

**Targeting the Median Justice:
A Content Analysis of Legal Arguments and Judicial Opinions**

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Abstract

The median justice has long been thought to occupy a special position in Supreme Court decision-making. Given the importance of the “swing justice,” it is not surprising that conventional wisdom holds that lawyers and litigants target the median in an effort to prevail before the Court. In this paper, we make use of automated content analysis of Supreme Court opinions and litigant briefs to trace indirect evidence for such strategic litigation. Our results provide not only systematic, quantitative support for strategic targeting, but they also suggest that automated content analysis can be fruitfully applied to the study of law and courts.

Individuals and groups who bring issues before the US Supreme Court generally do so in an attempt to win; that is, they wish to prevail in their legal dispute because they have an interest in the direct outcome of the case, or because they may be attempting to advance a broader policy agenda (see, e.g., Caldeira and Wright 1988; Collins 2008). Because they must attract the support of a sufficient number of justices to have their case heard and to win, sophisticated litigants have good reason to take into account the legal, social, and political environment in which the justices operate, and that may shape the Court’s decision to hear a case and the manner in which the justices will dispose of it. Not surprisingly, the need to be attuned to these dynamics of judicial decision-making has attracted scholarly attention, and “strategic litigation” has been a frequent focus for analysts of the U.S. Supreme Court. For example, a great many studies have demonstrated that to be successful before the court, interest groups must develop plan of litigation and “pick” appropriate cases that present favorable facts (see, e.g., Barker 1967; Epstein and Kobylka 1992). Most notably, the NAACP was adept at both aspects of litigant strategy, a fact that seems to have been critical in the fight against racial segregation (Kluger 1976; Tushnet 1994; Vose 1957). Of course, “picking cases” and developing a long-term litigation strategy are not the only important components of success. Another central aspect --- perhaps the most important one, once the Court decides to hear a case ---

is to craft arguments that will appeal to the justices. If granted review, litigants must be mindful of which legal claims are likely to find favor.

Conventional wisdom among legal practitioners and scholars of the judicial process is that crafting arguments that can win usually means that litigants must “target” the center of the Court – specifically, the “swing” or median justice. In a Court whose decisions are driven, to a large extent, by policy preferences (Segal and Spaeth 2002) – which implies that justices can generally be arrayed along a spectrum from most conservative to most liberal – this justice is likely to cast the decisive vote (Giles 1977; Rohde 1972), and finding a position that can bring her on board is therefore crucial. As the late Justice William Brennan famously remarked, “[f]ive votes can do anything around here” (Simon 1995, 6). Similarly, Carter G. Phillips, an alumnus of the solicitor general’s office and one of the Court’s preeminent practitioners, observed that “[o]ne of the tricks of this trade is learn how to count to five” (1998, 187). In short, crafting a legal strategy that is aimed at convincing the “fifth vote” – the median justice – is an important goal for litigants. Anecdotal evidence for the conscious targeting of the median justice abounds. In discussing the litigation strategy surrounding the Court’s recent affirmative action decisions, for example, Jeffrey Toobin recounts that lawyers for the University of Michigan “knew that the key to winning O’Connor’s vote, and thus the case, was mobilizing establishment support for affirmative action” (2007, 248). To do so, they developed a litigation strategy that would focus on demonstrating corporate and military backing for the policy.

Our aim in this paper is twofold. First, we hope to supplement common sense expectations and anecdotal evidence of litigant attempts to “target the median” with systematic, quantitative support demonstrating such behavior across a large number of cases. We do so by making use of *Wordscores*, an automated content analysis technique developed by Laver, Benoit, and Garry (2003), to analyze judicial opinions and the briefs filed by parties to draw inferences about which justice (if

any) the litigants were attempting to appeal to in drafting their arguments. The second purpose of our paper relates to the use of automated content analysis. To date, much of the quantitative literature in judicial politics has relied on categorical, or even binary, indicators of opinion content, most commonly the “direction” of the Court’s decision. While there are obvious practical considerations for doing so, largely connected to the desire to analyze a large number of opinions, this approach necessarily ignores much of the nuance of legal texts that plays a more prominent role in the work of legal scholars, who have criticized such work precisely on these grounds (see, e.g., Edwards and Livermore 2009; White 2005).¹ Automated content analysis offers a potential bridge between these two approaches to studying “the law.” By making content analysis of a large number of legal texts possible, this technology holds out the hope of systematic, quantitative analysis that can --- within limits --- be more sensitive to the actual *content* of decisions. To date, however, the application of such methods to studying legal texts has been exceedingly rare (see Evans et. al. 2007 and Corely 2008 as the most prominent examples). Along with these recent efforts, our analysis in this paper provides a compelling example of the potential for using such techniques in the judicial politics.

