Agenda Formation

William H. Riker, Editor

Ann Arbor THE UNIVERSITY OF MICHIGAN PRESS

Spatial Realignment and the Mapping of Issues in U.S. History: The Evidence from Roll Call Voting

Keith T. Poole and Howard Rosenthal

Fifty years ago E. E. Schattschneider, in his classic *Party Government*, wrote that the "political parties created democracy" and that "modern democracy is unthinkable save in terms of the parties" (1940, 1). Schattschneider argued that freedom of association and the guarantee of regular elections with plurality winners made the development of two mass-based political parties inevitable in the United States. U.S. political history can be written almost entirely as a conflict *between* and within political parties. The political parties have mirrored the great social and economic conflicts that have divided Americans. When they have failed to do so, they have been torn apart and replaced by new parties better representing mass opinion.

The realignment literature in political science is concerned with changes in mass support for the political parties and how leaders of the parties responded to them. The prevailing view in this literature is that there have been three major realignments: one in the 1850s over the extension of slavery to the territories; one in the 1890s over the creation of inflation either by abandoning the gold standard or by monetizing silver; and one in the 1930s because of the collapse of the economy during the Great Depression.¹

The most complete statement of this thesis is by Sundanist (1983). He

The most complete statement of this thesis is by Sundquist (1983). He argues that a realignment is a durable change in patterns of political behavior (1983, 4). In his basic model of realignment, a new issue emerges that cuts across the existing cleavage and reorganizes the political parties around it.

We thank Douglas Skiba and Albert Robertson for their assistance and a member of the Advocate for perfecting amendments. Final work on this manuscript, including superb editing by Kathleen Much, was completed while Rosenthal was a Fellow at the Center for Advanced Study in the Behavioral Sciences. He is grateful for a grant of financial support provided by the National Science Foundation, #BNS-8700864, during his stay at CASBS.

All authors agree on these three (see Burnham 1970; Ginsberg 1972 and 1976; Sinclair 1977 and 1981; Brady 1982; Sundquist 1983). Ginsberg (1976) finds evidence for substantial differences between the two political parties during the 1880s.

"[T]he party system has a new rationale, an old conflict has been displaced by a new one for a segment of the electorate, and that segment of the electorate has formed ... new party attachments on the basis of that rationale. If the segment is large enough ... a new party system supplants the old one" (1983, 37).

Sundquist, relying mainly on changes in party registration and voting at the county level in various states, marshals an impressive body of evidence for his thesis. There can be little debate about whether major changes in the mass electorate occurred during the 1850s, 1890s, and 1930s. The evidence is convincing. Less convincing is Sundquist's argument that these changes in the mass electorate "shifted" the party system on its axis. In Sundquist's model, if the new issue does not seriously divide the political parties *internally*, then "the crisis will be reached and resolved relatively quickly" and the scale of the realignment "will be relatively minor" (1983, 44–45). In other words, the severity of a realignment is a direct function of the internal divisions of the parties—if a new issue fell exactly along the current line of cleavage, no realignment would occur.

In Sundquist's model, the mass electorate and professional politicians are part and parcel of the same process. Sundquist's evidence comes from changes in the *mass electorate*. We draw our evidence from changes in the behavior of professional politicians. Specifically, the purpose of this essay is to examine the "standard position" in the realignment literature (as represented by Sundquist) by analyzing all recorded roll call votes of the members of Congress from 1789 to 1985.

In subsequent sections, we state a simple model of realignment based upon the spatial model of party competition and offer evidence that the realignments of the 1890s and the 1930s occurred along the line of cleavage that solidified in the 1870s. We find only one realignment since 1830. This was the 1850s realignment over the extension of slavery to the territories. The *late* 1930s or early 1940s witnessed the birth of a second realignment focused on the issue of civil rights for blacks. But as this second realignment proved to be less intense than the first (and only temporary), we describe it more appropriately as a perturbation.

Realignment in the Context of the Spatial Model of Voting

In previously published work (Poole and Rosenthal 1985, 1987, 1988, 1989a, 1989b, 1991b) we have laid out in detail a spatial theory of roll call voting and shown a method, D-NOMINATE, for estimating our model. Since our model is a simple application of standard spatial theory, we will only briefly review it here and then turn to a discussion of realignment within the model.

We represent each legislator with an ideal point in a multidimensional policy space, and each roll call by two points—one representing the policy outcome corresponding to a yes vote and one representing the policy outcome corresponding to a no vote. We place both the legislators and the roll calls in the space using the D-NOMINATE procedure, which is blind to the party affiliation of the legislators, the content of the roll calls, and, in fact, to any information other than the actual yes or no choices. The space turns out to be, at most, two dimensional. Even the most casual inspection of the results suggests that the main (graphically horizontal) dimension is almost always economic, involving redistribution. Contemporary liberals are on the left, redistributive side, of this dimension, conservatives on the right. The first dimension briefly switches to the slavery conflict in the 1850s. The second dimension is, grosso modo, slavery in the 1830s and 1840s, agrarian versus urban from 1870 through 1936, and civil rights from 1937 through the early 1970s.

A legislator's vote is determined by utility maximization. Utility functions consist of a deterministic component and a stochastic component. The deterministic component is represented by a monotonic function of distance from the ideal point, whereas the stochastic component picks up nonspatial factors and idiosyncratic spatial dimensions. ² Dynamics are captured by letting the legislator ideal points be simple polynomial functions of time.

We found little evidence that legislator positions in the space changed dramatically at any point in U.S. history. Allowing for quadratics and higher order polynomials did not permit a notably better fit to the data than the model where legislator positions were restricted to simple linear functions of time. In addition, annual linear movement was in itself small, never averaging more than 1 percent of the space. We also found that, with critical exceptions noted below, roll call voting could be captured by a two-dimensional model.

Consistent with the Sundquist view, roll call voting is, in fact, largely unidimensional for most of U.S. history, with a second dimension becoming relevant at times when realignment is incipient. Adding a third dimension is never useful to our understanding of the evolution of the political process. The results we report here are based on a dynamic, two-dimensional estimation for 1789–1985 with legislator positions constrained to linear functions of time. This estimation places considerable constraint on the positions of each legislator. In particular, the reader should note that, whenever we display legislator positions and their votes on a specific roll call, the legislator positions are based on the legislator's voting record throughout his or her career.

