

The Power of the Lower South: A Multidimensional Analysis of the Philadelphia Convention*

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Abstract

Despite a widely held belief that delegates from the Lower South succeeded at the Constitutional Convention as extremists, we argue that delegates from the Lower South were more often successful when their interests were mainstream. Our argument proceeds using a two dimensional map of delegate preferences at the Constitutional Convention, estimated using a new dataset on delegate votes, multiple imputation, and optimal classification. We argue that states closer to the center of a vote – measured by the average distance of a delegation to the nay-side, bloc median line – was more likely to be on the winning side than a delegation less mainstream. We establish this relationship using regression analysis then apply it to two substantive issues, one where the Lower South succeeded and the other where it largely failed.

1 Introduction

What the Lower South (South Carolina and Georgia) achieved at the Constitutional Convention is quite surprising. The Constitution initially prohibited a ban on the slave trade until 1808, it guaranteed fugitive slaves would be returned to their masters, and it prevented export tariffs.¹ It also provided a louder voice for the Lower South in the U.S. House of Representatives by including three-fifths of slaves in the apportionment of the House. The latter agitated northerners and later lead extreme New England Federalists, such as Timothy Pickering and William Plummer, to propose succeeding from the union (McDonald 2000, 61).

The Lower South states of South Carolina and Georgia were dependent on slaves, imported from Africa, for indigo and rice production that was largely exported to the West Indies. Slaves in these states were roughly half the population. Other southern states were more heavily invested in tobacco with slaves closer to a third of their populations. Other than New Hampshire and Massachusetts, no two state coalition voted together more often than the Lower South, which might explain why McDonald (1958) and Jillson and Anderson (1978) treat them as a regional bloc.

Despite the widely accepted view that the Lower South was more successful at the Constitutional Convention than their position warranted, delegates from the Lower South were less successful at getting their motions passed than northern delegates and no more likely to be on the winning side of a vote.² Delegates from five of the twelve states attending the Convention made 78% of the recorded motions: Connecticut, Massachusetts, Pennsylvania, Virginia, and South Carolina. Among those states, South Carolina was clearly the least

¹In per capita figures, southern exports were roughly twice the size of northern exports, giving the South, especially the Lower South, a strong interest in prohibiting export taxes.

²Treating Delaware northward as the North, the Lower South passed 35% of its motions compared to 41% for the North across the 397 roll call in our dataset (described later) – though the difference is not statistically significant. Furthermore, the average state from the Lower South was on the winning side of an issue on 75% of the votes, while the average state from the North was on the winning side on 76% of those votes.

successful, getting only 33% of its motions passed while the other four succeed at least 43% of the time. Was the Lower South as successful as the traditional narrative suggests? And if so why did it succeed and why did it fail?

This paper attempts to answer those questions by estimating a two-dimensional map of the relative preferences of the 55 delegates at the Constitutional Convention using a new dataset of delegate votes (Dougherty and Heckelman 2012), multiple imputation, and optimal classification. The recovered dimensions reflect delegate preferences for centralization and sectional issues. We claim a state closer to the center of a vote was more likely to be on the winning side (more likely to vote yea if the proposal passed or nay if the proposal failed). We measure a state's centrality as its distance to the nay-side, bloc median line. Roughly speaking a bloc median line divides the space so that half of the delegations are on each side. With an even number of delegations there are typically two bloc median lines and the one on the side of the status quo is on the nay side.³ With perfect spatial voting,⁴ delegates on this line must give their consent in order for the vote to pass.

To establish this relationship, we run three regressions. The first relates whether the Lower South is on the winning side of a vote to its centrality on the issue. The second examines a similar relationship for Pennsylvania and Virginia as a comparison. Both suggest that centrality increases the chance of success, with some interesting nuances for the Lower South. The third regression, analyzes the relationship between the Lower South winning and the trajectory of the vote. It suggests the Lower South was more likely to succeed on votes that protected states rights and favored the South or strengthened the national government and favored the Northern arm of the large state coalition. It was less likely to be on the winning side of a vote if it appealed to purely sectional preferences. We then show how our

³More accurately, if one were to draw an arrow from the proposal to the status quo, the arrow would point toward the nay side of the space and the bloc median line on that side would be the nay-side bloc median line.

⁴Perfect spatial voting implies that 1) delegates vote sincerely (i.e., vote for the alternative closer to their ideal point), and 2) they vote without error (Poole 2005). The error assumption is relaxed during ideal point estimation.

theory might explain the Lower South's success on votes related to export tariffs while it failed on many votes related to apportionment.

Because the Congress of the Confederation largely created policy, not new institutions, it could not appeal to preferences on the strength of the national government, which may explain why the Lower South partially succeeded at the Constitutional Convention when it continually failed in the Congress of the Confederation. Such an explanation differs from the traditional account of northerners conceding to the will of extremists (Davis 1977; Riker 1987; Kaminski 1995; Beeman 2009).

2 Background: The South in Congress and the Grand Convention

Regional divisions between the North and South slowly formed in the Congress during the Articles of Confederation (Jillson and Wilson 1994). Northern and Southern states differed over issues related to the debt, the issuance of additional requisitions, and international trade. These tensions climaxed in 1786 when John Jay, the Secretary of Foreign Affairs, asked Congress to clarify its instructions about a treaty he was negotiating with Spain. Spain blockaded American ships from the mouth of the Mississippi River, inhibiting southern commerce. At the same time, Northerners wanted Jay to negotiate a commercial agreement with Spain that advanced their economic interests. Jay asked Congress whether it would forgo navigation of the Mississippi for a period of twenty-five to thirty years if he could close the commercial part of the deal for the North. Southern delegates were outraged. After a bitter debate, Congress repealed Jay's earlier instructions to protect the Mississippi River in a vote of seven states to five, opening up an avenue to surrender Southern interests in favor of Northern ones. All seven Northern states voted in favor of the proposal and all five

Southern states, Maryland southward, voted against.⁵ The vote illustrated why the South would continuously lose if decisions were made along purely sectional lines.

Jillson and Wilson's (1994) multidimensional scaling of delegate votes in the Congress of the Confederation illustrates the polarization in Congress at the time. Sectional issues were so dominant in 1786 and 1787 that Congress divided itself into two disjoint clusters, a northern cluster and a southern one, along the primary dimension of voting. Votes on the Jay Treaty ran straight across the dimension, leaving southern states at the mercy of the North.

2.1 Voting Rules and Coalitions

Both the Congress of the Confederation and the Constitutional Convention voted using state blocs, with each state delegation casting one vote. The size of each state delegation varied depending upon the number of delegates each state appointed. When an issue was raised, the position of each state was determined by a majority of its delegates. In the event of a tie, the state's vote was recorded as divided. Unlike bloc voting in the Congress of the Confederation, a motion passed at the Constitutional Convention if more states voted yea than nay and a quorum of seven states was attained. In the Congress of the Confederation, minor issues passed with seven affirmative votes (a majority of the states) and major issues passed with nine affirmative votes (three-fourths of the states).

It should be no surprise that the system did not favor southern states, particularly states from the Lower South. Northern states consistently held a majority of the state votes in both Congress and the Constitutional Convention. If we categorize Delaware northward as northern states, then eight of the confederation's thirteen states were northern and five were southern. Even though Rhode Island did not send a delegation to the Constitutional Convention and New York and New Hampshire were never on the floor at the same time, the North still outnumbered the South six states to five at the Convention. What is surprising

⁵Delaware did not attend.

is at the same time that the South was failing in Congress, it seemed to succeed at the Constitutional Convention. Certainly, the loss of two northern states helped the Lower South.

The dominant explanation for the success of the Lower South at the Convention seems to be that the North made compromises with the Lower South to keep it committed to the development of a new constitution (Davis 1977; Riker 1987; Kaminski 1995; Beeman 2009). The nineteenth century abolitionist William Lloyd Garrison described the relationship as an “unholy alliance” because it led to the protection of the slave trade and prevented the nation from abolishing slavery. William Riker (1987), a prominent political scientist, agreed that Northerners made concessions for the South to help attain the supermajority of states required for ratification. Although this may explain a number of key votes, like the alleged vote trade between the delegates from South Carolina and Connecticut over the requirement of a two-thirds majority to pass navigation acts in exchange for a protection of the slave trade (Hutson 1987a; McGuire 2007), we argue that concessions are not the whole story. Like Jillson and Wilson (1994), we find one of the major issues of conflict at the Convention was sectional. The other was over the strength of the national government, Aldrich’s (1995) “great principle.” Different delegates represented the states at the Constitutional Convention than in the Congress of the Confederation and these delegates faced institutional decisions, where the strength of the national government was at stake. When the Lower South was extreme at the Constitutional Convention, it typically lost, as it had done in the Congress of the Confederation. When it won sectional issues, the issue was typically tied to the relative strength of the national government, making the Lower South more mainstream. The Lower South’s ability to tie issues to preferences on the strength of the national government may explain why it succeeded at the Convention while it failed in Congress.