Conceptual Issues

The goal of our analysis is to provide evidence for the systematic targeting of arguments by litigants at the median justice. Before describing our data and the *Wordscores* procedure, we begin by outlining the logic of our inquiry. The centerpiece of our approach is to use content analysis to assess the similarity between the brief filed by the winning party in a case and the opinion issued by the Court. This raises an obvious question: Why do we focus on textual similarity? We do so

¹ Recently, some of these measures have also come under scrutiny by scholars who generally favor quantitative approaches. See, for example, Harvey (2008) and McGuire et al. (2009).

because there are good reasons to believe that the degree of textual similarity can provide us with (indirect) evidence of attempts by litigants to appeal to the median.

Suppose the Supreme Court has decided a case, and issued an opinion, written by one of the justices.² There are, of course, a number of influences that shape the opinion that the justice will author – most importantly, the need to hold together the majority that supports the decision (Maltzman, Spriggs, and Wahlbeck 2000; Murphy 1964). That is, the opinion is a bargaining outcome or compromise reached among the justices who support the opinion (and may even reflect the influence of dissenters). It will not simply be an exposition of the author’s views. However, the opinion will *also* be shaped by the particular preferences of the opinion author – there will be some “opinion writer influence” (Rohde 1972). That is, while there are constraints the opinion author must respect, *within* these constraints, she can make use of her agenda-setting power to shape the decision in ways that approximate her views as well as possible.³

As they compose an opinion, justices can draw from a number of sources --- relevant precedent, canons of statutory interpretation, textual analysis, constitutional or legislative history, the suggestions of their colleagues, to name but a few. Of course they also rely on the merits briefs of the litigants (see Corley 2008 for a detailed analysis of the factors that shape the extent to which the Court relies on party briefs). Indeed, these briefs themselves will draw on the sources just mentioned when a party thinks that they are relevant for advancing its cause. Importantly, as we summarized above, litigants are likely to develop their arguments with a focus on securing the support of the

² Naturally, a number of forces conspire to determine who writes the opinion in a case (Maltzman, Spriggs, and Wahlbeck 2000). As will become clear in a moment, we can ignore the dynamics of opinion assignment; for our purposes, the critical issue is that we know *who* wrote an opinion.

³ For formal treatments that derive (constrained) opinion author influence over opinion content, see Hammond et al. (2005), Lax and Cameron (2007), and Carrubba et al. (2007).

swing justice. That is, the merit briefs are targeted at the median justice. On balance, the party that is more successful at making an argument that resonates with the median will prevail.

Consider the implications of this fact for the similarity between the opinion that is issued and the litigant briefs filed by the parties. Suppose, for example, that the author of a given opinion is the median justice. In writing that opinion, this justice would find much in the winning party's brief with which she agreed. After all, the brief was written precisely to appeal to her. To the extent that she is able to shape the content of the opinion, she can therefore easily draw on the material in the winning party's brief. Now suppose the opinion is written by a justice *other* than the median. The litigant briefs were written to appeal to a justice with a different set of preferences, and as a result, this justice should find less to agree with in the winning party's brief than the median. To the extent that he is able to shape the content of the opinion, he should therefore incorporate *less* material from the winning party's brief than the median.⁴ Moreover, the more distant a justice is from the median ideologically, the more that justice should disagree with the median and, not coincidentally, the brief written to appeal to the median's preferences. As a result, to the extent that he can, such a justice will attempt to shape the opinion in ways that deviate from the position advanced in the winning party's brief. In other words, we would expect that as an opinion author is located further from the median, the opinion looks *less and less* like the winning party's brief:

Implication: If litigants are attempting to target their briefs at the median justice, the similarity between the winning party's brief and the opinion of the Court will decline as the preferences of the opinion author diverge from those of the median justice.

