Measuring Court Preferences, 1950 - 2011: Agendas, Polarity and Heterogeneity

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Abstract

Court scholars have a voracious appetite for Supreme Court preference measures. Several papers question whether widely-used Martin and Quinn scores provide valid intertemporal measures, calling into question virtually an entire generation of quantitative research on the Court. This paper discusses the challenges of inter-temporal preference estimation and revises, updates and extends Bailey and Maltzman (2011) to present Supreme Court preference estimates that are more defensibly comparable across time and institutions.

*I appreciate comments from Albert Yoon. Any errors are mine.
Court scholars have a voracious appetite for Supreme Court preference measures, whether in spatial or behavioral models of Court decision-making. While much of the demand for these measures has been filled by Martin and Quinn scores (Martin and Quinn 2002), not everyone is convinced that Martin and Quinn scores capture preference change over time. Some scholars note instances of implausible preference changes implied by the Martin and Quinn scores (Bailey 2007; Lauderdale and Clark 2012). Others, such as Ho and Quinn (2010, 846), note the strong assumptions required to use Martin and Quinn scores in a cardinal sense and encourage scholars to use the scores as ordinal rather than cardinal measures.

The consequences for empirical Court research are substantial. Not only does Ho and Quinn’s advice affect the vast array of contemporary Court scholarship that uses Martin and Quinn scores, but it also raises two fundamental questions. Are Court preferences so difficult to estimate that we are doomed to using only ordinal, rather than cardinal, measures? Can anything be done to generate preference estimates that are comparable over time?

The main challenge in generating inter-temporally comparable preference estimates is agenda change. Failing to distinguish agenda change from preference change can produce preference measures that conflate the two. For example, when we observe justices voting conservatively more often, is it because their ideologies have shifted? Or did this occur because the cases on which they were voting were different? These are questions we cannot answer by looking only at votes. Other challenges to generating accurate preference measures include identifying the ideological polarity of votes, modeling the functional form of preference dynamics and dealing with possible multidimensionality of preferences (Lauderdale and Clark 2012; Fischman and Law 2009).
This paper presents new measures of Supreme Court preferences based on bridging information that aids inter-temporal comparability. The results differ markedly from Martin and Quinn regarding the ideological location of the Court in the 1970s and in the current era. The methods are distinct from Bailey (2007) and Bailey and Maltzman (2008, 2011) in that they use a more flexible approach to modeling preference change (following the logic of Martin and Quinn), cover a longer time period that includes Justices Kagan and Sotomayor and more explicitly address issues that have arisen in the literature such as the coding of ideological polarity (Harvey and Woodruff 2011). The paper also presents alternative specifications that control for some (but certainly not all) non-policy values that may influence judicial voting, including factors that have not previously been assessed in ideal point models.

1 Challenge of preference measurement

Many empirical Court scholars use Martin and Quinn (2002) scores as measures of justices’ ideologies. These scores are the product of applying an item response theory model of preferences to data on voting by individual justices on all cases from 1937 onward. The method requires no coding of cases as liberal or conservative and estimates a different preference for each justice for each term. The evolution of preferences for individual justices are smoothed over time via a “prior” that shrinks the ideal point estimate for a justice in a given term toward the preference estimate for that justice in the previous term.

Martin and Quinn scores have been used in models explaining opinion writing (Bonneau, Hammond, Maltzman and Wahlbeck 2007), the effect of case characteristics on ideological voting (Bartels 2009, 2011), oral arguments (Johnson, Wahlbeck and Spriggs 2006), app-
Case 1:
2 liberal votes, 1 conservative vote

Case 2 – constant cutpoint:
1 liberal vote, 2 conservative votes

Case 2 – different cutpoint:
1 liberal vote, 2 conservative votes

Figure 1: Difficulty in Identifying Preference Change or Cutpoint Change

A major concern about Martin and Quinn scores is whether they are comparable across time. Many applications that use Martin and Quinn scores use them because they are “on a comparable scale over time” (Martin and Quinn 2007, 366) and “allow for comparisons of ideological positions for justices who never served with each other” (Bartels 2009, 490).

Such statements are true only if “the distribution of case characteristics is constant over time” (Ho and Quinn 2010, 845; Bailey 2007). Figure 1 illustrates the role this assumption plays for Martin and Quinn scores. The top row shows ideal points of three justices on “Case
1,” a case on which two of the justices voted liberally and one voted conservatively. Suppose we assume that justices’ ideal points can vary over time (as most work on the Court does) and consider possible ideal points on “Case 2,” a case on which one of the justices voted liberally and two voted conservatively. In the first scenario, the case cutpoints on Case 2 is the same as for Case 1 and this means that justice 2 has moved to the right. However, the second scenario shows a situation in which the case cutpoint has moved left and justice 2 has not moved at all. Both scenarios for Case 2 are logically possible and, indeed, highly plausible as we could easily imagine cases that have similar ideological cutpoints as earlier cases and cases that have different cutpoints than earlier cases. For measurement, however, deciding which scenario is most accurate is crucial. Looking at the vote tally on Case 2 of two conservatives versus one liberal provides no guidance and we must rely on some external assumption or information. Martin and Quinn’s approach implicitly assumes that only scenario 1 is true, a strong assumption.¹

It is possible that the Martin and Quinn approach could mistake a shift in case cutpoints for a shift in justice ideal points. Figure 2 shows Martin and Quinn estimates for the Court median over time and, for reference, the percentage of non-unanimous Supreme Court decisions that were conservative. Higher values indicate a more conservative Court median. The Martin and Quinn estimates imply, for example, that the Court median was at one of its historically conservative peaks in 1973. This is hard to square with the fact that during this period the Court was generally considered rather liberal and produced two of its most liberal decisions ever: in Roe v. Wade (1973) the Court said that there is a constitutional right to

¹More precisely, their approach assumes that the distribution of votes is the same across terms.
abortion and in *Furman v. Georgia* (1972) the Court imposed a nationwide moratorium on the death penalty. The Martin and Quinn scores also have a dramatic move to the left from 1973 to 1981, something inconsistent with conventional views on the Burger Court and other scaling efforts (Grofman and Brazil 2002; Bailey 2007).

