

Is There a Latino Dimension to Voting in Congress? A  
Proposed Method to Unhooding “Racists” in Congress

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## **Abstract**

One of the most important and symbolic ways in which political scientists have assessed the quality of American democracy is by the voting behavior of congressional representatives. Thorough analysis of the voting patterns of congressional representatives through spatial voting models have largely found that nearly every issue considered by Congress can be subsumed within a single liberal-conservative dimension. The implication is that the interests of minority Americans, such as Latinos, are best situated within this single dimension that has long defined American politics. The further logical extension is that traditionally liberal representatives, irrespective of race, provide the adequate substantive representation to Latinos as do Latino representatives. Scholars interested in race and representation have typically avoided use of ideology scores obtained from spatial models and utilized ideology scores that limit the sample of votes that are assumed to be theoretically better measures of support for minority interests in Congress. In this piece, I utilize new advancements in the estimation of spatial voting models to suggest that such models, with more theoretically complete information do uncover a Latino dimension to voting in Congress. The findings suggest that scholars studying race and representation need not discard spatial models of legislative voting and that the complete rejection of arguments for descriptive representation of Latinos based on previous results from spatial voting models are unfounded.

# 1 Evaluations of American Democracy through Analysis of Legislative Voting

The importance of legislative bodies to democratic systems cannot be overstated, for it is within such bodies that the “will of the people” rests and is exercised. The extent to which the United States’ federal legislative body, the U.S. Congress, is an exact miniature replica of American society not just in appearance but also in behavior provides us with the ability to assess the quality of representation afforded to the American people by Congress.

According to a pure delegate model of representation, the will of Congress ought to be completely congruent with the will of the people in the body politic. Majoritarian models of democracy posit that the will of the people is conveyed to members of Congress through elections, and as many congressional scholars have noted elections are the mechanism that drives the behavior of representatives of Congress (Mayhew 1974). In winner-take-all elections and in a majority-rules institution, we then ought to expect that the will of the people, expressed during congressional elections, will subsequently be expressed by elected representatives by the votes those representatives cast on behalf of the people who they were elected by.

Therefore, it is not surprising that the process by which most political scientists chose to evaluate the quality of representation in Congress is through the votes that we observe representatives cast. Voting of representatives is, if not, the most important mechanism to evaluate the quality of representation than it certainly is the most symbolic. One vote by a single representative symbolizes the votes for the thousands of citizens whom that legislator represents.

Certainly, voting is not the only way in which representatives provide representation to constituents in Congress, nor should it be the only way in which we evaluate the quality of congressional representation (Tate 2003). Representatives relish opportunities for constituency casework from helping elderly constituents track down social security checks, to regular news letters, or to obtaining flags that have flown over the U.S. Capitol. Members of Congress also provide an abundance of extended remarks on the floor of Congress to demonstrate to their constituents that they are working on their behalf. Legislators will also spend the majority of their time out of the public eye providing more representation by working on the drafting and editing of legislation (Hall 1996), which is admittedly the primary purpose of any legislative body.

Nevertheless, casting a vote in Congress remains the primary critical test for any analysis of the quality of congressional representation for the very reason that voting is so visible and symbolic. Ballots cast by members of Congress not only have policy consequences but serve as the mechanism by which representatives signal to their constituents what they stand for and is the primary activity that legislators have to communicate and explain to their constituents back home (Kingdon 1989).

## 2 Race and Representation in Congress

Having noted that most assessments of congressional representation are based on analysis of legislators’ votes, scholars thus reach conclusions about American representative democ-

racy based on how congressional representatives cast their votes. The aggregate outcome of votes allow us to make deductions about the structure of Congress (Krehbiel 1991, Weingast & Marshall 1988, Cox & McCubbins 1993, Gilligan & Krehbiel 1987, Gilligan & Krehbiel 1990, Poole & Rosenthal 1997, Patterson & Caldeira 1988, Singh 1998), while the individual outcome of votes allow us to deduce how each representative defines themselves to their constituents back home (Mayhew 1974, Fenno 1978, Kingdon 1989, Swain 1995, Canon 1999, Tate 2003).

From either vantage point, scholars interested in race and representation want to examine the outcome of these votes to see the extent to which the will of minority groups in the population, such as African Americans or Latinos, are subsequently being expressed in Congress. Examinations of the aggregate outcome of votes will often reveal that Congress, as an institution based on geographic representation and majority-rules, will never allow for the will of American minority groups to be expressed (Guinier 1994, Guinier 1995). Although there are notable instances in congressional history when the interests of minority groups, notably African Americans, have been successfully advocated, such as the Civil War amendments, the Civil Rights Acts of the 1880s, the Civil Rights Act of 1964, or the Voting Rights Act of 1965.

However, these legislative victories for minorities arguably occurred because it was not only congruent with the will of minority Americans but because the majority of white America also shared the same sentiments thus allowing the legislation to succeed. Furthermore, there are more infamous examples in congressional history in which the interests of minority Americans have been subsumed to the benefit of white Americans, such as the three-fifths compromise, the Missouri Compromise, alien land laws, or race-based immigration policies. These serve as some of the examples demonstrating that Congress, like the rest of American society, has never been able to escape controversies over race and ethnicity and why Guinier (1994) and Guinier (1995) argue that the only way to guarantee that the will of minorities is expressed in Congress is to alter the rules of the institution.