3 A Spatial Map of the Convention

To illustrate our argument, we first estimate a two dimensional map of delegate preferences using a 55 by 397 matrix of votes (Dougherty and Heckelman 2012) and optimal classification (Poole 2000, 2005). The vote matrix includes 4,026 yea or nay positions across all substantive roll calls at the Convention, where the position of at least one delegate could be inferred on both sides of the issue.⁶ Forty-eight of these roll calls were unnumbered in the journal. To the best of our knowledge, this paper is the first to use this information to provide a multiple dimensional study of the Constitutional Convention and a full-scale study of what made the Lower South successful.

Because delegates wanted to maintain secrecy at the Constitutional Convention in order to promote more candid discussions, the convention journal and Madison's notes recorded the vote of the state blocs, but rarely recorded the votes of individual delegates. This practice has hampered the ability of scholars to analyze the voting behavior of delegates at the Convention (Gibson 2007). In order to distinguish among individual delegates, the position of each delegate on individual roll calls must be inferred.

Dougherty and Heckelman (2012) inferred delegate votes in three steps using a process similar to McDonald's (1958). First, by the rules of the Convention, the position of each state (yea, nay, or divided) was determined by a simple majority of the state's delegates. Hence, if there were only two delegates attending from a state and the state voted yea (nay), both delegates were coded yea (nay). Delegates who motioned or seconded a motion were also coded as yeas. Second, they inferred additional delegate votes using statements made by the delegates in the notes of James Madison, Robert Yates, Rufus King, and others (collected in Farrand 1966). Statements from personal manuscripts and speeches published in Farrand's (1966) volume 3 or the supplement (Hutson 1987b) were also used if they

⁶Vote 168 and 475a were dropped from our estimates because we required delegates to have a minimum of ten votes to be included. Less than 10 codes were inferred for James McClurg (VA), the sole dissenter on vote 168, and Thomas Fitzsimons, the sole dissenter on vote 475a.

could be tied to a particular roll call on a particular day. For example, Luther Martin (MD) was coded as voting no on vote 368, a motion to prevent the federal government from interfering with the slave trade until 1808, because he explicitly said he voted against the clause in a letter to his general assembly. He made statements consistent with that coding during the Convention’s debates (Farrand 1966, 2:364, 3:211-12). Third, after the positions of the delegates were recovered, attendance records were re-consulted to determine whether additional delegate votes could be inferred from the state’s vote and the fact that each state’s vote was determined by a majority of its delegates. For example, Maryland was recorded as a yea on vote 368. Because John Mercer was absent and Luther Martin was coded as nay, the three remaining Maryland delegates, Daniel Carroll, Daniel of St. Thomas Jenifer, and James McHenry, must have voted yea in order for a majority of the Maryland delegation to vote yea. See Dougherty et al. (2012) and Heckelman and Dougherty (2013) for a more thorough description of their data recovery project.

We estimate delegate preferences using this data, multiple imputation, and optimal classification (Poole 2000). Optimal classification unfolds binary data using a non-parametric procedure which first estimates an optimal cut line for each vote, then optimally classifies voters in the regions formed by the cut lines.⁷ The process is then iterated until the number of classification errors are minimized – i.e. the number of times an ideal point for a delegate voting yea (resp. nay) on the nay side (resp. yea side) of a cut line is the smallest. The resultant scaling places those who voted similarly more closely together than those who voted more dissimilarly. Unlike ADA or ACU scores, there is nothing in the procedure that defines the recovered dimensions *ex ante*. Instead, the substantive content of each dimension must be interpreted *ex post*. This allows the researcher to “learn” what the voting pattern implies rather than to force a scale on the dimensions.

⁷A cut line demarcates the space between individual who prefer the status quo and individuals who prefer the proposal on any pairwise vote. With Euclidean preferences, assumed here, the cut line is perpendicular to a line connecting the proposal and the status quo and it intersects such a line at its midpoint.

To prevent delegates with only a few votes from affecting the location of the cut lines, we excluded delegates with 10 or fewer inferred votes from the optimal classification routine. Of the 55 delegates at the Convention, 42 had more than 10 votes. Among them, five had between 12 and 20 inferred votes and five others had more than 200 inferred votes. The average roll call had only 10.3 ye or nay codes.

Because there are many missing observations in the roll call matrix, a skree plot of the double-centered agreement score matrix does not help us determine the appropriate number of dimensions (Poole 2005, p. 151). Instead, we have to consider other measures. See Rosenthal and Voeten (2004) for a similar problem. One method is to compare the aggregate proportional reduction in error (APRE) for each additional dimension. *Ex ante*, APRE scores must increase with each additional dimension (similar to an R^2 increasing with each additional independent variable). Hence, one would not attempt to maximize the APRE. Instead, a researcher would select the appropriate number of dimensions based on improvements in the APRE. In our case, a one dimensional scaling has an APRE of .551, a two dimensional scaling has an APRE of .758, and three dimension scaling has an APRE of .892. Because the APRE of the scaling improved by 38% going from one to two dimensions, but only by 18% going to three dimensions, we decided that two dimensions adequately scales the votes. Two dimensions correctly classifies 92.6% of the 4,102 choices. That is, it correctly puts the 43 delegates on the ye or nay side of the cut line 92.6% of the time there is a ye or nay vote. Three dimensions correctly classifies only 96.7% of the votes. Using the votes recorded for the state blocs alone, Pope and Treier (2012) argue that the Convention could be scaled with two or three dimensions but decided to proceed with two, as done here.⁸

The estimated locations of the 42 delegates are depicted with solid markers in Figure 1. The location of delegates from the Southern states are depicted by gray triangles while delegates from Northern states are depicted by blue circles. One of the insights of the scaling

⁸Keep in mind that higher dimensional votes are not lost in the scaling. They are simply scaled along with the other votes on the reported dimensions.

is that it provides a glimpse of the major underlying issues at the Convention. Scholars have hypothesized a variety of dimensions for voting at the Constitutional Convention including issues related to apportionment, localism-nationalism, and separation of powers (Londregan 1999; Jillson 2002; Pope and Treier 2012). Any combination of these dimensions, or another, could be recovered.

[Figure 1 here]

The first dimension in our scaling appears to be localism–nationalism, which reflects the classic dichotomy between those who wanted a stronger national government and those who wanted to protect the sovereignty of states. Heckelman and Dougherty find localism-nationalism to be the primary dimension of conflict in their single dimensional scaling of the same votes. Our first dimension is correlated with theirs at .936, suggesting that localism-nationalism might be the most accurate description. Delegates who were known for their localist stances, such as Elbridge Gerry, John Lansing, Luther Martin, and Robert Yates, are on the left side of the figures, while some of the Convention’s most ardent nationalists, Alexander Hamilton, James Madison, George Read, and James Wilson are on the right. Because other issues may correlate with this dimension, the label should not be interpreted as solely measuring preferences for centralization.

[Figure 2 here]

For example, the first dimension also seems to capture the small state coalition on the left and the large state coalition on the right. This is easily seen in Figure 2. This figure denotes the location of each state’s median(s) assuming all 53 delegates attended and voted solely based on the first dimension. Five of the six states in the large state coalition appear on the right: Massachusetts, Pennsylvania, Virginia, South Carolina, and Georgia.⁹ The only state that appears “out of position” is North Carolina, which voted with the large state coalition

⁹Georgia voted with the large state coalition because it anticipated large population growth relative to the other states (Beeman 2009).

but appears on the left. New Hampshire may *seem* misplaced, but its delegates did not attend the Convention until July 23 – well after most of the small-state and large-state differences were resolved. Put differently, we may accurately label the first dimension as capturing localist and nationalist tendencies, but that does not mean the dimension captures localism and nationalism exclusively. It appears to capture the small-state vs large-state divide as well, which others have treated as a separate dimension (Pope and Treier 2012). The fact that votes on apportioning the U.S. Senate typically ran roughly parallel to this dimension reinforces our claim.

The second dimension appears to show variation among the delegates over sectional issues, with the North at the top of the figure and the South at the bottom. The pattern is easily discernable from the solid gray triangles for the South and the solid blue circles for the North. With the exception of Elbridge Gerry, at the lower middle of the figure, and some overlap of Northern and Southern delegates at the center of the figure, the distinction between Northern and Southern delegates is quite clean. Lower South delegates such as John Rutledge and Charles Cotesworth Pinckney are near the bottom-right of the figure, while Gouverneur Morris and James Wilson, who openly confronted the South on issues of slavery, are shown near the top. Although few “empirical studies” have identified sectional differences as one of the major dimensions of conflict at the Convention,¹⁰ sectional differences have been repeatedly stressed by historians (Davis 1977; Kaminski 1995; Beeman 2009), they were a major dimension of conflict in the Congress of the Confederation (Henderson 1974; Jillson and Wilson 1994), and they are consistent with Madison’s claim that “the great division of interests ... did not lie between the large & small States: it lay between the Northern and Southern” (Farrand 1966, 1:486).

Our scaling quantifies the relative distances between delegates and allows us to address more fine-grained questions about the Convention. While it is well known that Luther Martin and James Madison held very different views, our scaling quantifies the extent of

¹⁰For an important exception see Jillson and Anderson (1977)

their disagreement. For example, the distance between Martin and Madison is more than twice the distance between Martin and his co-delegate Daniel of St. Thomas Jenifer. The scaling also helps us locate lesser known delegates like John Blair and William Davie, who appear in the center of the figure.