⁴ Note that this does not imply that an opinion written by a non-median justice does not incorporate any material from the winning party's brief, or looks "nothing like" that brief. As outlined above, opinion authors are constrained in their ability to write an opinion that reflects their views. Rather, this is a relative claim: To the extent that the opinion author can shape the content of the opinion, she should make *less* use of material in the winning party's brief than the median justice would have done.

Wordscores

To look for evidence of this implication, we need a measure of similarity between the opinion, on the one hand, and the written briefs on the other. To generate these estimates, we rely on the *Wordscores* procedure, an automated content analysis program developed for the STATA statistical package by Laver, Benoit, and Garry (2003). Originally, the program was developed to locate the platforms of political parties in ideological space, but its application is generalizable to other situations in which one is interested in estimating the location of one or more texts relative to some set of reference texts (Laver, Benoit, and Garry 2003; see also Laver and Garry 2000).

The logic of *Wordscores* relies on two central assumptions: (a) Texts expressing different ideological (or legal) positions make use of systematically different language, and (b) texts that are similar in their use of language do, in fact, represent similar ideological (or legal) positions.⁵ Given these assumptions, the analyst identifies a set of reference texts, to which she assigns some (exogenous) scores. In our particular application, we will use the two briefs filed by the parties as our reference texts, assigning the brief filed by the respondent a score of 1 and the brief filed by the petitioner a score of 0.⁶ Next, *Wordscores* analyzes the pattern of word usage across the reference texts, and assigns each word that appears in a text a score that corresponds to a weighted average of the exogenous scores assigned to the reference texts, with weights that correspond to the relative frequency of the word's usage across the reference texts (for the particulars of the procedure, see

⁵ We return to a discussion of these assumptions, and the general strengths and weaknesses of *Wordscores* and other automated content analysis procedures in the conclusion.

⁶ In most applications, the scores assigned to the reference text are intended to carry some substantive meaning, for example, that one text is more liberal (low score) than another (high score). In our case, the scores carry no substantive meaning, and can be assigned arbitrarily since we are merely intending to make a judgment about similarity of texts, not the substantive position they take. As a result, we use the [0,1] interval because it is easy to interpret; newly scored texts that receive a score below .5 are more similar to the petitioner's brief and texts that receive a score above .5 are more similar to the respondent's brief.

Laver, Benoit, and Garry 2003; Martin and Vanberg 2008). To continue our example, a word that appears *only* in the brief for the respondent would receive a score of 1; the word is associated perfectly with the respondent's position. Similarly, a word that appears exclusively in the plaintiff's brief receives a score of 0. A word that appears twice as often in the respondent's brief as it does in the plaintiff's brief would receive a score of .66.⁷ With this "dictionary" of word scores in hand, the final step in the procedure is to score any new ("virgin") text by assigning it a score that equals the weighted average of the individual scores of the words that the text contains, where the weights correspond to the relative frequency of each word within the new text.

Interpretation of these "virgin text scores" poses a challenge, especially if the analyst wants to make comparisons across virgin and reference texts. The scoring of virgin texts works by taking advantage of the fact that the reference texts (a) make use of *different words* or (b) make use of the *same word with different frequency*. Many texts include the same words in roughly the same frequency, however. Laver, Benoit, and Garry call such words (e.g., "the," "and," etc.) "non-discriminating" words (2003:316). Because the procedure assigns such words a score roughly equal to the average position of the reference texts, the virgin text scores will typically be much more tightly distributed around their mean than the reference texts. In order to compare the scored texts directly to the reference texts, it is therefore necessary to transform these scores in a manner that places them on the same metric as the reference texts. To do so, we use a transformation developed by Martin and Vanberg (2008) that allows direct comparison of reference and virgin texts. In addition, we also conduct our analysis by eliminating words that appear not to discriminate sufficiently between the reference texts.

After conducting the *Wordscores* analysis, we are left with the following scores for each case in

⁷ We arrive at this score because $2/3*1+1/3*0=.66$.

our dataset: The two briefs of the parties, assigned a score of 0 (plaintiff) and 1 (respondent), and a newly scored Supreme Court opinion, with a transformed score on the 0-1 scale. A transformed score above .5 implies that the word usage in the opinion is more similar to the word usage of the respondent's brief than the plaintiff's brief. A score below .5 implies the reverse: The opinion looks more like the brief filed by the plaintiff than the brief filed by the respondent. Moreover, we can readily use the distance between the opinion and the briefs as a measure of similarity: The closer the transformed score gets to 0, the more "like" the plaintiff's brief the opinion is, and the closer the score gets to 1, the more it is "like" the respondent's brief.