More precisely, the symmetric distribution is a simple transformation of the unit normal, and the stochastic component is distributed as the log of the inverse exponential (i.e., the logit distribution).

in two ways within our two-dimensional framework. First, newly elected illustrates the process.3 exhibit movement that, relative to their earlier positions, resulted in polarizaon the new dimension. Second, incumbents, through the linear terms, should representatives from the same party should take relatively polarized positions onal to the stable set from the last realignment, across which both political the process of polarization. This can be modeled as a new dimension, orthoglegislator ideal points should show little change from Congress to Congress. space is stable—the same dimension(s) account for voting over time, and age of the last realignment. In a spatial model, this means that the policy ment, congressional voting should be stable and organized around the cleavcontext of the spatial model we estimated. For example, well before a realignthe new issue, so that the old, stable set begins to wither away. Figure 1 tion. As the process continues, more and more of the voting is concerned with parties become increasingly polarized. We should see this polarization occur A new issue then emerges that splits the political parties internally and begins As defined by Sundquist, realignment is easily accommodated with the

stages. Both political parties are now polarized. The new dimension is the over slavery. Alternatively, if the new dimension becomes an important but system where the second dimension becomes the first dimension. This is what second dimension begins (fig. 1b). Figure 1c shows the process in its later new, second dimension has only recently emerged, members typically have dimension and little differentiation on the second dimension. Because the second is the new, realigning issue. Early in the process, as shown in figure dimensions. The first dimension is the original line of cleavage, and the and late. Two political parties are shown as contour maps over a space of two twentieth century. Once formal segregation was ended and blacks received dimension. The latter scenario describes the conflict over civil rights in the dimension and the reemergence of the dominance of the preexisting first be resolved within the existing system, resulting in the collapse of the second not primary focus of voting, the issues represented by the new dimension may happened in what we claim is the one real realignment, the 1850s realignment The stage shown in figure 1c may be followed by the creation of a new party primary focus of voting and the legislators are bimodally distributed across it tors begin reacting more forcefully, and the process of polarizing on the As the issue heats up in the electorate and becomes more salient, the legislanot had to take positions on the issue that show internal party differentiation la, we observe a bimodal distribution that shows party polarization on the first Figure 1 shows the realignment process at three stages—early, middle,

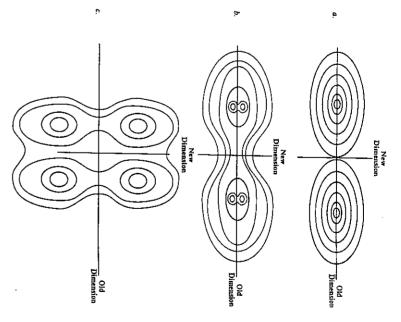


Fig. 1. Spatial realignment
a. Early stage
b. Middle stage
c. Late stage

voting rights in the 1960s, conflict over race became entwined with other aspects of redistribution captured by the first, economic dimension.

Below we test this model with our two-dimensional, D-NOMINATE scaling. Earlier, in Poole and Rosenthal 1991b, we discussed estimation and statistical issues. Our aim here is to apply the results of our scaling to the analysis of the model of realignment outlined above.

In the third section, we discuss our scaling results for the 1850s, 1890s, and 1930s. For these three periods, we find evidence for only one realignment—the 1850s. We also discuss our scaling results for the late 1930s

^{3.} See also Aldrich 1983

to the 1970s and show that an important perturbation of the space—as distinct from a dimensional realignment—began in the second New Deal. In the fourth section, we turn to a discussion of issue change more generally, namely, how new issues are accommodated within an existing spatial structure. We conclude in the fifth section.

Evidence for Realignments?

As part of our larger research project, we coded every roll call vote cast in the House of Representatives from 1789 to 1985 for three sets of categories of issues. First, we coded each roll call using the coding scheme developed by Clausen (1973) and Clausen and Van Horn (1977). Second, we also coded each roll call using a modified version of a coding scheme developed by Peltzman (1984). We also coded each roll call by specific issue categories that we developed. The flexibility and detail of this coding allow us to select all roll call votes cast on almost any issue of importance in U.S. history.

To analyze realignments and issue change, we select all roll calls on the relevant issue and examine the spatial voting patterns over the issue across time. In particular, we focus on how well voting on each roll call is accounted for by the first dimension of our estimation as well as the increase in fit from adding the second dimension. In all of this we control for the margin of the roll call. To control for the margin, we focus on how well we do in accounting for the minority vote by computing the proportional reduction in error (PRE) as our measure of fit. The PRE is equal to the minority vote minus the number

of classification errors, with the difference being divided by the minority vote. That is:

MINORITY = min {Number voting Yea, Number voting Nay}

This measure is 1 if there are no classification errors and 0 if the spatial model is not doing better than the marginals of the vote. For example, suppose the roll call is 65 to 35 and the first dimension classifies 75 percent of the legislators correctly and adding the second dimension results in 88 percent of the legislators being correctly classified. The PRE would equal (35 – 25)/35 or 0.29 for one dimension and (35 – 12)/35 or 0.66 for two dimensions.

Comparing the PRE for one dimension (PRE1) with the PRE for two dimensions (PRE2) gives a good indication of the spatial character of the roll call. If PRE1 is high and PRE2 — PRE1 is small, then the vote is concerned primarily with the first dimension. If PRE1 is low and PRE2 — PRE1 is large, then the vote is along the second dimension. In our figures, we focus on these sorts of differences by issue areas. The analysis is restricted to roll calls with splits less than 80-20, that is with at least 20 percent of those voting on the minority side. The aim here is to exclude "hurrah" votes and nonspatial protest votes.

Note that it is possible for PRE2 – PRE1 to be negative for two reasons. First, our scaling maximizes a likelihood function, *not* classification.⁹ Second, the legislator coordinates are chosen as a function of all the votes and not just the vote on one roll call; therefore, two-dimensional coordinates can improve the fit overall while decreasing the fit on some individual roll calls.