The proposals for change that Guinier (1994) and Guinier (1995) propose are so far reaching and altering that they are not foreseeable in the near future. Nevertheless, to a certain extent, we have seen changes adopted inside and outside of Congress to change the institution as a whole. Some of the internal reforms have been attempts to temper the power of the majority party in Congress (Binder 1996) or efforts to increase committee power as another way to mitigate against majority tyranny (Gamm & Shepsle 1989, King 1997). While much of the internal institutional reforms in Congress have not been to enhance the political power of racial minorities, such reforms have inevitably allowed black and Latino and representatives in Congress to wield extraordinary influence over the legislative process. For instance, the ability of many minority representatives to accrue high levels of seniority have allowed them to achieve high ranking positions of power within both the party and committee systems in Congress.

Yet the most direct way of increasing the probability of success of minority agendas in Congress has to increase the numbers of minority representatives in Congress. Such attempts have been made both inside and outside of Congress. One notable instance occurred during the 103rd Congress when representatives of U.S. territories, who were all black or Latino representatives, were granted voting rights on the House floor (see Canon & Espino (2002)

for a detailed analysis). Outside of Congress, other attempts at reform have been made to increase minority representation in Congress by increasing the probability of electoral success for black and Latino candidates for Congress. State legislatures, state and federal courts, and the Department of Justice have worked in tandem to do this through the creation majority-minority districts.

The creation of majority-minority districts, which had once been a tool to disenfranchise minority Americans, has been used in recent decades to enfranchise minority Americans by increasing by increasing levels of minority descriptive representation. The underlying logic to this effort was that minority representatives are the best representatives of minority Americans. In fact, history had shown that the absence of African American representatives to Congress following the period of “Redemption” in the South allowed an all white Congress to once again forgo any concern over minority interests. History had shown that Congress possessed a “conscience” (Clay 1992) so long as minority representatives were present in its halls.

There has been considerable debate over the extent to which increasing levels of minority descriptive representation through the creation of majority-minority districts actually increases the overall level of substantive representation for minorities (Grofman, Griffin & Glazer 1992, Swain 1995, Lublin 1997, Cameron, Epstein & O’Halloran 1996, Hero & Tolbert 1995, Brink & Miller 1997, Thernstrom & Thernstrom 1997, Lublin 1999, Epstein & O’Halloran 1999). The weight of the evidence presented by various camps as to the level of substantive minority presentation in Congress largely rest on the individual voting behavior of representatives. The patterns of voting behavior are obtained from interest group scores, such as ADA, ACU, LCCR, COPE, or NHLA scores, or the canonical Poole-Rosenthal NOMINATE scores. The interest group scores are simply the percentage of votes in agreement with the respect advocacy group’s position on selected pieces of high-profile legislation. The first and second dimension Poole-Rosenthal scores are the ratings of legislators on liberal-conservative and civil rights scales, respectively, which are computed from the voting patterns of representatives on all non-unanimous roll call votes, regardless of the profile of the vote.

Aside from the obvious concerns over selection bias in the use of limited versus unlimited samples of roll call votes, it is remarkable that for the high stakes placed on such debates over the extent to which descriptive minority representation translates into substantive minority representation, few researchers pay careful attention to the construction of these legislator voting scores. Poole-Rosenthal NOMINATE scores are largely held as the gold standard measure of representatives’ overall ideological position. Yet a large majority of the studies on race and representation use focused interest group scores as measures support for black or Latino interests in Congress. The reasons are that the first dimension NOMINATE scores largely measure an overall liberal-conservative dimension. The second dimension NOMINATE scores, while, perhaps measuring a racial dimension, are no longer as significant predictors of voting patterns as are the the first dimension scores. Therefore, those interested in representation of minority interests will often turn to various interest group scores compiled by interest groups that are seeking to particularized support for minority interests, such as scores compiled by the National Hispanic Leadership Agenda (NHLA).

These interest group scores are typically the percentage of times each legislator votes for the preferred position of the interest group on an average of 10 to 20 key roll call votes selected

by the interest group. The use of such particularized interest group scores as measures of support for Latinos or blacks is not inherently wrong. However, the resulting implication of the use of such scores ought to be more carefully considered. Presumably, researchers only use less than one percent of all roll call votes cast in a session of Congress to measure levels of substantive minority representation because if more than one percent of a select group of votes are used, then researchers will not find any distinctive dimensions to congressional voting other than the influence of political parties.

In other words, we would conclude that of all the myriad issues that Congress is presented, less than one percent of these issues are of relevance to minority Americans. Furthermore, because the canonical NOMINATE scores fail to detect any other significant dimension other than a single partisan dimension, we would be left to conclude that this provides the empirical evidence necessary to support this reasoning. To date, no research has systematically tested whether this is a valid assumption to make. Researchers interested in race and representation would be well-served to re-examine this justification and understand more fully how the ideological measures from spatial voting models are derived and whether modifications to such models might lead us to conclude that there actually is a significant racial dimension to congressional voting patterns outside of a sample of select roll call votes. In the next section I turn to such a brief overview of the traditional spatial model of legislative voting.