Issues of intertemporal comparability become particularly pressing when Martin and Quinn scores show plausible yet highly debatable shifts such as the sharp turn to the right evident in the figure after 2008, a shift completely absent in the percent conservative data. I discuss this period in detail in Section 3.

Concerns about inter-temporal comparability lead Ho and Quinn (2010, 846) to say in “How Not to Lie with Judicial Votes” that “inferring meaning into cardinal values is mis-
guided” and to recommend that the Martin and Quinn measures should be used as ordinal measures. If accepted, this claim is highly consequential for the statistical literature on the Supreme Court as the scores (and their “judicial common space” offshoots) have become a mainstay of empirical analysis.²

There are two directions one can go in response to Ho and Quinn’s critique. One is to accept it and to use Martin and Quinn scores only as ordinal measures. The question then becomes whether the additional complexity associated with calculating and interpreting the scores is worth using them over simple measures of the percent of time a justice votes conservatively, which generally control for agenda effects and provide ordinally accurate rankings of justices within terms or natural Courts (Chiou and Imai 2008, 6).

There are several benefits of ordinal Martin and Quinn scores over percent conservative scores. First, as with any item-response theory (IRT) model and unlike percent conservative scores, Martin and Quinn ordinal scores do not weight all votes equally. Those votes that do not divide justices according to “ideology” get a discrimination parameter near zero which decreases their influence in the calculation of preferences. Second, the model incorporates information from previous periods. Practically, this means that if two justices vote conservatively a similar percentage of time in a given term, then the one who was more conservative in the previous term is likely to be estimated as more conservative. Third, by controlling for case characteristics, the Martin and Quinn ordinal scores deal with situations in which jus-

² Martin and Quinn (2002) has been cited 454 times according to Google Scholar as of January 2012. Judicial common space scores (Epstein, Martin, Segal and Westerland 2007) are based on a mapping of Martin and Quinn scores onto the first dimension Poole and Rosenthal common space scores. Although using the first dimension of Poole and Rosenthal scores seems natural, it is actually quite controversial. Segregationist southern senators such as James Eastland (D, MS) are moderates on Poole and Rosenthal’s first dimension. It seems more apt to use Poole and Rosenthal’s second dimension (on which these members of Congress were arch-conservative) to characterize political preferences relative the Court (Bailey 2007).
tices do not vote on the same cases in a given term. Finally, Martin and Quinn scores come with measures of uncertainty and percent conservative scores typically do not (although they could be produced).

Despite these advantages, ordinal Martin and Quinn scores do not differ dramatically from ordinal rankings based on percent conservative scores. The correlation of the ordinal ranking from Martin and Quinn and percent conservative for the period 1950 to 2011 is 0.93. Figure 3 shows a scatterplot of ranks produced by the two approaches. The size of the circles reflects how many observations are at a given point and the results illustrate how similar the ordinal rankings are. And, if one were to calculate the percent conservative scores based on a given issue area (civil liberties, for example), it seems one could conceivably generate a measure that makes up for some of the simplicity of the measure with a more targeted sample.

This paper goes in another direction in response to Ho and Quinn’s critique. It focuses on what can be done to generate intertemporally comparable scores and presents a bridging approach to account for agenda change.

**Polarity** Another challenge in estimating judicial preferences is determining the ideological polarity of cases (Fischman and Law 2009, 154 - 166; Ho and Quinn 2010, 836). That is, how do we know what are liberal and conservative votes? Like pornography, we may know a liberal vote when we see it, but like pornography it is difficult to devise clear criteria (see Jacobellis v. Ohio (1964)). For example, just as Lady Chatterley’s Lover wove a risque story into literature, Gonzales v. Raich (2005) wove pro-federal government principles into a decision to overturn a California law allowing medical marijuana. What are we to do? Do
Figure 3: **Ordinal Martin and Quinn Scores versus Percent Conservative**
we deem *Raich* liberal because it favored a federal law over a state law, something liberals typically favor? Or is it a conservative decision because it ruled against medical marijuana? There may be no cut and dry answer.

There are three approaches to coding the ideological polarity of cases. Spaeth (2011) uses rule-based coding, deeming a decision liberal if the decision favors an accused criminal, a civil rights claimant (such as someone making claims on behalf of minorities, homosexuals, poor people or some other “underdog”), the government in most takings cases, a free speech or privacy claim and so on. Usually this is unproblematic, but there are cases where the process strays from common political understanding. On campaign finance cases, for example, Spaeth codes voting to strike the 2004 Bipartisan Campaign Reform Act as a liberal vote because it favors speech rights even though this position was much more associated with political conservatives. It is also possible that subjectivity enters as coders may code according to what they think they directionality “should” be based on how the vote turned out (Harvey and Woodruff 2011).

The second approach is automated coding; Fischman and Law (2009) call this the “agnostic” approach. Many IRT models including Martin and Quinn follow this approach. In these models there is a parameter that identifies the polarity of the case. If the parameter is estimated to be positive, the decision is considered conservative; if the parameter is estimated to be negative, the decision is deemed liberal. The merit of this approach is that it does not rely on manual coding. If liberals are in the majority on a case and they are opposed by conservatives, the case polarity parameter will have a discrimination parameter saying the vote is liberal. If conservatives are in the majority opposed by liberals, the opposite
will be true. If some mix of liberals and conservatives vote for something then the polarity parameter will be near zero simply indicating that we can’t tell what the ideological polarity of the vote is. Simplifying only a little, automated coding says a decision is liberal if liberals voted for it and conservatives voted against.