Slavery and the Realignment of the 1850s

A total of 857 roll calls concerning slavery were included in our scaling of the House. In figure 2 we plot 20-roll-call moving averages of PRE1, PRE2 —

^{4.} The accuracy of our coding depends upon the accuracy of the descriptions of the roll call votes in the ICPSR codebooks. The codebook descriptions can be misleading. For example, a key vote on the Wilmot Proviso (August 8, 1846) was actually a vote on foreign affairs appropriations. The codebook description does not mention slavery. Whenever, from other sources, we know of such instances, we have coded the roll calls and corrected the codebooks appropriately. (Our thanks to Barry Weingast for alerting us to this example.)

^{5.} The codes are: government management, social welfare, agriculture, civil liberties, foreign and defense policy, and miscellaneous policy.

^{6.} The categories are: budget general interest, budget special interest, regulation general interest, regulation special interest, domestic social policy, defense policy budget, defense policy resolutions, foreign policy budget, foreign policy resolutions, government organization, internal (to Congress) organization, Indian affairs, and the District of Columbia.

^{7.} We used 98 categories ranging from Iran and Central America to slavery, the national bank, presidential impeachment, school prayer, voting rights, public works, disputed elections, and price controls.

^{8.} In contrast, every roll call with at least 2.5 percent in the minority was included in the estimation of legislator positions. This is because lopsided votes provide us with information about the relative positions of extremists, even though the votes themselves typically fit the spatial model relatively poorly and are substantively uninteresting. For details, see Poole and Rosenthal 1991b.

^{9.} Consequently, it might be preferable to focus on changes in probabilities rather than classifications (Poole and Rosenthal 1991b). But because the results are similar, we use the more interpretable PRE measure.

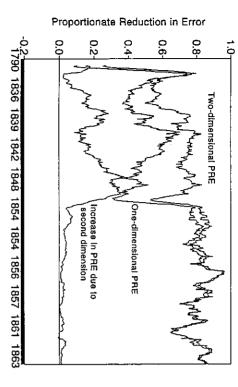


Fig. 2. Twenty-roll-call moving averages in votes on slavery, 1790-1867

PRE1, and PRE2 for the 822 roll calls having at least 20 percent voting in the minority. ¹⁰ Since there is one point per roll call, the horizontal axis is not evenly divided in units of time. In particular, note that 1854 appears twice—showing the large number of roll calls on slavery during the middle 1850s.

Only 68 of the 857 roll calls occurred before 1831; the great bulk of the roll calls were cast in the 1830s, 1840s, and 1850s, during the Whig-Democrat political party system. Beginning in the 1840s, voting on slavery occurred primarily along the second dimension. In line with the scenario shown in figure 1, the 20-roll-call moving average of PRE2 — PRE1 trends upward from 1830 until the late 1840s and then drops to nearly zero after 1852. In addition, PRE1 falls steadily from 1840 to 1852 and then climbs dramatically, indicating that the first dimension is now the slavery dimension. The scenario is clear: as the conflict within the country grew, the Whig and Democratic parties split along North-South lines on the second dimension, while the first dimension continued to divide the Whigs from the Democrats along traditional economic issues (e.g., tariffs, internal improvements, the

national bank, homestead acts). By 1853, the economic dimension collapsed and was replaced by the slavery dimension.

The 32d Congress was pivotal. By then the conflict had become so intense that it destroyed the spatial structure of congressional voting. The 32d is the second-worst-fitting House in U.S. history. (The worst occurred when the Federalists collapsed and gave way to one-party government in the Era of Good Feelings.) But by the 33d Congress, spatial structure began to reform, and slavery became the primary dimension. The scatter diagrams presented in figures 3 through 6 illustrate this process. In scatter diagrams throughout this chapter, each legislator is represented by a letter token, coded for the political party identifications assigned by Martis (1989).

Figure 3 shows a vote on whether to accept a petition concerning slavery in the district of Columbia on December 10, 1844. The legislator positions are those for the 28th Congress. The vote of each legislator is shown by the letter case of the token. Lower case corresponds to an antislavery vote, upper to proslavery. The first (horizontal) dimension separates the Whig and Democratic parties; the second (vertical) dimension separates the representatives into southerners (on top) and northerners (on bottom). Since proslavery voters are at the top and antislavery voters at the bottom, this second dimension accounts for the almost perfect spatial separation on this roll call; only 9 of 188 votes are misclassified in the D-NOMINATE estimation. ¹¹ The spatial structure shown in figure 3 held from approximately 1832 to 1849.

Figure 4 shows a motion to adjourn made on May 11, 1854, during the debate on the Kansas-Nebraska Act. ¹² Like the District of Columbia slavery vote, this roll call is spatially structured with only 3 of 147 votes misclassified. But in the period between the vote on District of Columbia slavery and the Kansas-Nebraska Act, the spatial structure changed completely. The first dimension is now a slavery dimension, and the Democratic and Whig parties are mixed together in the center of the space.

Figure 5 shows a vote concerning appropriations for the Kansas legislature taken on the last day of the 34th Congress, March 3, 1857. ¹³ Only one of the 171 votes is misclassified. In contrast to figure 4, there is little mixture in the center of the space, and the pro- and antislavery blocs are well separated. By this time, the Whig party was all but dead, and the party identification "opposition" best describes the ex-Whigs (Martis 1989, 34). The second

^{10.} The graphs in this figure result from computations based on more than eight million individual voting decisions in the first 99 Houses. A typical legislator's position is estimated from some 900 choices. In modern times, a typical roll call's parameters are estimated from more than 400 choices. Evidence in the figures reflects aggregations of these parameters. Poole and Rosenthal (1991b) conduct statistical significance tests for statements similar to those made in the text. They are generally significant at ρ levels several orders of magnitude below conventional levels. Basically, anything of interest displayed in the figures is statistically significant.

^{11.} Roll call number 433 in the 28th House. The division on the roll call was 107 yea and 81 nay.

Roll call number 175 during the 33d Congress. The division on the roll call was 64 yea
 and 83 nay.

^{13.} Roll call number 719 in the 34th Congress. The division on the roll call was 85 yea and 86 nay.