To get the 13 excluded delegates back into the figure, we imputed additional votes using multiple imputation (Little and Rubin 2002), put the 13 delegates into the mesh using both their observed and imputed votes, then averaged the location of each delegate across their various imputations and reported the average. The procedure was designed to keep the cut lines and ideal points from the original 42 delegates fixed and to make the 13 delegates adjust to those positions. More specifically, we imputed delegate votes using the MICE package in R and a 55 by 1, 203 matrix, which included 397 delegate votes, 397 state votes, 398 measures of missingness, and 11 covariates.¹¹ Including a large number of variables is typical for such models, and the variables predicting missingness help address the assumption that our data is not missing at random (van Buuren and Groothuis-Oudshoorn 2011). For each imputation, we restricted the predictor matrix so that each delegate’s imputed vote was only affected by the vote of *his* own delegation on the same roll call and the size of *his* delegation on the same roll call, as well as his full sets of votes and covariates. Because predictive mean matching, the method we used to impute votes, restricts imputations to observed values, the process

¹¹The 398 measures of missingness included the total number of statements made by a delegate per days they attended and 397 variables indicating the total number of members from their delegation present on each roll call. Presumably, Dougherty and Heckelman (2012) were less likely to code a delegate if they had a larger delegation present. The 11 covariates included (1) the number of previous years a delegate had in executive service (Heckelman and Dougherty 2013), (2) the number of previous years a delegate had in legislative service (Heckelman and Dougherty 2013), (3) the number of previous years a delegate had in judicial service (Heckelman and Dougherty 2013), (4) whether the delegate was an Anti-Federalist (Riker 1987), (5) whether the delegate had professional banking experience (Garraty and Carnes 1999), (6) the percentage of monetary requisitions paid by a delegate’s state (Dougherty 2001, 95), (7) the number of slaves within a delegate’s state (United States 1989), (8) whether the delegate was a merchant (Garraty and Carnes 1999), (9) whether the delegate was a member of the clergy (Garraty and Carnes 1999; and Wright and MacGregor 1987), (10) the distance of the delegate’s home to navigable water (McGuire 2003), and (11) whether the delegate came from the South. Heckelman and Dougherty (2013) used variables 1 through 7 to explain whether a delegate was a localists or a nationalist and found each significant. We found these variables, and variables 8-11, to be significantly related to one of our optimal classification dimensions either as one of many independent variables or alone.

tends to impute votes only for roll calls with a large number of observed yea or nay codes. In our case, the method imputed votes for only 33 of our 397 roll calls – the same roll calls for each imputation. After votes were imputed for all delegates on the 33 roll calls, we removed votes imputed for delegates who did not attend. This prevented us from assigning a yea or nay position to someone who was not there. Because William C. Houston (NJ) and George Wythe (VA) attended only the first two weeks of the Convention, the technique imputed only one addition vote for each. As a result, we drop both delegates from the remainder of the analysis. Because they voted on less than 4% of the votes in our data and the roll call mesh was fixed prior to imputation, this decision has almost no affect on our results. Among the remaining 11 delegates, our multiple imputation procedure, with deletions for non-attendance, produced an average of 29 yea or nay codes per delegate with Pierce having the least, 12 codes, and Fitzsimons having the most, 39 codes.

We ran the imputation procedure 40 times. For each imputed matrix, which now contains a combination of imputed and observed votes, we placed the excluded 11 delegates (13 minus Houston and Wythe) into the roll call mesh using Poole’s legislator procedure. This procedure positions a delegate in a fixed classification region that minimizes the delegate’s classification errors. We then identified the five imputations which minimized total classification errors and created five locations for each of the 11 delegates (one location for each of the five best sets of imputed data). We then reported the average location for each of the 11 delegates across the five imputations as their ideal point. The locations are marked in Figure 1 by hollow blue circles for northern delegates and hollow gray triangles for southern delegates.

The positions fit the imputed data well. The average percent of correctly classified votes ranged from 74% for Blount (NC) to 93% for McClurg (VA), with an average of 81% for the eleven voters.¹² Furthermore, delegates like George Clymer (PA) and Robert Morris (PA),

¹²The number of classification errors in the average location cannot be calculated because there is not a set of imputed votes associated with the average location. Instead, we report the average classification errors for each delegate across imputations used in the average.

who are known for their nationalistic stances, appear toward the right of the figure, while delegates like William Pierce (GA) are correctly placed among delegates from the Lower South – providing some face validity for the imputed locations. As an additional measure of fit we calculated how each state would vote if delegates vote based on their side of the cut line, then compared the predicted votes for each state to the observed votes for each delegation. Our model correctly predicts 73% of the yea or nay votes recorded for each state. A Bayesian IRT model produced similar distributions of ideal points for the delegates but had other limitations.¹³

4 Theory: Distance from the Center

We now use this scaling to calculate “bloc median lines” for each roll and to determine whether an actor’s success is related to his distance from the nay-side, bloc median line. Recall that in a single dimension with N voting individuals (N odd) and Euclidean preferences, an alternative at the median voter cannot be defeated using pair-wise majority rule (Black 1948; Hinich and Munger 1997). Furthermore, any status quo that is not at the median can be defeated by a proposal closer to the median. With perfect spatial voting, the median voter is always on the winning side of the issue because his/her vote is necessary for a motion to pass.

In two dimensional space, the conditions for equilibrium are quite rare (Plott 1967; McKelvey 1976). Nevertheless, we can use the concept of a median line to help us predict whether a proposal will pass. Any straight line L partitions the set of ideal points into three subsets: those that lie on one side of L , those that lie on the other side of L , and those that lie on L itself. A median line partitions the set of ideal points so that no more than half of the ideal

¹³Our Bayesian IRT model includes many of the same covariates in the prior for all 55 delegates. Like any Bayesian model it imputes missing votes conditioned upon prior distributions, covariates, and observed data. The ideal points of our Bayesian and OC estimates were correlated at at least .83 for each dimension respectively. We did not report our Bayesian IRT because the covariates pushed many of the cut lines to the edge of the space. The procedure we develop avoids such issues.

points lie on either side (Davis et al. 1972; Godfrey et al. 2011; Miller 2014). Suppose there are two alternatives (the status quo q and the proposal p). The median line associated with (q, p) has properties *somewhat* similar to median points in unidimensional space. For any (q, p) , the median line associated with (q, p) is the median line perpendicular to line segment \overline{qp} . The alternative that wins a majority vote between q and p depends on the relationship between median line and the cut line.¹⁴ If the median line lies on the p side of the cut line, a majority of ideal points will lie on that side of the cut line and p will beat q ; if the cut line lies on the q side of the median line, then q beats p . Moreover, if the \overline{qp} trajectory is fixed, then every point *off* the median line is beaten by a point *on* the median line.

[Figure 3 here]

The idea is illustrated for seven voters in Figure 3.A. The median line M is perpendicular to the line segment \overline{qp} and has the same number of voters above and below it. In general, whichever alternative, q or p , is closer to M will be favored by the η voter(s) on the median line and the $(N - \eta)/2$ voters on one side of the line (below M in this case), giving the closest alternative at least a bare majority in the pairwise contest. In Figure 3.A, M is closer to q than it is to p , so q will win *at least* the votes of $\{A, D, E, F\}$, which is a majority of seven.¹⁵

If the number of voters are even and ties are decided in favor of the status quo, then there are usually two median lines associated with any (q, p) . Each line partitions the set so that no more than half of the ideal points are on one side. Figure 3.B shows such a case for six voters. In this case, there are four voters below line M_1 inclusive, $\{A, D, E, F\}$, and four voters above M_2 inclusive, $\{F, A, B, G\}$. Both lines demarcate a minimum majority of ideal points, including the points on the line. If one of the two alternatives (q or p) are closer to both median lines, then that alternative will win a majority. If one alternative is closer to one median line while the other alternative closer to the other median line, then the status

¹⁴Recall that a cut line is perpendicular to \overline{qp} and intersects \overline{qp} at exactly half the distance between q and p .

¹⁵In this case, q also gains the votes of B, G , and perhaps C .

quo will prevail. In Figure 3.B the status quo is closer to both median lines so the status quo wins.

4.1 Bloc Median Lines

The concept of a median line can be extended to bloc voting, the process used at the Convention, by finding the line(s) perpendicular to \overline{qp} that demarcate the smallest majority of states in the space. We will call these lines “bloc median lines” to differentiate them from median lines. A bloc median line can be found by projecting ideal points onto any line parallel to \overline{qp} (the normal vector line is one such line with the additional property of intersecting the origin), calculating the median of each state’s projection, and determining the median of the state medians.¹⁶ With an even number of state delegations, there are typically two bloc median lines. Figure 3.C depicts an example with seven voters divided into two state delegations: $state_1 = \{A, B, C\}$ and $state_2 = \{D, E, F, G\}$. Given the \overline{qp} trajectory, B is the median of $state_1$ and E and F are the medians of $state_2$. The bloc median lines intersect points B and F , as shown by M_1 and M_2 in the frame.¹⁷ A majority of state medians are below M_1 inclusive and a majority of state medians are above M_2 inclusive.¹⁸ In general, if one of the alternatives, q or p , are closer to both bloc median lines than that alternative will win at least at least a bare majority of states. If one alternative is closer to one bloc median line while the other alternative is closer to the other bloc median line, then the status quo will prevail. The calculation of the bloc median line becomes more complicated if states near

¹⁶See Poole (2005) for applications of projection lines and normal vectors to non-bloc voting.