The agnostic approach risks circularity. An extreme example is *U.S. v. Comstock* (2009) in which seven justices voted to uphold a federal law on sex offenders and Scalia and Thomas voted to strike the law on the grounds that it was not effectuating an enumerated power. An agnostic approach would comfortably code this as a liberal vote as it was the more liberal justices lined up against the most conservative justices. In fact, though, the polarity was the opposite, if anything, as Scalia and Thomas were effectively voting to strike a law that increased penalties on sex offenders. Presumably their policy preferences were for states to impose such penalties, but that is not what they were voting on. Their votes to strike the law would have decreased punishment. Many implications of such behavior, especially with regard to the effect of policy attitudes versus law on voting can get lost once the majority’s vote is classified as a liberal vote.³

A third approach is to use non-Court actors to identify the ideological polarity of Court cases. Harvey and Woodruff (2011) look to external sources for coding polarity by using the ideological polarity implied by congressional votes on statutes that made their way to the Court. Even if the ideological polarity of a case can be argued either way philosophically, the politics of the underlying statute sheds light on the practical ideological implications of a

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³ *Oregon v. Ice* (2009) is another good example. Ginsburg, joined by Stevens, Kennedy, Breyer and Alito, argued that the Sixth Amendment allows judges rather than juries to do the fact-finding necessary for imposing consecutive sentences on criminal defendants. They were opposed by Scalia, Souter, Thomas and Roberts. The minority in this case was arguing for a potentially more lenient outcome, yet was comprised of more conservative justices than the majority.
functional form of preference dynamics  Most scholars believe judicial ideal points evolve over time (Epstein, Hoekstra, Segal and Spaeth 1998; Bailey and Chang 2001; Bailey 2007; Martin and Quinn 2002). There are several different ways to model the preference change. One is to estimate preference change in terms of a polynomial function over time (Bailey 2007; Poole and Rosenthal 1997). Such a functional form can, depending on the degree of the polynomial, fit a broad range of non-linear and non-monotonic preference change. And the functional form implicitly imposes smoothing from one period to the next, consistent with the idea that while there may be preference change, preferences from the previous period nonetheless provide useful information about preferences in the next period. A major limitation of fitting preference change with a polynomial equation is that the approach will not handle discrete shocks to preferences very well. Suppose, for example, that justices shift left or right in response to an election outcome. The polynomial approach will smooth out this shift, something that could be detrimental to many research questions.4

When Martin and Quinn estimate preferences separately for each term for each justice, they incorporate information about preferences in the previous term. They do this via Bayesian priors that “smooth” preferences over time. In contrast to the polynomial approach, preference estimates can still shift discretely, although not as much as they would without priors. One of the challenges is “tuning” the model by selecting a smoothing parameter. This is more of an art, than a science (Martin and Quinn 2002, 147).

4 For this reason Bailey and Maltzman (2011, chapter 6) estimate preferences separately in the period just before and just after an election in order to assess separation of powers shifts related shifts in Court behavior.
Heterogeneity  In addition, questions about dimensionality of judicial preferences lurk in any measurement discussion. Changing dimensionality could induce appearances of preference change where they may be none. Farnsworth (2007, 1896) provides an example:

Suppose, to take a simplified example, that Justice Kennedy tends to vote for the government in cases involving criminal procedure, but against the government in cases involving free speech, while Justice Rehnquist—a less libertarian sort of conservative—tends to vote for the government in both situations. (Both assumptions happen to be accurate.) Imagine that in term T, there are many criminal procedure cases (where the two Justices vote the same way) and few speech cases (where they don’t). Then in term T + 1, there are lots of free speech cases. Kennedy’s preferences may appear to drift to the left relative to Rehnquist’s when they haven’t really changed at all.

If justices’ preferences differ across substantive issue areas, a one dimensional model could conflate preference change and agenda change. Martin and Quinn (2002, 146) present evidence inconsistent with such a worry, as the “first” dimension in their models seems to explain across multiple issue areas reasonably well. Lauderdale and Clark (2012), however, find that when each case is defined in relation to a substantive area and the cases it most cites, there are definite signs of multidimensionality as the identity of the Court median varies substantially across specific cases, even within a term.

Another way in which there could be multiple dimensionality is that justices could value legal principles and these principles could ebb and flow in cases across issues. This would make a cross-issue area comparison inapt as a means of testing multidimensionality. However, if there are a set of cases where all justices deviate from their one dimensional ideologies in predictable ways then this would likely show up in a multidimensional scaling such as Grofman and Brazil (2002, 58). On the whole, Grofman and Brazil find this not to be the case as the first dimension of preferences they estimate is overwhelmingly more predictive.
than the second or higher dimensions.

If justices are indeed influenced by legal values, but the weight they place on them varies idiosyncratically across justices, these factors will be hard to capture in one or multiple dimensional scaling. Yet, important judicial behavior could lurk in such a situation. For example, if it is indeed the case that Kennedy is, as in Farnsworth’s example above, distinctively protective of free speech claims, this could not only have the measurement implications Farnsworth highlights, but it could also have implications for the extent to which justices’ policy motivations are similar to, say, those of members of Congress. Bailey and Maltzman (2008, 2011) identify a large number of justices who systematically deviate from their one dimensional preferences when precedent, congressional deference and free speech are involved.

2 A bridging approach to preference measurement

This paper addresses each of the major challenges described above. It uses a bridging approach to deal with agenda change. It uses position taking by non-Court actors to identify the ideological polarity of cases. It uses a prior-based flexible approach to model preference dynamics and it is expandable to include covariates that capture an important subset of factors that may not be accounted for by the standard left-right ideological dimension. I discuss each of these in turn in this section.

Controlling for agenda with bridge observations As discussed above, the impediment to using Martin and Quinn scores as cardinal preference measures for the Court is Martin and
Quinn’s assumption that the Court agenda does not change over time.\textsuperscript{5} If, however, we can control for agenda change, we may be able to create measures that are comparable over time. We do not need the agenda to be identical in each period; we simply need to ensure that the agenda change is identifiable.

