7

Sophisticated Voting and Agenda Manipulation

In this chapter, we examine the evidence that indicates whether there is strategic or sophisticated voting in Congress. A basic premise of this book is that on each roll call, legislators vote as if they were choosing sincerely between a Yea outcome and a Nay outcome. That is, those who prefer the policies associated with the Yea outcome actually vote Yea, while those who prefer the policies associated with the Nay outcome vote Nay. Preference is determined by the legislator's Euclidean distance to the alternatives and by random disturbances (see chapter 2).

The alternative to sincere voting is strategic or sophisticated voting. We need to consider two types of strategic behavior: vote trades and sophisticated voting on agendas. Vote trades occur when one actor says to another, "Let's make a deal." The deal might be a logroll, of the type explored in chapter 6, where votes on one issue (such as agricultural price supports) are traded for votes on another (food stamps). Another possible deal is represented by a White House phone call with an implicit promise that the legislator will acquire chips that can be cashed in in the future. Still another would be the trading of a vote in response to campaign contributions, endorsements, or threats. A wide range of interest groups, from the National Rifle Association (NRA) to the America-Israel Political Action Committee, are alleged to be particularly successful in manufacturing trades. Nevertheless, the traders are likely to be legislators close to the "sincere" cutting line on an issue because the votes of these people, who are nearly indifferent on the issue, represent the cheapest votes. The most liberal members of Congress are unlikely to succumb to NRA threats to work against their reelection; the most conservative don't need to be pushed. Similarly, as we argued in chapter 2, logrolls are likely to take place between spatially adjacent actors. Vote trades involving actors close to sincere cutting lines largely preserve spatial voting. Such trades will not significantly influence the estimation of legislators' ideal points. Of course, the estimated cutting-line and outcome locations can, depending on the extent of trading, differ substantially from those produced by sincere behavior.

Strategic behavior also arises when there is a series of votes on the agenda for a specific bill. Strategic voters look ahead to future votes. When future votes are considered, a self-interested voter may vote against his or her immediate preferences. The calculation is basically that a vote for one's first choice today may be wasted if it means an empty cupboard tomorrow. Instead, one votes for one's second choice, recognizing that half a loaf is better than no loaf. Sophisticated behavior with respect to agendas, unlike logrolls, does not require implicit or explicit trades among legislators.

Strategic calculations make sense only if one anticipates a sequence of votes. In chapter 2, we indicated that the spatial model would still apply if there was a finite, binary agenda and both the agenda and voter preferences were known in advance. Voters would simply replace the ostensible alternatives with sophisticated equivalents and continue to vote along spatial lines. Such sophisticated voting would not bias our estimation of the legislator coordinates. The outcome coordinates estimated would be those of the sophisticated equivalents rather than the true mappings of the alternatives.

In this chapter, we first look for sophisticated voting using a one-dimensional model. We argue that truly sincere voting should almost always be observed, largely because the framers of bills should be able to anticipate how to draft their legislation to command a majority. Consistent with this hypothesis, our search of the literature on strategic voting found very few bothersome needles in our haystack of the 37,000 roll calls in the first 100 Congresses. In the few instances where the literature points to sophisticated voting, we find that the predictions of the complete-information model—with preferences and agenda known in advance—are disconfirmed, indicating that some voters vote in a sophisticated fashion while others continue to vote sincerely.

The presence of a mixture of voting types suggests that the basic one-dimensional voting model with a single midpoint might be improved on by a two-point model in which extremists on both ends vote one way and moderates vote the other. This so-called both-ends-against-the-middle voting might also arise because extremists are position-taking or expressing alienation. For example, Jesse Helms voted against a moderating Republican amendment to the minimum-wage bill in 1990, thereby expressing his opposition to a minimum wage of any form. In this chapter we show, however, that a two-point model cannot improve vote classifications beyond the amount expected from the random-error process assumed by D-NOMINATE.

When there is a mixture of sincere and sophisticated types, agenda manipulation is possible. There are in fact a few dramatic examples of successful killer amendments. These all involve race and are the final topic of this chapter.

Saving Amendments, Killer Amendments, and One-Dimensional Voting

The basic framework for the analysis of strategic voting can be developed by the simple voting tree shown in figure 7.1. In this tree, B stands for a bill, A stands for an amendment, and Q stands for the status quo. The first vote involves the amendment and the bill, with the winner being put against the status quo. Suppose that the unamended bill, B, would lose to the status quo, whereas the amended bill, A, would defeat it. That is, A > Q and Q > B, where the use of the bold face > in A > Q means A is preferred to Q by a majority. If A, B, and Q are one-dimensional—that is, they lie on a line through the basic space—A > Q and Q > B implies that A > B. Therefore, if everyone voted sincerely, the amendment would pass and then defeat the status quo—the amended bill would indeed be the winner.

To fix matters, let Q be a minimum wage of $3.35, let B be a minimum wage of $4.75, and let A be a minimum wage of $4.25. Sincere voting would have only liberals who preferred $4.75 to $4.25 voting against the amendment and only conservatives who preferred $3.35 to $4.25 voting against the amended bill. (To denote the
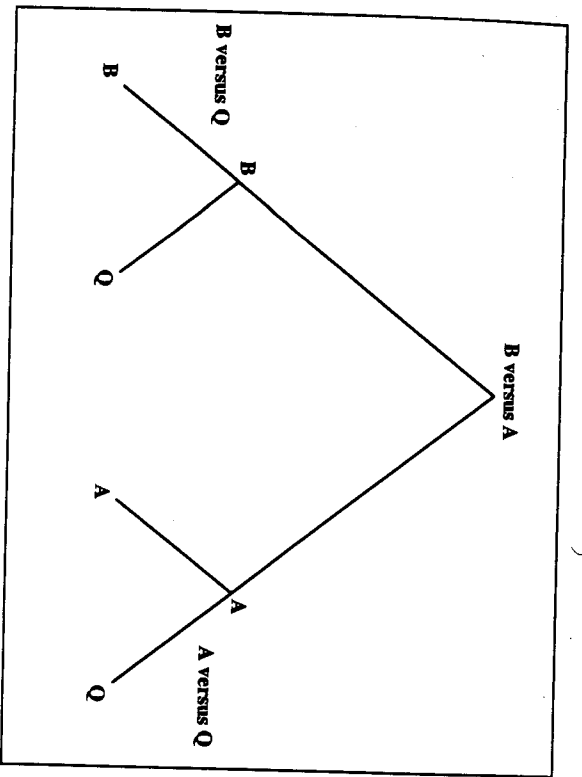
Figure 7.1. A simple agenda tree. An amendment (A) is voted on against the bill (B). The winner of this vote is then voted on against the status quo (Q).

preference of an individual, we use the nonbold face >.) As figure 7.2 illustrates, we can have only four voter types with one dimension. Assume there were 20 voters with preferences of B > A > Q (that is, B was preferred to A and A preferred to Q); 20 with A > B > Q; 20 with A > Q > B; and 40 with Q > A > B. These are consistent with A > Q (by a vote of 60 to 40) and Q > B (by a vote of 60 to 40). If the Q > A > B types, the most conservative members, saw all other types voting sincerely, they could vote for the $4.75 wage on the initial vote. This would win, combining 20 B > A > Q votes and 40 Q > A > B votes. Then, on the final vote, Q would defeat B. Clearly, sophisticated behavior would pay for the conservatives.

Sophisticated behavior by conservatives poses a dilemma for legislators with a preference ordering of B > A > Q. If they vote for the bill on the first vote and they win, then they lose to the status quo. They are faced with a choice of either compromising their principles or "going down in flames." If they do choose to compromise and look ahead, they will realize, as explained in chapter 2, that the initial vote is really a vote between A and Q, the sophisticated equivalent of B. When all voters vote on the basis of the sophisticated equivalents, A wins the initial vote 60 to 40 and the final vote 60 to 40.

Three related observations are pertinent to this situation. First, A plays the role of a saving amendment, introduced when it is clear that the original bill will be defeated. Second, on the initial vote, liberals and conservatives flip-flop when they vote in a sophisticated fashion. Liberals vote for the lower wage, $4.25; conservatives vote for the higher wage, $4.75. Third, on a saving-amendment agenda, the initial vote and the final vote should be identical. In our example, there should be two 60-to-40 votes, with Q > A > B types forming the minority in both cases.
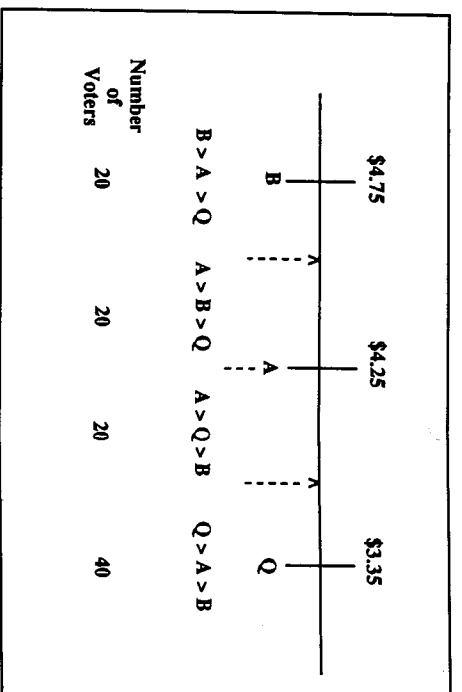
Figure 7.2. The minimum-wage example. The bill (B) with a high wage of $4.75 is at the liberal end of the continuum. The amendment (A) has a more moderate proposal of $4.25. The status quo (Q) is $3.35. In one dimension, there are only four types of strict preferences. The number of voters of each type is shown under the type.

$4.75 (B) — $4.25 (A) — $3.35 (Q)

B > A > Q	A > B > Q	A > Q > B	Q > A > B
Number of Voters 20	20	20	40

We argue that one should only rarely observe saving amendments, the reason being that the managers of bills should draft a bill that can win. One would expect few proposals with the property Q > B. Much more often, one should see agendas where B > Q.

If B > Q, there might be amendments where A > B. Hence, in one dimension, A > Q. Such amendments would occur in cases where the bill managers report a bill that can defeat the status quo but where opponents can come up with a measure that is more appealing to the median voter in the chamber. In this case, the sophisticated equivalents on the initial vote are simply the ostensible alternatives, A and B. The initial vote will be a sincere vote between A and B; and the second vote, a sincere vote between A and Q. Or, alternatively, one could see proposals where B > A > Q. In this case, the opposition is proposing amendments as a matter of position-taking. But again, the initial choice will be a sincere vote between A and B. A good illustration of this situation is provided by the Erlenborn amendment on the minimum wage, shown in figure 6.4.

