13	.34	0	1
Amicus briefs	4.09	4.94	0	78

Note. N = 2,952, except for amicus briefs (N = 2,507).

651 decisions, for which the vote was 5–4 in 574 cases and 5–3, 4–3 or 4–2 in the others. The excluded variable is votes that are neither unanimous nor close. This category includes 224 8–1 decisions, 31 7–1 decisions, 337 7–2 decisions, 443 6–3 decisions and 73 decisions with votes of 6–2, 6–1 or 5–2. We predict a negative regression coefficient on Unanimous and a positive coefficient on Close, relative to the excluded variable.

Hypothesis 3. We predict that the greater the importance of a case, the more interest the justices will take in the oral argument and the greater, therefore, the number of questions or words. We use two measures of the overall importance of a case: Epstein and Segal's (2000) measure of front-page coverage in the *New York Times*, coded one if the *Times* mentions the case on the front page and zero otherwise, and the number of amicus curiae briefs filed. The two variables are strongly correlated.[20]

Table 6 summarizes the variables used in the regression analysis. Table 7 presents the regression results. We cluster the observations by term to account for any correlation between questions and words in a given term. The results in Table 7 partly support our predictions. There are about 8 percent fewer questions (equations [7.1] and [7.3]) and words

20. We estimated the following regression (t-statistics in parentheses):

$$\underset{}{\mathrm{AC}} = \underset{(5.94)}{-265.58} + \underset{(21.30)}{5.54}\mathrm{NYT} + \underset{(6.08)}{.135}\mathrm{Term} - \underset{(.43)}{.002}\mathrm{Cases}, \qquad R^2 = .19,\ N = 2{,}507,$$

where AC is the number of amicus briefs filed in a case, NYT is a dummy variable indicating front-page coverage in the *Times*, Term is the term of the court (which is associated with the increase in the number of lawyers and lobbyists), and Cases is the number of cases per term. There are very strong and significant positive effects of both NYT (front-page coverage is associated with 5.5 more amicus briefs) and Term (each later term is associated with .13 more amicus briefs per case), whereas Cases has no observable effect on the number of amicus briefs.

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Table 7. Regression Analysis of Questions, 1979–2007 Terms

Independent Variable	ln(Questions) (7.1)		ln(Words) (7.2)		ln(Questions) (7.3)		ln(Words) (7.4)	
U.S. party	−.047**	(3.45)	−.028*	(2.07)	−.039*	(−2.55)	−.020	(−1.33)
Civil liberties	.095**	(3.45)	.105***	(3.78)	.125***	(4.08)	.130***	(4.18)
Economics	.050	(1.72)	.016	(.55)	.070*	(2.16)	.031	(.94)
Judicial power	.077*	(2.44)	.081**	(2.56)	.109**	(3.10)	.113**	(3.19)
Unanimous vote	−.079***	(5.41)	−.078***	(5.35)	−.081***	(−5.01)	−.086***	(−5.25)
Close vote	−.014	(.83)	−.000	(.02)	−.010	(−.51)	−.007	(−.36)
Judges voting	.083***	(5.06)	.077***	(4.71)	.099***	(5.52)	.080***	(4.37)
Dummy94	.305***	(11.62)	.398***	(15.14)	.281***	(10.25)	.370***	(13.44)
Term	−.002	(1.06)	.015***	(9.58)	.002	(.86)	.021***	(10.70)
NYT	.089***	(4.68)	.081***	(4.23)	.067**	(2.96)	.054*	(2.35)
Amicus briefs					.004*	(2.52)	.004*	(2.46)
Constant	7.065*	(2.28)	−22.842***	(7.35)	.337	(.09)	−34.18***	(8.93)
Adjusted R^2	.17		.45		.17		.41	
N	2,952		2,952		2,507		2,507	

Note. Numbers in parentheses are t-statistics.

*$p < .05$.

**$p < .01$.

***$p < .001$.

in questions (equations [7.2] and [7.4]) in unanimous decisions, but there is no significant difference in number of questions or words between close and other decisions. The greater the number of justices voting, the greater the number of questions and words; a unit increase in the number of justices who vote (say, from eight to nine) leads to an 8–9 percent
q14 increase in the number or words in questions. They ask significantly more questions in civil liberties and judicial power cases than in economics and federalism (the excluded issue) cases. This is a surprising result because both measures of importance (NYT and the amicus variable) are positively correlated with more questions and total words in questions, and we would expect those variables to account for any greater importance of civil liberties and judicial power cases. We also observe highly significant increases in questions and words (around 30–40 percent) correlated with the period since Breyer's appointment in the 1994 term, no time trend in the number of questions but a positive and significant trend in the number of words in questions, and fewer questions (in terms of both numbers and words) when the federal government is a party, although the effect is not statistically significant in regression (7.4).