### 3 The Spatial Model of Congressional Voting

Nearly every spatial model of legislative voting, such as the Poole-Rosenthal model, rely heavily on the logic of the Euclidean spatial voting model developed by Davis, Hinich & Ordeshook (1970). The traditional model in which actors are assumed to have quadratic utilities in their preferences has been rigorously proven and tested since it was first introduced to political science (Hinich & Enelow 1984, Platt, Poole & Rosenthal 1992). This spatial model of legislative voting patterns has been hailed as the most accurate way in which to theorize and study legislators' preferences. Furthermore, the simplicity of the Euclidean model has strong intuitive appeal for researchers seeking to make singular conclusions of how representatives routinely make decisions on policies presented to them.

In a strictly uni-dimensional world of preferences, we can conceive of a single line with polar opposite positions at each end of this line. We can then classify any single issue and any single individual along this single dimension. When a particular issue arises for consideration by a legislative body, there are two positions that legislators have to choose from - either supporting or opposing the issue. The positions of support or opposition are each aligned at different points along this single dimension. In the language of formal spatial modelers, each legislator will derive the greatest utility from choosing the position closest to their own unique position on this dimension. A critical assumption, of course, is that legislators are utility maximizers. Given the drive for re-election (Mayhew 1974) and the way in which legislators weigh votes carefully in order to be able to explain their position to constituents back home (Kingdon 1989), this is not too stringent of an assumption to make.

This in itself is intuitive and easy to understand. So why does it quickly become so complicated and many of us then quickly nod off as if we are once again in high school geometry? The problem lies not in simple logic of the model but rather in estimating this model with

real data. Consider the House of Representatives where we have 435 representatives and a typical session of Congress where each representative casts about 1,000 votes for various bills and amendments. Let us substitute the number of representatives and votes with the letters  $i$  and  $j$ , respectively.

Keep in mind, that any vote is a binary choice between Yea or Nay.<sup>1</sup> And let us define the vote outcomes we observe with the letter  $y$ . So if we want to know how the  $i$ th legislator cast her vote on the  $j$ th bill, we would write this simply as  $y_{ij}$ . Now let us define,  $y_{ij}$  in slightly greater detail. In the Euclidean model, the assumption is that legislator  $i$  will derive utility from either voting Yea or Nay on vote  $j$ . Let us define the utility for legislator  $i$  as  $U_i$ , the Yea position on vote  $j$  as  $\zeta_j$  and the Nay position on vote  $j$  as  $\psi_j$ .

Assuming a utility maximizing world of legislators where these utilities are quadratic over each of the two possible outcomes, each legislator will vote Yea or Nay based on whichever of those positions is going to give them the greatest sense of benefit. In other words, we assume that whenever  $U_i(\zeta_j)$  is greater than  $U_i(\psi_j)$  we will observe  $y_{ij} = 1$  if we code Yea votes equal to a value of 1. We would observe  $y_{ij} = 0$  (i.e., a Nay vote) if the value of  $U_i(\psi_j)$  is greater than  $U_i(\zeta_j)$ . This can be expressed in the following equation:

$$y_{ij}^* = U_i(\zeta_j) - U_i(\psi_j) \quad (1)$$

We do not directly observe  $y_{ij}^*$ . Rather, this serves as the latent measure of the distance between the two position on each vote for each legislator. When  $y_{ij}^*$  is positive we observe a Yea vote and when it is negative we observe a Nay vote.

How are the “ideal” position of each legislator defined? These simply are those values that define the utility legislator  $i$  derives from voting Yea or Nay. That is, again assuming quadratic utilities in the Euclidean world, this utility is the squared combination of where a legislator is positioned along a dimension and where the vote choice is positioned along the same dimension, or to vote Yea on vote  $j$  the utility is simply

$$U_i(\zeta_j) = -(x_i - \zeta_j)^2 \quad (2)$$

and to vote Nay vote  $j$  the utility derived would be defined as

$$U_i(\psi_j) = -(x_i - \psi_j)^2. \quad (3)$$

Whichever, of these two was the highest value would be the position that the legislator would take.

If we were simply theorists, we would stop here. However, empiricists who then go on to apply this model to real world data will note that in the imperfect world of human behavior, such a model does not perfectly predict the actual vote outcomes we observe. To account for this error, empiricists have to add an error term to the equation because human beings may not be utility maximizing every single time or, rather than completely reject the notion that legislators are always rational beings, legislators might have incomplete information to accurately chose the maximizing position.

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<sup>1</sup>For simplicity, we will not consider abstentions as a third possible choice right now.

Returning to the latent variable equation and substituting error terms into the utility equations for both the Yea and Nay positions we would then have a model as follows:

$$y_{ij}^* = -(x_i - \zeta_j)^2 + \eta_{ij} - (-(x_i - \psi_j)^2 + \nu_{ij}) \quad (4)$$

where  $\eta_{ij}$  and  $\nu_{ij}$  account for the random error associated in choosing the ideal position. We can assume these error terms have a bivariate normal distribution and are i.i.d. across legislators and votes.<sup>2</sup> With these assumptions, we can define the variance of each vote  $j$  as  $\sigma_j^2 = V(\eta_{ij}) - 2Cov(\eta_{ij}, \nu_{ij}) + V(\nu_{ij})$  and combine the two error terms into a single value of  $\epsilon_{ij}$ , where  $\epsilon_{ij} = (\nu_{ij} - \eta_{ij})/\sigma_j$ . With substitution, we then get

$$y_{ij}^* = 2(\zeta_j - \psi_j)x_i + \zeta_j^2 - \psi_j^2 + \epsilon_{ij}. \quad (5)$$