An even more hopeless position-taking amendment would have the characteristic B > Q > A. In this case, the initial vote will be a sophisticated vote between B and Q, and the second vote will be a sincere vote between B and Q. Consequently, if voters are sophisticated, the initial and final vote should have identical cutting lines. So if bill managers exercise care in making proposals, one should find only sincere voting, unless some legislators prefer to engage in position-taking and to "go down in flames."

Empirical tests do not reject the proposition that most voting is sincere. In chapter 6, we summarized the Romer and Rosenthal (1985) study of Senate voting on amendments to the bill concerning the minimum size that opened a firm to inspection by the Occupational Safety and Health Administration and the Poole and Rosenthal (1991b) study of amendment voting on minimum wages. Such amendments provide a direct test of sincere voting because the amendments are altering a quantitative parameter of

a bill. With sincere voting, as the firm size is made smaller, the pro-OSHA vote should decrease, and as the minimum-wage level is made higher, the pro-minimum-wage vote should decrease. In both cases, the evidence was consistent with sincere voting. Ladha (1991, 1994), using a model derived from NOMINATE, carefully studied all amendment voting in the 95th Congress through the 98th, for which, as with minimum wages or OSHA inspections, an a priori quantitative ordering could be given to the alternatives. Almost all cases he studied supported sincere voting.

Three important exceptions that illustrate sophisticated voting have been identified by Enelow and Koehler (1980) and Enelow (1981). How do these well-known examples—the Common Situs Picketing Bill in 1974, the Panama Canal Treaty ratification in 1978, and Title IV of the 1966 Civil Rights Act—appear in the D-NOMINATE estimation?

Consider the Common Situs Picketing Bill, which was discussed in chapter 2. The situation was exactly as diagrammed in figure 7.1. The key vote was on the Sarasin amendment, which was designed to weaken the original bill—which most members believed would be defeated. The Sarasin amendment passed by a vote of 246 to 177, but then the amended bill lost 205 to 217.[1] Figure 7.3 shows the two votes.

The spatial model accounts very well for the two votes. The PRE for the Sarasin amendment was 0.74, and for the final-passage vote, the PRE was 0.75. Note that the two cutting lines are almost parallel, and that the representatives that represent voting errors tend to be clustered near the cutting lines. The Sarasin amendment was drafted to gain support among southern Democrats and Republicans. This objective was achieved—the cutting line passed through the southern Democrats and liberal Republicans. The party splits on the amendment vote were northern Democrats, 184 to 10; southern Democrats, 33 to 52; and Republicans, 29 to 115. In contrast, the splits on the final-passage vote were northern Democrats, 171 to 23; southern Democrats, 20 to 65; and Republicans, 14 to 129.

The voting patterns shown in figure 7.3 are consistent with sophisticated voting (on each vote) by both the extremes—the liberals and conservatives; and with sincere voting by the moderates—the group between the two cutting lines. For the moderates to be voting sincerely, their preferences would have to be the same as those of their more conservative brethren to the right of the Sarasin cutting line—namely, a preference ordering of Q > A > B. On the Sarasin amendment vote, the liberals and conservatives vote for the sophisticated equivalents (A versus Q), whereas the moderates vote sincerely on A versus B. On the final passage, the moderates now vote for Q. This behavior is consistent with the fact that the cutting lines are not identical. Indeed, since the status quo won the final vote, the Sarasin amendment was not a saving amendment, with A > Q.

Enelow and Koehler (1980, p. 406) note that the defeat of the amended bill "surprised both supporters and opponents of the bill alike." Suppose, however, as Enelow and Koehler claim (p. 407), that the amendment did not seriously weaken the bill—that is, A was almost as liberal as B. It is then possible that voters recognized that Q > A. In this case, because Q always wins in the final vote regardless of whether it faces A or B, voters can vote either way on the initial vote. Note, however, regardless of whether Q > A or A > Q, if all parties are certain that Q > B, liberals cannot be worse off by voting for A on the initial vote, and conservatives cannot be worse off by voting for B. Therefore, they can be expected to be sophisticated voters.
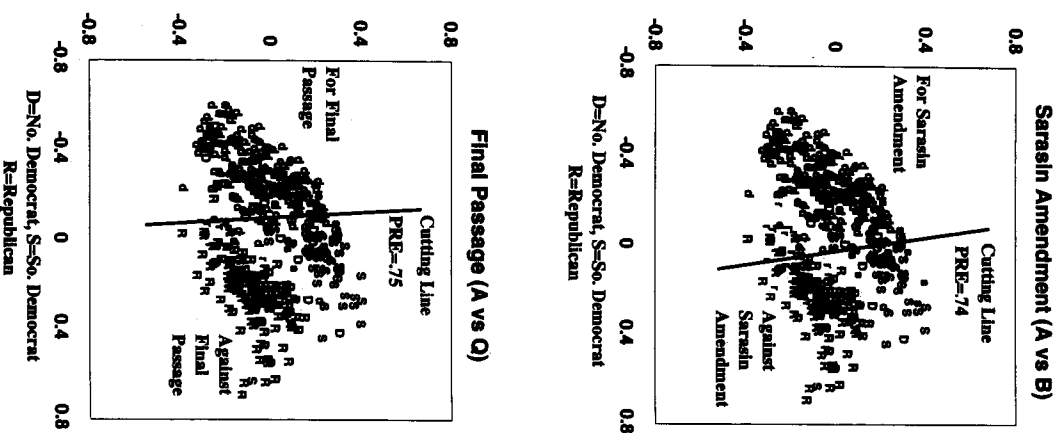
Figure 7.3. House voting on the Sarasin amendment and on passage of the Common Situs Picketing Bill. Those voting with a majority of the Democrats are shown in lowercase letters. (VOTEVIEW numbers 82 and 83; March 23, 1977.)

Among those representatives with preferences Q > A > B, those with relatively moderate D-NOMINATE scores appear, as we argued earlier, not to have followed their more conservative brethren and instead to have voted sincerely. The end result is nonetheless a vote along spatial lines, although the cutting line on the initial vote has neither the interpretation of being generated by sincere voting nor the interpretation of being generated by sophisticated equivalents. Instead, the cutting line reflects both types of behavior. Ironically, the final outcome would have been exactly the same if all voters had voted sincerely.

amendment whose purpose is exactly opposite to that of a saving amendment is as a killer amendment. A killer amendment is designed to sink a bill (so that ... that would defeat the status quo were it not amended (so that $B > Q$). Since $B > $ ... $Q > A$. in one dimension, $B > A$. Even with sincere voting, the killer amendment ... would fail. Sophisticated voters will treat the initial A-versus-B vote as a Q-versus-B vote, implying that B would defeat A on the first vote. Hence, in one-dimensional voting killer amendments must always fail!

Enelow and Koehler (1980) discuss several amendments offered by conservatives as killer amendments to the Panama Canal Treaties of 1978.[2] Although the intent of the conservatives was directly opposite to that of the saving Sarasin amendment favored by liberals, the voting patterns were similar. The amendments were of the "motherhood and apple pie" variety. For example, one concerned a cemetery in the Canal Zone where U.S. citizens were buried. The strategy of the conservatives was very simple: propose something that it is embarrassing to vote against; then the amended bill also passes. But if any of the "motherhood and apple pie" amendments passed, the amended treaty would require a renegotiation with Panama. A renegotiation would be preferred by the conservatives because, at a minimum, it would force a delay in the implementation of the main treaty provisions.

Placing "motherhood and apple pie" in our basic ideological space is somewhat problematical because, when voted on sincerely, such proposals might attract unanimous support. Because voters voted strategically, however, the actual voting behavior on the Panama Canal Treaty amendments fits into a one-dimensional framework.

Figure 7.4 shows one of these amendments along with the final-passage vote on the Panama Canal Neutrality Treaty. The amendment concerned the right of the United States to maintain military bases in the Canal Zone if the United States were at war. It was offered by Senator James Allen (D-AL), and then Senator Frank Church (D-ID) made a motion to table it. The motion to table passed by a vote of 57 to 38 on March 1, 1978, and the neutrality treaty was later passed by a vote of 68 to 32 on March 16, 1978.[3]

Both votes fit the spatial model well. The *PRE* for the Church motion was 0.68, and the *PRE* on the final passage was 0.59. The two cutting lines are close to being parallel, indicating unidimensional voting on the issue; and the overall pattern is very similar to that shown in figure 7.3 for the Common Situs Picketing Bill, but the interpretation of it is quite different.

Any vote for the Allen killer amendment can be interpreted as a sincere vote, since the amendment was of the "motherhood and apple pie" variety. But such a vote was also in accord with the strategic interests of conservatives who voted for the amendment (that is, against the Church motion to table) but against the treaty. Liberals who voted against the amendment but for the treaty were, in voting against "motherhood and apple pie," acting strategically, accepting an embarrassing vote in return for preserving the treaty.