6. INDIVIDUAL JUSTICES

Our earlier analysis showed that when the justices direct relatively more questions to one party, that party is more likely to lose. We now consider whether that proposition holds for the individual justices with respect to both the questions asked by the Court as a whole and the questions asked by the individual justices. Our data are limited to justices who served for all or part of the 2004–7 terms because until then the transcripts of oral argument did not identify which justice was asking which question. Although there are recordings before 2004 from which the identities of questioning justices could be gleaned, we have not attempted to do that. We also consider the variation among the justices in their participation at oral argument.

6.1. The Effect of the Court's Questions on a Justice's Vote

We estimate multiple regressions for each justice of the form

$$\text{Win}_i = f(Q, T, \text{U.S.}, I, \text{LC}, u). \quad (2)$$

The term Win_i is a dummy variable that takes the value of one if justice i votes for the petitioner and zero if he votes for the respondent; Q

denotes the set of question variables for the court (not for the individual justices); *T,* U.S., and *I* are defined as before; LC denotes the ideological direction of the lower court decision, which takes the value of one if the decision is liberal and zero if it is conservative; and u is the residual. We include LC to test the hypothesis that liberal justices are more likely to vote to reverse conservative lower court decisions and conservative justices are more likely to vote to reverse liberal lower court decisions. Since the petitioner is the losing party in the lower court, a positive coefficient on LC would indicate a conservative vote in favor of the petitioner appealing a liberal decision. Alternatively, a negative coefficient on LC would indicate a liberal vote supporting the respondent in an appeal of a liberal decision.

q15 Table 8 presents logit regressions for the individual justices. The number of observations in each regression depends largely on the number of years the justice served on the court. To illustrate, the regression for Justice John Paul Stevens has 2,907 observations (equal to the number of his votes in cases with oral arguments during his tenure on the Court), while the regression for Justice Samuel Alito has only 171 observations, which reflects his recent tenure. Table 8 shows the regression coefficients (and *t*-ratios) only for the question variables and the variable denoting the ideological slant of the lower court decision. The results for the other variables are similar to those of our earlier regressions.

The main finding in the regressions for the individual justices is that the number of questions asked by the Court has a significant effect on the votes cast by individual justices. That is, the greater the number of questions the justices ask the petitioner (respondent), the less likely an individual justice is to vote for the petitioner (respondent). For all 11 justices, the regression coefficients are in the predicted direction and statistically significant (except that the coefficient on questions to the respondent is not significant in the Roberts regression). Thus, for example, if we set the numbers of questions to the respondent and petitioner at their means (about 65 for the respondent and 64 for the petitioner), Justice Ginsburg is highly likely to reverse a conservative lower court decision and rule for the petitioner (.72 predicted probability). But if the Court asks the petitioner 25 more questions, the odds of her voting for the petitioner fall to .58, and they decrease to about .50 if the Court asks 40 more questions of the petitioner. For Scalia, the odds of voting to reverse a liberal lower court decision are .74. But as the number of questions the justices as a group ask the petitioner increases, the probability that Scalia will vote to reverse declines dramatically. If the Court

Table 8. Logistic Regressions of the Votes of Each Justice on the Number of Questions Asked by the Whole Court, 2004–7 Terms