¹⁷The algorithm we use to identify the bloc median line simplifies to 1) projecting ideal points onto the normal vector line, 2) treating even sized delegations as having a left and a right state median, 3) treating odd sized delegations as having two medians (the same value for the left as for the right), 3) ordering state medians from smallest to largest, and 4) identifying the state medians in the $(2n + 2)/2$ and $2n/2$ positions, where n is the number of states attending and $2n$ is the number of median positions across states.

¹⁸Recall, a proposal passes at Convention if and only if 1) a quorum of seven states is met, and 2) more states vote yea than nay. Ignoring the quorum requirement, M_2 intersects point F , rather than point E , because any q between M_2 and a parallel line through E would be defeated by a proposal on M_2 . Such a proposal would attain a favorable vote from $state_1$, a divided vote from $state_2$, and pass by a simple majority of states.

the center of the projection overlap, making it quite possible, indeed likely, that delegates on the bloc median lines will come from different states.

It is important to keep in mind that different angles of \overline{qp} can affect the location of the bloc median line(s). With large variation in attendance, the bloc median line(s) can vary on a fixed \overline{qp} trajectory. Hence, we should not conclude that a status quo between any two bloc median lines is in some type of equilibrium. Such status quos are usually vulnerable to proposals made on different trajectories or proposals made with different delegates attending, consistent with McKelvey's (1976) well known theorem.

4.2 Distance to the Bloc Median Line(s) and Success

We now try to explain why states closer to the bloc median line on the *nay side of the vote* are more likely to be on the winning side of an issue than states farther from this line. Consider a delegate who's ideal point is on the bloc median line on the nay side of the space. With perfect spatial voting, the delegate(s) who's ideal point intersects the nay-side, bloc median line will always be on the winning side of a vote. To see this, consider Figure 3.D, ignoring the three points for the moment. In this example, the yea side of the vote is top-right. If M_1 and M_2 were the bloc median lines, M_2 would be the *nay-side, bloc median line* because it is closer to the nay side of the space. The cut line could be in one of three regions: above M_1 , between M_2 and M_1 inclusive, or below M_2 . Lines C_1 , C_2 , and C_3 denote various locations for the cut line. If the cut line is above M_1 (as is the case for C_1), then both bloc median lines will be on the nay side of the vote, the status quo will prevail, and the ideal points on M_2 will be on the winning side of the vote (the nay side). If the cut line is between M_2 and M_1 (as is the case for C_2), then delegates on the two bloc median lines will split their votes, the status quo will prevail, and the ideal points on M_2 will be on the winning side of the vote (the nay side).¹⁹ If the cut line is below M_2 (position C_3), then both bloc median lines

¹⁹Note, ideal points on M_1 will be closer to the proposal and be on the losing side of the vote. This is why we focus on the nay-side, bloc median line rather than the yea-side, bloc median line.

will be on the yea side of the vote, the proposal will pass, and the ideal points on M_2 will be on the winning (yea) side of the vote. In all three cases, the delegates with ideal points on M_2 will be on the winning side.²⁰ The case where the yea side of the vote is below the cut line can be analyzed similarly.

If delegates *on* the nay-side, bloc median line are always on the winning side of a perfect spatial vote, then it stands to reason that delegates closer to the nay-side, bloc median line are more likely to be on the winning side than delegates farther away. In Figure 3.D, for example, delegate X is closer to M_2 than delegates Y or Z . If a potential cut line started at M_2 and moved continuously in a parallel fashion down and to the left of M_2 (not shown), X would be on the same side of the cut line as M_2 for most of these cut lines, making it on the winning side most of the time. The cut line would have to be moved considerably further down and to the left for Z to be on the same side of the cut line as M_2 (i.e., for Z to win). If, in contrast, the cut line moved in a parallel fashion up and to the right of M_2 , X would always be on the same side of the cut line as M_2 , meaning it would always be on the winning side. Y would be on the opposite side of the cut line (i.e. losing) for many of the parallel cut lines, except those that passed through Y or were further top-right from it. It is for this reason that the distance of a delegate to the nay-side, bloc median line should be associated with a delegate's success. Without knowing the exact location of q and p , delegates closer to that line would be more likely to win than delegates farther away from that line. Closer delegations should be more likely to win as well.

4.3 Observed Distance and Success

A quick glance at Figure 1 suggests that delegates like William Davie (NC) or Daniel Carroll (MD) are near the center of the space. This makes them mainstream on almost any vote. Other delegates, like John Dickinson (DE) or Charles Cotesworth Pinckney (SC) are not in

²⁰Suppose the status quo were between M_1 and M_2 , but M_2 was closer to p than to q . In this case, M_1 would be the nay-side, bloc median line, changing the vantage of the analysis.

the center of the space but they could be in the center of a vote if they were close to the nay-side, bloc median line associated with the vote. In this sense, they could be mainstream on some issues but not on others.

Delegates from the Lower South tended to be closer to the nay-side, bloc median line, and more mainstream, when a vote combined state's rights with a strengthening of Southern interests or greater centralization with the strengthening of Northern interests – i.e., in cases where the \overline{qp} trajectory was closer to a 45° angle. To see this, consider Figure 4. This figure depicts all 53 delegates with the delegates from South Carolina and Georgia marked in red and green, respectively. It also depicts two normal vector lines (i.e., two possible \overline{qp} trajectories) for the vote. If everyone voted and the vote was on a 45° line, as depicted in frame A, then Georgia and South Carolina would be in the center of the vote. They would also be closer to the nay-side, bloc median line (not shown). Contrast this with frame B. If everyone voted and the vote was on a -45° line, then Georgia and South Carolina would be more extreme and farther from the nay-side, bloc median line. This explains how the Lower South can be considered mainstream on one vote and extreme on another vote in two dimensional space. Greater states rights which strengthen Southern interests (or more centralization which favor Northern interests or even the interests of the large state coalition) could make the Lower South more mainstream. Votes on a -45° trajectory, or purely sectional votes, on a -90° trajectory, would make the Lower South extreme.

[Figure 4 here]

Figure 5.A shows the observed relationship between the average distance of the delegates from South Carolina and Georgia to the nay-side, bloc median line and the angle of the vote (i.e., the \overline{qp} trajectory without polarity). The average distance for the two states is depicted by redish markers for the South Carolina delegation and by blue markers for Georgia delegation, with a median spline through each set of points to indicate trends. It is clear from this figure that delegates from the Lower South were generally closer to the nay-side, bloc median lines on angles between 0° and 50° and generally farther from the the

nay-side, bloc median lines on angles between -90° and -50° or angles greater than 80° . These angles are consistent with the depiction in Figure 4.

[Figure 5 here]

Across roll calls, South Carolina and Georgia were most likely to vote with New Hampshire (when it attended), Massachusetts, and North Carolina (McDonald 1958; Jillson and Anderson 1978). However, the angle of the vote had small effects on the loyalties of these states. Connecticut, Pennsylvania, and Delaware were much more likely to vote with South Carolina and Georgia on angles between 0° and 50° , which we might call *sweet* angles for the Lower South, than on angles between -90° and -50° or angles greater than 90° , which we might call *bitter* angles for the Lower South.²¹ Among these three states, the votes of Connecticut and Pennsylvania were more likely to change the position of the Lower South from losing to winning than the support of Delaware.²² It appears that an advantage of the *sweet* angles is that these angles helped South Carolina and Georgia pick-up votes from Connecticut and Pennsylvania – votes that often helped them move to the winning side.

To show that “sweet spots” are not the same for all states, consider another two state coalition as a comparison: Pennsylvania and Virginia. These states had common interests as the two largest states in the union. Furthermore, they, like South Carolina and Georgia, voted together often, explaining why McDonald (1958, p. 97) considered them a coalition. Of the 66 possible two state combinations, Pennsylvania-Virginia and South Carolina-Georgia were among the three pairs to vote together most often. The only remaining pair was New Hampshire-Massachusetts, but New Hampshire missed all the votes prior to the Great Compromise, making Pennsylvania-Virginia the only pair other than South Carolina-Georgia to vote together on at least 270 questions and agree at least 70% of the time.

²¹This statement is based on comparing the proportion of times a state voted with South Carolina and Georgia on bitter and sweet angles. The proportion is significantly different at the .05 level only for these three states.

²²This statement is based on a comparing the number of times a state was in coalition with the Lower South and the Lower South coalition won versus the number of times a state was against the Lower South Coalition and the Lower South coalition lost.

Ironically, Pennsylvania and Virginia were closest to the nay-side, bloc median line on almost the opposite trajectories as South Carolina and Georgia (see Figure 5.B). Delegates from Pennsylvania and Virginia were much closer to the nay-side, bloc median and more mainstream on votes with roughly a -45° trajectory than they were on votes with roughly a 45° trajectory. This suggests that Pennsylvania and Virginia should succeed as a coalition on very different types of issues than the Lower South. These issues should appeal to different aspects of pro-nationalism and sectionalism.