Data

Our data for this analysis come from the 2003 and 2004 terms of the Supreme Court. These terms are particularly appropriate because they come at the end of a long period of stability in the Court's membership, and occur at a time during which expectations about which justice holds the "swing" vote on the Court were relatively clear: Justice Sandra Day O'Connor. As a result, litigants were generally in an excellent position to "target" their arguments at the median. For each of these terms, we began with the full sample of all published opinions. We then located (using Lexis-Nexis) the briefs filed by each party in these cases (a number of cases do not provide a full record of party briefs, and therefore had to be dropped from the analysis). From these cases, we eliminated three more sets of opinions. We do not consider "consolidated" cases in which the court jointly rules on a number of petitions, because there is no straightforward way to decide which briefs to use in the analysis. Similarly, we also eliminate cases that were decided by a unanimous Court. Like other observers, we believe that unanimous cases are "special" in the sense that the very unity on the court indicates that the dynamics we are concerned about --- having to do with the attempt to capture the

center of the Court --- are absent in such cases, perhaps because the legal considerations are so obvious and manifest that there is little room for disagreement among the justices (see Baum 1998, 76-78 for various citations to this work). Finally, we do not consider cases in which the Court does not issue a clear ruling in favor of one party, that is, cases in which it “reverses in part and affirms in part” because these cases do not allow us to cleanly identify the winning party’s brief. In total, we are left with fifty-four cases for which we conduct our analysis. For each case, we use the two briefs as reference texts and use *Wordscores* to place the opinion of the Court relative to the two briefs. We then calculate the distance --- or similarity --- between the opinion and each of the two briefs as the absolute distance between the scores of these texts.⁸

Analysis

Before turning to the heart of our analysis, we first conduct a preliminary robustness check. Is there reason to think that the similarity scores produced by *Wordscores* are valid, that is, that texts that are judged to be “close” to each other in word usage do indeed take a similar legal position? If this is the case (i.e., if *Wordscores* does pick up on similarity in legal position), then the closeness score should be a reasonably good predictor of the Court’s decision. Specifically, in cases in which the court reverses, the opinion of the Court should take a legal position that is closer to the position taken by the petitioner than the respondent. After all, it is the petitioner who prevailed. We would therefore expect that in reversals, *Wordscores* places the opinion closer to the petitioner’s brief than to the respondent’s brief. The reverse should be true in affirmances: When the court takes the side of the respondent, we would expect that the opinion looks more like the brief filed by the respondent

⁸ Because the opinion score always falls between the scores for the petitioner’s and respondent’s briefs, the two distance scores sum to 1.

than the petitioner.

We can test this prediction in a straightforward manner. For each of our cases, we create a binary variable that indicates whether the opinion is more similar to the petitioner’s or the respondent’s brief as judged by *Wordscores*. We then predict the outcome of the case as a function of that variable. If the opinion is systematically closer to the winning party’s brief, we would expect that the Court should issue a reversal when arguments favoring that outcome are closer to the ones the majority actually adopts, compared to the arguments urging affirmance. Table 1 reports the results, which are unambiguous: when the opinion is more similar to the petitioner’s brief than the respondent’s brief, the Court issues a reversal. The model performs well; it correctly classifies roughly 71 percent of the cases, reducing the error over the modal prediction by 77 percent.

Table 1. Does Merits Brief’s Proximity to Written Opinion Predict Case Outcome?

<i>Variable</i>	<i>Probit coefficient</i>	<i>Standard error</i>	<i>Significance</i>
Petitioner’s brief closer than respondent’s brief	1.29	.42	.002
Constant	-.19	.25	---

Note: Dependent variable equals 1 if the Court reversed the lower court, 0 if the Court affirmed the lower court; independent variable equals 1 if the petitioner’s brief was closer to the majority opinion, 0 if the respondent’s brief was closer; N = 48

Naturally, this result serves only as a robustness check; it is not, by itself, explanatory.

However, it reassures us that the *Wordscores* procedure is able to pick up on the “similarity” between

legal texts in a reliable way: When the petitioner's position prevails, *Wordscores* indicates that the opinion is more like the petitioner's brief than the respondent's. Armed with this result, we can proceed to the direct test of the implication outlined above with greater confidence.