Justice	*N*	Questions Asked of Petitioner		Questions Asked of Respondent		LC			
						Unanimous		Nonunanimous	
Alito	171	−.022*	(2.04)	.020*	(1.96)	.801*	(2.13)	1.754**	(3.26)
Breyer	1,026	−.022***	(5.53)	.024***	(6.19)	−.991***	(6.49)	−1.898***	(8.48)
Ginsburg	1,130	−.022***	(5.85)	.018***	(4.92)	=1.100***	(7.89)	−1.999	(9.98)
Kennedy	1,770	−.019***	(6.61)	−.019***	(6.66)	.744***	(6.89)	1.368***	(9.44)
O'Connor	2,497	−.016***	(6.91)	.017***	(7.40)	.763***	(8.68)	1.503***	(12.33)
Rehnquist	2,693	−.016**	(6.67)	.018***	(7.65)	1.562***	(17.03)	3.068***	(21.40)
Roberts	203	−.021*	(2.30)	.014	(1.51)	1.169**	(3.24)	2.146***	(4.00)
Scalia	1,989	−.019***	(6.73)	.016***	(5.82)	1.321***	(12.76)	2.528***	(16.35)
Souter	1,435	−.025***	(7.30)	.018***	(5.72)	−.841***	(6.89)	−1.382***	(8.47)
Stevens	2,907	−.025***	(11.14)	.025***	(11.53)	−1.181***	(13.67)	−1.746***	(14.93)
Thomas	1,318	−.018***	(5.02)	.007*	(1.99)	1.626***	(12.44)	3.182***	(14.60)

Note. All regressions include dummy variables indicating whether the United States is a respondent or petitioner, dummies for each term the justice served (excluding his or her first term) and dummies for civil liberties, economics and judicial power. Numbers in parentheses are *t*-statistics. *N* = number of the justice's votes in cases with oral arguments during his or her tenure on the Court; LC = ideological direction of the lower court's decision.

*$p \leq .05$.

**$p \leq .01$.

***$p \leq .001$.

asks the petitioner 25 more questions (holding constant the number of questions to the respondent at the mean), the odds of Scalia's voting to reverse decrease to .64. If the Court doubles the number of questions it asks the petitioner compared to the respondent, Scalia is more likely to vote to affirm.

The obvious reason why the voting of the individual justices as a function of the balance of questions mirrors the Court as a whole is that about 40 percent of the cases are decided unanimously. The question variables are less significant predictors of a justice's vote if we restrict the sample to nonunanimous cases, since if the balance of questions correctly predicts the majority decision (other things constant), it must incorrectly predict the votes of the dissenters. In the nonunanimous cases, the balance of questions by the Court as a whole is a statistically significant predictor of the votes of Justices Breyer, Ginsburg, Sandra Day O'Connor, David Souter and Stevens but, with the partial exception of Anthony Kennedy, not of the more conservative justices, although the signs of the variable are correct. The number of questions asked the respondent but not the petitioner is a statistically significant predictor of Kennedy's vote.[21] So for the most conservative justices, the unanimous cases are driving the overall result that the questions asked by the Court as a whole predict the votes of the individual justices. This suggests that those justices are less easily swayed by the give-and-take of oral argument than the more liberal justices.

Until now we have not considered ideology as a factor in questions because our focus was on the Court as a whole. When we turn our attention to the individual justices, the ideological direction of the lower court decision (LC in equation [2]) is likely to be an important factor in a justice's vote. This is indeed the case. As the last two columns of Table 8 show, LC is a highly significant predictor of a justice's vote, holding constant the other variables in the regression. We find negative and significant coefficients for the four liberal justices in our sample, which indicates that they are less (more) likely to vote for the petitioner when the lower court decision was liberal (conservative), and positive and significant coefficients for the seven conservative justices, which indicates that they are more (less) likely to vote for the petitioner when the lower court decision was liberal (conservative). Not surprisingly, both the magnitude and the significance levels of the regression coeffi-

21. We do not reproduce the results of the questions regression for the nonunanimous cases. They are available from the authors on request.

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cients on LC are greater in the nonunanimous than in the unanimous sample.

We can examine the importance of ideology better by converting the regression coefficients on LC into the change in the probability of voting for a petitioner who is appealing a conservative rather than a liberal decision.[22] Taking the average of the seven conservative justices, the increase in the probability of voting to reverse a liberal decision is .27 for all cases but .52 for nonunanimous cases. For the four liberal justices, we find a decrease of .24 in the probability of voting to reverse a liberal decision in unanimous cases and a decrease of .41 in nonunanimous ones. Consider a few examples. The increase in the probability of voting to reverse a liberal compared to a conservative decision is .38 for Justice Clarence Thomas, .31 for Scalia and .18 for Kennedy and O'Connor in unanimous cases and .75 for Thomas, .60 for Scalia, .32 for Kennedy and .35 for O'Connor in nonunanimous ones. For the four liberal justices, the decrease in the probability of voting to reverse a liberal compared to a conservative decision is .23 for Breyer, .26 for Ginsburg, .20 for Souter and .28 for Stevens in unanimous cases and .45 for Breyer, .47 for Ginsburg, .33 for Souter and .41 for Stevens in nonunanimous ones. It thus appears that conservative justices are more committed to voting to reverse a liberal decision than liberal justices are to voting to reverse a conservative decision since the increase in the probability of reversing a decision for conservative justices is about 25 percent higher than that for liberal justices (.52 compared to .41).