4.4 Regression Analysis

Such relationships can be evaluated more systematically using three logit regressions, each of which treats a roll call as the unit of analysis.

The first examines cases where the Lower South votes together. It regresses a dichotomous dependent variable indicating whether the Lower South was on the winning side of a vote on the average distance of the Lower South delegates from the nay-side, bloc median line with several controls.²³ If our hypothesis is correct, the Lower South should be on the winning side more often when it is closer to the middle of the vote than when it is more extreme. The results of this analysis, with Huber-White robust standard errors, are reported in Table 1, column (1). We describe the results for the control variables first.

[Table 1 here]

Northern state margin is the number of Northern states attending minus the number of Southern states attending. Presumably, the Lower South would be less likely to be on the winning side if more Northern states attend. Contrary to such expectations, however, the coefficient for this variable is negative and insignificant, suggesting the North may not have acted against the Lower South when it voted together.

²³The dependent variable was coded one if both South Carolina and Georgia vote yea and the vote passed or if both South Carolina and Georgia voted nay and the vote failed. It was coded zero if both states voted together but their choice did not prevail. If they did not vote together, it was coded as missing.

Temperature is the average daily temperature measured by a Swiss-born meteorologist thirteen miles northwest of Philadelphia (Hutson 1987b, 325-337). Populizers of the Convention have described the summer of 1787 as oppressively hot, when in fact the average temperature was 71 degrees with a maximum daily temperature of 85 degrees. Although one might think that hotter days would hurry the delegates and increase the chances of the Lower South winning, temperature does not have a significant effect.

Debate length indicates the length of the debate, coded as the total number of delegates who spoke on the issue between the time the issue was raised and the moment the vote was taken on the issue and a new proposal made (coded using Farrand 1966). We expected more controversial issues to require longer debate, making it more difficult for any region to be on the winning side. In this case the coefficient is positive and insignificant. Everything else equal, longer debate appears to have had little or no affect on the success of the Lower South.

Sectional unity is a dummy variable indicating whether a majority of southern states voted on one side of an issue while a majority of northern states voted on the other side. Presumably, sectional unity votes are more likely to go against the Lower South, because the North consistently maintained more delegations on the floor than the South. The coefficient is negative and significant, as expected, suggesting that votes which pitted Northern delegates against Southern ones typically left the Lower South on the losing side.

State vote margin is the absolute difference between the number of state yea votes and the number of state nay votes on a roll call. This variable controls for the fact that a state is more likely to be on the winning side of a lopsided vote than on a close vote. Unsurprisingly, the effect is positive and significant suggesting that everything else equal a state is more likely to be on the winning side if the vote margin is large.

Of course the variable of primary interest is the average distance of the Lower South delegates to the nay-side, bloc median line. We measure this distance as the average distance of the South Carolina delegates plus the average distance of the Georgia delegates divided by

two, to reflect the nature of bloc voting. For the reasons described in the previous section, shorter distances reflect more mainstream stances on the issue given the trajectory of the vote, the delegates attending, and bloc voting. We expect the Lower South is more likely to be on the winning side of the vote if they are closer to this bloc median line than if they are farther away. We interact this variable with a dummy variable for whether the motion was made exclusively by Lower South delegates.²⁴ Everything else equal, we expect questions will be *less* likely to succeed if they are made by the Lower South – simply because the Lower South sometimes offered controversial proposals.

With the interaction term included in the model, the t statistics for the distance of the Lower South, the dummy for the Lower South motioning, and the interaction term cannot be interpreted in the usual fashion (Brambor et al. 2006). Instead, the relationship between the Lower South winning and its distance from the nay-side, bloc median line can be more easily seen in a plot of the predicted probability of winning on various distances, with the other independent variables held at their means (see Figure 6.A). The red line indicates the predicted probability if the motioners were from the Lower South. The blue line indicates the predicted probability if the motioners were *not* solely from the Lower South or there were no motioners. The hash-marks around each line indicate a 95% confidence interval.²⁵

[Figure 6 here]

Three results can be seen in this frame. First, for cases that were not a Lower South motion (the blue line), the probability the Lower South would win is larger when it's delegates are closer to the nay-side, bloc median line than when they are farther away. We are 95% confident the relationship is greater than zero for distances less than 1.3. This suggest that the lower South was more likely to succeed when it was more centrist than when it was more

²⁴Of the 397 votes in our study, 286 votes were motioned, 62 of which were motioned by two delegates (not including seconds). We coded a motion as a Lower South motion if the sole proposer was from the Lower South or if both proposers were from the Lower South. Seconds were not utilized.

²⁵Confidence intervals extend beyond $[0, 1]$ because standard errors were calculated using the delta method.

extreme. Second, for cases where the Lower South motioned (the red line), the probability it would win is more responsive to distances, as shown by the sharp decline in the predicted probability for distances near 0.4. The two results suggest that the Lower South was more likely to be on the winning side of a vote when it was closer to the nay-side, bloc median line. That is, it was more successful as a centrist. The effect is pronounced, over the range of our data, for cases where the Lower South motions. Third, and perhaps most sticking, motioning significantly reduced the Lower South's chances of success for all observed distances greater than 0.4. This can be seen by noting the confidence intervals do not overlap for distances between 0.4 and 1.2, the blue line is below the red line over this range, and the greatest distance in our data was 0.84. The result might suggest that the Convention generally frowned on proposals made by the Lower South.

The strength of this relationship can be better appreciated by comparing it to similar results for Pennsylvania-Virginia (see Table 1, column (2)). The results in this column are very similar to those we described for the Lower South, except debate length is now negative and significant as expected, suggesting that more debate was associated with a smaller probability of Pennsylvania and Virginia from landing on the winning side. In addition, sectional unity votes did not dampen the success of the Pennsylvania-Virginia coalition, perhaps because the two states straddled the two sections and were less likely to vote together on contentious sectional issues.

More importantly, the distance to the nay-side, bloc median line had a different effect on the probability of winning for Pennsylvania-Virginia than it did for the Lower South (see Figure 6.B). Because the predicted probabilities are fairly close to one over the range of observed distances, 0.15 to 0.65 for both types of motioners the Pennsylvania-Virginia coalition was likely to win regardless of its distance. In addition, the lack of separation between the red and blue lines suggests that motioning did not have a negative effect on the success of Pennsylvania and Virginia, as it did for South Carolina and Georgia. Pennsylvania

Virginia dominated the debates and the Convention seems to have treated their motions more neutrally.

Of course, we might get very different results for another two state coalition than we did for the two-state coalitions considered here. The success of those coalitions might be like South Carolina-Georgia, Pennsylvania-Virginia, or something entirely different. We introduce Pennsylvania and Virginia as a coalition simply to suggest that the effect of distance is not entirely the same for every two-state coalition.

Finally, table 1, column (3) shows results for a model similar to column (1), with the distance of the Lower South replaced by a variable indicating how far the trajectory of the vote is from 25° – the middle of the Lower South’s *sweet spot*.²⁶ The specification also has no interaction term. Recall, the Lower South was generally closer to the nay-side, bloc median line and more mainstream on angles closer to 25° than on angles farther from 25° . For this reason, the Lower South should be more likely to win on angles closer to their *sweet spot*. The same angle will not be optimal for most other states. The negative and significant value for this variable suggests that the Lower South was more likely to be on the winning side of the vote the closer it was to 25° , consistent with our theory. In fact, with all independent variables held at their means, increasing the angle of the vote by 30° increases the probability of the Lower South winning by four percentage points. Considering that the variable ranges from 0° to 180° , this is a modest but noticeable effect. Table 1, column (3) also shows a negative and significant relationship for the dummy indicating whether delegates from South Carolina or Georgia were the sole motioners. Again, motioning actually dampens the chances of the Lower South winning, consistent with our previous results. With all other independent variables held at their means, a discrete change from a Lower South motion to another type of motion (or no motion) increased the predicted probability of the Lower South winning by 0.28.

²⁶The variable *Degrees from 25°* is the absolute value of the difference between 25° and the observed angle in degrees.

Combined with observations from the previous section, these results suggest the Lower South was more likely to be on the winning side of an issue when it was more mainstream on trajectories closer to 25° . We now investigate the Lower South's relative success on issues it cared about and try to relate its successes to both its distance to the nay-side bloc median line and the trajectory of the vote.