We can substitute in terms into the above equation to simplify it further so that  $\beta_j = 2(\zeta_j - \psi_j)$  and  $\alpha_j = \zeta_j^2 - \psi_j^2$  which results in

$$y_{ij}^* = \beta_j x_i - \alpha_j + \epsilon_{ij}. \quad (6)$$

At this point, the above equation ought to look familiar to a linear regression models, and given the nature of the variable  $y_{ij}$  it resembles the familiar binary probit or logit models with a hierarchical structure. Yet, this is now finally where the complication arises. With conventional linear regression models, we have data in which we observe both  $y_{ij}$  and  $x_i$ , which then allows us to estimate the parameters of interests  $\beta_j$  and  $\alpha_j$ . In this model, however,  $x_i$  is an unobserved predictor we still have to estimate. Therefore, this equation is underidentified and we cannot use methods, such as OLS or MLE to estimate the equation.

The only available solutions would be to assign values to any one set of unidentified items to identify the other items (Londregan 2000) or to use some form of iterative imputation to simultaneously estimate the unidentified items. The former approach may impose more assumptions than most researchers would be comfortable doing. The latter approach, however, requires significant computing power. With the increasing availability of computing power, though, this problem is less of an issue today.

For instance, Poole and Rosenthal use an iterative imputation algorithm to circumvent this “missing data” problem and allows them to produce the well-known NOMINATE (*Nominal Three-Step Estimation*) scores. To use the particular algorithm, they have to make the identifying restriction that ideal points of legislators are to roughly fall in the range of [1,1]. Recently, Jackman (2000), Jackman (2001), and Martin & Quinn (2002) have shown that this missing data problem can be resolved through Bayesian estimation methods and that unlike NOMINATE scores, Bayesian estimation can also produce measures of uncertainty of the ideal point estimates for legislators,  $x_i$ , and legislation  $y_{ij}$ .

Up to this point, I have refrained from discussing the dimensionality of this Euclidean model. Adding dimensions does not alter the logic of identifying  $y_{ij}$  and  $x_i$ . What does change, however, is the number of parameters to be estimated (an identical set of equations for each dimension to be estimated) and the ability to easily distinguish the parameters in any one dimension from parameters in other dimensions.

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<sup>2</sup>It is in the actual estimation of these error terms and particularly the distributive assumptions made where many spatial voting models diverge.

In their thorough analysis of nearly every single roll call in congressional history with such a spatial model, Poole & Rosenthal (1997) find that voting in Congress is largely explained by a single dimension - one that is tied to economic redistribution. To be more precise, Poole & Rosenthal (1991) first presented findings in which they found only 1.5 dimensions exist. They say only 1.5 dimensions because “while a second dimension adds significantly in some Congresses, the second dimension is clearly less important than the first.” (p.232) They find that a second dimension only dominates significantly in a handful of 19th Century sessions of Congress and only one session of Congress during the 1960s. Overall, they find that this second dimension typically only accounts for an additional 3 percent of the voting patterns in Congress compared to 80 percent for the first dimension.

It is the second dimension that has been of greatest interest to scholars interested in race and representation. Poole & Rosenthal (1991) termed this second dimension an internal party conflict dimension or a regional conflict dimension. In subsequent analysis, (Poole & Rosenthal 1997) further confirm the occasional appearance of this second dimension in congressional voting and show that it is largely tied to issues related to support or opposition to enlarging the scope of civil rights. Yet overall and especially in recent sessions of Congress, they find that issues related to this second dimension have all been but completely subsumed within the primary liberal-conservative dimension in recent Congresses.

The disappearance of this second dimension does not necessarily mean that race related issues no longer play an important role in how of representatives make their voting decisions. Rather it means that, while such issues may continue to be important, they are no longer distinguishable from the single economic redistribution dimension. Such a second dimension is presumably distinguishable from the liberal-conservative redistribution dimension only on a handful of votes and hence why many researchers measuring minority representation limit their focus to these handful of votes.

As a result of detecting only a single primary dimension via NOMINATE scores, we might simply conclude that minority representatives are best categorized on this single dimension as being more or less liberal (i.e., more or less supportive of redistributive policies). That is, the conclusion most scholars reach is that minority representatives provide better substantive representative the more liberal they are.

However, we know that a new breed of racial politics has emerged in the last quarter of the 20th century (Kinder and Sears) that has also brought about a new way in which race is represented by representatives (Canon 1999, Fenno 2003). Furthermore, the estimation of many spatial voting models have searched for patterns in voting data in seemingly atheoretical ways; or what might be more accurate is that the many researchers searching for the patterns in legislative voting data have not had their theoretical concerns focused on issues of race and representation.

Recent advancements in the Bayesian estimation of spatial voting models now make it possible to more easily apply substantive information about the ways in which we suspect race will emerge in legislative voting patterns thus improving the theoretical development of spatial voting models. Specifically, scholars interested in race and representation have suspicions that race does play a role in legislator’s voting decisions. The Bayesian estimation of spatial voting models allow us to incorporate such information to tap any of the dimensions that we believe must exist given our substantive prior beliefs much much in the same way that

scholars using interest group scores are bringing substantive prior beliefs to their assessments of representation by limiting their focus to only those votes deemed to be substantively important.