6.2. Number of Questions and Total Words in Questions

We now consider questions asked by the individual justices in the 2004–7 terms. We limit our analysis to justices still on the Court and therefore exclude O'Connor and Chief Justice William Rehnquist (both of whom participated in fewer than 20 percent of the cases in our data set) from most of the analysis.[23]

q16 As Table 9 shows, the justices vary considerably in the extent of their participation during oral argument. Measured by number of questions, Scalia is the most inquisitive justice. In no case in our sample did he fail

22. The change in the probability of voting for a petitioner who is appealing a conservative versus a liberal lower court decision equals the regression coefficient on LC multiplied by $P(1 - P)$, where P (= .62) is the mean probability of the petitioner's winning and $(1 - P)$ (= .38) is the mean probability of the respondent's winning.

23. Our data set includes 41 cases in which O'Connor participated and 22 in which Rehnquist participated.

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Table 9. Questions and Words in Questions for the Individual Justices, 2004–7 Terms

		Questions per Case		Words in Questions per Case	
Justice	Cases	Mean	SD	Mean	SD
Scalia	232	24.77	12.89	681.35	318.79
Roberts	204	22.44	8.62	622.12	250.20
Breyer	228	18.27	11.94	860.94	472.79
Souter	232	15.09	9.60	560.69	338.32
Ginsburg	232	14.66	7.74	506.32	266.16
Stevens	231	13.18	9.68	316.43	218.09
Kennedy	231	13.26	8.54	353.70	226.06
Alito	174	4.61	3.50	156.03	120.73
Thomas	229	.04	.41	1.2	11.39

to ask a question. Ginsburg is the only other justice who asks at least one question in every case; Scalia's minimum number of words is six and Ginsburg's three. On average, Scalia asks about 25 questions per case, though his standard deviation is reasonably high (12.9). Roberts and Breyer ask about 18 to 22 questions per case, but *t*-tests indicate that Scalia's mean is significantly higher than anyone else's. Breyer, however, is the wordiest justice by a large margin, with 860.9 words per oral argument, Scalia being second with 681.4 words. Ginsburg is in the middle of the Court in both number of questions and number of words, but her maximum in an individual case of 1,846 words is second only to Breyer's (2,550). Thomas is the only justice whose means are significantly lower than all the other justices. His median number of questions and words is zero. Alito's means are second lowest, perhaps because he is the most recent appointee to the Court and may still be feeling his way.

The justices can be divided into two or three groups, depending on whether number of questions or number of words in questions is the measure. With respect to number of questions, there are three groups:[24] Scalia, Roberts and Breyer ask significantly more questions than average; Souter, Ginsburg, Kennedy and Stevens are not significantly different from average; Alito and Thomas ask significantly fewer questions than average. In terms of words, Breyer, Scalia, Roberts, Souter, and Ginsburg ask sig-

24. These groupings reflect a comparison of the expected number of questions to the actual number of questions asked by each justice. The expected number is simply the total number of questions divided by the number of justices. We ran (paired) *t*-tests for each justice against expected questions. We did the same for the number of words.

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Table 10. Mean Number of Questions and Words to Petitioner and Respondent, 2004–7 Terms

		Mean Number of Questions Asked			Mean Number of Words		
Justice	Cases	Of Petitioner	Of Respondent	Difference	To Petitioner	To Respondent	Difference
Roberts	204	11.52	10.91	.61	311.44	310.68	.75
Scalia	232	12.60	12.17	.43	342.20	339.15	3.05
Breyer	228	7.68	10.59	−2.91*	359.75	501.20	−141.45*
Souter	232	7.53	7.56	−.02	280.30	280.39	−.09
Ginsburg	232	7.78	6.87	.91	264.51	241.81	22.70
Stevens	231	6.22	6.96	−.74	144.09	172.34	−28.25*
Kennedy	231	6.98	6.27	.71	195.66	158.03	37.63*
Alito	174	2.53	2.08	.45	85.81	70.22	15.59
Thomas	164	0	.04	−.03	.15	1.05	.90

Note. Cases in which the justice did not participate in the decision are excluded.
*$p < .05$ (on the basis of a paired t-test).

nificantly more words than average; Stevens, Kennedy, Thomas and Alito ask significantly fewer.