Testing the Theory

Recall the central argument we wish to evaluate. If strategic litigants make arguments that are designed to appeal to the preferences of the median justice, then the median justice should find much material in the brief of the winning party that resonates with her. In contrast, the more a justice's preferences diverge from the median, the less the justice will agree with the position taken in the brief. To the extent that opinion writers are able to shape the content of the opinion, we would therefore expect that when the median justice authors an opinion, she will draw more heavily on the material in the winning party's brief than a justice who is not the median. Specifically, we would expect that the further the preference of an opinion author diverge from those of the median, the less she will draw on the brief submitted by the winning party, and hence the less similar the opinion will be to the winning party's brief. We thus have a straightforward empirical prediction we can evaluate: The similarity of the Court's opinion and the winning party's brief will *decline* as the ideological distance between the opinion author and the median justice *increases*.

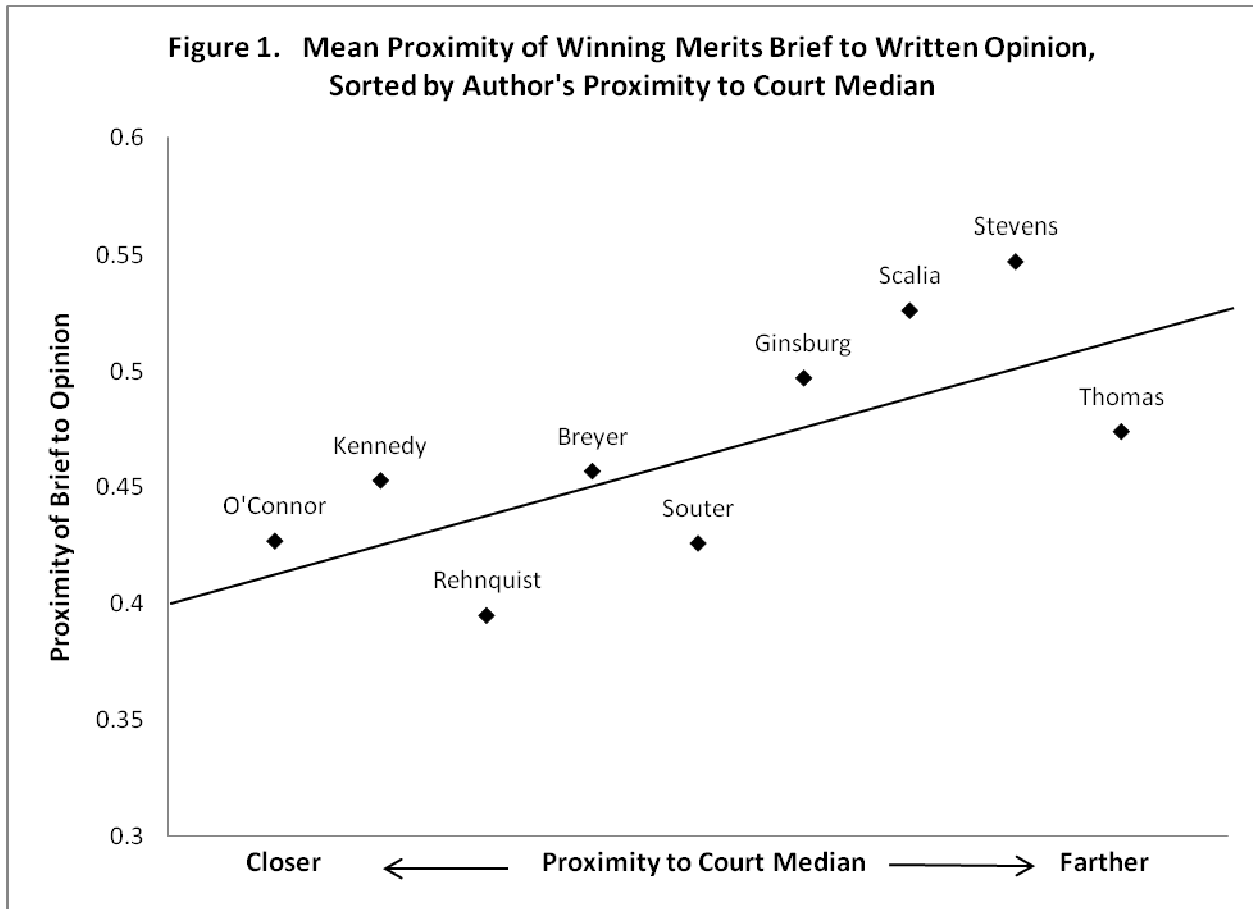
We measure the similarity between the Court's opinion and the brief of the party that prevailed using the *Wordscores* estimates described above: If the Court reversed, we take the distance between the opinion and the petitioner, and if the Court affirmed, we take the distance between the opinion and the respondent's brief. To measure the distance between the author of the opinion and the median justice, we rely on the ideal point estimates for each of the justices constructed by Martin