The interesting case concerns the moderates in between the two cutting lines who voted both for the amendment and for the treaty. Although one could see them as being sincere voters, they may well also have been strategic ones. They wanted the treaty and may have been willing if necessary, "to take the fall" on the amendment, but they could presume that liberals wanted the treaty even more than they did. Moreover, there were enough liberals to defeat the amendment, leaving the moderates free to take the patriotic position on the amendment.
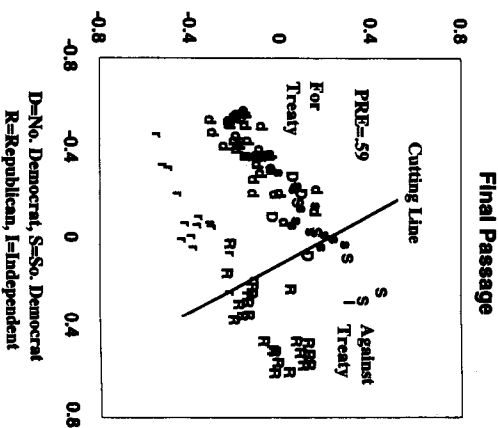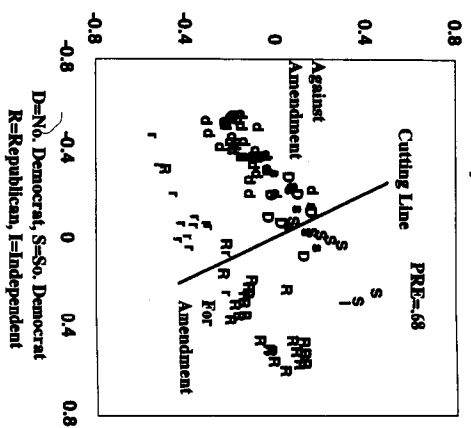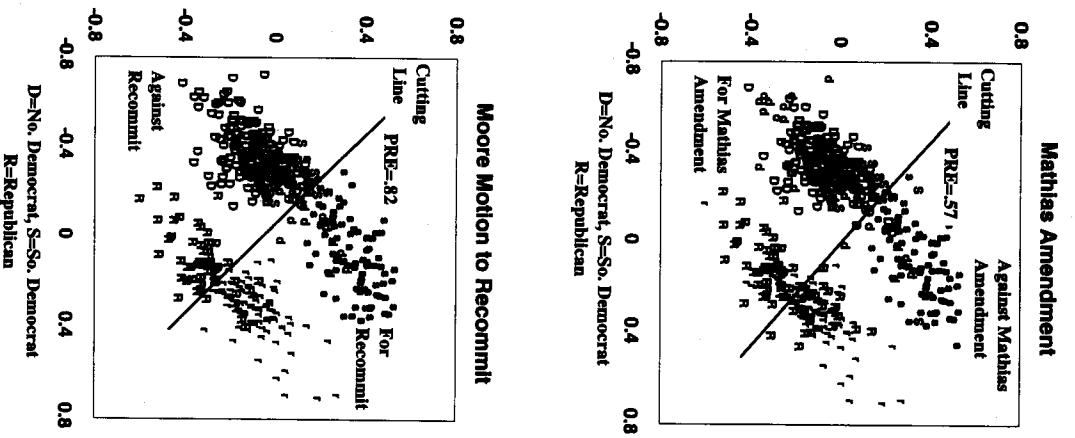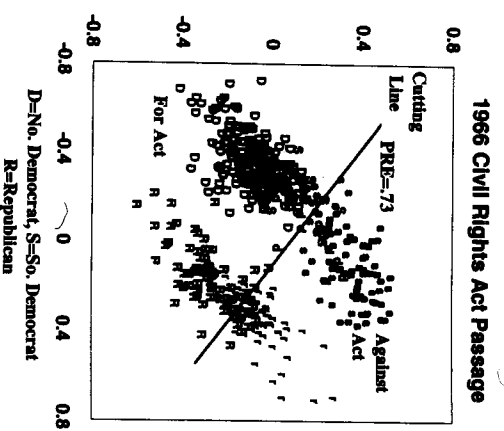
Military Bases Amendment

Cutting Line PRE=.68

Against Amendment   For Amendment

D=No. Democrat, S=So. Democrat
R=Republican, I=Independent

Final Passage

PRE=.59 Cutting Line

For Treaty   Against Treaty

D=No. Democrat, S=So. Democrat
R=Republican, I=Independent

Figure 7.4. Senate voting on the Church motion to table military-bases amendment and on passage of the Panama Canal Neutrality Treaty. Those voting with a majority of the Democrats are shown in lowercase letters. (VOTEVIEW numbers 673 and 702; March 1 and March 16, 1978.)

Enelow (1981) shows another interesting case where, unlike the Common Situs Picketing Bill, there was a successful saving amendment. The case is Title IV, the open-housing provision of the 1966 Civil Rights Bill. Title IV was aimed at prohibiting discrimination in the sale, rental, or financing of housing. Representative Charles Mathias (R-MD)[4]—who supported Title IV—offered a saving amendment to weaken Title IV enough for it to survive an attempt to delete it from the bill. Figure 7.5 shows

Mathias Amendment

Cutting Line PRE=.57

Against Mathias Amendment

For Mathias Amendment

0.8 · 0.4 · 0 · -0.4 · -0.8

-0.8 -0.4 0 0.4 0.8

D=No. Democrat, S=So. Democrat
R=Republican

Moore Motion to Recommit

Cutting Line PRE=.82

For Recommit

Against Recommit

0.8 · 0.4 · 0 · -0.4 · -0.8

-0.8 -0.4 0 0.4 0.8

D=No. Democrat, S=So. Democrat
R=Republican

Figure 7.5. House voting on the Mathias amendment to Title IV, the open-housing provision of 1966 Civil Rights Bill, the Moore motion to recommit, and passage. (VOTEVIEW numbers 289, 292, and 293, respectively; August 9, 1966.) Those voting with a majority of the Democrats are shown in uppercase letters.

the three critical votes in the sequence: the Mathias amendment, which passed by a vote of 237 to 176; the motion by Representative Arch Moore (R-WV) to recommit the bill with instructions to delete Title IV, which failed on a vote of 190 to 222; and the final-passage vote of 259 to 157.5 The expectation of Mathias was that the original bill, B, would lose to the motion to recommit, R, but that the amended bill, A, would defeat both R and the status quo, Q.

1966 Civil Rights Act Passage

Cutting Line PRE=.73

For Act

Against Act

0.8 · 0.4 · 0 · -0.4 · -0.8

-0.8 -0.4 0 0.4 0.8

D=No. Democrat, S=So. Democrat
R=Republican

Figure 7.5. (*continued*)

Two things stand out in figure 7.5. The three cutting lines are roughly parallel, again suggesting a single active dimension, but the fit of the spatial model is poor for the Mathias amendment. On the Moore motion and on the final-passage vote, the spatial model performs very well in that the errors are quite close to the cutting line. Not so for the Mathias amendment—the *PRE*s were 0.57, 0.82, and 0.73, respectively.[6]

The expected-utility theory of sophisticated voting developed by Enelow (1981) predicts that the only groups that may split their votes on a saving amendment are the extreme liberals and/or conservatives. Even if it means an eventual defeat for the bill, some of the extremist legislators may not be able to bring themselves to compromise their principles. In short, the two-outcome spatial model we fit to the roll calls may not work well for this type of roll call.

The Mathias amendment is an example. Note that a number of liberal Democrats quite distant from the cutting line voted against the amendment (the lowercase "d"s in the lower left quadrant). In contrast to the Sarasin and Allen amendments, where strategic voting led to a spatial, cutting-line pattern of voting, voting of the Mathias-amendment-vote type would, if pervasive, run counter to the basic premise of this book. Consequently, it is important to check whether "both ends against the middle" voting is prevalent.

Both-Ends-against-the-Middle Voting

The both-ends-against-the-middle type of voting on the Mathias amendment does not appear to occur very often. Among the examples of sophisticated voting that we found in the literature—more of which we discuss below—it is in fact the only one that shows this pattern. In addition, in chapter 3, we showed that the voting error from D-NOMINATE closely matches the theoretical-error distribution—especially on roll calls with at least 20 percent on the minority side.

To get a better measure of how frequently two-ends-against-the-middle voting occurs, we performed a simple experiment using a version of the optimal-classification method we described in chapter 2. Recall that the first step is to begin with an arbitrary ordering of the legislators. The optimal cutting point is found by making a simple search of the midpoints between adjacent legislators. These roll call midpoints are then fixed, the optimal point for each legislator is found, and so on.

Here, we perform the same experiment, only now each roll call is represented by *two* cutting points. We now search *all pairs* of cutting points to find the optimal classifying pair. This allows for the two-ends-against-the-middle Y-N-Y (Yea-Nay-Yea) and N-Y-N patterns. It also allows for the simple Y-N and N-Y patterns, where the two cutting points are the same. These roll call midpoint pairs are then fixed, the optimal point for each legislator is found, and so on.

Because the one-point model is a subset of the two-point model, the latter is guaranteed to do better. Accordingly, we show the classification gain provided by the sophisticated two-point model over the one-point model for the House of Representatives in figure 7.6. Given our results in chapter 3, it is not surprising that the two-point model does not have much punch—for 65 Houses, it added 1 percent or less to the classifications; and for 86 Houses, it added 1.5 percent or less.

To see whether an increase of 1 percent is a meaningful result, we performed a Monte Carlo analysis by applying the two-point classification procedure to artificial data created from legislator and roll call coordinates from D-NOMINATE. We introduced errors into the individual utility functions at roughly the level encountered in the actual roll call data. The two-point model always showed an increase of about 1
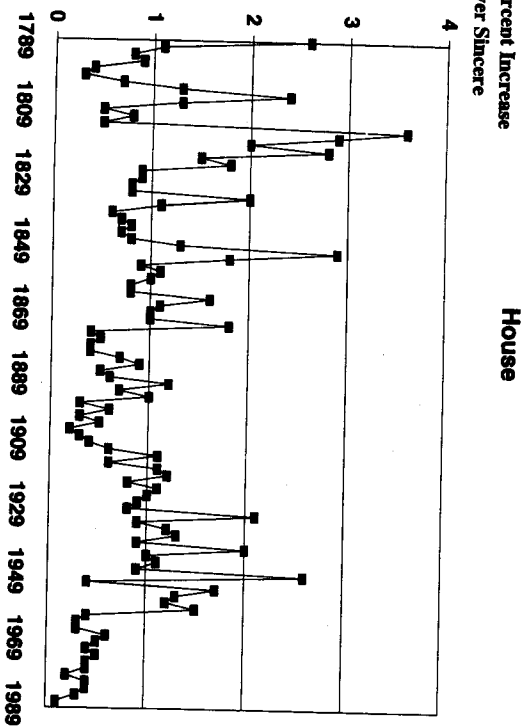

Percent Increase
Over Sincere

House

| | | | | | | | | | | | |
|1789|1809|1829|1849|1869|1889|1909|1929|1949|1969|1989|

Figure 7.6. Increase in classification when both-ends-against-the-middle voting is allowed (1789–1988). Optimal classifications with two cutting points on each roll call are compared to standard optimal classification with one cutting point. Allowing for both-ends-against-the-middle voting does very little to improve classification, particularly after the late 1950s.

percent over the one-point model. In short, two-ends-against-the-middle voting is undeniably occurring, but it clearly has a low-level effect.

Killer Amendments in Two Dimensions

Until this point, we have considered strategic voting in the context of unidimensional issues. In the unidimensional case, the distinction between sincere and sophisticated voting has limited policy relevance. With a truly saving amendment, a majority should prefer the amendment to the bill, and a majority should prefer the amended bill to the status quo; so the amended bill should win even with sincere voting. If there were a truly unidimensional killer amendment (in contrast to the "motherhood and apple pie" amendment), the amendment should never pass in one dimension. If the original bill is liberal in relation to the status quo, for example, the killer amendment needs to be even more liberal. In this case, a sincere majority would prefer the original bill.