Do the justices spend more time questioning one side? Typically not, as Table 10 indicates. Breyer is the principal exception. On average, he asks about three more questions of the respondent than of the petitioner but uses 141 more words in questions to the former. Stevens asks on average the same number of questions of the respondent and petitioner, but he too uses significantly more words when questioning the respondent. Kennedy uses significantly more words when speaking to the petitioner, but the numbers of questions that he asks of petitioners and of
q17 respondents are statistically indistinguishable.[25] This is consistent with his role as the Court's swing voter. That position makes him the most powerful justice and hence increases the perceived benefit to him of getting it right. In addition, the fact that he is the swing justice suggests that he sees more merit in both sides of more cases than the other justices do.

6.3. Questions and Votes

Our earlier analysis showed that the party asked more questions is likely to lose. We now ask whether a particular justice's vote can be predicted

25. It turns out, however, that Table 9 masks an important characteristic of the justices' questioning. They tend to use more words when speaking to the party with whom they are inclined to disagree on ideological grounds. Three out of the four liberals (Souter, Ginsburg and Breyer) ask significantly fewer questions of liberal petitioners than of conservative ones. Stevens asks about five fewer questions of liberal petitioners. Conversely, the two George W. Bush appointees and Scalia are significantly less likely to question conservative respondents and conservative petitioners than liberal ones.

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from the number of questions he or she asks. Figure 6 shows the mean number of questions asked of each party, by justice. As we would expect, asking more questions of a party predict that the justice will vote against that party.[26] Chief Justice Roberts, for example, asks on average (14.1 − 8.6 =) 5.5 more questions of the petitioner when he votes for the respondent and (12.1 − 10.2 =) 1.9 more questions of the respondent when he votes for the petitioner. The same holds for Stevens, Scalia, Souter and Ginsburg. Alito and Breyer fit the basic pattern—they tend to vote against the party they question more—but the difference is not statistically significant when Alito votes for the petitioner and when Breyer votes for the respondent. Kennedy does not ask more questions of the party he votes against but does ask the petitioner more questions when he votes in the petitioner's favor. The difference is statistically significant for words, but only marginally so for questions ($p < .08$).

We estimate multiple regressions for each justice (except for Thomas, who asked only one petitioner a question and four respondents questions in 229 cases) for the 2004–7 terms using the same specification as in equation (2) except that we substitute questions asked by the particular justice for questions asked by the Court as a whole. In estimating the regressions, we clustered the observations by the term of the court.

q18 Table 11 displays the results. Even after we control for the direction of the lower court decision and the participation of the United States, the number of questions and the total words in questions still provide a reasonable predictor of most justices' votes. We expect the behavior of the individual justices to be less predictable than that of the Court as a whole. Consider the following example. Justice A asks the respondent 20 questions and the petitioner none, and as a result the remaining justices fully appreciate the weaknesses in the respondent's position and have little interest in asking the respondent additional questions. Suppose each of them asks the petitioner three questions and the respondent one. If we sum the questions asked the two parties, we find that the petitioner has been asked 24 questions and the respondent 28, yet eight of the nine justices asked the petitioner more questions than the respondent. Assume that the Court votes unanimously in favor of the petitioner. Superficially, this would appear to contradict our finding that questions predict outcomes, but it does not because in the example the questioning pattern