and Quinn (2002).⁹ For the 2003 and 2004 terms, these estimates identify Justice O'Connor as the median – a result that accords with the intuition of most observers of the Court. Using the M-Q scores, we calculate the absolute value of the difference between each opinion author's ideal point and Justice O'Connor's.

Figure 1 presents a first cut at these data. In the figure, we plot the average distance of the opinions written by each justice as a function of the justice's distance from O'Connor. Of course, the number of opinions written by each justice in any given term is small, and thus these summary statistics are only suggestive. Despite this limitation, the data in this figure are quite instructive; there clearly appears to be positive relationship between a justice's ideological proximity to the Court's median and the similarity of her opinions to the winning parties' briefs. Importantly, as the median justice, O'Connor shows the closest correspondence between the briefs of the prevailing parties and her own opinions. Stated differently, the opinions that Justice O'Connor authors are comparatively close to the positions articulated by litigant she supports.

As the ideological distance between O'Connor and her fellow justices increases, the justices find that they have less and less in common with her and thus with the arguments made by the parties they support. The justices farthest from O'Connor --- Ginsburg and Stevens, to the left, and Thomas and Scalia, to the right --- draft opinions that are more prone to depart from the arguments presented by the litigants whose causes they nevertheless underwrite. Absent some reason to suspect that one justice is more inclined than another to write an opinion that adheres to the argument outlined in the winning litigant's brief, it seems quite plausible to conclude that the reason

⁹ As Martin and Quinn (2002) emphasize, using these scores to analyze justices' voting behavior is inappropriate because the scores are derived from votes. In our case, we are not predicting votes, and therefore do not confront the potential endogeneity issue. The justices' ideal point estimates for the 2004 Term may be found at <http://adm.wustl.edu/supct.php>.



for these differences is the strategic decision by parties to pitch their cases to the center of the Court.

Useful as the data in Figure 1 may be, they still warrant a formal statistical test. Does this relationship hold up under closer scrutiny, once we move to the level of individual opinions, instead of considering averages for each justice? To conduct this test, we model the distance between the Court's opinion and the winning party's brief (as measured by *Wordscores*) as a function of the opinion author's distance from the Court (as measured by the absolute difference in ideal points). Our expectation should be fairly obvious: we anticipate that the larger the distance between the opinion author and the median justice, the larger the distance between that justice's opinion and the arguments made by the winning party.

Table 2. Do Written Opinions Resemble the Winning Litigants' Briefs?

Variable	Model 1 (all words included)		Model 2 (excluding words with overlap above 25%)	
	<i>Coefficient</i>	<i>t-score</i>	<i>Coefficient</i>	<i>t-score</i>
Opinion writer's distance from median justice	.025 (.013)	1.89 **	.028 (.014)	2.04 **
Constant	.422 (.028)		.413 (.030)	

Note: Dependent variable is the *Wordscores* distance between winning party's merits brief and the Court's majority opinion; standard error in parentheses; N = 49; ** p<.05, one-tailed test.