Possibilities are quite different in two dimensions. Reconsider figure 2.6. There are now, in contrast to the four voting types in one dimension, six possible types of strict preferences. If there were 32 A > B > Q types, 2 A > Q > B types, 2 B > A > Q, 31 B > Q > A, 31 Q > A > B, and 2 Q > B > A, we would have Q > A by a 64-to-36 vote; B > Q by 65 to 35; and A > B by 65 to 35. That is, we would have a voting cycle in which there would be no one alternative that defeated all others under majority voting. In particular, it is possible to have B > Q and A > B but Q > A. Sincere voting would lead to the amendment's killing the bill.

In contrast, voting on sophisticated equivalents would lead to the recognition that the initial vote is truly one between B and Q; so B would win. Therefore, if voters vote strategically, killer amendments won't work in either one or two dimensions. If voters are sincere, the amendments might well succeed, but only in two or more dimensions. Not surprisingly, therefore, the interesting cases of killer amendments in the literature all involve two dimensions. Given that (in chapter 3) we identified race as the second dimension in those periods of American history where a second dimension was most important, it is also not surprising that the examples all involve race.

A killer amendment discussed by both Enelow (1981) and Riker (1982) was the Powell amendment. The amendment was offered by Adam Clayton Powell, Jr. (D-NY) to the 1956 School Aid Bill. The amendment "barred federal funds from going to states that had failed to comply with the decisions of the Supreme Court" (Enelow, 1981, p. 1080) and therefore would have denied aid to segregated schools. The amendment passed by a vote of 225 to 192 (northern Democrats voted 77 to 42; southern Democrats, 0 to 104; and Republicans, 148 to 46) on July 5, 1956, and the amended bill then failed by a vote of 194 to 224 (ND 116–3; SD 3–102; R 75–119) on that same day.[7] Note that, as an African-American, Powell himself may have been more interested in position-taking than in strategic legislative activity. Presumably, Powell wanted both school aid and desegregation. His actions suggest that he preferred position-taking on desegregation to a half-loaf consisting of school aid.

The Powell amendment transformed the debate from one over the level of school aid to one over both school aid and school desegregation. The status quo, Q—no school aid and segregated schools in the South (in spite of the 1954 *Brown v. Board of*
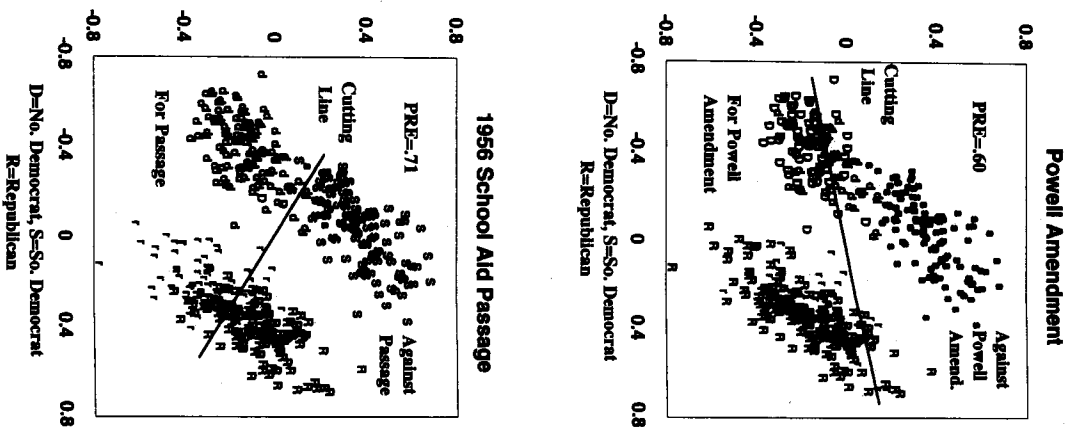
Education ruling)—would appear to be near the conservative pole on both dimensions. The unamended bill, B, had a combination of school aid and (implicitly) the status quo, segregation. That is, the bill was relatively liberal on one dimension and conservative on the other. The amended bill, A, was liberal on both dimensions. So if the Powell amendment were attached to the School Aid Bill, then southern Democrats would clearly vote for the status quo of no school aid. According to our issue analyses in chapters 4 and 5, segregation, the status quo, would be near the top of the second dimension with the southern Democrats, and the status quo of no school aid would be on the right side of the first dimension with the conservative Republicans. The status quo was thus a conservative position on both dimensions.

Figure 7.7 shows the two votes. The *PREs* were 0.60 and 0.71, respectively. The southern Democrats voted almost unanimously against both motions and were clearly sincere voters on both. The southern Democrats were probably a mix of the orderings of $B > Q > A$ and $Q > B > A$ because, no doubt, some southern representatives would have liked the school aid if there were no strings attached (Riker, 1982, p. 154). The Powell amendment split the northern Democrats, with the liberals voting for the amendment and the moderates voting, along with the southern Democrats, against the amendment. The ordering of northern Democratic liberals was clearly $A > B > Q$, and that of the northern Democratic moderates was probably $B > A > Q$, so both groups were voting sincerely on both motions. In addition, the Democratic party fits the spatial model very well.

Not so for the Republicans—the cutting line for the Powell amendment produces the prediction that almost all the Republicans will vote for the amendment. This occurs because 96 Republicans voted for the Powell amendment but against final passage—indeed, they were Y-N voters. These Y-N voters were clearly voting in a sophisticated fashion if their preference ordering was $Q > B > A$, and sincerely if their ordering was $Q > A > B$ (Riker, 1982, p. 155). Most of these Y-N voters were moderates and conservatives. Of the 96 Y-N voters, 79 were above the cutting line. These 17 below the cutting line, and they are adjacent to the Y-N voters, all of whom were liberals. These 17 Y-N voters could have had the ordering $Q > A > B$ because the liberal Republican Y-Y voters they were next to were undoubtedly sincere voters with the ordering $A > B > Q$ or $A > Q > B$. This would be consistent with the liberal Republicans, continuing in the nineteenth-century civil-rights tradition of their party. If some were more fiscally conservative than the others, then it is plausible that they would have had the ordering $A > Q > B$. Nevertheless, the bulk of the 79 Y-N Republicans above the cutting line were clearly sophisticated voters.

In sum, the preference orderings, from top to bottom, for the Republicans were in all likelihood $Q > B > A$, $Q > A > B$, $A > Q > B$, and $A > B > Q$; and for the Democrats, $Q > B > A$, $B > Q > A$, $B > A > Q$, and $A > B > Q$. Overall, everyone voted sincerely except the conservative Republicans, who were split—most voted sophisticatedly, while a minority voted sincerely. Note that these preference orderings *require* the presence of two dimensions; no one-dimensional ordering can produce them. Riker (1982) cites the Powell amendment as an example of a voting cycle produced by sophisticated voting. The bill was killed because northern Democrats voted sin-

Powell Amendment

PRE=.60

Cutting Line

For Powell Amendment

Against Powell Amend.

D=No. Democrat, S=So. Democrat
R=Republican

1956 School Aid Passage

PRE=.71

Cutting Line

For Passage

Against Passage

D=No. Democrat, S=So. Democrat
R=Republican

Figure 7.7. House votes on the Powell amendment and on passage of the 1956 school aid bill. (VOTEVIEW numbers 122 and 124; July 5, 1956.) Those voting with a majority of the Republicans are shown in uppercase letters. The Powell amendment operated as a killer amendment since 96 Republicans voted for the desegregation provisions of the amendment but voted against passage.

cerely and Republicans voted sophisticatedly. Even though the status quo, Q, prevailed, as Riker shows, it was probably the case that $B > Q$. For figure 7.7, without the Powell amendment, the cutting line on passage probably would have been higher on the second dimension. Only 15 of the more moderate southern Democrats near the cutting line would have been needed to pass the School Aid Bill.

Riker (1982) cites two other examples of cycles—the Wilmot Proviso, and the DePew amendment to the constitutional amendment for the popular election of senators. In 1846, President Polk, a Democrat, wanted a quick victory in the war with Mexico. Intending to bribe the Mexican military commanders, he asked Congress to appropriate $2 million for that purpose. Polk should have gotten the $2 million without much difficulty, because the Democrats had firm control of the 29th Congress. In the House, the division was 142 Democrats, 79 Whigs, 6 American party members, and 1 vacancy. In the Senate, the division was 34 Democrats, 22 Whigs, and 2 vacancies. Unfortunately for Polk, Representative David Wilmot (D-PA) offered an amendment—which became known as the Wilmot Proviso—that prohibited slavery in any territories taken from Mexico. This amendment was passed by the House on a series of votes on August 8, 1846. The amended bill later died in the Senate.

As we discussed in detail in chapter 5, slavery, by this time, had emerged as a second dimension that divided both the Whigs and the Democrats. Consequently, just as was the case for the Powell amendment 110 years later, the status quo had two aspects. One involved providing no appropriation for the bribe; and the other meant, at a minimum, leaving the slavery question in the territories taken from Mexico as an open issue to be decided at a later date. Given the unified control of the government by the Democrats, the bill to provide funds for bribery would undoubtedly have passed in the absence of the Wilmot Proviso (Riker, 1982, p. 225).

The critical vote analyzed by Riker was on a procedural motion that would have killed the Proviso, so a Nay vote is for the Proviso. In the vote, shown in figure 7.8, the procedural motion failed by a vote of 79 to 93 (northern Democrats, 13 to 51; southern Democrats, 47 to 0; northern Whigs, 5 to 35; southern Whigs, 14 to 2; American party 0 to 5).[8] The vote was almost purely a sectional one. It was very representative of literally hundreds of other roll calls that were taken, through this period, on a variety of slavery-related issues. (Compare figures 7.8 and 5.6.) The *PRE* on this roll call was 0.85.

Because the House was rushing toward an adjournment, and a filibuster in the Senate prevented a final vote, the only pairing observed was A versus B and A > B by 93 to 79. As we noted above, clearly B > Q because of unified control by the Democrats. Riker (1982, p. 227) argues that the southern Democrats and the southern Whigs would certainly have voted for Q over A, and because most of the northern Whigs opposed the bill as amended by the Wilmot Proviso, they would also have probably voted for Q. Hence, Q probably would have gotten the 47 southern Democrats and 14 southern Whigs who voted against the Wilmot Proviso, along with the 35 northern Whigs who voted for the Proviso. This yields a total of 96 votes, so that Q > A.