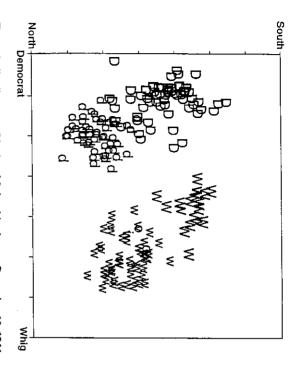


Fig. 3. Roll call vote on District of Columbia slavery, December 10, 1844. (Each token represents a legislator; lower case = antislavery vote; upper case = proslavery vote. Party affiliation is shown with the following symbols: D = Democrat; i = Independent and Democrat; O = Law and Order; X = Independent Whig; V = Van Buren Democrat; W = Whig.)

dimension is very weak but appears to capture the nativist sentiment of the time, because it tends to separate members of the American (Know-Nothing) party from the rest of the House.

Finally, figure 6 shows an early vote in the 36th House on a procedural motion regarding slavery during the battle over the speakership. ¹⁴ Only one of the 232 votes is misclassified. The Republican party was now in the House in force, and the spatial separation between the pro- and antislavery blocs is very clear.

What figure 2 and figures 3 through 6 show is that the realignment of the 1850s within Congress was sudden and occurred *before* the Republican party became a real force in U.S. politics. This result throws into question some recent work by political economists and historians.

Fogel (1990) studies the realignment that produced Lincoln's electoral victory by comparing the elections of 1852 and 1860. At least in Congress, we see that the old Whig system had largely disintegrated by the time of the

14. Roll call number 3 in the 36th House. The division on the roll call was 116 yea and 116

nay

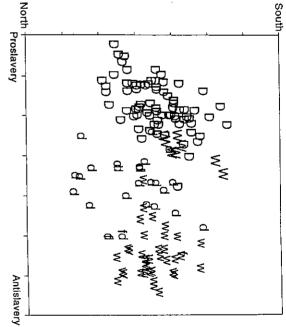


Fig. 4. Roll call on the motion to adjourn, May 11, 1854 (Kansas-Nebraska Act). (Each token represents a legislator; lower case = anti-slavery vote; upper case = proslavery vote. Party affiliation is shown with the following symbols: D = Democrat; F = Free Soil; W = Whig.)

elections of 1852. To compare the old system to the new, 1848 would appear to be a better benchmark.

Weingast (1991) correctly identifies 1850 as a crucial date in the slavery conflict. The old spatial alignment collapsed in the 1851–52 House (and Senate). But Weingast attributes the sudden change to a single event—the destruction of a credible commitment to slavery in the South by breaking the North-South balance in the Senate with the admission of California as a free state in 1850. What we show is that the tension over slavery had built gradually over time, as shown by the steadily rising importance of the second dimension in the 1840s. The realignment of the 1850s was more a matter of a process that gradually increased stress until a breaking point was reached than one of a single, overwhelming event.

This pattern does fit Sundquist's model rather nicely. A new issue (actually a version of a very old issue), the extension of slavery into the territories, emerged. It cut across the existing line of cleavage (conflicts over economic policy) and caused the two political parties to polarize, with one being destroyed in the process. A new party system then formed around the new issue. In spatial terms, a stable, two-dimensional two-party system becomes un-

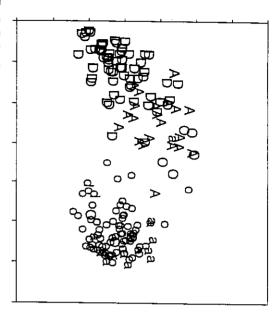


Fig. 5. Roll call on appropriations for the Kansas legislature, March 3, 1857. (Each token represents a legislator; lower case = antislavery vote; upper case = proslavery vote. Party affiliation is shown with the following symbols; A = American; D = Democrat; O = Opposition; R = Republican.)

stable. The first dimension disappears, and its place is taken by the old second dimension.

Gold and Silver and the "Realignment" of the 1890s

In Sundquist's narrative, in the aftermath of the Civil War, the main dimension of conflict was concerned with reconstruction, secession, Negro rights, and related issues. Neither party was attentive to the farmers and the emerging labor movement. The period from 1866 to 1897 was marked by a long-run, persistent deflation with accompanying falling commodity prices. This was the driving force behind the inflation issue, which, according to Sundquist's narrative, represented a new line of cleavage that led to the realigning election of 1896. The Gold Democrats deserted the Democratic party for the Republican party; the Silver Republicans were not able to overcome their aversion to the Democrats because of the Civil War and remained in the Republican party. Consequently, the Republicans were the majority party until the 1930s.

During the period from 1866 to 1908, a total of 179 roll calls with a unority of at least 20 percent were cast in the House on the gold and silver

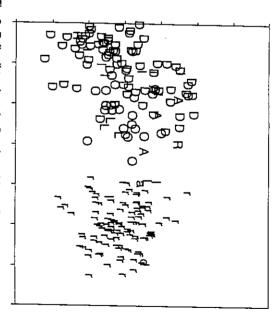


Fig. 6. Roll call to elect the Speaker without discussing slavery, December 6, 1859. (Each token represents a legislator: lower case = antislavery vote; upper case = proslavery vote. Party affiliation is shown with the following symbols: A = American; D = Democrat; I = Independent and Democrat; L = Anti-Lecompton Democrat; O = Opposition; R = Republican.)

issue (see fig. 7). In addition, we show the PRE increase for the actual roll calls as well as the moving average. The level of variability is similar to that which could be shown for the other issues considered in this essay. We also show MAJORITY = 1 - MINORITY to indicate that the average voting on the winning side is not a factor that warrants special attention. Again note that the horizontal axis is not evenly divided in units of time.

The pattern for the gold and silver issue is quite different than that for slavery. There is evidence that the gold and silver issue was a new line of cleavage in that a persistent but low-level effect can be seen for the second dimension. Indeed, an examination of the spatial maps for Congresses through this period shows that the second dimension tended to separate west-erners from easterners, especially within the Republican party. In addition, this separation was *maintained* after the 1896 election.