5 Case Studies: Three-Fifths and Export Taxes

Several issues were important for the Lower South, such as maximizing the number of slaves used in the apportionment of the legislature, protecting the slave trade, maintaining control of commercial treaties, and preventing export tariffs. However, the Lower South was not uniformly successful across these issues. It tended to be more successful on international trade issues than it was on including more slaves in the apportionment of the legislature. The Lower South was on the winning side of roughly 58% of the apportionment votes and 71% of the votes related to international trade. Its successes were not due to greater unanimity on international trade issues nor less sectional division. On average, the vote margin across state blocs was smaller on international trade votes than on apportionment votes, making international trade votes more divided. Furthermore, a majority of Northern states were pitted against a majority of Southern states on a slightly greater percentage of international trade votes than on apportionment votes. Part of the reason the Lower South succeeded on international trade issues and failed on many apportionment issues was because its preferences relative to the other states were more mainstream. On average, the Lower South was 0.52 units away from the nay-side, bloc median line on apportionment votes and 0.29 units away from the nay-side, bloc median lines on international trade votes (i.e., 44% closer on trade votes). The closer distance may explain why it was more successful.²⁷

²⁷The Lower South was also closer to its more preferred trajectory of 45° on international trade than on apportionment. The average trajectory of an apportionment vote was -20.21° , while the average trajectory of an international trade vote was 5.61° . In making these statements, the votes categorized as apportionment include: 3, 37, 39, 40, 41, 105, 106, 110, 113, 114, 120, 124, 125, 126, 127, 128, 129, 132, 133, 134, 136, 137,

Why then was three-fifths clause created? Although some readers may think that the three-fifths compromise was invented late in the Convention to overcome some impasse between the North and South, it was initially created twelve days after voting began. When the idea was raised on June 11, the Convention was trying to outline an “equitable ratio” of apportionment for the legislature. John Rutledge and Pierce Butler of South Carolina proposed apportioning the legislature according to the quota of contribution from each state. Perhaps cognizant of how much support their proposal could gain and wanting to establish a different principle, James Wilson (PA) quickly interrupted with another idea. In vote 39, he proposed that the equitable ratio should be “the whole number of white & other free Citizens & inhabitants of every age sex & condition including those bound to servitude for a term of years and *three-fifths of all other persons not comprehended in the foregoing description except Indians not paying taxes, in each State*” (emphasis added, Farrand 1966, 1: 201). His proposal passed nine states to two, with only New Jersey and Delaware opposed. Wilson may have chosen three-fifths as the initial ratio because a majority of states in Congress agreed to apportion requisitions according to this ratio in 1783 (United States 1910, 24: 215). In other words, he might have proposed it because he thought it would pass. No friend of slavery, Wilson may have then hoped the Convention would eventually reduce the ratio of slaves but keep popular apportionment. Madison agreed that the Convention should fix a standard and suggested the details should be worked out by a committee (Farrand 1966, 1: 206). Vote 39 was on a mixed trajectory of 63 degrees, near the Lower South’s sweet spot, reflecting both a sectional division in the vote and an appeal to the large state coalition. Without the emphasis on popular apportionment, the part appealing to Massachusetts and Pennsylvania, the proposal would have been pure sectional and likely failed.

142, 145, 147, 149, 150, 151, 154, 156, 205, 206, 207, 252A, 253, 254C, 329, 330, 331, 333, 518, 543, 544, and 568A, where letters indicate unnumbered votes located after the numbered vote in the journal. The votes categorized as international trade votes include: 221, 237, 238, 239, 284, 285, 286, 290, 314, 366, and 385.

Southern delegates would try to improve their position from this mark, and northern delegates would try to curb it back, but ultimately their attempts to expand or contract the three-fifths clause failed.

The clause was revisited on July 11, when Charles Cotesworth Pinckney and Pierce Butler, co-delegates from South Carolina, proposed to strike out three-fifths clause and replace it with an apportionment that treated “Blacks” equal to “Whites” (their terminology).²⁸ This did not mean that they were ready to give Blacks the same rights as Whites. It meant that they wanted to count Blacks as 5/5ths in the apportionment rather than 3/5ths. The trajectory of the vote was -57° , putting South Carolina and Georgia on the extreme. South Carolina and Georgia were the farthest states from the nay-side, bloc median line at .83 and .74 units, respectively. The average state was .33 units away. As it turns out, both northern and southern delegates spoke against the proposal and vote 132 failed three states to seven.

Four votes later, the Convention tried to formally agree to include three-fifths of Blacks in the apportionment. This motion failed four states to six. Clearly, the Convention was willing to let the three-fifths clause on the table to keep other principles of apportionment off, but they were not prepared to concede the three-fifths ratio, at least not yet. Again, this vote was at a trajectory of -23° , making South Carolina and Georgia the farthest states from the nay-side, bloc median line. Rufus King (MA) opposed the motion because “the admission of [Blacks] along with Whites at all, would excite great discontents among the States having no slaves” (Farrand 1966, 1: 586). Gouverneur Morris (PA) said he “was compelled to declare himself reduced to the dilemma of doing injustice to the Southern States or to human nature, and he must therefore do it to the former” (Farrand 1966, 1: 588).

Nine votes later, Charles Pinckney tried to improve the representation of the South by again proposing to rate Blacks as equal to Whites. Again, the trajectory of the vote made

²⁸Pinckney and Butler clearly had slaves in mind when they used the term “Blacks.” According to figures from the 1790 census, slaves per capita in a state and slaves, free Blacks, mulattoes, and Native Americans per capita in a state were correlated at .99 (Dougherty and Heckelman 2008). This might explain why the Convention made no attempt to distinguish Black from slaves in its votes on apportionment.

South Carolina and Georgia extreme. Without a principle to base the exception upon, even southern delegates would not give in to the demands of the Lower South. George Mason (VA) said “he could not agree to the motion, notwithstanding it was favorable to Virga. Because he thought it unjust” (Farrand 1966, 1: 581). The vote failed, with only South Carolina and Georgia voting in favor of it.

Ironically, the Convention’s experience with the three-fifths clause was not one where delegates were openly cajoled into bending to the Lower South. Southern interests were advanced with Wilson’s initial proposal, then subsequent votes went against their interests. The remaining attempts to strengthen the clause were thwarted partly because the Lower South, and other Southern states, maintained extreme preferences on the votes.

Eventually, the Convention accepted the three-fifths ratio in a form that was almost identical to its initial proposal.²⁹ For this reason, the story of the 3/5ths compromise is not one of gradually succumbing to the will of the South. It is one of initially proposing something that appealed to both the South and larger states, then finding little room to change it.

If the three-fifths clause highlights some Lower South failures, then votes on export taxes should mark some Lower South successes. The Convention first addressed export taxes when it considered Article VII of the Report of the Committee of Detail on August 16. The committee was chaired by John Rutledge (SC) who opposed export taxes. Section 1 of their report gave Congress the power to lay and collect duties, imposts, and excises.

Shortly thereafter, James Madison (VA) proposed (in vote 335) that export taxes should be allowed if two-thirds of each house gave their consent (Farrand 1966. 2: 363). Although

²⁹The issue was settled on July 12. One month later when Gouverneur Morris proposed a change in the opposite direction. He wanted to curb the apportionment of the South and to make the three-fifths clause temporary by putting the word “free” before the word “inhabitants” in the clause allowing the legislature to regulate the number of representatives according to the number of inhabitants. His proposal would effectively undo the three-fifths Compromise (Farrand 1966, 2: 221-3). The trajectory of this vote was at -54° , partly reflecting the sectional division within the proposal. With the pivotal states of Delaware and Pennsylvania voting no, it should be no surprise that that the Convention rejected the proposal and once again stuck with the idea initially made by Wilson.

an outright prohibition of export taxes was dear to the Lower South, the underlying issue was largely about the power of the national government, putting this vote on a 23° trajectory, with South Carolina and Georgia closest to the nay-side, bloc median line (i.e. the most mainstream states). Although Madison, a southerner, thought the exception was an improvement, delegates from the Lower South did not agree. Pierce Butler (SC) said he “was strenuously opposed to a power over exports; as unjust and alarming to the staple States” (Farrand, 1966, 2: 360). Abraham Baldwin (GA) and William Few (GA) voted against it, as did the South Carolina delegation. In a narrow six to five vote, the measure was struck down. The Lower South was on the winning side of a sectional vote because it was more mainstream.

The next vote was to agree that “no tax or duty shall be laid by the Legislature on articles exported from any State,” as proposed in the the report of the Committee of Detail. The proposal was on an angle of 31°, which was favorable to the Lower South, with Rutledge (SC) and Few (GA) on the bloc median lines. At this point Elbridge Gerry (MA) stood up and proclaimed he “was strenuously opposed to the power over exports. ... We have given [the general government] more power already than we know how will be exercised – It will enable the Genl Govt to oppress the States, as much as Ireland is oppressed by Great Britain” (Farrand 1966, 2: 362). This was not an argument about sectional imbalance. It was an argument about the excessive power of the federal government. Gerry saw the states’ rights part of the issue, which might explain why Massachusetts switched sides and the voted with Connecticut and the southern states in a 7-4 vote. Again, the vote was sectional and protected southern interests but the Lower South succeeded because it was mainstream.

Votes over import duties and supermajority rules for treaties proceeded similarly. They illustrate that the Lower South needed a large amount of states’ rights or an appeal to the Northern arm of the large state coalition to succeed.³⁰

³⁰The South wanted a two-thirds majority for treaties because a majority of states in the Senate were Northern. Most of their proposals were down and to the right, reflecting the interests of the Southern branch

6 Conclusion

The 1790 census showed the practical effects of the three-fifths clause. New Hampshire was entitled to four seats in the first U.S. House of Representatives because it had 140,000 free citizen. South Carolina was entitled to six seats, even though it had 140,000 free citizens as well. The difference was counting three-fifths of South Carolina's 100,000 slaves (Amar 2006). The three-fifths clause gave the South relative parity in the House, allowing it to insulate the slave trade, maintain fugitive slave laws, and delay the abolition of slavery for decades. If the House was apportioned on free citizens alone, the North would have outnumbered the South by a three-to-two ratio and some of the more odious laws in U.S. history may have been avoided.