26. The results are virtually identical when we use the number of words in questions instead of the number of questions.

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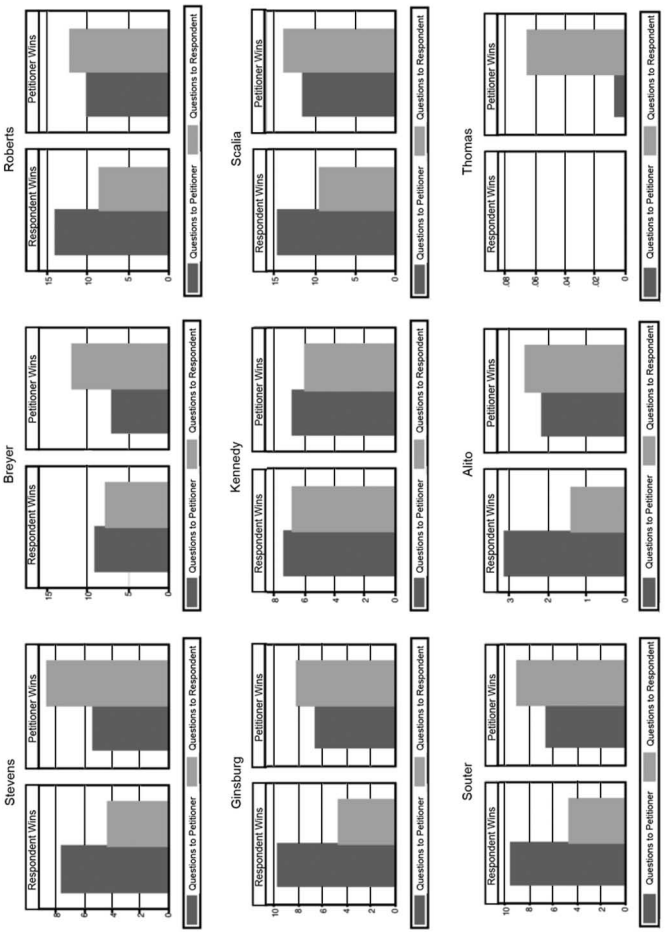

Figure 6. Mean number of questions asked of the respondent and petitioner, by whether the justice voted for the respondent or petitioner, 2004–7 terms.

Table 11. Logistic Regressions of the Votes of Each Justice on the Number of Questions and Words, 2004–7 Terms

		Number of Questions Asked			Number of Words		
Justice	Votes	Of Petitioner	Of Respondent	LC	To Petitioner	To Respondent	LC
Alito	170	−.044 (−.71)	.186* (2.06)	.376 (.94)	−.001 (−.58)	.005^{+} (1.89)	.403 (1.01)
Breyer	223	−.042* (−2.08)	.098*** (3.87)	−1.63*** (−4.37)	−.001* (−1.96)	.003*** (4.87)	−1.597*** (−4.17)
Ginsburg	227	−.137*** (−3.89)	.141*** (3.95)	−1.19*** (−3.31)	−.005*** (−3.97)	.005*** (4.68)	−1.017** (−2.77)
Kennedy	226	−.015 (−.51)	−.030 (−1.08)	.440 (1.46)	−.001 (−1.12)	.000 (.17)	.456 (1.52)
Roberts	200	−.047^{+} (−1.89)	.046 (1.62)	.763* (2.03)	−.002** (−2.95)	.002^{+} (1.72)	.520 (1.33)
Scalia	227	−.045* (−2.31)	.057** (2.82)	1.013** (3.00)	−.002** (−2.86)	.003*** (4.08)	.728* (2.06)
Souter	227	−.063** (−2.70)	.092*** (3.32)	−1.281*** (−3.69)	−.002** (−2.81)	.003*** (3.39)	−1.226*** (−3.52)
Stevens	226	−.046^{+} (−1.79)	.127*** (3.84)	−.991** (−2.70)	−.002 (−1.47)	.004*** (3.39)	−1.028** (−2.78)
All justices except:							
Kennedy	226	−.030*** (−3.36)	.018* (2.11)	.477 (1.54)	−.001*** (−3.82)	.001*** (3.91)	.498 (1.57)
Thomas	224	−.017* (−2.04)	.000 (.02)	1.628*** (5.07)	−.001* (−2.52)	.001** (2.65)	1.64*** (5.04)

Note. All regressions include dummy variables indicating whether the United States is a respondent or petitioner and the ideological direction of the lower court's decision. Numbers in parentheses are *t*-statistics. LC = ideological direction of the lower court's decision.

$^{+}p \leq .10$.
$^{*}p \leq .05$.
$^{**}p \leq .01$.
$^{***}p \leq .001$.

of the other individual justices is responding to the questioning by the justice who has the strongest views about the case.

Still, the numbers of questions and of words in questions are significantly correlated with all the justices' votes ($p \leq .05$; excluding, of course, Thomas), and have the expected sign for Breyer, Ginsburg, Scalia, Souter and, with one exception, Stevens. For Roberts, questions asked of and words in questions asked of the petitioner are more predictive of his vote than are questions asked of the respondent; for Alito the reverse holds. The principal exception is Kennedy; none of his question variables produce a statistically significant coefficient. This is consistent, as explained earlier, with his being the swing justice.