Moreover, gold and silver is only weakly a second-dimension issue. Note that the increase in PRE from the second dimension peaks in the late 1870s, well before the "realigning" election of 1896. By the middle of the 1880s, members of Congress saw the gold standard and the monetization of silver as

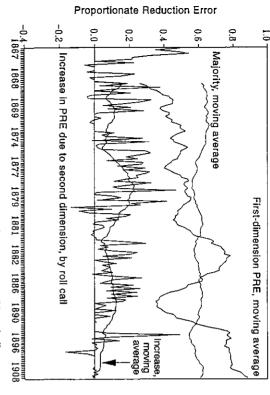


Fig. 7. Twenty-roll-call moving averages in votes on gold and silver issues. 1866–1908

part of set of issues, including the regulation of railroads and antitrust laws for industrial monopolies, that were defined along a "procommercial/anticommercial" axis (Poole and Rosenthal, 1991a). From 1890, well before the "critical" election of 1896, through 1908, the first-dimension PRE on gold and silver is always above 0.75. Although the first-dimension PRE's for gold and silver were lower prior to 1890, the first dimension was *never* replaced, in contrast to the 1850s. Rather, by the early 1890s, gold and silver as an issue was absorbed by the first dimension.

In sum, the evidence indicates that gold and silver as an issue realigned. That is, the basic configuration of the members of Congress was fairly stable throughout this period, but the mapping of gold and silver changed. That is, gold and silver slowly changed from a weakly two-dimensional issue to a strongly one-dimensional issue over the period. The realignment at the level of congressional voting did not change the basic structure of voting, rather, as an issue, gold and silver evolved until voting on it lined up along the first dimension.

The Great Depression and the "Realignment" of the 1930s

The collapse of the stock market in October, 1929, was followed by the economic slide into the Great Depression of the 1930s. By the summer of

1933, industrial production was down 50 percent, commodity prices were down 50 percent, and unemployment was around 24 percent. The consequences for the Republican party were equally severe. The elections of 1930, 1932, 1934, and 1936 resulted in a thoroughgoing replacement of Republicans by Democrats in Congress. By 1937, the Democratic party held a 333 to 89 margin over the Republicans in the House (13 members of Congress belonged to minor parties) and a 75 to 17 lead in the Senate (4 in minor parties). This massive replacement is the "realignment" of the 1930s. Since the Civil War, never before or after this time were the two parties so imbalanced in Congress.

The economic catastrophe changed the agenda of Congress. Providing relief for the destitute, formerly the function of private and religious organizations, became the province of the federal government. Moreover, the New Deal altered forever the role of the federal government in regulating the economy. Sinclair argues that the New Deal agenda "increased the ideological content of American politics" and produced "a much clearer ideological distinction between the congressional parties" (Sinclair 1977, 952). Ginsberg argues that "changes in policy after 1933 are in keeping with voter choices favoring alterations in the economic system and redistributions of opportunities in favor of urban working class elements" (Ginsberg 1976, 49).

There is no question that the Congressional agenda radically changed during the 1930s. The central question concerning realignment is: did the change in content bring with it a change in the spatial structure of voting? The answer is no. The change in agenda was accommodated within the existing framework. What *did* change was the ratio of Democrats to Republicans. This point is illustrated by figures 8 and 9, which show the estimated positions of representatives for the 71st (1929–30) House and 73d (1933–34) House, respectively. Is Individual spatial positions are largely unchanged. Note that, in both figures, southern Democrats (S tokens) are at the left edge of the Democratic party. The depression did not lead to an immediate repositioning within the Democratic party, but simply to an expansion of the Democratic shape of the Republican cloud changed, but largely as a result of the elimination of a part of the cloud.

The spatial structure of figures 8 and 9 is essentially the same. In addition, the fit of the two-dimensional dynamic model to the roll call data through the "realigning" period is quite good (Poole and Rosenthal 1991b). The second dimension through this period picked up a weak western-versus-castern-states effect along with voting on the "social" issues of the day—prohibition and immigration.

The stable spatial structure shows that the legislation of the First New

For similar results for the Senate, see Poole and Rosenthal 1989b.

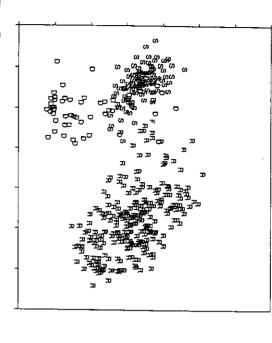


Fig. 8. Estimated positions in the 71st House, 1929–30. (Party affiliation is shown with the following symbols: D = Northern Democrat; F = Farmer-Labor; R = Republican; S = Southern Democrat.)

Deal was largely accommodated within the spatial structure that had prevailed since the end of Reconstruction. The legislation reflected either new issues that mapped readily onto the old lines of conflict or old issues, latent during the Democrats' prolonged minority status, that could be brought to the floor and passed with the new Democratic majorities.

A good illustration of the nonrealignment of the Depression is illustrated by roll call voting on labor issues, shown in figure 10. Not until the battle over the Fair Labor Standards Act—the original minimum-wage bill—in 1937–38 did the second dimension play any role in labor legislation. When the second dimension did come into play, it closely tracked the North-South division within the Democratic party over race (see below).

Another illustration of the nonrealignment of the depression is roll call voting within Clausen's social welfare category, shown in figure 11. We removed voting on liquor regulation and immigration from the category because they were strongly two-dimensional *before* the depression (see figs. 15 and 16; these issues will be further discussed in the next section). Figure 11a shows all roll calls from 1900 to 1977. The bottom line shows the increase in PRE brought about by adding a second dimension. It is essentially at a zero level since the mid-1970s; consequently, we have not graphed the large number of roll calls since 1977. It can be seen that social welfare has been largely

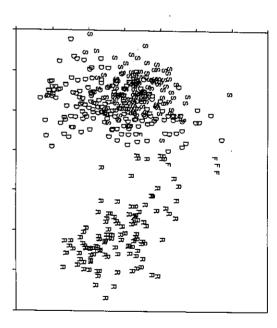


Fig. 9. Estimated positions in the 73rd House, 1933–34. (Party affiliation is shown with the following symbols: D = Northern Democrat; F = Farmer-Labor; R = Republican; S = Southern Democrat.)

a first-dimensional issue throughout the century, with occasional minor increments from the second dimension. These increments occurred in the late 1930s, the 1950s, and the 1960s. There is no evidence of a realignment brought about by the depression.

The result is emphasized by figure 11b, which enlarges the 1900–1964 portion of figure 11a. The increments to PRE brought about by the second dimension all occur after the beginning of Roosevelt's second administration. Since the social welfare category also contains the labor roll calls, the pattern in figures 11a and 11b is very similar to that in figure 10.