The results of this regression are presented in Table 2. Model 1 reports the results of including all words in the opinion in the *Wordscores* analysis. As we discussed above, one potential drawback of the *Wordscores* procedure is its treatment of non-discriminating words, which are automatically assigned a “centrist” position by the program when in fact it may be more appropriate to treat them as having no ideological or legal content (e.g, “and,” “the,” etc.). Thus, in model 2, we eliminate words that have a large degree of overlap between the two briefs, focusing the analysis only on words that discriminate sufficiently between the texts.¹⁰

In both models, the opinion writer's distance to the median justice emerges as a significant predictor of the correspondence between litigant argument and judicial policy, and the coefficients are stable across the two models. The closer the opinion writer gets to the median, the more closely

¹⁰ Specifically, we eliminate words that have more than a 25% overlap between the briefs.

her opinion will resemble the arguments laid out in the merits briefs of the successful litigant. As one moves to either end of the Court's ideological spectrum, the justices are less inclined to take the merits briefs to heart --- even though they are voting in favor of those who submit them. The simplest and (we think) most plausible interpretation of these results is that sophisticated litigants who are seeking to maximize their chances of success in the Court carefully construct their legal arguments so as to secure the support of the median justice: It is for this reason that we see the content of the briefs mirrored in the Court's opinion more clearly, the closer the opinion author is to the median justice at whom these arguments have been targeted.

Conclusions

Our analysis demonstrates that opinion writers embrace what is contained in the winning party's brief with varying degrees of enthusiasm, and that the level of that enthusiasm is strongly conditioned by a justice's location on the Court's ideological lineup: the closer an opinion writer is to the center of the Court --- specifically the median justice --- the more likely she is to retain significant elements of the winning party's brief in the opinion. This is precisely what we would expect to observe if strategic litigants address their brief to the concerns of the median justice. If they do so, then that justice (and others close to her) will find much to agree with in the winning party's brief. To the extent that they are able to shape the content of the opinion, they will therefore be more likely to draw on this brief than a justice located at the ideological edges of the Court.

At the same time, it is important to stress that there are limits to what we can claim as a result of these findings. We do not, for example, posit a general theory of opinion writing, nor do we offer a general account of how justices utilize the content of briefs in their written opinions. Doubtless there are other factors --- some systematic, some idiosyncratic --- that affect how closely

the majority opinion resembles one or more merits briefs. Our claim is much more limited; to the extent that opinion authors can shape the content of an opinion, they will be more likely to draw on the brief of the winning party if they agree with its content. This likelihood will increase the closer the opinion writer is to the Court's median, because this is where the litigants are targeting their arguments. The data we have presented clearly support this hypothesis.

Taken on its own, this is not an entirely surprising finding. Conventional wisdom and anecdotal evidence lead to a strong presumption that litigants target the median. Of course, the received wisdom is sometimes wrong, and so it is important to confirm this litigation tactic in a quantitative, statistical fashion. Thus, we provide the first systematic evidence of strategic targeting across a larger number of opinions. At the same time, these results also offer an important methodological contribution to the study of policymaking in the Supreme Court. To conduct our analysis, we relied on an automated content analysis procedure developed in the context of analyzing the manifestos of political parties (Laver, Benoit, and Gary 2003). Despite a fairly simple-minded counting algorithm for comparing word usage across texts, our results show that the method is able to detect legally relevant similarities among opinions and briefs. Like other recent work employing content analysis (Evans et al. 2007; Corley 2008; McGuire and Vanberg 2005), this paper underscores the potential for using automated content analysis in the systematic analysis of judicial decisionmaking. Having seen its usefulness here, we urge scholars of the Court to investigate the various creative ways in which *Wordscores* --- as well as other automated content analysis procedures --- might be exploited to analyze the various written texts that structure judicial decision making. Doing so offers the tantalizing hope that we can move beyond the limited categorical variables that have dominated quantitative judicial scholarship to richer measures of judicial outputs.

References

- Barker, Lucius J. 1967. "Third Parties in Litigation: A Systemic View of the Judicial Function." *Journal of Politics* 29:41-69.
- Baum, Lawrence. 1988. "Measuring Policy Change in the U.S. Supreme Court." *American Political Science Review* 82:1109-1127.
- Caldeira, Gregory A. and John R. Wright. 1988. "Organized Interests and Agenda Setting in the U.S. Supreme Court." *American Political Science Review* 82:1109-1127.
- Carrubba, Cliff, Barry Friedman, Andrew D. Martin, and Georg Vanberg. 2007. "Does the Median Justice Control the Content of Supreme Court Opinions?" Presented at the Second Annual Conference on Empirical Legal Studies.
- Collins, Paul M. 2008. *Friends of the Supreme Court: Interest Groups and Judicial Policy Making*. New York: Oxford University Press.
- Corley, Pamela C. 2008. "The Supreme Court and Opinion Content: The Influence of Parties' Briefs." *Political Research Quarterly* 61: 469-478.
- Edwards, Harry T. and Michael A. Livermore. 2009. "Pitfalls of Empirical Studies that Attempt to Understand the Factors Affecting Appellate Decisionmaking." *Duke Law Journal* 58:1895-1989.
- Epstein, Lee, and Joseph F. Kobylka. 1992. *The Supreme Court and Legal Change: Abortion and the Death Penalty*. Chapel Hill: University of North Carolina Press.
- Evans, Michael, Wayne McIntosh, Jimmy Lin, and Cynthia Cates. 2007. "Recounting the Courts? Applying Automated Content Analysis to Enhance Empirical Legal Research." *Journal of Empirical Legal Studies* 4: 1007-39.
- Giles, Micheal W. 1997. "Equivalent Versus Minimum Winning Opinion Coalition Size: A Test of Two Hypotheses." *American Journal of Political Science* 21:405-408.