William Lloyd Garrison thought the Constitutional Convention produced passages, like the three-fifths clause, because the North had entered into an unholy alliance with the Lower South. In 1844, he publicly burnt a copy of the Constitution and condemned it as a "covenant with death" and "an agreement with Hell." William Riker (1987) thought such concessions were made to assure the document would be ratified by a supermajority of states. Both saw the North as strategically voting with an extreme.

Although northern delegates occasionally compromised with the South, it is not clear that compromising most accurately characterizes the lower South's successes. Delegates from the Lower South were fairly extreme on purely sectional votes at the Constitutional Convention that varied along the second dimension, but they were more mainstream on votes that combined the power of the central government with sectional issues. When South Carolina and Georgia were close to the nay-side, bloc median line, they were usually flanked by northerners on either side, guaranteeing some key northern votes. This was most likely to occur when a vote appealed to delegate preferences for a stronger national government and the large-state coalition or when it appealed to states rights and southern interests. Neither

of the large state coalition. These angles were *bitter* for the Lower South, helping to explain why the Lower South lost narrow sectional votes on roll calls 480, 484, and 486-489.

were likely to be latent to the issues considered by the Congress of the Confederation at the same time. In this sense, it is possible that delegates voted sincerely, and still supported the Lower South on some issues which it won.

Although characterizing Southern delegates as centrists on any issue may seem odd, Southerners have been centrists during other periods in American history. A disproportionate number of moderate Senators were from the South in the first three Congresses,³¹ and Southerners were centrists on several issues at the Constitutional Convention. They may have gained influence in U.S. politics, not because of their brinkmanship or work to form unholy alliances, but because on a few occasions their ideas appealed to the center of the voting body.

³¹Despite representing only 38 – 40% of the states in the first Senates, DW-NOMINATE scores suggest that Southerners controlled 40% of the seats in the center quintile in the First Senate, 60% in the Second Senate, and 67% in the Third Senate, <<http://voteview.com/dwnominate.asp>>.

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Figure 1: Delegates at the Constitutional Convention

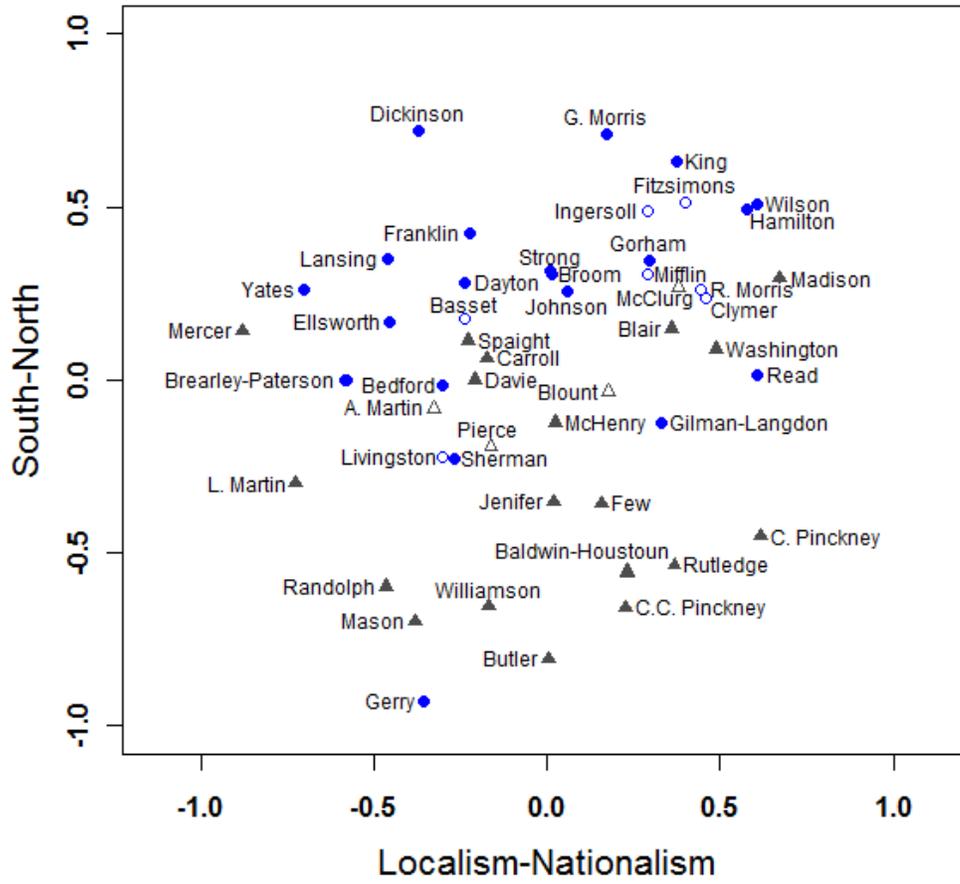


Figure 2: State Medians on the First Dimension

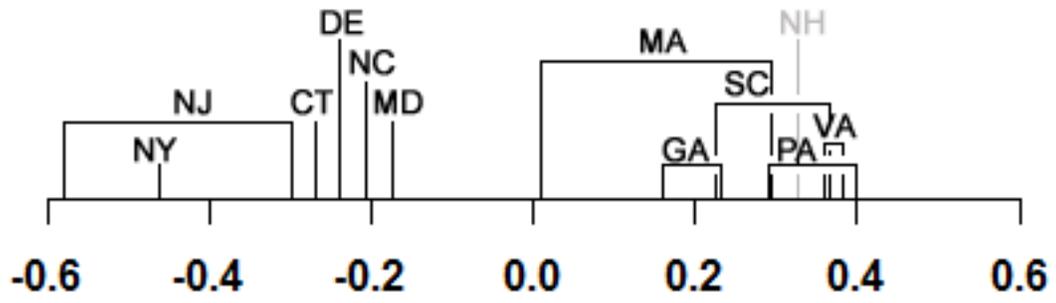
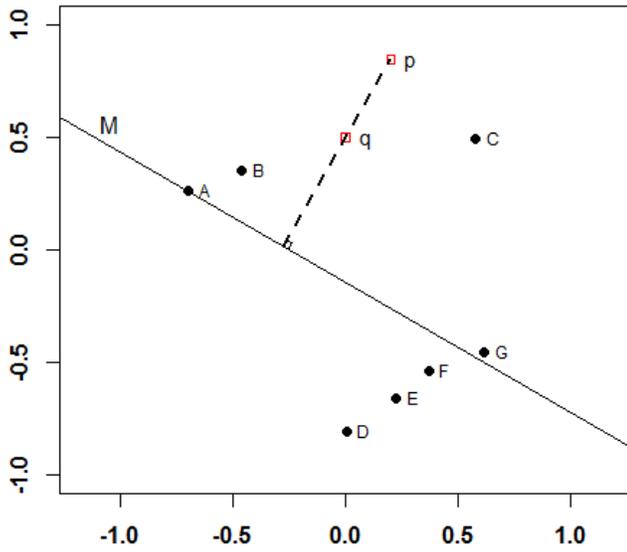
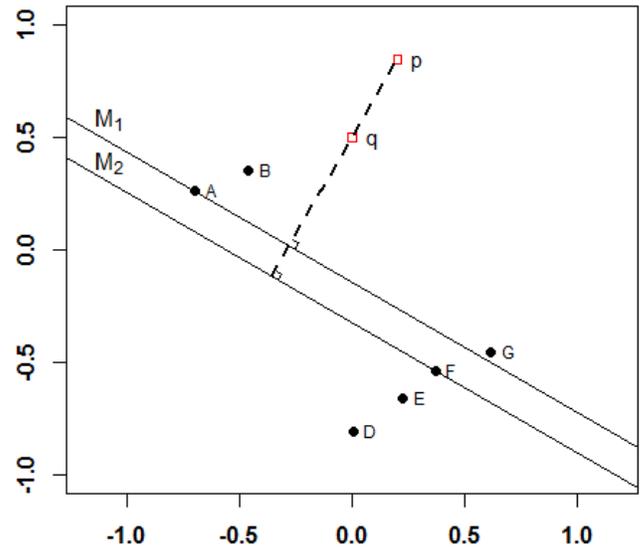


Figure 3: Median Lines, Bloc Median Lines, and Success

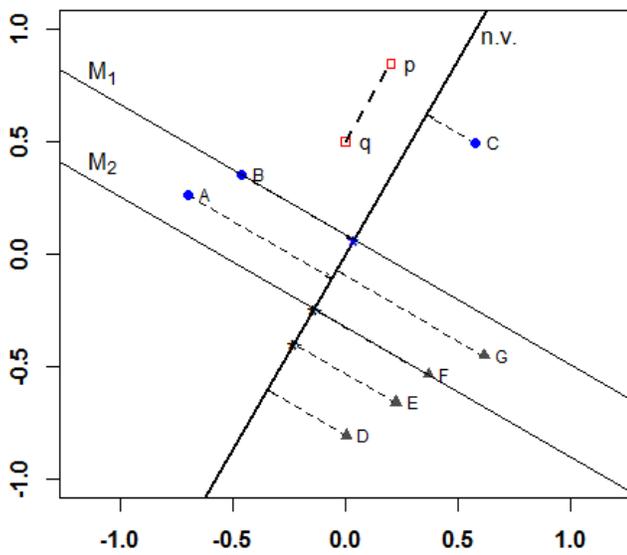
A. Median Line (odd number of voters)