Civil Rights and the Perturbation of the Space

In perhaps a classic illustration of Riker's (1962) size principle, the sweeping Democratic victories in 1932 and 1936 were too good to last. Northern Democrats embarked on the Second New Deal. Many of the new programs were not to the liking of the South, and the conflict is most evident in the area of civil rights for blacks.

Roll calls on civil rights issues are shown in figure 12. During the Civil War and Reconstruction, civil rights votes had high first-dimension PRE's. During the war, there were many votes on the role of negroes in the military.

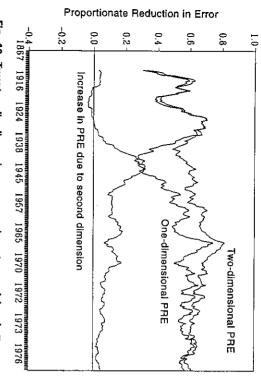
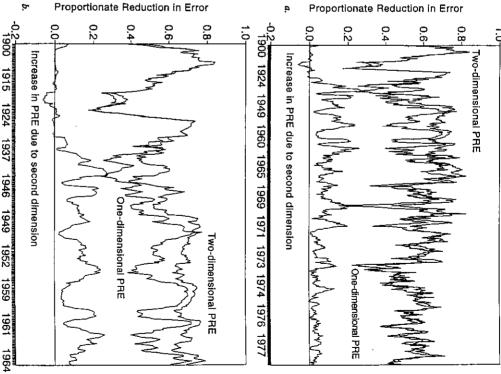


Fig. 10. Twenty-roll-call moving averages in votes on labor issues

reverse logic, the split on a host of antilynching roll calls in 1921 and 1922. whites in the South. The split on economic issues happened to match, with meant favoring redistribution from richer whites in the Northeast to poorer what lower PRE's, but voting alignments on civil rights continue to be along the first dimension. This is largely because being left on economic issues Between Reconstruction and the New Deal, votes on civil rights had some Reconstruction saw votes on the Bureau of Freedmen and civil rights bills

Southerners on civil rights votes. issues. A second dimension became necessary to differentiate Northerners and by roll calls on the poll tax and voting rights in the armed torces, there was a lynch laws recurred, in 1937 and 1940, and were joined, during World War II, only one falling in the first Roosevelt administration. By the time votes on horde of Northern Democrats who aligned themselves on the left on economic Between 1922 and 1937, there were only two civil rights roll calls, with

economic interest of a low-wage area, 16 Southern white congressmen also duced in 1937 and passed in 1938 might have been motivated from the Although the opposition of the South to the minimum-wage legislation intro-The economic agenda itself became infused with the conflict over race.



All roll call votes, 1900–1977

Fig. 11. Ten-roll-call moving averages in votes on social welfare issues b. Roll calls from 1900 to 1964 only

by keeping sectors of the economy concentrated in the South (and where competition with the North was not an issue), such as tobacco, out of the Rosenthal 1991c). Even though the position of the South was accommodated explicitly opposed minimum wages as favoring Southern blacks (Poole and

nullify their region's advantage in attracting industry" (1977, 948). Sinclair also argues that the measure as opposed to temporary measures such as work relief (949). North-South split on minimum wage was also due in part to the fact that it was a permanent 16. Sinclair argues that "Southerners feared that a nationwide minimum wage would

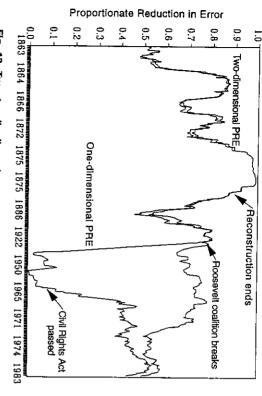


Fig. 12. Twenty-roll-call moving averages in votes on civil rights for blacks, 1862-1985

initial coverage, Southerners largely opposed the labor legislation of the Second New Deal. Consequently, labor also had an important second-dimension component from the late 1930s onward (see fig. 10).

As economic issues also turned from redistribution between whites to redistribution from whites to blacks, particularly in the South, Southerners became more conservative on the first dimension in addition to defining a pole on the second dimension. Most of the increase in classification accuracy on economic issues available from a second dimension was thus eliminated by the late 1950s. Voting on labor issues increasingly lined up on the first dimension. By 1970, first-dimension PRE levels returned to those found in the 1920s and 1930s (see fig. 10).

Civil rights remained a second-dimension issue longer than labor. But after economic conservatives in the Republican party joined Northern Democrats to pass the Civil Rights Act of 1964 and the Voting Rights Act of 1965, civil rights could increasingly be accounted for by the first dimension. In signing the legislation and "delivering the South to the Republicans for 50 years," Lyndon Johnson signaled a realignment in mass voting behavior, particularly in presidential elections. But this did not lead to a spatial realignment in Congress. Rather, it ended the perturbation of the space by the civil rights issue. Unlike the 1920s, there is now a consistent position, personified by Jesse Helms, of a "right" position on economics and race. Similarly, as

Southern Democrats sought black support, they became increasingly like Northern Democrats. Not a single Southern Democratic senator failed to vote to override President Bush's veto of the Civil Rights Bill of 1990. The veto was sustained by conservative Republicans, North and South. Indeed, the impact of the bill is nationwide, and there is a heavy component of economic redistribution inherent in the bill.

The vote to override Bush's veto is shown in figure 13. The configuration of senators was produced by running NOMINATE on the 100th Senate; only the 88 senators who served in both the 100th and 101st Senates are shown in the figure. What is striking about the configuration is the nearly complete disappearance of the second dimension. The most "extreme" Southern Democrats are now indistinguishable along the main dimension from such "liberal" republican senators as Bob Packwood of Oregon. Indeed, our animation work (Poole and Rosenthal 1989a) shows the gradual disappearance of the second dimension from the middle 1970s through 1985. Figure 13 suggests that this trend continued through the late 1980s, producing a true "unidimensional Congress."