It is this Bayesian method of estimation detailed in Jackman (2000, 2001) that I use to estimate a spatial voting model for representatives in the U.S. House during the 103rd Congress with a specific focus on whether a dimension of support or opposition to Latino interests can be identified beyond the traditional liberal-conservative dimension renowned by Poole & Rosenthal (1997) as the primary dimension to voting in Congress. The ability to identify other dimension in roll call voting via Bayesian estimation is not a mere exercise in methodological techniques. Rather, the ability to accurately identify multiple dimensions in Congressional roll call voting requires strong theoretical justification on the part of researchers using such methods. Specifically, in order to reduce the complexity of a model with more than one dimension, researchers will often have to add “prior” information to the data that will guide the model estimation. Essentially, this can be thought of as a researcher telling his computer, “Based on what I know, I have some prior beliefs about the way the world works. So look for for this particular structure to the data with this particular level of precision.” This not only allows for the algorithm to solve the equation but also allows researchers to test how well-informed their prior beliefs actually are.

In fact, after detailing the ways in which Bayesian simulation can be applied to estimating the ideal points in multiple dimensions for legislators and bills in the U.S. Congress, Jackman (2001) writes,

Priors need not play a mere technical role... researchers with interests in, say, trade, foreign policy, or environmental policy can specify informative priors for the discrimination parameters of key roll call votes; in an extremely crude way, this is how interest group ratings get constructed. These priors effectively “pre-label” on or more of the dimensions presumed to underlie the roll calls. Analysis can then proceed entirely consistent with the spatial voting model, but incorporating the researcher’s prior beliefs about the dimensions underlying the policy space. Researchers might then investigate what other roll calls discriminate with respect to these dimensions, which may be helpful in better understanding legislative politics more generally.

## **4 Is There a Latino Dimension in Congressional Voting?: An Application to the 103rd Congress**

In this section I present some findings of the dimensions in congressional roll-call voting observed in the 103rd Congress. I have entered into this discussion by suggesting that the ways in which members of Congress process information over racial issues into their decision making is different today than it used to be much as we have seen a transformation in the processing of racial issues in the general American public. Furthermore, I also have suggested that previous spatial models of voting may have not been correctly searching “under the right stones”. The question we are then presented with is how we ought to conduct such searches

that will accurately capture what many scholars of race and representation has existed all along.

To begin to address this, we must first ask whether issues in Congress are even being addressed and analyzed with a substantive interest on minority Americans, such as Latinos, to make this endeavor worthwhile. Examinations of legislation and debate in recent sessions of Congress suggest that such issues are being considered by Congress. Because of these debates, we are led to believe that there is at least some dynamic to congressional decision making that makes the focus on Latinos unique. Furthermore, given that many scholars and pundits indicate that Latinos and the concerns of Latinos defy easy classification into the unidimensional American policy space (e.g., socially conservative but economically liberal), we might take this as further evidence that a Latino dimension to legislative voting might definitely emerge as uniquely different from the traditionally dominate liberal-conservative dimension.

The question then is under what conditions might we expect the emergence of such a dimension in the modern U.S. Congress? Poole & Rosenthal (1997) make a strong case that a single dimension explains nearly every vote decision in nearly every single session of Congress. However, others (Koford 1989) have suggested that this is an artifact of their methodological technique and that the case for only a single dimension to congressional voting has been overstated. Recently, Jackman (2001) has demonstrated that the use of Bayesian simulation to estimate the parameters in the traditional spacial voting model allow one to incorporate theoretical beliefs into model specification that will enhance the ability of researchers to detect other underlying dimensions in congressional voting patterns.

Poole & Rosenthal (1997) and Jackman (2001) indicate that circumstances under which other dimensions will emerge or those instances in which the primary liberal-conservative dimensions does not predict voting preferences. Such circumstances can be debate over civil rights for American minorities that we saw divide the Northern and Southern Democrats in the 1960s (Poole & Rosenthal 1997). Other instances can be debate over interventionist or isolationist foreign policies that can split both political parties (Jackman 2001).

The question before us is how to search for a Latino dimension to voting. Jackman (2001) details in his methods for uncovering an alternate dimension to voting patterns that he used substantive information from votes that were not as accurately explained on the primary liberal-conservative dimension. Such a method, though, will not be as likely to uncover a Latino dimension to roll call voting because it is prone to detect dimensions that divide *both* Democrats and Republicans.

In the debate over civil rights legislation in the 1960s, we saw that such issues were more likely to divide Democrats than Republicans. Since the Democrats are the party in Congress with a “conscience” (Clay 1992) because of their black and Latino members, we might expect that this conscience would be most likely to be raised only within the Democratic Party. That is, the very votes on which the “conscience” of the Democratic Party is raised by its minority members might by the very same votes on which the Republican Party is more unified than ever in opposition.

Therefore, in order to detect a Latino dimension to voting in Congress, I look to votes in which the Democrats are fractured in their voting cohesiveness. I assume that such votes are indicative of another dimension to voting in Congress and assign priors to the Gibbs sampler

in the Bayesian simulations that these particular votes are indicative of this other dimension. Furthermore, I look to votes that divided highly along partisan lines as informative of the first dimension - the liberal-conservative dimension.