In effect, a unified Whig party, plus the southern Democrats, would have defeated the bill as amended by the Wilmot Proviso. This would be consistent with a cutting line in figure 7.8 that passed through the Democrats, as it does for the Wilmot Proviso vote, but at a sharper downward angle so as to include all or most of the northern Whigs. Sincere position-taking on slavery by northern Democrats would have led to the defeat of Polk's proposal.

The other example of a voting cycle discussed by Riker involves the DePew amendment to the constitutional amendment to permit the direct election of senators (which became the 17th Amendment). The DePew amendment is yet another example of the power of race in American politics—once again, the introduction of race, via an
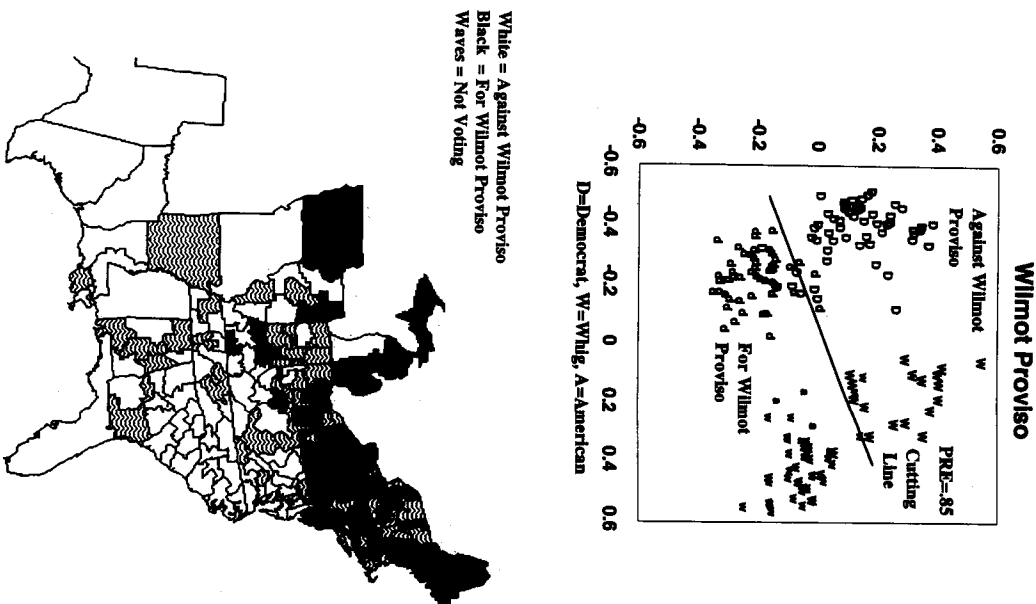
Figure 7.8. House voting on the Wilmot Proviso. (VOTEVIEW number 456; August 8, 1846.) Those voting with a majority of northerners are shown in lowercase letters. The sectional nature of the vote is shown on the map. Only two slave-state representatives from the border state of Kentucky supported the proviso.

amendment to a bill, created a voting situation with a two-dimensional status quo. In this situation, it had the interesting effect of derailing a bill that, unamended, had more than a two-thirds backing in the Senate. DePew's clever maneuver had the effect of creating a voting cycle.

Riker (1982, p. 195) estimates that at least 64 of 86 senators (or 88, after Oklahoma was admitted to the Union in November 1907) supported the constitutional amendment. Even with the two-thirds requirement for constitutional amendments, clearly

B > Q. The DePew amendment was offered by Senator Chauncey DePew (R-NY) as a device to derail the amendment. The southerners interpreted the DePew amendment as giving the federal government the authority "to send the army into the South to register blacks and enforce their voting rights" (Riker, 1982, p. 194). During the lame-duck session of the 61st Congress in early 1911, the constitutional amendment reached the floor of the Senate. Opponents offered the Sutherland amendment, the negative equivalent of the DePew amendment, to strike language from the constitutional amendment that guaranteed white supremacy in the South.[9] Hence, a vote for the Sutherland amendment was equivalent to voting for the DePew amendment. The Sutherland amendment passed by a vote of 50 to 37 on February 24, 1911 (NDs, 0 to 7; SDs, 1 to 22; Rs, 49 to 8), and the constitutional amendment, as changed by the Sutherland amendment, failed by a vote of 54 to 33 on February 28, 1911, because a two-thirds vote was required (NDs, 7 to 0; SDs, 14 to 9; Rs, 33 to 24).[10]

Figure 7.9 shows the DePew-Sutherland amendment, along with the final-passage vote. The *PREs* were 0.92 and 0.41, respectively. The DePew-Sutherland amendment was opposed by all the Democrats and a few progressive Republicans and supported by most of the Republican party. The constitutional amendment was then opposed by many (but not all) southern Democrats and northeastern Republicans.

The recorded votes tell us that A > B and, because of the two-thirds requirement, Q > A. But the unaltered constitutional amendment clearly had a two-thirds support in the Senate, so that B > Q. DePew's clever maneuver was first used in 1902 during a committee's consideration of the amendment and had the effect of preventing the amendment from reaching the floor for a vote (Riker, 1982, p. 193). Since it was clear that from then on DePew (or someone else) would offer his amendment, it had the effect of delaying the passage of the 17th Amendment for nine years because Republicans were united in their support of voting rights for blacks. It was finally passed by the 62nd Senate on June 12, 1911, after the Democrats had made enough gains in the 1910 elections to defeat the Sutherland amendment. The amendment was sent to the states in 1912 and ratified by 36 of the 48 states on May 31, 1913.

The three successful killer amendments found by Riker are the only ones mentioned in the literature. We suspect that the reason they are not more common is that potentially successful killer amendments are derailed either by strategic voting or by the introduction of subsequent saving amendments by bill managers.

An example of a saving amendment introduced by a bill manager occurred in the voting on the Reagan Interstate Commerce Bill in the 48th Congress. The Reagan bill eventually passed in the House but the Senate did not act.[11] During the House debate on interstate commerce, James O'Hara, an African-American Republican member from North Carolina, moved to eliminate racial segregation in passenger rail service. As with the Powell amendment in the twentieth century (discussed earlier), the O'Hara amendment passed with the support of northern Democrats and Republicans. The O'Hara amendment was modified, however, by a saving amendment that banned discrimination but held that "separate but equal" seating was nondiscriminatory. The language allowed just enough northern Democrats to switch from position-taking to strategic voting, so that the amendment to the amendment passed by a bare 8-vote majority. As a consequence, the Interstate Commerce Bill was not killed, as it would have been if it had been turned into a race issue for southern representatives.
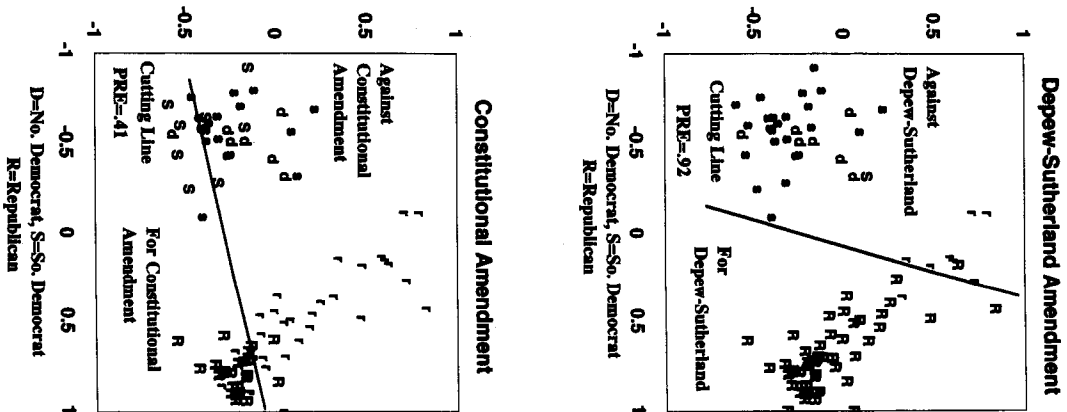
Depew-Sutherland Amendment

Against Depew-Sutherland

For Depew-Sutherland

Cutting Line
PRE=.92

D=No. Democrat, S=So. Democrat
R=Republican

Constitutional Amendment

Against Constitutional Amendment

For Constitutional Amendment

Cutting Line
PRE=.41

D=No. Democrat, S=So. Democrat
R=Republican

Figure 7.9. Senate voting on the Depew-Sutherland amendment and on passage of the constitutional amendment for popular election of senators. (VOTEVIEW numbers 244 and 248, respectively, February 24 and February 28, 1911.) Those voting with a majority of the Republicans are shown in uppercase letters. Republicans voted for the amendment, which concerned blacks' voting rights in the South, and against passage. Southern Democrats voted overwhelmingly against passage.

This example shows that the supporters of killer amendments try to take advantage of the unwillingness of some of a bill's supporters to compromise their principles and vote strategically. At the same time, supporters can be clever in finding alternative language that circumvents the strategy of their opponents. In any event, there are relatively few observations of voting cycles in Congress.

Summary

Our analysis suggests that sophisticated voting is not pervasive in Congress. We found some saving and killer amendments that could be analyzed as essentially one-dimensional. Our examination of these amendments disclosed only one example, the Mathias amendment, where voting strayed from a one-dimensional spatial pattern and became a case of both ends against the middle. Such voting is rare, however, as disclosed by our analysis of the two-point model.

Voting is sophisticated in another fashion, as illustrated by William Riker's examples: the Wilmot Proviso, the DePew amendment, and the Powell amendment. The examples are separated by approximately 60 years, but each involves the same maneuver: the introduction of an amendment that taps into the second great organizing dimension of American politics—race; and the destabilization of the winning coalition along the primary dimension of voting. The Wilmot Proviso split the Democratic party, which was a winning coalition that controlled the entire government in 1846. The DePew amendment caused a split between the Democratic party and progressive Republicans, thereby reducing the winning coalition to below a two-thirds size. Finally, the Powell amendment split the Democratic party internally in a rerun of 1846 and defeated the School Aid Bill, which had majority support. These three examples suggest that strategic manipulation of the agenda can have important effects when some legislators feel bound to engage in position-taking, sincere voting. But, as the interstate commerce example showed, additional manipulation can short-circuit manipulative strategies. On balance, strategic behavior appears to be a destabilizing force only very rarely. We thus continue to find that the spatial model is a reasonable summary of roll call voting behavior.