- Hammond, Thomas H., Chris W. Bonneau, Reginald S. Sheehan. 2005. *Strategic Behavior and Policy Choice on the U.S. Supreme Court*. Palo Alto, CA: Stanford University Press.
- Harvey, Anna L. 2008. What Makes a Judgment ‘Liberal’? Coding Bias in the United States Supreme Court Judicial Database.” Typescript.
- Laver, Michael, Kenneth Benoit, and John Garry. 2003. “Extracting Policy Positions from Political Texts Using Words as Data.” *American Political Science Review* 97:311-331.
- Laver, Michael, and John Garry. 2000. “Estimating Policy Positions from Political Texts.” *American Journal of Political Science* 44:619-634.
- Lax, Jeffrey R., and Charles M. Cameron. 2007. “Bargaining and Opinion Assignment on the U.S. Supreme Court.” *Journal of Law, Economics, and Organization* 23:276-302.
- Martin, Andrew D. and Kevin M. Quinn. 2002. “Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953-1999.” *Political Analysis* 10:134-153.
- Martin, Lanny and Georg Vanberg. 2008. “A Robust Transformation for Wordscore Content Analysis.” *Political Analysis* 16:93-100.
- Maltzman, Forrest, James F. Spriggs II, and Paul J. Wahlbeck. 2000. *Crafting Law on the Supreme Court: The Collegial Game*. Cambridge: Cambridge University Press.
- McGuire, Kevin T., and Georg Vanberg. 2005. “Mapping the Policies of the U.S. Supreme Court: Data, Opinions, and Constitutional Law.” Presented at the annual meeting of the American Political Science Association, Washington, DC, 1-5 September.
- McGuire, Kevin T., Georg Vanberg, Charles E. Smith, Jr., and Gregory A. Caldeira. 2009. “Measuring Policy Content on the U.S. Supreme Court.” *Journal of Politics* 71:1305-1321.
- Murphy, Walter F. 1964. *Elements of Judicial Strategy*. Chicago: University of Chicago Press.
- Phillips, Carter G. 1998. “Advocacy before the United States Supreme Court.” *Thomas M. Cooley*

- Law Review* 15:177-194.
- Rohde, David W. 1972. "Policy Goals and Opinion Coalitions in the Supreme Court." *Midwest Journal of Political Science* 16:208-224.
- Segal, Jeffrey A., and Albert D. Cover. 1989. "Ideological Values and the Votes of U.S. Supreme Court Justices." *American Political Science Review* 83:557-565.
- Segal, Jeffrey A., and Harold J. Spaeth. 2002. *The Supreme Court and the Attitudinal Model Revisited*. Cambridge: Cambridge University Press.
- Simon, James F. 1995. *The Center Holds: The Power Struggle Inside the Rehnquist Court*. New York: Simon and Schuster.
- Toobin, Jeffrey. 2007. *The Nine: Inside the Secret World of the Supreme Court*. New York: Doubleday.
- Tushnet, Mark V. 1994. *Making Civil Rights Law: Thurgood Marshall and the Supreme Court, 1956-1961*. New York: Oxford University Press.
- Vose, Clement. 1957. *Caucasians Only: Supreme Court, the National Association for the Advancement of Coloured Peoples, and the Restrictive Covenant Cases*. Berkeley: University of California Press.
- White, G. Edward. 2005. "Unpacking the Idea of the Judicial Center." *North Carolina Law Review* 83:1089-1186.