Specifically, for my analysis I use all roll call votes in which there was more than 3 percent opposition for 963 votes total. I only look at representatives who had at least a 90 percent attendance record in voting bringing my sample of legislators to 427. To assign priors on the first dimension, I searched for votes in which the Republicans and Democrats were voting in 99 percent opposition to each other. That is, votes in which there was very little overlap between Democrats and Republicans. This generated a total of 9 roll call votes. For those votes I assign priors on the first dimension discrimination parameters of -15 and prior variance of 2. On these same votes, I assign tight priors of 0 and variance of .01 for the second dimension to ensure that these votes discriminate exclusively on the first dimension.

For the priors on the second dimension (i.e., the Latino dimension I hope to find), I searched for votes on which the Democratic representatives were less than 90 percent unified and on which the Congressional Hispanic Caucus was at least 70 percent unified. This generated a sample of 23 votes. On these roll votes I assign tight priors of 0 and variance .01 priors on the discrimination parameters for the first dimension to ensure that these votes discriminate exclusively on the second dimension. On these same votes, I assign priors of -10 and variance 2. I set all other priors for remaining votes and for all legislators' ideal points to vague priors with mean zero and variance 100. The Gibbs sampler sampled from the posterior density of this data to generate 1 million samples. The first half of this sample was discarded as a "burn-in" and only every 2,000th iteration was retained for the final analysis generating a final set of 250 samples upon which my analysis of the dimensions to voting in the 103rd Congress are generated.

Figure 1 shows the distribution of the 1st Dimension of scores. The graph of this 1st dimension legislator ideal points shows a highly bimodal distribution. This distribution strongly corresponds to the well-known liberal-conservative dimension that other researchers have uncovered. In fact, the correlation with these 1st Dimension ideal points and partisan affiliation is a positive .8780, suggesting that similar density plots by partisan affiliation would reveal highly unimodal distributions within each party with Republicans on the right (positive) and Democrats on the left (negative). The corresponding correlations with Black Democrats and Latino Democrats are -.38 and -.19, respectively, suggesting that if the scale taps a liberal-conservative dimensions these scores show that Black Democrats are more liberal than Latino Democrats.

A similar density plot for all legislators' ideal points on the 2nd dimension reveals a tri-modal distribution with a heavy left skew. This graph is displayed in Figure 2. The distribution of second dimension ideal points diverges sharply from the distribution of the first dimension points. The correlation of these second dimension scores with partisan affiliation falls to positive .6429, which generally suggests that Republicans are on the right of this dimension and Democrats are on the left. The corresponding correlations with Black Democrats and Latino Democrats are -.45 and -.25, respectively. Yet the overall distribution we see in Figure 2 compared to the distribution in Figure 1 would suggest that while there is a central tendency to the first dimension, there is a heavy tendency to fall to the right on the second dimension.