8
Roll Call Voting and Interest-Group Ratings

We will now extend our analysis of legislative behavior to incorporate the role of interest groups. We have previously established that there is a polarized distribution of legislator preferences. This polarization has been increasing since the 1960s. Polarization, when coupled with party discipline and majority rule, results in relatively extreme swings in policy outcomes. Policy outcomes are rarely close to the ideal point of the median legislator in one dimension or close to the center of the space in two dimensions. And in chapter 6, we presented very strong evidence indicating that legislators could not be viewed as representing middle-of-the-road interests in their constituencies. It is interest groups that may well direct the polarization process.

The potentially polarizing role of interest groups is evident in the research of Kirkpatrick (1976) and of McCloskey et al. (1960). They found that convention delegates and political activists had extreme opinions relative to those of the mass public. This finding is quite consistent with the theory of rational abstention. According to this theory, active political participation, in the form of time and money spent in promoting group causes, is far more costly than simply voting. Theoretically, of course, moderates should be the ones who do not participate, since they have less to lose from a disliked extreme outcome than do extremists.[1] If activism, of which interest groups are one form, implies extremism, and if politicians are responsive to activists, polarization will result. Since the beginning of the Clinton administration, there has been substantial anecdotal evidence to support this view. The president, by responding to gays in the military, health care, and Haiti. Senator Bob Dole, in his quest for the Republican nomination in 1996, initially ran toward the Right, not the center. The new Republican majorities in Congress have kowtowed to the National Rifle Association.

Attempts by politicians to take a moderate position often come under attack from interest groups at both ends of the spectrum on an issue. Consider the problems of California governor Pete Wilson, a former senator, in dealing with the abortion issue:

> Press aide Dan Schnur said . . . Wilson had long opposed federal funding for abortion, . . . [but]Wilson does support state tax spending on abortion because a 1981 California Supreme Court ruling guaranteed poor women access to abortion through Medi-Cal. . . . Wilson's comments sparked a negative reaction from both sides of the abortion debate. Proponents of abortion rights and their foes characterized the governor's remarks as waffling. . . . Susan Culman, national chairwoman of the Republican Coalition for Choice,

said she was surprised to learn that "the only reason [Wilson] has supported state funding was because it's the law." ... But the most vociferous criticisms came from anti-abortion advocates. ... "Our concern would be that he's posturing himself for the presidential race," said Kenda Bartlett of Concerned Women for America. If those are truly his deeply felt feelings, ... he would be actively pursuing some way to change [state law].[2]

A politician who, like Wilson, is blasted by both of the extreme sides on an issue, may choose to take a polarized position, thus avoiding one source of criticism.

In this chapter, we present systematic evidence indicating that a large set of visible interest groups have extreme policy positions. We accomplish this by integrating their ratings with the roll call data.

Many interest groups rate members of Congress on a 0-to-100 scale. The raters include groups with a broad ideological orientation, such as the Americans for Democratic Action (ADA), groups with a special public-interest mission, such as the League of Conservation Voters; labor unions, such as the United Auto Workers; business and industry associations, such as the Chamber of Commerce of the United States; and farm organizations, such as the National Farmers Union. In this chapter, we integrate the evaluations of the interest groups into the spatial model of legislative choice that underlies this book. In a nutshell, interest groups are treated as roll call voters. The combined analysis of the "votes" of interest groups, and of the choices of representatives and senators, leads to an important substantive conclusion: Interest groups, particularly labor unions and ideological groups of the Left and Right, are more extreme than members of Congress. If interest groups succeed in pulling legislators away from middle-of-the-road or moderate positions, they may be an important factor in the increasing polarization of American politics that we cited in chapter 4.

This chapter also provides three important methodological results. First, we validate the earlier D-NOMINATE estimates of spatial positions. Second, we are able to make direct comparisons of the House and Senate results because the interest groups effectively "vote" in both houses. In contrast, if just roll call voting data are employed, one must perform separate scalings of the House and Senate, with the consequence that the estimated locations of representatives and senators are not comparable. With the interest-group data, we obtain a common scaling of the House and Senate. Third, we use the results to discuss whether interest-group ratings, which are widely used in professional journals in economics and political science, fulfill their intended purpose as reasonable measures of liberalism/conservatism or ideology.

Interest-Group Ratings

Interest groups, as part of their efforts to influence the political process, regularly publish ratings of members of Congress.[3] To construct its ratings, an interest group selects a set of roll calls. These typically number between 10 to 40 roll calls in each House. If a member of Congress supports the interest group's position on all the selected roll calls, the member receives a score of 100. Members who always oppose receive a score of 0. More generally, a legislator's rating equals the percentage of the selected roll calls in which the legislator took the interest group's position.[4]

In this chapter, we study the 96th Congress (1979-80).[5] In table 8.1, we list 28 interest groups that issued ratings during the 96th Congress, along with the number of

roll calls each group used in its ratings. (Also included in the table is CARTER, which refers to the *Congressional Quarterly* rating of support for President Carter's legislative program.)

Does the information provided by the interest groups accord with the story laid out in the previous chapters? The answer is a quite positive one; in particular, the main liberal/conservative dimension found by D-NOMINATE is closely matched by the interest-group ratings. The ratings correlate very highly with our first dimension.

Table 8.2 shows the Pearson correlations between the ratings of the groups and both dimensions of D-NOMINATE.[6] Correlations are provided for all members, for Democrats only, and for Republicans only. The correlations for all members between the first dimension and the ratings most commonly used by researchers—such as the ADA, COPE, the ACA, and the ACU—are all above 0.9. No first-dimension correla-

Table 8.1 Interest Groups That Evaluated Congressional Votes in 1979–1980

Group	Abbreviation	Number of Votes Selected[a]	
		Senate	House
American Civil Liberties Union	ACLU	15	15
American Conservative Union	ACU	44	47
Americans for Constitutional Action	ACA	53	50
Americans for Democratic Action	ADA	38	38
American Farm Bureau Federation	AFBF	—[b]	9
American Federation of State, County and Municipal Employees	AFSCME	13	14
American Federation of Teachers	AFT	11	15
American Security Council	ASC	10	10
Bread for the World	BFW	10	10
Building and Construction Trades Department (AFL-CIO)	BCTD	12	13
Congressional Quarterly presidential support votes	CARTER	276	235
Chamber of Commerce of the United States	CCUS	58	52
Child Welfare League of America	CWLA	16	16
Christian Voice	CV	14	14
Coalition for a New Foreign and Military Policy	CFNFMP	14	17
Committee on Political Education (AFL-CIO)	COPE	38	39
Congress Watch	CW	65	70
Consumer Federation of America	CFA	21	24
Friends' Committee on National Legislation	FCNL	21	28
League of Conservation Voters	LCV	30	50
League of Women Voters	LWV	20	20
National Alliance of Senior Citizens	NASC	20	20
National Council of Senior Citizens	NCSC	20	20
National Farmers Organization	NFO	16	19
National Farmers Union	NFU	23	18
National Federation of Independent Business	NFIB	18	15
National Women's Political Caucus	NWPC	—[b]	13
United Auto Workers	UAW	35	31
United Mine Workers	UMW	11	10

[a] All votes used by the interest group in either 1979 or 1980.
[b] This group did not evaluate the 96th Senate.

Table 8.2 Correlations of Interest-Group Ratings with D-NOMINATE Dimensions

	Senate						House					
	All		Democrats		Republicans		All		Democrats		Republicans	
Group	1*	2b	1	2	1	2	1	2	1	2	1	2
ACLU	-.74	-.58	-.88	-.84	-.81	-.82	-.80	-.49	-.83	-.74	-.68	-.68
ACU	.95	.22	.88	.79	.94	.87	.96	.17	.91	.63	.87	.58
ACA	.96	.14	.84	.76	.95	.82	.96	.09	.91	.56	.87	.53
ADA	-.93	-.30	-.91	-.84	-.90	-.87	-.93	-.39	-.93	-.81	-.76	-.65
AFBFc							.77	.24	.64	.56	.60	.43
AFSCME	-.70	-.33	-.59	-.55	-.70	-.73	-.81	-.32	-.79	-.62	-.70	-.32
AFT	-.75	-.26	-.63	-.56	-.74	-.69	-.87	-.35	-.85	-.70	-.64	-.56
ASC	.89	.21	.84	.83	.77	.76	.88	.35	.88	.76	.60	.57
BFW	-.85	-.45	-.83	-.82	-.87	-.91	-.91	-.22	-.86	-.61	-.75	-.60
BCTD	-.74	.19	-.14	-.01	-.65	-.43	-.75	-.02	-.56	-.33	-.51	-.14
CCUS	.94	.08	.84	.73	.88	.76	.84	.33	.82	.74	.40	.44
CWLA	-.85	-.42	-.81	-.80	-.89	-.84	-.94	-.19	-.90	-.62	-.78	-.49
CV	.91	.30	.84	.78	.92	.85	.89	.23	.83	.60	.73	.60
CFNFMP	-.79	-.45	-.84	-.82	-.78	-.77	-.84	-.50	-.87	-.83	-.62	-.71
COPE	-.94	-.22	-.86	-.83	-.92	-.82	-.92	-.18	-.87	-.66	-.74	-.41
CW	-.82	-.41	-.81	-.81	-.80	-.80	-.88	-.43	-.87	-.87	-.62	-.65
CFA	-.88	-.37	-.91	-.86	-.83	-.81	-.89	-.39	-.87	-.83	-.63	-.56
FCNL	-.88	-.45	-.88	-.88	-.90	-.90	-.91	-.43	-.92	-.83	-.63	-.70
LCV	-.65	-.63	-.84	-.84	-.72	-.81	-.85	-.55	-.86	-.89	-.75	-.70
LWV	-.78	-.58	-.88	-.88	-.81	-.92	-.87	-.45	-.89	-.79	-.74	-.70
NASC	.94	.16	.85	.79	.90	.80	.94	.21	.92	.70	.72	.51
NCSC	-.88	-.33	-.81	-.74	-.88	-.84	-.93	-.22	-.90	-.69	-.75	-.48
NFO	-.78	-.08	-.30	-.38	-.80	-.65	-.59	.06	-.33	-.11	-.61	-.06
NFU	-.89	-.11	-.69	-.53	-.86	-.71	-.68	.17	-.32	-.01	-.62	.00
NFIB	.88	.13	.71	.60	.86	.76	.87	.18	.84	.63	.43	.11
NWPCc							-.89	-.20	-.82	-.59	-.71	-.54
UAW	-.95	-.24	-.88	-.83	-.92	-.88	-.94	-.27	-.92	-.72	-.79	-.54
UMW	-.77	-.19	-.56	-.49	-.79	-.68	-.88	-.35	-.85	-.80	-.68	-.43

Note: Our data are for 101 individual senators, including 59 Democrats, 41 Republicans, and 1 Independent. The corresponding figures for the House are 438 Representatives—278 Democrats and 160 Republicans. Senators total more than 100 and representatives total more than 435 because of within-Congress replacements.

a Correlations are with the first-dimension D-NOMINATE coordinates.
b Correlations are with the second dimension.
c This group did not publish ratings for the 96th Senate.