Might Kennedy's and Thomas's votes be influenced by the questions of other justices? The question is explored in the bottom two rows of Table 11. All eight regression coefficients have the expected signs—that is, Kennedy and Thomas tend to vote for the outcome signaled by the questions asked by the other justices—and seven are statistically significant. Unsurprisingly, the effects tend to be smaller than the corresponding effects of a justice's own questions.

We also considered whether Kennedy's and Thomas's votes are more responsive to questioning by other conservative justices than to questioning by liberal justices. Both Thomas and Kennedy are less likely to vote for the petitioner the more questions conservatives ask the petitioner (Thomas significantly so), and Thomas and Kennedy are more likely to vote for the petitioner the more questions conservatives ask the respondent (although the regression coefficients are not statistically significant).[27] Kennedy is significantly less likely to vote for the petitioner the more questions the liberals ask the petitioner's lawyer. Kennedy's votes are not affected by the number of questions the liberals ask the respondent's lawyer. Thomas's votes are affected, but the influence runs counter to our other findings: the more questions the liberal justices ask to the respondent, the more likely Thomas is to vote in his favor ($p \leq .10$).

The ideological variable in Table 11 has a significant positive effect on the voting of the five conservative justices and a negative effect on the voting of the four liberal justices. For the latter group, however, the negative coefficient is significant only for Breyer. The implication is that the conservative justices and Breyer have a stronger political commitment than the liberal justices other than Breyer. Petitioners won about 69 percent of the cases in the period covered by our study, but when the

27. The *t*-ratio is 1.27 for Thomas and .49 for Kennedy.

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petitioner was appealing a liberal decision, the figure exceeded 90 percent for Scalia, Roberts and Thomas and 75 percent for Alito and Kennedy. The corresponding figure for the liberal justices is less than 50 percent, but it is statistically significant only for Breyer.

7. CONCLUSION

Our main purpose has been to test the hypothesis that, even after correcting for possible confounding factors, Supreme Court justices are more prone to ask questions at oral argument of the lawyers for the parties against whom they will vote. Our findings are also consistent with the limited role of deliberation in appellate courts and with two prominent theories of judicial behavior: the legalistic, which implies that questions are disinterested efforts to probe weaknesses in either side's case and hence that the more questions that are asked, the weaker the case is likely to be, and the realistic theory, that justices often (or perhaps always) make up their minds on a case before argument (or even before briefing) and use oral argument to try to persuade the other justices to vote with them. We find that both motives play a role in the questioning practices of Supreme Court justices.

REFERENCES

Epstein, Lee, and Jeffrey A. Segal. 2000. Measuring Issue Salience. *American Journal of Political Science* 44:66–83.

Gressman, Eugene, Robert L. Stern, and Stephen M. Shapiro. 2007. *Supreme Court Practice*. Arlington, Va.: Bureau of National Affairs.

Johnson, Timothy R., Ryan C. Black, Jerry Goldman, and Sarah A. Treul. 2009. Inquiring Minds Want to Know: Do Justices Tip Their Hands with Questions at Oral Argument in the U.S. Supreme Court? *Washington University Journal of Law and Policy* 29:241–62.

q19 Johnson, Timothy R., Ryan Black, and Justin Wedeking. Forthcoming. Leaving the Attorneys Out: Justice Interruptions of Their Colleagues during Oral Arguments. *Loyola Law Review*.

Posner, Richard A. 2008. *How Judges Think*. Cambridge, Mass.: Harvard University Press.

Roberts, John G., Jr. 2005. Oral Advocacy and Re-emergence of a Supreme Court Bar. *Journal of Supreme Court History* 30:68–81.

———. 2009. Remarks at the Fourth Circuit Court of Appeals' Judicial Conference, White Sulphur Springs, W.V., June 27.

Tuesday Nov 30 2010 10:33 AM/JLS3270/2010/vol. 39/June 2010 /hale/rkamins/mnh2/ms to editorial/use-graphics/narrow/default/

Shullman, Sarah. 2004. The Illusion of Devil's Advocacy: How the Justices of the Supreme Court Foreshadow Their Decisions during Oral Argument. *Journal of Appellate Practice and Process* 6:271–93.

Wrightsman, Lawrence S. 2008. *Oral Arguments before the Supreme Court*. New York: Oxford University Press.

Tuesday Nov 30 2010 10:33 AM/JLS3270/2010/vol. 39/June 2010 /hale/rkamins/mnh2/ms to editorial/
use-graphics/narrow/default/