Figure 1: First Dimension, 103rd Congress

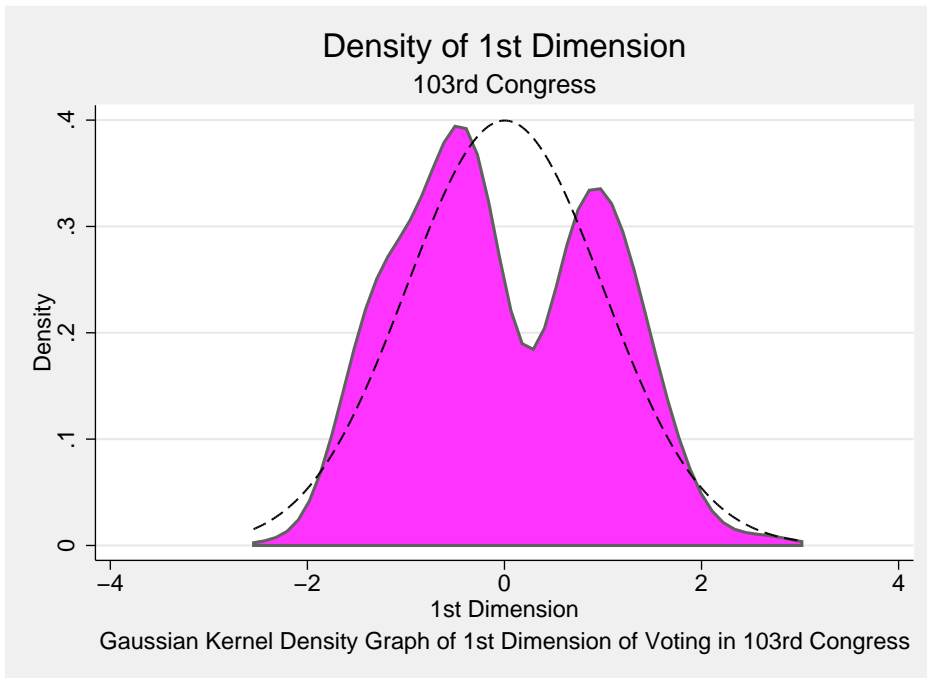
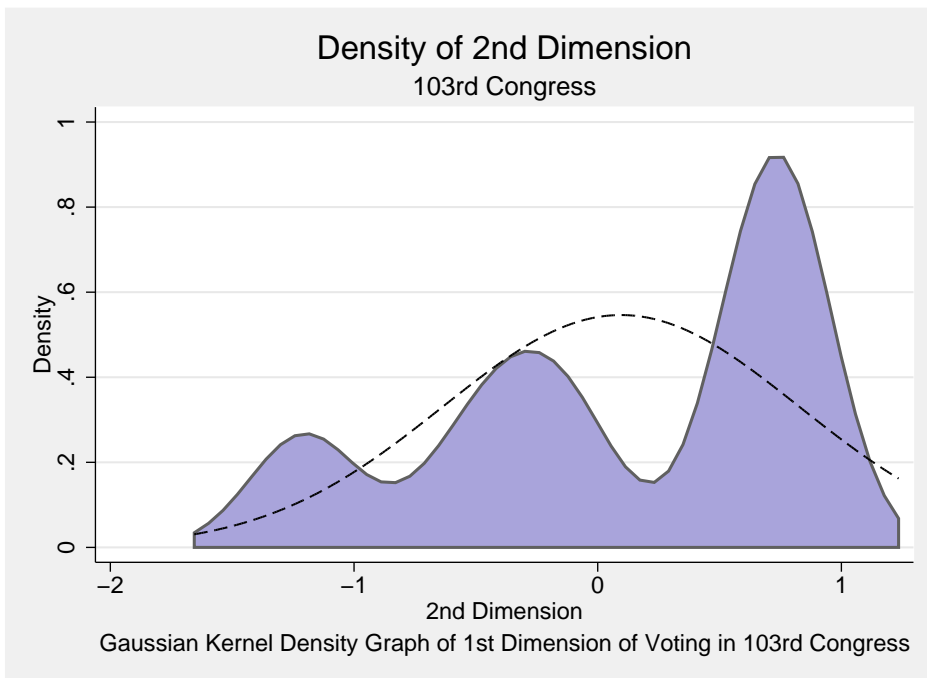
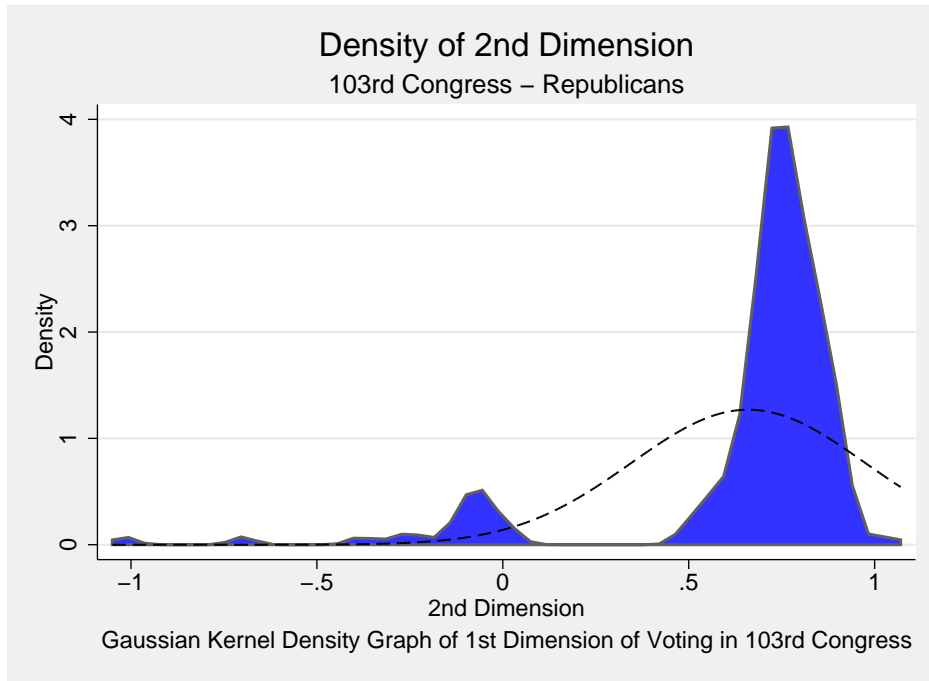


Figure 2: Second Dimension, 103rd Congress



In graphing legislators on this second dimension separately by party, however, we find that this tri-modal distribution is actually driven by the voting patterns of Democratic representatives. Figures 3 and 4 plot the second dimension points for Republicans and Democrats, respectively. We see that the distribution of Republican ideal points on this second dimension is highly unimodal with the majority of Republicans clustering to the far right of this scale. In effect, we find that on this second dimension, Republicans are strongly unified, while Democrats appear to cluster into three distinct groups with the majority of Democrats positioning themselves on the middle of this scale.