The civil rights episode, lasting roughly from 1940 to 1966, is very instructive about spatial realignment. Although race and economics are substantively quite distinct, only one dimension was needed before 1940. This outcome was just fortuitous. Conservative positions on race and economics just happened to be strongly, albeit negatively, correlated. The breakup of the oversized Roosevelt coalition and the subsequent enfranchisement of Southern blacks took place in a framework of spatial perturbation. A second dimension was needed to capture the resolution of this conflict, but the conflict never managed to dominate the basic economic conflict inherent in democracy. Voting never became chaotic, as in 1851–52. The perturbation ended with legislation that induced a strong positive correlation of conservative positions on race and economic policy. Converse's view of constraint in ideology (1964) is now reflected in a basically one-dimensional political space in Congress.

Incorporation of Substantive Issues Into the Basic Space

Most of the galaxy of policy issues that confront Congress are neither as intense nor as enduring as the question of race, which led to the realignment of the 1850s and the perturbation of the 1950s. How are these issues accommodated in the basic space?

If an issue is to result in sustained public policy, we hypothesize that the policy must eventually be supported by a coalition that can be represented as a split on the first, major dimension. Policy developed by coalitions that are

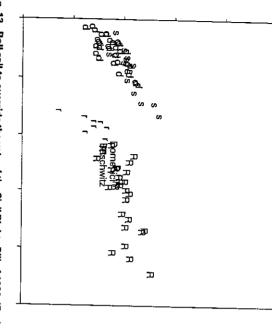


Fig. 13. Roll call to override the veto of the Civil Rights Bill of 1990. (Each token represents a legislator; lower case = vote to override; upper case = vote to sustain. Party affiliation is indicated with the following symbols: D = Northern Democrat; S = Southern Democrat; R = Republican. Names indicate classification errors.)

nonspatial or built along the second dimension is likely to be transient and unstable.

To investigate this hypothesis requires us to sharpen our focus and look at issue areas that are relatively narrowly defined, permitting us to hold substance relatively constant. Our first effort of this type was a detailed study of the history of minimum-wage legislation (Poole and Rosenthal 1991c). We found that, before World War II, minimum wage was relatively poorly mapped into the space. Even if two dimensions are used, the classifications were much worse than after the war. After the war, minimum wage became a first-dimension issue with a high degree of classification accuracy.

Abortion is an example of an issue in the initial, ripening phase. As shown in figure 14, when abortion first came onto the agenda shortly after the Supreme Court's *Roe v. Wade* ruling, the issue was quite variable in its fit to the existing spatial dimensions. It basically falls along the first dimension but with a low level of PRE. But the PRE has gradually and significantly (t = 5.12) increased with time. Part of this increase has resulted from well-known flip-flops, such as Richard Gephardt's conversion to a pro choice position. It

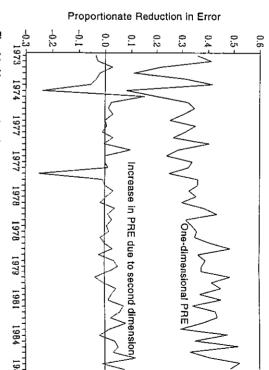


Fig. 14. Votes on abortion issues, 1973–85. (PRE regressed on time; $R^2 = .331$; t = 5.12.)

no longer seems possible that abortion policy can be decided by single-issue politics.

Prohibition is a nice counterpoint to abortion. The temperance movement was a classical example of single-issue politics. As figure 15 shows, voting on the passage of prohibition and its repeal did not map at all into the first dimension and had a moderately high level of PRE on the second dimension. The special-interest coalition was strong enough to amend the Constitution, but it did not produce a lasting element of public policy.

Finally, immigration is a more complex issue, as shown in figure 16. Free immigration (of Europeans) was a permanent element of public policy throughout the eighteenth and nineteenth centuries. There was a conflict, a classical economic conflict, between those who wanted cheap labor and those who did not. Through 1910, votes on immigration were, as we would expect, on the first dimension with a very high level of PRE. But, in the early twentieth century, the immigration issue took on an added element of conflict. Northern and western Europeans wanted to keep eastern and southern Europeans out. In a large number of roll calls just before World War I, the first dimension failed to classify votes on immigration. An enduring policy of restricted immigration was enacted only when the issue had been substantially "remapped" onto the first dimension and the immigration acts of 1920 and

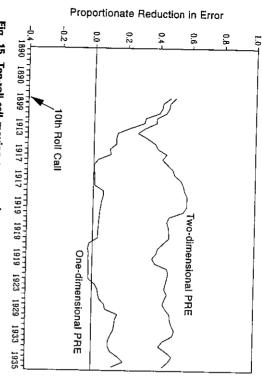


Fig. 15. Ten-roll-call moving averages in votes on prohibition-related issues, 1890–1937

1924 were passed. Subsequently, in the 1930s through the 1970s, the second dimension was more relevant, but the substance changed. The basic policy of restrictive immigration was not changed, but votes took place on the admission of political refugees. When a systematic policy change was introduced in the 1980s, there was no longer an effect from a second dimension.

Although much more work is required on how specific issues map into the basic unidimensional structure of congressional voting, the results from minimum wage, abortion, prohibition, and immigration, and, in an earlier period, monetary policy, provide support for our hypothesis that stable policy coalitions are built on the first dimension.

Conclusion

Major changes in the mass electorate occurred during the 1850s, 1890s, and 1930s. But only in the 1850s is there evidence that these changes produced a corresponding shift in the structure of congressional roll call voting. The changes of the 1890s and 1930s were largely massive replacements of one party by the opposing party. These replacements did not change the basic structure of congressional voting.

Beginning in the late 1930s, however, a realignment did perturb the structure of congressional voting. The unwieldy Roosevelt coalition broke up

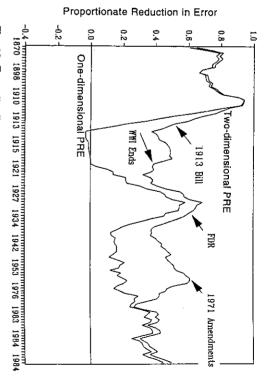


Fig. 16. Ten-roll-call moving averages in votes on immigration issues, 1870–1984

because of North-South conflicts over the old issue of race. This division peaked in the 1960s and has slowly faded away. Southern Democrats are now to the left of "liberal" Republicans.

sisted for several decades, but there was no dimensional realignment. Simconditions are strongly related to electoral outcomes, with the incumbent's effects that dampen only slowly. Consequently, the "realignment" of the itarly, Republican ascendence in the late 1890s may have reflected the vast the depression. Because the shock was massive, Democratic majorities per-1930s may have been only a powerful shock on the dimension as a result of Londregan, and Rosenthal 1991) that electoral gains have long-run lagged party being punished in bad times. It has also been established (Alesina, For example, it is well known, at least since Kramer 1971, that economic be no more than a remapping of ideal points on the long-run first dimension. congressional majorities. But sometimes these shifts in voter allegiances may how shifts in voter allegiances influence presidential election winners and thus able to study dimensional realignment directly, the literature focuses on disparity in the findings. Whereas we estimated spatial positions and were results. We speculate that this difference in data is not the source of the professional politicians as opposed to previous analyses of national election monly described in the literature may be a simple consequence of our tocus on Our finding of only one major realignment rather than the three com-

discoveries of gold in South Africa and the Klondike that vitiated the inflationary agenda of the Democrats.