The correlations with the second dimension for all members are much smaller; none exceeds 0.65 in magnitude. For all interest groups and for both houses, the magnitude of the first-dimension correlation always exceeds the magnitude of the second-dimension correlation. No group issues ratings that primarily tap the second dimension. This result supports our view (expressed in chapter 3) that American politics,

tion is below 0.59 in magnitude. Liberal groups have a negative correlation; conservative groups, a positive one. Note further that, on the first dimension, the House correlation is positive if and only if the Senate correlation is also positive. This finding demonstrates that the interest groups are consistent in evaluating the two houses.

particularly in the contemporary period, is largely unidimensional. We explore this finding in more detail later in the chapter.

When separate correlations are computed for each party, the first-dimension correlations remain high, but the second-dimension results change dramatically. This is no surprise. As first discussed in chapter 3, in the modern period, liberal Democrats lie at one end of the first dimension, and conservative Republicans, at the opposite end (see also figures 8.5 and 8.6). Moderates from both parties are in the middle. Thus, the first dimension and the liberal/moderate/conservative positioning of the ratings correlate highly, overall. In contrast, moderate Democrats tend to be at one end of the second dimension; moderate Republicans, at the other; and extremists from either party tend toward the middle. This alignment produces a low *overall* correlation between the D-NOMINATE second dimension and the interest-group ratings. In contrast to the overall pattern, *within* each party, the second dimension—as well as the first—discriminates along liberal/conservative lines, distinguishing liberal from moderate Democrats, and moderate from conservative Republicans. Within each party, there are relatively high correlations on both dimensions.

The pattern of the correlations is reflected directly in the D-NOMINATE scores. Even though the overall correlations between the first and second dimensions were virtually zero, the correlations between the D-NOMINATE first and second dimensions for 1979–80 were 0.90 for the Senate Democrats, 0.88 for the Senate Republicans, and 0.71 and 0.43 for the respective party contingents in the House of Representatives.

As noted above, ratings of individual interest groups appear frequently in professional journals in economics and political science as measures of the liberalism/conservatism or the ideology of legislators.[7] Whether these ratings are being used as measures of preferences in a particular policy area or as general measures of ideology, the implicit assumption being made is that the group that issues the ratings *is at the periphery of the space spanned by the legislators.* That is, if the ADA rating measures liberalism with a score of 100 indicating the most liberal legislator and a score of 0 indicating the least liberal, all members with less than perfect scores must be more conservative than the ADA. In short, the ADA has to anchor one end of the scale.

To see the effect of this assumption, suppose that some interest group is truly a centrist group—for example, its ideal legislator is someone like Senator David Boren of Oklahoma. What would the ratings of such a group look like? Clearly, centrist legislators like Boren would receive scores near 100. If the centrist interest group were to evenly balance its ratings by including a number of roll calls with midpoints to its left and an equal number with midpoints to its right, both the very liberal Ted Kennedy types and the very conservative Jesse Helms types would receive scores near 50. This interest group's ratings would cover a range from moderates to extremists. (Recall that, in one dimension, the roll call midpoint is the point equidistant between the Yea and Nay outcomes.)

If an interest group is instead exterior to the legislators, its ratings act much like a thermometer: Just as a thermometer tells us that 60° is hotter than 50° but cooler than 70°, an ADA rating of 60 is a less liberal one than an ADA rating of 70, but a more liberal one than an ADA rating of 50. Hence the legislators can be ordered by their "thermometer reading."

The upshot of the statements above is that the way researchers have used interest-group ratings implies a simple one-dimensional spatial model in which the interest group and the legislators can be represented as points on a line, where the point representing the interest group is the farthest left or right point. Figure 8.1 shows a hypothetical situation in which the ADA is to the left of six legislators—A, B, C, D, E, and F. In this situation, legislator A would receive the highest score and F would receive the lowest score. Now, suppose our hypothetical centrist interest group were positioned between legislators C and D, as shown in figure 8.1. Then C would get the highest rating, followed by D, with F getting the lowest rating. As the figure shows, this is akin to defining a new dimension by *folding* the original dimension back onto itself at the location of the centrist interest group. Notice that if the centrist group's ratings could be *unfolded*, then they would be equivalent to the ADA ratings.

The folding problem is one reason that, even if the interest-group ratings were based solely on votes that have cutting lines perpendicular to the first dimension, the correlations in table 8.2 would not be 1.0. (Recall that the cutting line is the two-dimensional analog of the midpoint; it is the locus of points equidistant from the Yea and Nay outcomes.) A folded group in the center of the space would have a correlation near 0. Conservative groups that were near the end of the space would have a correlation that was positive but less than one. Another reason that the ratings would not produce perfect correlations is that, because they are based on a fairly small number of roll calls, the ratings are not very fine-grained (Kiewiet and McCubbins, 1991).

Looking at figure 8.1, if legislator A receives a 100 rating based on 10 roll call votes, then A votes with the ADA position 10 out of 10 times. By assumption, the ADA is to the left of A. Hence, if there is perfect spatial voting (no errors), legislator A must be to the left of the midpoint of all 10 roll calls. Suppose that not only A but also B were rated 100 and that legislators E and F were both rated 0. These ratings imply that, among the roll calls selected by the ADA, the farthest left midpoint is to the right of B, and the farthest right midpoint is to the left of E. This situation is shown in figure 8.2.

Figure 8.2 demonstrates that the implicit assumption that the interest group is exterior to the legislators can be more accurately phrased: In a perfect voting world, if an interest group is exterior to the midpoints of its chosen roll calls, then the ordering of the legislators is weakly monotone with the true ordering. Stated simply, the orderings are identical, except that the coarseness of the ratings leads to ties. And the presence of ties will reduce correlations. More generally, the ratings are influenced by the distribution of the roll calls selected (Snyder, 1992a). For example, as in figure 8.2, if the midpoints are concentrated in the center of the distribution of legislators, then the ratings will be bimodally distributed even if the legislator distribution is unimodal. Even if the interest group uses many roll calls, if the midpoints of the selected roll calls are all close to one point in the space, there will be a relatively low correlation between the ratings and the true legislator positions.

To illustrate the effect of an interest group's selection of a relatively small number of roll calls, with cutting lines that are heavily clustered in the space, we examine the ratings of the highly liberal ADA and the highly conservative ACA, two interest groups unlikely to be affected by the folding problem. The top portions of figure 8.3 shows the distribution of their ratings for the 96th House against the first dimension of D-NOMINATE. In both cases, a large number of ratings at or close to 0 and 100
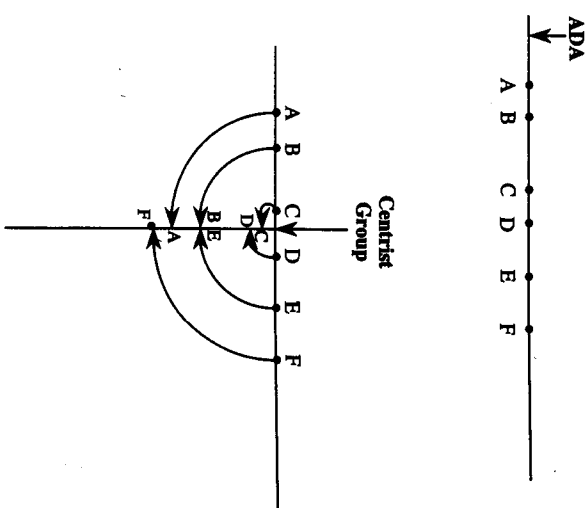
lead to S-shaped curves. Distinctions that D-NOMINATE makes among both the most liberal representatives and the most conservative are lost in the ratings, leading to the flat portions of the S shapes. The bottom portion of the figure shows the distribution of the midpoints for the S shapes selected by the two groups, vis-à-vis the distribution of the representatives. In both instances, the midpoints are disproportionately drawn from the center of the legislator distribution. Concerns about bias in interest-group ratings (Snyder, 1992a) are well founded.
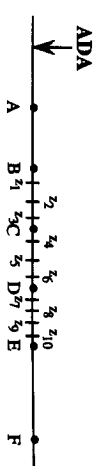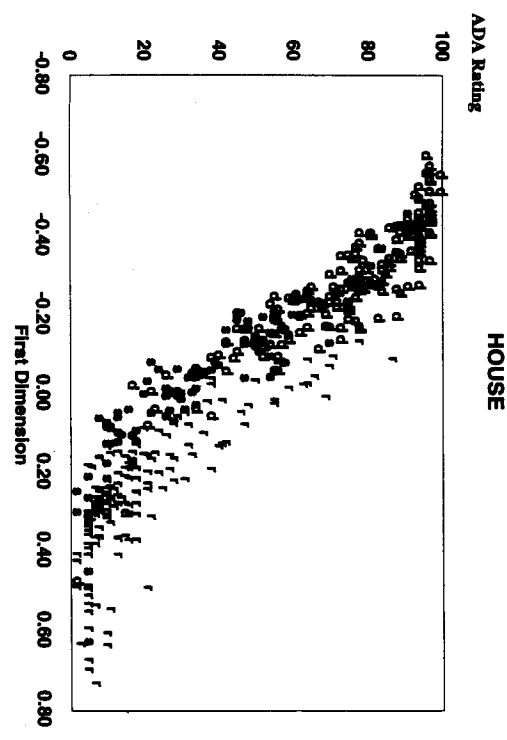
Figure 8.1. The folding of legislators' ideal points in interest-group ratings. A, B, C, D, E, and F denote the ideal points of legislators. An extremely liberal interest group like ADA (in the top part) rates legislators in a way that preserves the liberal/conservative order of the legislators. In contrast, the centrist interest group (in the bottom part) is about equally distant from the extreme liberal A and the extreme conservative F. The centrist group gives A and F similar ratings. These ratings "fold" the ideal points.