Therefore, this paper builds on previous bridging estimates (Bailey 2007; Bailey and Maltzman 2008, 2011) to identify agenda change by incorporating bridging information that pins down preference changes over time. The analogy – and it is a very close analogy – is to test standardization. A test score based on one set of questions is hard to compare to another score based on a different set of questions. If we gave identical tests we could compare scores, of course, but that is infeasible for standardized tests that cannot simply give identical tests year in and year out. Some questions can overlap, though, and this is enough to identify relative test performance as the overlapping questions provide information about relative ability across tests. For the Court case, we will identify certain “questions” (cases) that have been “asked” (voted on) over time. We will also be able to identify cases that are to the left or right of previous cases, information that also helps pin down agenda and preference change over time.

We use two sources of bridging information. One is the positions taken by justices on cases decided by earlier courts. It is relatively common for justices to state a clear position about an earlier decision. For example, in \textit{FEC v. Wisconsin Right to Life} (2007) Scalia stated that \textit{Austin v. Michigan Chamber of Commerce} was “wrongly decided”; in \textit{Allegheny v. ACLU} (1989) Justice Kennedy wrote “I accept and indeed approve both the holding and

\textsuperscript{5}This critique also applies to Poole and Rosenthal’s NOMINATE measures for Congress (Bailey 2007, 438).
the reasoning of Chief Justice Burger’s opinion in *Lynch* [*Lynch v. Donnelly* (1984)].” We have collected 1,611 observations of justices taking positions on previous cases by reading all opinions from 1950 onward and looking for instances in which a justice took a clear position on a previous case.\(^6\)

The second source of bridging information is about the relative position of cases over time. It is not unusual for case law to evolve in an ideologically understandable way. For example, the Court held in *Miller v. Alabama* (2011) that juveniles convicted of murder cannot be subject to mandatory life sentences. The cutpoint of this case was clearly to the left of *Graham v. Florida* (2010) in which the Court ruled against mandatory life sentences for juveniles for crimes other than murder. To see this, consider the vote of a liberal on *Graham*. Does that liberal vote imply support for the liberal position on *Miller*? It does, as voting against mandatory life sentences for murder implies opposition to mandatory life sentences for lesser crimes.

The movement of case cutpoints is not the same as the movement of Court jurisprudence. The Court held against execution of people for crime committed when they were under 16 *Thompson v. Oklahoma* (1988). A year later, in *Stanford v. Kentucky* (1989), the Court allowed execution of those convicted of crimes committed between the ages of 16 and 18. The Court did not move left in *Stanford*, but the cutpoint did as justices voting liberally on *Stanford* (advocating against execution of minors over 16) is logically consistent with voting liberally on *Thompson* (opposing execution of individuals under 16). (The Court eventually

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\(^6\)We also include 34 observations of Robert Bork taking positions on cases or roll calls at the time of his nomination or before. We estimate a single ideal point for Bork. No other failed nominee had sufficient number of positions that we could find. Given the small number of observations and the ideological extremity of Bork, it is unlikely that inclusion of these observations materially affects other estimates.
did move left in *Roper v. Simmons* (2005) holding that it is unconstitutional to execute people for crimes committed under 18.)

We have identified 327 instances in which case cutpoints can be linked in this manner. Three areas provide many of these linkages. On abortion, the Court has often considered restrictions short of banning it. If a justice were liberal on such a case (whether or not the Court opinion was) this implies that he or she believed *Roe* extends not only to the right to abortion, but also, for example, to the right to abortion in a non-hospital setting. One cannot get to such a holding without also upholding *Roe*, which implies the cutpoint is to the left of *Roe*. A similar logic applied for many civil rights cases. For example, if a justice voted liberally on busing, that meant he or she had to be liberal on *Brown v. Board of Education* (1954) because support for de-segregation is a necessary (but not sufficient) pre-cursor for support for mandatory busing. In our terms, this means the cutpoint on busing cases and votes was to the left of the cutpoint in *Brown*. A list of cutpoint constraints is available in the supplemental appendix.

This information is incorporated in the model by imposing a restriction that the estimated cutpoints reflect the substantive relation identified in the historical record. Recall, as in Figure 1, that vote data alone is not enough to identify preference change, but that if we know something about movement of cutpoints we could, for example, incorporate that information to distinguish between various scenarios in the figure. The appendix provides details on how this information is incorporated in the statistical model.

Some might object that use of bridging information to identify preference change over time yields unrealistic counterfactuals. Are we trying to say what Justice Holmes would
make of GPS surveillance? Or what Justice Taney would think of Twitter? That is not what we are doing. There is no time traveling. Our bridge observation of Justice Thomas writing in 1992 that *Roe* was “wrongly decided” does not tell us what Thomas thought about the case in 1973 when it was originally decided. What it does tell us is what Clarence Thomas in 1992 thought of the case and this has implications for the ideological location of the Court (or at least this one member of it) in 1992 relative to 1973.

The reliance of this approach on external data is both a strength and a weakness. It is a strength in the sense that if anyone has specific reasons to justify thinking that the Court has moved to the right or left, this can be incorporated into the estimation. That is, if someone believes the Court has become more anti-accused and can identify either a case that is clearly to the right of a previous case (based on the substance of a ruling) or finds instances of justices critiquing earlier liberal opinions, then this information can be incorporated and used to help pin down relative movement over time. The use of this data also creates challenges, including not only the effort of identifying such external information, but also the possibility for subjectivity to enter in the collection or coding of data. That the data is available in the supplemental material is one check on this concern, but some level of such concern is inherent in the approach.