Figure 3: Second Dimension, 103rd Congress - Republicans



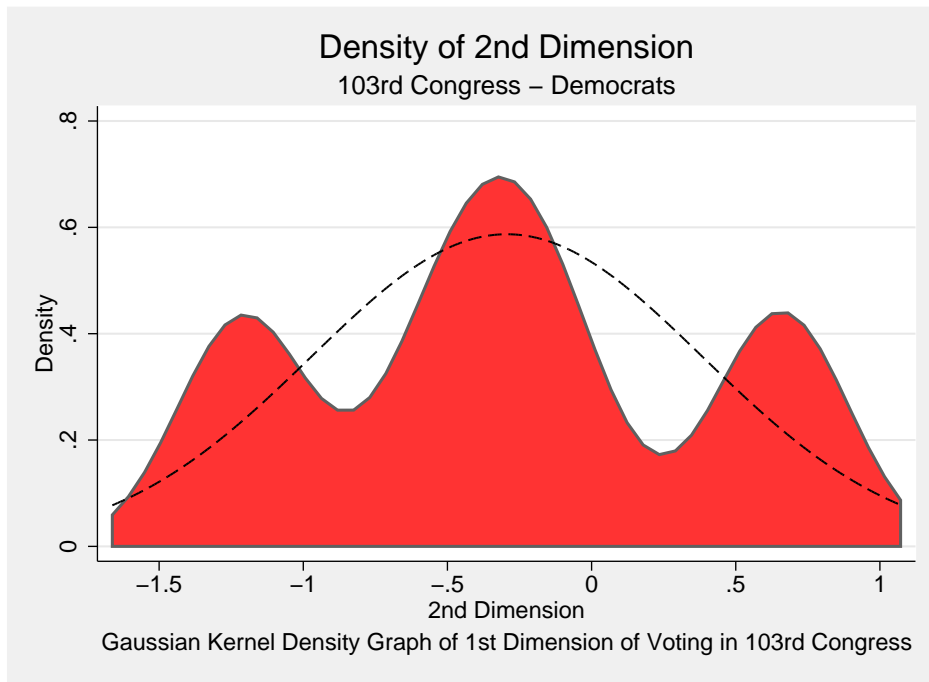
In aligning Figures 3 and 4 what we, in effect, see is that about a quarter of Democrats can be considered “Republicans” on this second dimension that I modeled to tap a Latino dimension to voting. There are only a small handful of Republicans who can be classified as “Democrats” on this scale. Some interesting questions are who are these representatives atypical of their fellow party members and why do they vote the way they do? While not fully answering that question in this paper, in Table 4 I list those Republicans to the left of most of their fellow party members - specifically with scores less than 0.5 on this second dimension. Notice of these 19 representatives, two of them are three of the Latino Republicans serving in Congress at the time. Bonilla (R-TX), the other Latino Republican, had a second dimension of 0.7, which is right at his party’s average.

In Table 4 I list Democrats who are to the far left (bottom one percentile) on the second dimension. That is, if this second dimension does tap a “Latino dimension” these representatives would be the most Latino friendly representatives. Conversely, in Table 4 I “unhood” those Democrats on the opposite end of this dimension. Notice that no members of the

Table 1: Republicans to the Left on Second Dimension

Representative	State
Bentley	MD
Bereuter	NE
Cox	CA
Diaz-Balart	FL
Doolittle	CA
Gilman	NY
Grandy	IA
Hefley	CO
Hoke	OH
Horn	CA
Hyde	IL
Inglis	SC
Morella	MD
Porter	IL
Regula	OH
Rohrabacher	CA
Ros-Lehtinen	FL
Smith	NJ
Smith	MI

Figure 4: Second Dimension, 103rd Congress - Democrats



Congressional Hispanic Caucus are on the far left of this dimension, while there are three members of the Congressional Black Caucus with this small group of representatives.

## 5 Conclusion and Future Frontiers

The analysis presented herein is far from complete. One of the motives for this piece was to demonstrate that methods that seem devoid of any focus on issues of race and politics can be used by scholars interested in such issues to uncover findings overlooked by many scholars whose primary focus is more in the development of such methods.

It was my attempt here to apply such recent developments in the estimation of the spatial voting model to look for new patterns in congressional voting that others may overlook. The increasing importance of Latinos and their representation calls for a stronger drive by scholars interested in these issues to utilize these new advancements to keep other researchers in political science that such issues maintain importance and will only increase in importance.

The preliminary findings confirm what other scholars have already known for a long time about congressional voting patterns - the parties reign supreme. Many with more of a substantive rather than methodological interest in voting and representation have always strongly held to the belief that more than one dimension to decision making exists in Congress as (Clausen 1973) noted many years earlier. It is those with more substantive interests in voting, race, and representation then who should strive to apply their substantive theoretical focus to the advancement and modification of those methods they doubt.

Table 2: Democrats to the Left on Second Dimension

Representative	State
Andrews	ME
Brown	FL
Brown	CA
McDermott	CA
Olver	MA
Owens	NY
Payne	NY
Rostenkowski	IL
Sabo	MN

Table 3: Democrats to the Right on Second Dimension

Representative	State
Condit	CA
Danner	MO
Darden	GA
Deal	GA
Lancaster	NC
Parker	MS
Sisisky	VA
Skelton	MO

In the results presented here, I made an initial attempt to uncover an alternate dimension to the liberal-conservative dimension. It remains to be seen how much this second dimension explains patterns in congressional voting and how distinctive it is from the first dimension. Furthermore, the results here should not suggest that this is the only alternate dimension to search for. Future work ought to take the new developments in spatial voting model estimation to once again examine the questions over dimensionality in congressional voting, and see whether the second dimension I uncover here is less significant than other dimensions.

In future work, these results will incorporate goodness-of-fit measures to answer these concerns. Furthermore, in order to return to the substantive focus on race and representation, I will also examine the substance of the legislation that is more accurately being explained in the second dimension than in the first, as well as verify that those bills that use as my priors in the Bayesian simulations are not, in fact, driving my findings. And more importantly future work will tie this findings to the “electoral connection”. Namely, to what extent are these second dimension scores being driven by characteristics of representatives, their districts, and the electoral environment?

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