Our results on realignment suggest a general model for issue change. We have found that the first dimension throughout most of U.S. history has captured the main economic conflicts between the two major political parties. During normal periods, one typically finds a weak second dimension that captures the "social" issues of the day. New issues that have staying power will eventually be drawn into the exiting one- or two-dimensional alignment because it is easier to build stable coalitions within the existing stable structure of voting.

REFERENCES

- Aldrich, John H. 1983. "A Spatial Model with Party Activists: Implications for Electoral Dynamics." *Public Choice* 41:63–100.
- Alesina, Alberto, John Londregan, and Howard Rosenthal. 1991. "A Model of the Political Economy of the United States." Graduate School of Industrial Administration, Carnegie-Mellon University, paper #1990-27.
- Brady, David W. 1982. "Congressional Party Realignment and Transformations of Public Policy in Three Realignment Eras." American Journal of Political Science 26:333-60.
- Burnham, Walter Dean. 1970. Critical Elections and the Mainsprings of American Politics. New York: Norton.
- Clausen, Aage R. 1973. How Congressmen Decide: A Policy Focus. New York: St. Martin's Press.
- Clausen, Aage R., and C. Van Horn. 1977. "The Congressional Response to a Decade of Change: 1963–1972." *Journal of Politics* 39:624–66.
- Converse, Philip E. 1964. "The Nature of Belief Systems in Mass Publics." In *Ideal*.

 ogy and Discontent, ed. David E. Apter, 206-61. New York: Free Press.

 Fogel. Robert 1900 "Modeling Community of Belief Systems in Mass Publics." In *Ideal*.
- Fogel. Robert. 1990. "Modeling Complex Dynamic Interactions: The Role of Intergenerational, Cohort, and Period Processes and of Conditional Events in the Political Realignment of the 1850s." Historical Working Paper no. 12. Cambridge, Mass.: National Bureau of Economic Research.
- Ginsber., Benjamin. 1972. "Critical Elections and the Substance of Party Conflict. 1844–1968." Midwest Journal of Political Science 16:603–25.
- Ginsberg, Benjamin. 1976. "Elections and Public Policy." American Political Science Review 70:41–49.
- Kramer, Gerald. 1971. "Short Term Fluctuations in U.S. Voting Behavior, 1896-1964." American Political Science Review 65:131-43.
- Martis, Kenneth C. 1989. The Historical Atlas of Political Parties in the United States Congress: 1789–1989. New York: Macmillan.
- Peltzman, Sam. 1984. "Constituent Interest and Congressional Voting." *Journal of Law and Economics* 27:181–200.

- Poole, Keith T., and Howard Rosenthal. 1985. "A Spatial Model for Legislative Roll Call Analysis." *American Journal of Political Science* 29:357-84.
- Poole, Keith T., and Howard Rosenthal. 1987. "Analysis of Congressional Coalition Patterns: A Unidimensional Spatial Model." Legislative Studies Quarterly 12:55–75.
- Poole, Keith T., and Howard Rosenthal. 1988. "Roll Call Voting in Congress 1789–1985: Spatial Models and the Historical Record." In Science at the John von Neumann National Supercomputer Center: Annual Research Report Fiscal Year 1987, 111–16. Princeton, N.J.: John von Neumann Center.
- Poole, Keith, T., and Howard Rosenthal. 1989a. "Color Animation of Dynamic Congressional Voting Models." Graduate School of Industrial Administration, Carnegie-Mellon University, paper #64-88-89.
- Poole, Keith T., and Howard Rosenthal. 1989b. "Political Realignment in American History: Results from a Spatial Scaling of the Congressional Roll Call Record." In Science at the John von Neumann National Supercomputer Center: Annual Research Report Fiscal Year 1988, 157-62. Princeton, N.J.: John von Neumann Center.
- Poole, Keith, T., and Howard Rosenthal. 1991a. "The Enduring 19th Century Conflict Over Economic Regulation: The Interstate Commerce Act Reconsidered." Manuscript, Graduate School of Industrial Administration, Carnegie-Mellon University.
- Poole, Keith T., and Howard Rosenthal. 1991b. "Patterns of Congressional Voting." American Journal of Political Science 35:228-78.
- Poole, Keith T., and Howard Rosenthal. 1991c. "The Spatial Mapping of Minimum Wage Legislation." In *Politics and Economics in the 1980s*, ed. Alberto Alesina and Geoffrey Carliner, 214–46. Chicago: University of Chicago Press.
- Riker, William. 1962. The Theory of Political Coalitions. New Haven: Yale University Press.
- Schattschneider, E. E. 1940. Party Government. New York: Holt, Rinehart and Winston.
- Sinclair, Barbara. 1977. "Party Realignment and the Transformation of the Political Agenda: The House of Representatives, 1925–1938." American Political Science Review 71:940–53.
- Sinclair, Barbara. 1981. "Agenda and Alignment Change: The House of Representatives, 1925–1978." In Congress Reconsidered, 2d ed., ed. Lawrence C. Dodd and Bruce I. Oppenheimer, 221–45. Washington: CQ Press.
- Sundquist, James L. 1983. Dynamics of the Party System. Rev. ed. Washington: Brookings Institution.
- Weingast, Barry. 1991. "Political Economy of Slavery: Credible Commitments and the Preservation of the Union, 1800–1860." Paper presented at the Seventh International Symposium in Economic Theory and Econometrics, St. Louis.