Case polarity This paper addresses the polarity questions by using the policy stands taken by elected officials to identify the liberal-conservative valence for Court cases for which the valence is debatable. This follows the insight in Harvey and Woodruff (2011) that external actors provide a useful benchmark for coding Court cases because they allow us to identify ideological polarity even if nine justices do not provide clear evidence of it, either due to
non-ideological factors or by chance.

In practice, codings typically follow Spaeth liberal-conservative codings with exceptions for areas where the Spaeth codings conflict with underlying political positions. The major areas are campaign finance and government-funded marketing. For campaign finance related cases, Spaeth codes votes to uphold the limits on contributions or expenditures as conservative votes (as these are limiting speech and Spaeth coding rules take protecting speech as necessarily liberal). The political valence of campaign finance regulations is the opposite: overwhelmingly the political supporters of limits on contributions or expenditures come from the left and opponents of such laws come from the right. We therefore re-code these cases accordingly (as do Epstein and Segal 2006). On the marketing cases, the Spaeth coding rules take votes to favor mandatory government marketing programs (and the fees inherent in them) as conservative votes (as these are interpreted as limiting the speech rights by forcing farmers to support certain kinds of speech and the Spaeth rules take limits on speech as being inherently conservative). Here, the political coalition is again the opposite, with opposition to these programs coming from the right, as conservatives have opposed the government intervention in the economy inherent in the programs.

Preference dynamics For each preference estimate for a justice in a given year we implement a Bayesian prior based on the ideal point in the previous period. The variance of this prior determines how much smoothing occurs. If it is set at a very large value, then almost no smoothing occurs; if it is set at a very small value, then preferences change very little from one period to the next. As discussed in Martin and Quinn (2002, 147) specific estimates can be sensitive to the setting of such a parameter and there is no consensus way to determine
its value; as with Martin and Quinn, I set this value at a point at which the estimates do indeed move from period to period, but not too dramatically. Users of these scores (and Martin and Quinn scores) should note, though, the role this smoothing parameter plays.

**Heterogeneity** This paper addresses possible multiple dimensionality in two ways. First, it reports estimates based on models that include covariates that account for at least some important determinants of voting that may not reflect standard left-right ideological conflict. For example, suppose that some justices do indeed respect precedent and vote in favor of precedent against their ideological predisposition. These votes will appear moderate in left-right terms, but do not necessarily reflect moderation in conventional policy-ideological terms.

I therefore report results from models that control for five non-policy variables. Three were included in Bailey and Maltzman (2008, 2011): precedent, congressional deference and free speech. Two are new: deference to the executive and to dealing with Sixth Amendment challenges. In all these areas there are reasons to suspect that at least some justices deviate from conventional left-right ideology. The manner in which these variables are included is described in the statistical model below. These estimates are offered more in the spirit of a robustness check than a final word for two reasons. First, it is impossible to come up with a set of covariates that comprehensively captures non-ideological factors. Certainly the set here is not comprehensive. Second, the meaning of the “preference measures” is nuanced and whether one wants a measure net of legal factors depends on context. For example, suppose again that justices are indeed influenced by precedent and this produces moderate-looking votes. At one level we could describe these justices as, say, ideological liberals who respect
precedent. We could equally validly say that a liberal who respects precedent is effectively a moderate as he or she does not vote as consistently liberal as a liberal justice who ignores precedent would.

The second measure taken to deal with potential multidimensionality is to limit the data set. I include only Court votes on the social policy dimension that has dominated the Court docket in the post-war area. This dimension covers crime, civil rights, free speech, religion, abortion and privacy. Focusing on these issues allows us to focus on the most relevant areas of political-judicial exchange and to minimize chances that our results are affected by behavior on secondary issues that did not necessarily have the same structure of preferences. I also begin in 1950 as not to conflate the ideological splits of the New Deal era that revolved around economic legislation that were quite different than those of the post 1950 Court.

I include a large number of observations from members of Congress as well, including both bridge observations of members taking positions on Court cases and congressional votes on social and legal issues relevant to the Court such as abortion, crime and race. These observations perform several useful functions. The bridge observations provide more data on the political implications of Court cases, providing information that makes the estimation of judicial preferences more precise. The congressional votes are generally not linked directly to Court cases, but provide information about the preferences of members of Congress relative to each other, information that, in turn, helps pin down member preferences in a way that makes their positions taken on Court cases more informative.

Including congressional positions also helps identify the non-ideological influences on Court voting (or, more precisely, the influence of factors that cannot be explained with
the dominant left-right ideological dimension). For example, if we observe seven justices voting liberally against two voting conservatively, it could simply be that the ideological cutpoint explains the division. However, if members of Congress were overwhelmingly taking conservative positions on the case then it is possible that the divergence of Court and congressional voting may be explained by one of the additional variables such as free speech and precedent.

**Statistical model**  This bridging information is incorporated into a standard item response theory model of ideal points. The model builds on the canonical formulation of latent preferences in the ideal point estimation literature (see, e.g., Bailey 2001). The derivation and further details are in the appendix. The core of the model is

\[
Prob(y_{itv} = 1) = \Phi(\alpha_v(\theta_{it} - \kappa_v))
\]

where \( y_{itv} \) is 1 if justice \( i \) votes for the conservative position in term \( t \) on case \( v \), \( \alpha_v \) is the vote “discrimination” parameter (see appendix for more details), \( \theta_{it} \) is the ideal point of the justice at the time of proposal (the higher the value, the more conservative the justice) and \( \kappa_v \) is the vote cutpoint. For cases and votes for which we have information on the relative locations of the cutpoints, we constrain the cutpoints to satisfy the inequality constraint implied by the information.