B. Median Lines (even number of voters)



C. Bloc Median Lines (two states)



D. Winning and Bloc Median Lines

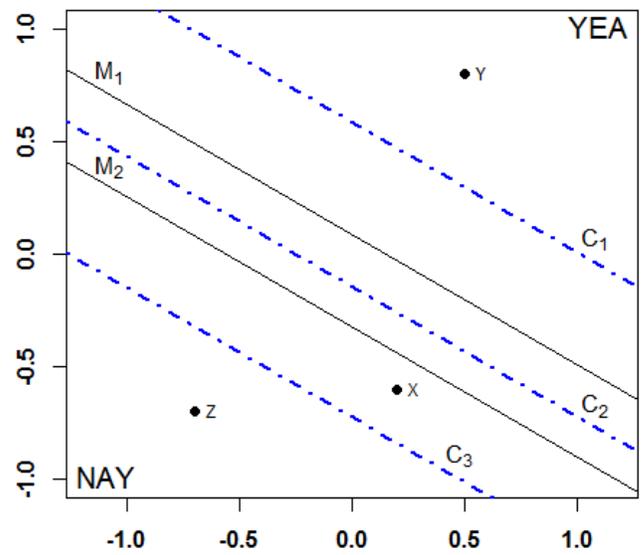


Figure 4: Trajectory of the Vote and the Extremism of the Lower South

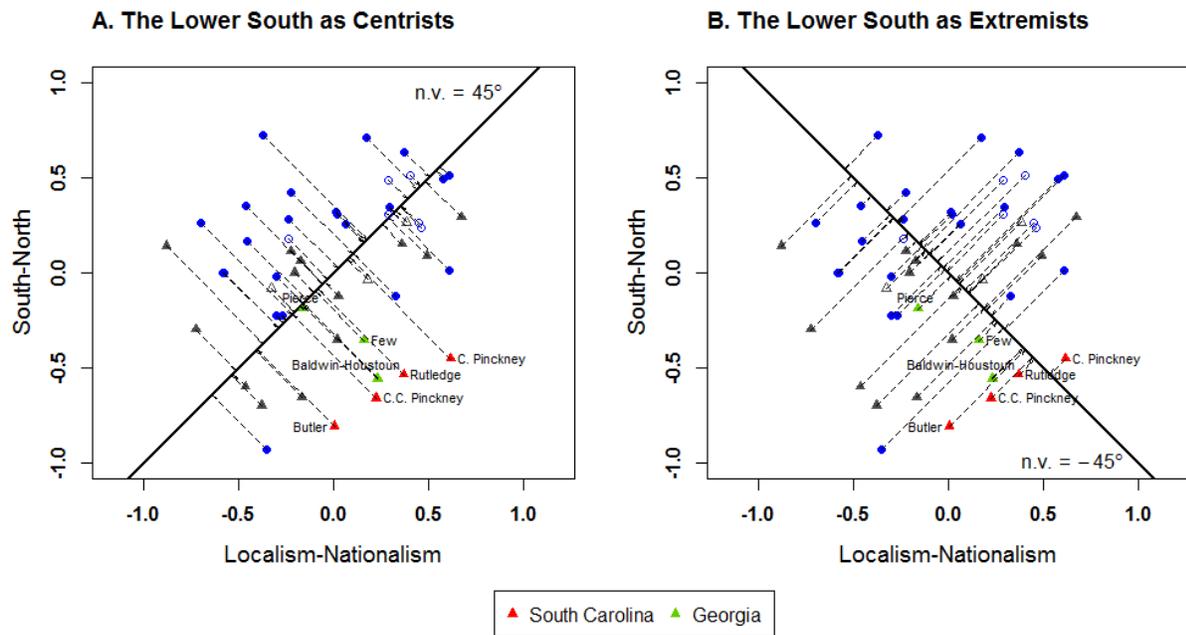


Figure 5: Distance of Four Separate States and the Angle of the Vote

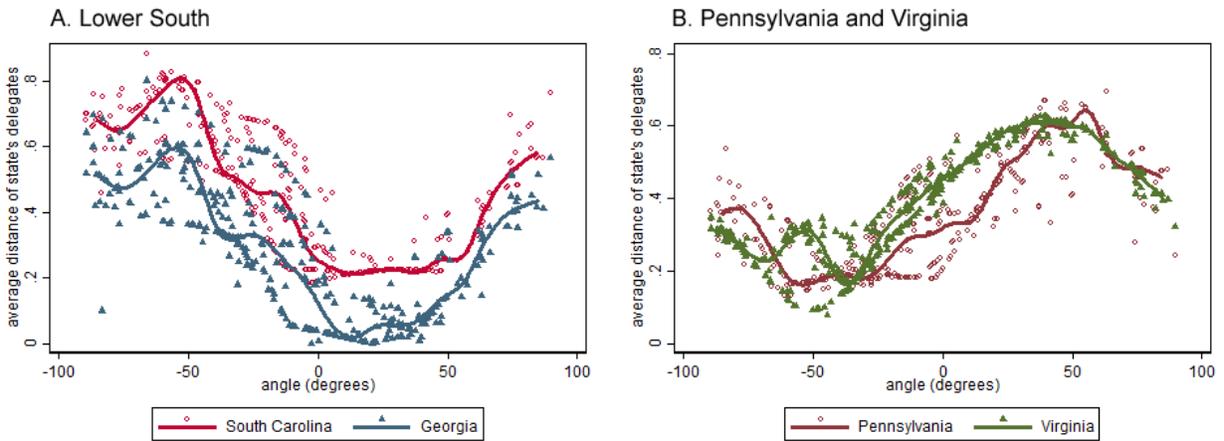


Figure 6: Predictions of Wins by Separate Two-State Regions with 95% C.I.s

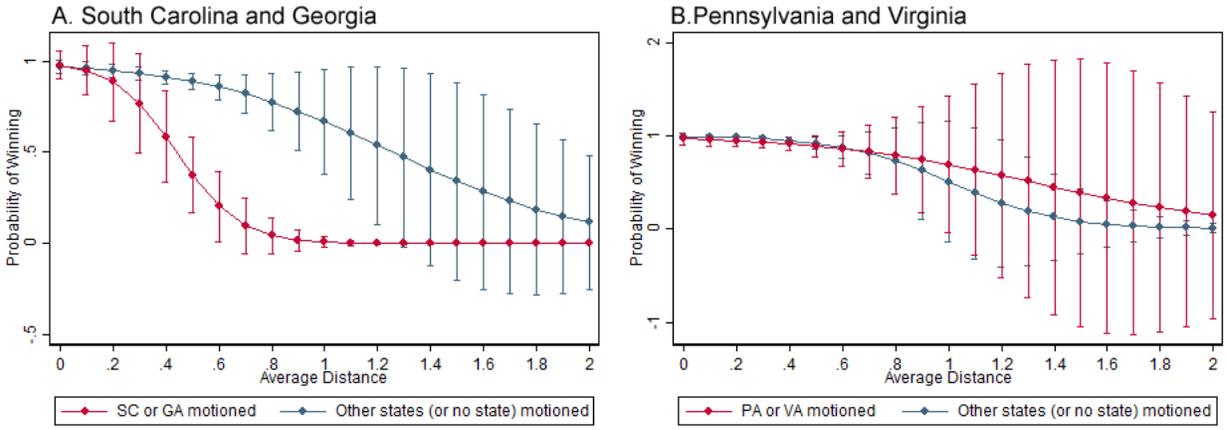


Table 1: The Probability of Success and the Distance to the Nay-Side, Bloc Median

	(1) SC-GA wins	(2) PA-VA wins	(3) SC-GA wins
SC-GA distance	-2.711* (1.162)		
SC-GA motioned	0.357 (1.792)		-2.099*** (0.512)
SC-GA (distance \times motioned)	-5.844 (3.629)		
PA-VA distance		-4.874* (2.066)	
PA-VA motioned		-1.540 (1.283)	
PA-VA (distance \times motioned)		2.338 (3.396)	
degrees from 25°			-0.019** (0.006)
northern state margin	-0.297 (0.373)	0.015 (0.337)	-0.091 (0.354)
temperature	0.005 (0.034)	-0.028 (0.030)	-0.009 (0.032)
debate length	0.032 (0.025)	-0.049* (0.024)	0.028 (0.022)
sectional unity vote	-1.775** (0.548)	0.742 (0.508)	-1.808*** (0.533)
state vote margin	0.175* (0.075)	0.712*** (0.103)	0.188* (0.073)
Constant	2.367 (2.473)	2.998 (2.207)	3.061 (2.341)
<i>N</i>	277	271	277
Log-likelihood	-87.221	-77.300	-90.894

Note: Unconditional, robust standard errors appear in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$