The model that includes covariates is

\[
Pr(y_{itv} = 1) = \Phi(\alpha_v(\theta_{it} - \kappa_v) + \pi_i Precedent_v + \delta_{1i} DefCongress_v + \delta_{2i} DefExec_v
\]
\[ +\sigma_{1i}Speech_v + \sigma_{2i}Sixth_v \] (1)

\( \pi_{1i}, \delta_{1i}, \delta_{2i}, \sigma_{1i} \) and \( \sigma_{2i} \) are the weights justice \( i \) places on precedent, deference (to Congress and the executive branch, respectively), and certain constitutional claims (speech and Sixth Amendment, respectively). \( Precedent_v, DefCongress_v, DefExec_v, Speech_v \) and \( Sixth_v \) are the precedent, deference to Congress, deference to the executive, speech and Sixth Amendment variables, coded as described below.

The model is estimated with Markov Chain Monte Carlo methods using Matlab code available in the supplemental materials. A modified Gibbs Sampler algorithm is used to repeatedly sample from the posterior density of the parameter distribution. The mean and standard error of the distribution of the parameters is estimated by the mean and standard error of the sampled observations.

3 Data

The court voting data comes from Spaeth (2012). There are 32,318 observations of votes by individual justices on 3,701 cases from 1950 to 2011. In order to ensure that the data corresponds to the assumption of unidimensionality, I limit the sample to cases that are conventionally associated with the standard left-right splits on the Court.\(^7\) Only cases that

\(^7\)I use the Spaeth (2011) database and limit cases to those \( \text{issueArea} \leq 6 \) (criminal procedure, civil rights, First Amendment, due process and privacy) and not related to Indian affairs (\( \text{issue} \) equals 20150 or 20160). This case selection excludes cases on unions, economic activity, judicial power, federal taxation and so forth. Citations are the unit of analysis (ANALU =0 in Spaeth’s data set) and I add split-vote decisions (ANALU = 4) when there are bridging observations. \( Bakke \) is a prominent example of a case with a split vote and many members of Congress taking positions on one or the other (or both) of the main holdings. I do not include memorandum cases and decrees (DEC TYPE = 3 or 4).
are relatively salient are selected as well.8

The inter-institutional elements of the estimation use votes and bridge observations for members of Congress. There are 529,272 individual level observations of congressional votes on 1,797 roll call votes in Congress on social and court issues (covering the dimension of issues in the Supreme Court data used). There are also 24,728 bridge observations of members of Congress taking positions on Supreme Court cases. There are 721 individual level bridge observations of presidential positions on congressional roll call votes and 641 bridge observations of presidents taking positions on Supreme Court cases. More details are in the supplemental material.

The precedent variable is +1 if the parties or justices on the liberal side advocated overturning precedent; it is -1 if the parties or justices on the conservative side advocated overturning precedent. The congressional deference variable is +1 if the parties or justices on the liberal side advocated overturning a congressional statute; it is -1 if the parties or justices on the conservative side advocated overturning a congressional statute. The free speech variable is +1 if the parties or justices on the liberal side advocated limiting speech rights; it is -1 if the parties or justices on the conservative side advocated limiting speech rights. The executive deference variable is +1 if the parties or justices on the liberal side advocated against a federal party to a case; it is -1 if the parties or justices on the conservative side advocated against a federal party to a case. The Sixth Amendment variable is -1 if the parties or justices on the liberal side advocated on behalf of an accused person’s rights under

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8Cases are selected if at least one of the following is true: discussed directly in the Harvard Law Review’s annual court review, included as a landmark case in the Legal Information Institute’s database of cases (see supct.law.cornell.edu/supct/cases/name.htm), coded as a salient case in Epstein and Segal (2000), included in the CQ’s key cases list, a President or member of Congress or non-contemporaneous justice took a position on the case, the case has clear cutpoint relation to another case, the case implicates precedent, deference or speech as coded.
the confrontation clause or right to a jury; there are no cases in which invocation of these rights implied a conservative outcome.\(^9\)

4 Ideal points

**Justice ideal points** Figures 4 through 6 display the estimated preference estimates for justices from 1950 onward. A 90 percent confidence interval is indicated with grey lines. The estimates are available in the supplemental material. The ideal points are generally what one would expect - Justice Douglas on the left and Justice Thomas on the right and so forth. They also exhibit clear non-linearities: Justice Black was more or less stable until around 1967 when he shot to the right. Frankfurter was liberal until his decisive move to the right from 1958. Justice White has the most jagged trajectory with a secular rightward shift punctuated by a move left in 1978.

**Supreme Court median over time** Figure 7 plots the Court median for the core model and the most recent available Martin and Quinn scores. To facilitate comparison, the average median has been subtracted from each set of measures.\(^10\)

If we accept a strong form of the Ho and Quinn critique, we would only use Martin and Quinn scores ordinally. Others, however, do use the Martin and Quinn scores cardinally (e.g.

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\(^9\)Sixth amendment cases are primarily drawn from cases for which the “LawSupp” variable in the Supreme Court database is 213 or 215.\(^10\)The variance of medians is similar across measures; the variance of individual ideal points is not the same as Martin and Quinn scores have a broader range. If the medians are normalized by the standard deviation of the individual ideal points then the Martin and Quinn scores are compressed around their mean without affecting movement relative to itself. Note that Martin and Quinn date cases by the Supreme Court term of the decision date. This is not the same as calendar year as Supreme Court terms run from October to September. The 2010 term, for example, covers cases decided from October 2010 to July 2011. The bridging scores use calendar years so as to facilitate bridging between Congress and the Court.
Figure 4: Estimated ideal points of Supreme Court Justices, 1950-1975
Figure 5: Estimated ideal points of Supreme Court Justices, 1955-2005
Figure 6: Estimated ideal points of Supreme Court Justices, 1982-2011
Figure 7: Comparison with Martin and Quinn Estimates of Supreme Court Median over Time

Epstein, Martin, Segal and Westerland 2007; Martin, Quinn and Epstein 2005; Silver 2012)

and it is with regard to these applications that the following discussion pertains.

The prime disjunction between the bridging and Martin and Quinn scores is marked conservatism of the Roe-era Court and the substantial move to the left from 1973 to 1981. This is not at all apparent in the bridge estimates which show a strong conservative trend in the early 1970s, but one that leaves the Court liberal compared to later Courts. This seems more consistent with general consensus that the Burger Court, while more conservative than the Warren Court, was not historically conservative (see, e.g., Friedman 2011, chapter 9). A second major disjunction is that the Martin and Quinn scores indicate that the contemporary Court is more conservative than any other time since 1937, the earliest date of the Martin and Quinn scores; we return to this later.
Model with covariates  Figure 7 also includes the medians as estimated from the model that includes the covariates described earlier. These medians are quite similar to the model without the covariates (even as the covariates themselves are statistically significant for many justices). The correlation of medians for the models with and without covariates is 0.97. The ideal points in the model with the covariates are very similar, with a correlation of 0.99. The differences that do exist typically occur when a justice’s unexpected votes are explained by a particular covariate. For example, Justices Thomas and Scalia voted liberally on a number of Sixth Amendment cases (even as liberals voted conservatively). In the model with covariates these votes do not make these justices look as “liberal” and hence their ideal points are shifted to the right for most years. Frankfurter is another interesting case, as his ideal points in the covariate model are more liberal, implying that some portion of his conservative votes are explained by the covariates.

There is no clear way to determine whether the ideal points based on the model with covariates are “better” as it depends on the concept one is trying to assess. If one is interested, for example, in relations between the Court and Congress one is probably better off with a model without covariates as this measures the differences between Congress and justices, regardless of the source of the voting by the Court. In standard separation of powers models, for example, it does not matter why justices vote against the policy preferences of Congress, only that they do. On the other hand, if one is trying to identify the “ideology” of justices in a way that is independent of agenda or case characteristics, one may prefer the estimates based on the model with covariates. The judicial preferences can then be adjusted based on the other estimated parameters depending on whether overturning precedent or speech and
so forth are invoked by a given case or line of cases.

**Cutpoints over time**  
Figure 8 shows the average case cutpoints for Supreme Court cases over time. Two points stand out. First, there is substantial variation in case cutpoint tendencies. There are several spikes and dips in the data, indicating a somewhat voluble agenda. Second, the agenda had moved in important ways in certain time periods. In the late sixties and early seventies there was a marked (but not necessarily consistent) shift to more liberal case cutpoints. When such a shift occurs, a moderate justice would vote conservatively more often as the cutpoints would shift from being to his or her right (and inducing liberal votes) to being on his or her left (and inducing conservative votes). This potentially helps explain the shift to very conservative estimates for the Court median in the Martin and Quinn scores in the early seventies. Their method does not attempt to track cutpoint changes over time and may therefore treat conservative votes in the seventies as evidence of a move to the right when such votes are, it would appear, a function of a leftward shift in the agenda. The supplemental material provides an illustration of cutpoint movement for specific civil rights case and votes.

**How Conservative is Justice Kennedy?**  
Examining instances when the bridging and Martin and Quinn scores diverge in more detail may shed light on potential problems and possible solutions. Bailey (2007) discusses the early 1970s. In this section we consider the divergence of the measures for the current Court.

The Martin and Quinn median estimate moves strongly left from 1995 to 2005 and then shifts sharply to the right after 2005. The initial turn to the right in 2005 occurred when
Alito replaced O’Connor, shifting the Court median from O’Connor (who had a Martin and Quinn ideal point of 0.03 in 2005) to Kennedy (who had a Martin and Quinn ideal point of 0.52 in 2005). The Martin and Quinn Court median keeps moving, however, as Kennedy shifts from 0.52 in 2005 to 1.49 in 2010, taking Kennedy from being near the average scores of Justices Stewart and White (around 0.5) to being near the Martin and Quinn score for Justice Rehnquist at the end of Rehnquist’s career (around 1.5). The left-side of Figure 9 shows Kennedy’s shift, with the Martin and Quinn scores of Justices O’Connor, Scalia and Rehnquist as reference.

After 2008 the Martin and Quinn measures diverge not only from the bridging estimates, but also from the the percent conservative data in Figure 2. The divergence from percent conservative is puzzling given that Martin and Quinn usually tracks the percent conserva-

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11Figure 7 subtracts 0.44 from this median score, the average of the Court medians for the Martin and Quinn scores from 1950 onward.
Figure 9: Martin and Quinn Scores and Bridging Estimates for Selected Justices, 1987-2011

tive fairly closely. The bridging scores, on the other hand, do not diverge from percent conservative in this time period.

The magnitude of the Martin and Quinn shift in median from 2008 to 2010 is historically significant. It is roughly 50 percent larger in magnitude than the movement to the right from 1980 to 1983 and about two-thirds the size of the largest three year shift in the post-war which occurred from 1967 to 1970. In contrast, the bridging scores indicate Kennedy has been more or less the same since 1995. These scores put him in 2010 near O’Connor’s ideal point at the end of her career and substantially to the left of Rehnquist, as seen in the right-side of Figure 9.

Because Kennedy’s shift to the right after 2007 drives much of the recent divergence in preference scores, it is useful to consider Kennedy’s votes and ask whether we can qualitatively discern a movement to the left or right. Note first that prominent conservative rulings supported by Kennedy in the 2006 or 2007 terms cannot explain the shift after 2007 (or do so only indirectly via the smoothing parameter). These include Parents Involved v. Seattle
School District (holding that Seattle schools could not use race as factor in assigning kids to schools), Hein v. Freedom From Religion Foundation (holding that taxpayers had no standing to object to challenge faith-based federal policies), Morse v. Frederick (holding that a school could punish a student for holding a sign that said “bong hits for Jesus”), Ledbetter v. Goodyear (holding that statute of limitations disallowed challenge to discrimination even if discrimination were discovered later), Bowles v. Russell (refusing to hear habeas appeals that were filed late even if a district court granted additional time), Medellin v. Texas (holding that International Court of Justice decisions are not binding in U.S.) and Gonzalez v. Carhart (upholding Partial Birth Abortion Act of 2003).

It is from 2008 to 2010 that Martin and Quinn estimate a decisive shift to the right for Kennedy. Several of Kennedy’s conservative votes in that time period do not imply a shift to the right. McDonald v. Chicago held that the Second Amendment covered a private right to gun ownership and was supported by more than 300 members of Congress as amici including many moderate members of Congress such as Senators Baucus, Feingold, Snowe and Webb and Representatives DeFazio, Dingell, Giffords and Oberstar. Only 56 members of Congress signed an amicus brief for the other side. The high profile Citizens United case was indeed quite conservative, but was a natural continuation of Kennedy’s jurisprudence rather than a shift to the right; indeed Kennedy voted against the original Austin decision that was overturned by Citizens United and joined Scalia’s opinion in FEC v. Wisconsin Right to Life in 2007 that deemed Austin “wrongly decided.”

There were also a number of cases on Fourth and Sixth Amendment cases in which Kennedy voted in a conservative direction, often against erstwhile conservatives Scalia and
Thomas. They include *Bullcoming v. New Mexico* and *Melendez-Diaz v. Massachusetts* (in both Kennedy was in the minority arguing that confrontation clause did not require testimony of forensic experts), *Arizona v. Gant* (in which Kennedy was in the minority arguing that police could search a vehicle after an arrest even if there was no clear threat to their safety or clear need to preserve evidence) and *Oregon v. Ice* (in which Kennedy, along with Stevens, Breyer and Alito, joined Ginsburg’s opinion stating that a judge, not a jury, could find certain facts). On every one of these cases, Kennedy voted with Breyer (and sometimes other liberals). These votes seem to reflect less a shift to the right than the “Farnsworthian” (see page 12) emergence of a distinctive cleavage on the Court.

In cases from 2008 to 2010, there is a rough parity between liberal and conservative votes for Kennedy. The percent of times Kennedy voted conservatively bounced, in Kennedy-esque fashion, from 65% to 53% to 64% in these three years (compared to 62% in 2006 and 50% in 2007). Cases on which Kennedy supported conservative outcomes include *District Attorney v. Osborne* (finding no post-conviction right to potentially exculpatory DNA evidence), *Connick v. Thompson* (ruling against holding prosecutor’s office liable for civil rights violations that arose because of poor training), *Ashcroft v. Iqbal* (holding that top government were not liable for alleged discriminatory activity of subordinates), *Herring v. U.S.* (allowing certain good faith exceptions to exclusionary rule), *Salazar v. Buono* (allowing a cross on a public park), *Ricci v. New Haven* (disapproving of a New Haven decision to nullify a firefighter’s exam on which whites did better than non-whites), *14 Penn Plaza v. Pyett* (holding that contractual arbitration precluded judicial resolution of discrimination claims), and *FCC v. Fox* (upholding FCC ban on “fleeting expletives”).
Cases in which Kennedy wrote or joined liberal opinions include *Graham v. Florida* (holding that juveniles cannot be sentenced to life in jail for non-homicide offenses), *Cone v. Bell* and *Harbison v. Bell* (providing rights for death row inmates), *Brown v. Plata* (releasing California prisoners due to overcrowding), *Wyeth v. Levine* (holding that drugs companies are not shielded from state liability laws due to federal regulation), *Altria v. Good* (holding federal laws do not preempt the ability of states to regulate tobacco), *Caperton v. Massey* (holding that a West Virginia judge had to recuse himself from a case involving major campaign contributor), *Safford Unified School District v. Redding* (deeming a strip search of a junior high girl unconstitutional) and *Brown v. Entertainment Merchants Association* (striking California law against selling violent video games to minors).

Public opinion is also consistent with the idea that the Court is not particularly conservative. Gibson (2012, 9) surveyed Americans about the Court in 2011 and found that those who were dissatisfied with the Court were equally likely to say the Court was too liberal or too conservative, leading him to conclude “there is no consensus in American politics today about the ideological location of the current Supreme Court.” Jessee and Malhotra (2012) polled Americans on specific Supreme Court cases, presenting them summaries of each position and asking which way the Court should have ruled. Of the nine decisions they polled with clear ideological valences (*Comstock*, discussed earlier, was the tenth case they polled), eight were conservative decisions (*Citizens United*, *Heller*, *Salazar*, *Ricci*, *Crawford*, *Baze*, *Parents Involved*, *Gonzales v. Carhart*) and respondents agreed with the actual decision 71.6 percent of the time. It was the one liberal decision in the survey, *Hamdan*, that had the lowest level of popular support, at only 29.9 percent agreement. Given that the public has
not shifted dramatically to the right (Stimson 1999, 2012) then these results are inconsistent with Martin and Quinn’s claim that the current Court is the most conservative Court in the postwar era.

5 Conclusion

Measuring Supreme Court preferences is important for empirical testing and, in turn, for intellectual development in the study of the Supreme Court. Many studies need to make cardinal comparisons, investigating preference change or “spatial distances” between actors or preference differences across institutional boundaries. Scholars frequently use Martin and Quinn scores for these purposes.

The problem is that it may be, as Ho and Quinn (2010, 846) argue, “misguided” to use the Martin and Quinn measures in this way. Theoretically, cardinal use of the Martin and Quinn scores requires an unrealistic assumption about fixed agenda space. Practically, the Martin and Quinn scores produce highly debatable claims that the Roe and Furman courts were among the most conservative of the post-war era.

This paper presents an alternative approach that directly engages with the issue of changing agendas by using bridging information over time to produce intertemporally comparable preference estimates for Supreme Court justices from 1950 to 2011. The estimates do not suffer from the face validity problems of Martin and Quinn and offer an alternative to going back to the dark ages of ordinal only preference measurement.
Bibliography