Figure 8.2. Ratings are biased by the roll calls selected by the interest group. If the ADA uses only the 10 roll calls with midpoints $z_1, z_2, \ldots, z_{10}$, legislators A and B and legislators E and F will vote (errors aside) identically on all 10 roll calls. The ratings for A and B and for E and F will then be identical, even though A is more liberal than B and F is more conservative than E.

HOUSE

ADA Rating

First Dimension

ADA Roll Call Midpoints vs Legislators

Number of Legislators and Midpoints

First Dimension

☐ Legislators   ■ Roll Call Midpoints

HOUSE

ACA Rating

First Dimension

ACA Roll Call Midpoints vs Legislators

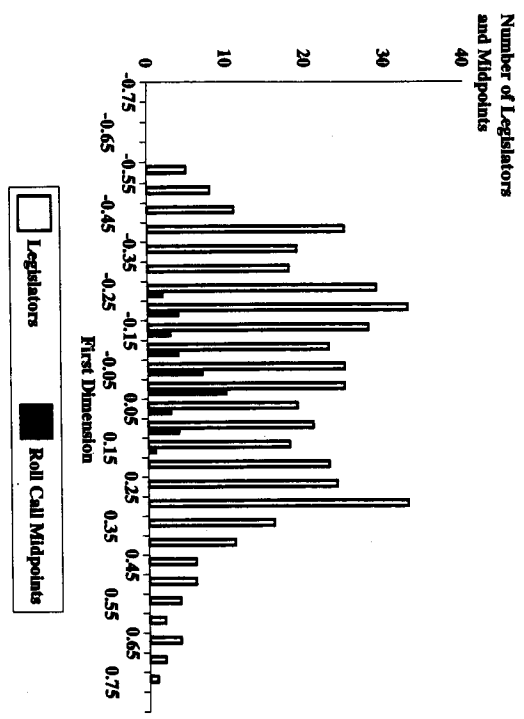Number of Legislators and Midpoints

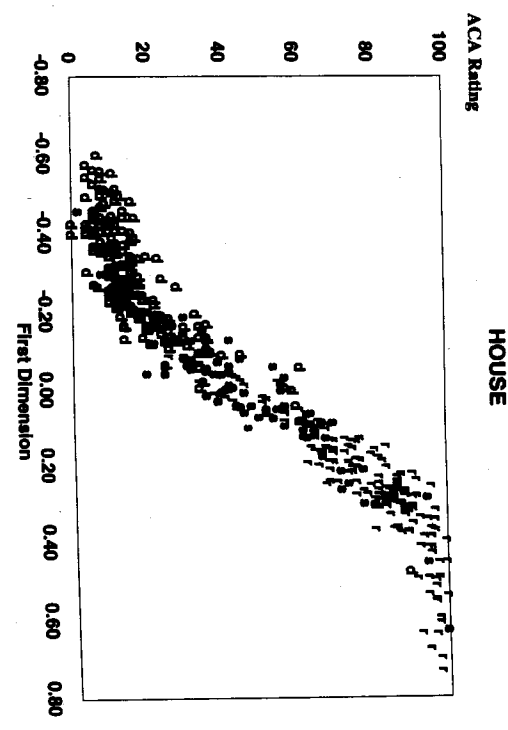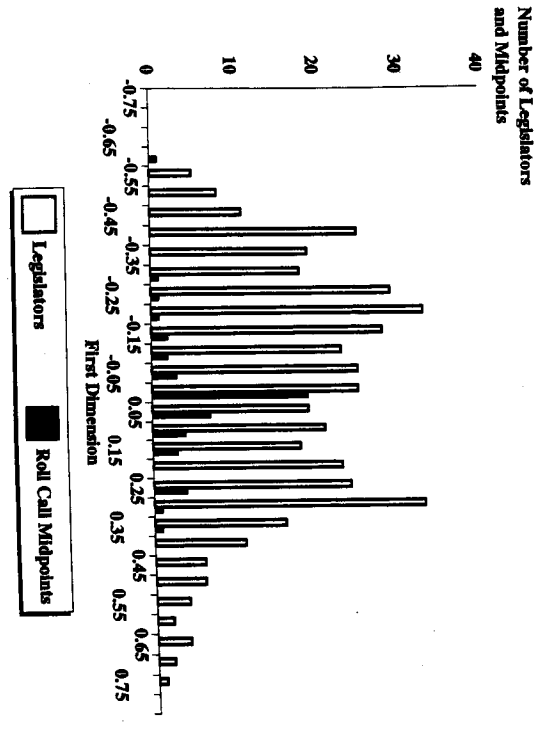First Dimension

☐ Legislators   ■ Roll Call Midpoints

Figure 8.3. The D-NOMINATE scores for the 96th House of Representatives (1979–80) and the ratings of the Americans for Democratic Action (ADA) and the Americans for Constitutional Action (ACA). The top portions plot the ratings against the scores, with the letter *d* indicating northern Democrats; *s*, southern Democrats; and *r*, Republicans. The S shape of both curves shows how the ratings fail to differentiate among extreme liberals and among extreme conservatives. This failure results, as the bottom portions show, from the interest groups' construction of their ratings from roll calls with midpoints near the center of the space.

Figures 8.1, 8.2, and 8.3 raise two related issues. First, can we test the assumption that the interest group is to the exterior of the legislators; and second, can ratings be unfolded to recover a common ordering of interest groups? We deal with these issues in the next two sections.

Are Interest Groups Exterior to the Legislators?

Using W-NOMINATE, we can test whether the interest groups are exterior to the legislators by treating the interest groups as legislators. For the 96th Congress, we identified every roll call vote used to compute the ratings of the 28 interest groups shown in table 8.1. If an interest group uses a roll call in its rating, it has stated its position and has thus "voted." These "votes" allow us to treat the interest groups as legislators and include them in a W-NOMINATE scaling of the 96th Congress that combines the actual votes of the members of Congress and the "votes" of interest groups. (Given that the maximum number of roll calls selected by an interest group was 70 [see table 8.1], most of the "votes" by the interest groups are abstentions.) In the first scaling we present, we used the 8 interest groups that selected at least 25 votes during the 96th Senate. Figure 8.4 presents the results in one dimension.[9]

As figure 8.4 shows, 7 of the 8 groups are estimated to be at or near the ends of the dimension (−1 and +1, respectively). The CCUS is the interesting exception. Its estimated first-dimension position of .86 is the most interior position among the 8 interest groups. It appears to be a genuine case of folding of the sort shown in figure 8.1. Of the 58 roll calls the CCUS used in its Senate ratings, 3 had less than 2.5 percent in the minority and were unscalable.[10] For the remaining 55 roll calls, 8 had midpoints to the
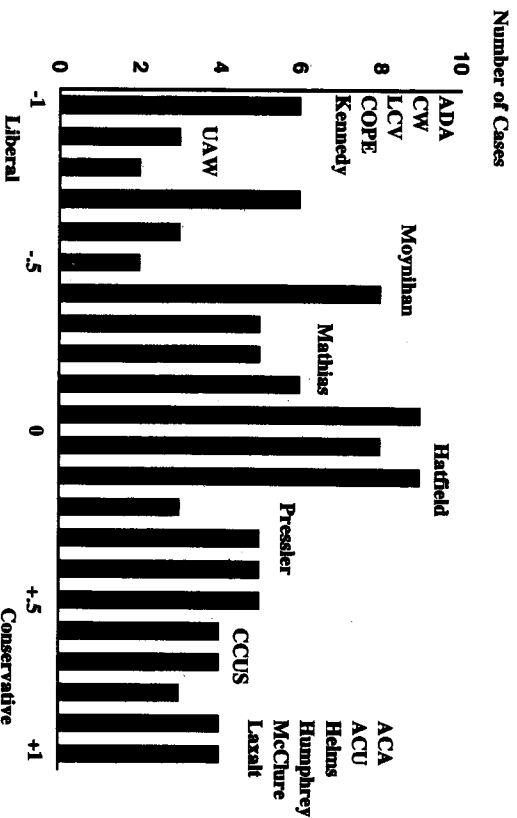
Figure 8.4. Interest groups and senators in a common one-dimensional space: W-NOMINATE scaling for 1979–80. The histogram shows the distribution of both senators and interest groups. All interest groups used in the scaling are named on the plot. Some senators are also named.

right and 47 had midpoints to the left of the CCUS's position. On 54 of the 55 roll calls, the CCUS "voted correctly"—that is, its actual position corresponded with the prediction of the spatial model on 54 of 55 occasions. The selection of roll calls by CCUS fits the spatial model quite well. Because the CCUS has an interior position, however, its ratings are folded. In fact, the 5 senators to the right of the CCUS received an average rating of 87, whereas the 5 senators equidistant to the left of the CCUS (between 0.72 and 0.86) received an average rating of 88.

As to the 7 interest groups at the right end, are *perfect*—that is, they are exterior to the midpoints of all their chosen roll calls. At the left end, COPE, the ADA, and the UAW fit the dimension very well. They are not perfect, but they have no more than two voting "errors." There are poorer fits for the LCV and for Ralph Nader's Congress Watch (CW). As we now demonstrate, a second dimension is required to account for their voting patterns.

We noted above that a one-dimensional spatial model with the interest group at the end of the dimension is the implicit model behind the use of interest-group ratings as measures of ideology. If the voting space of the legislators is in fact two-dimensional, and if all the interest groups are using the same dimension through the space to construct their ratings, then the interest groups should lie on a line that runs through the two-dimensional space.

Figure 8.5 shows the W-NOMINATE results for the 96th Senate, in two dimensions.[11] (As explained in appendix A, the space is constrained to be the unit circle.) Once again, 7 out of the 8 groups are on the rim of the unit circle, exterior to the posi-
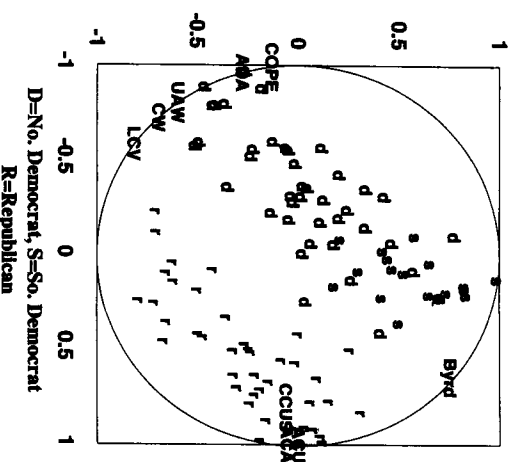
Figure 8.5. Interest groups and senators in a common two-dimensional space: W-NOMINATE scaling for 1979–80. The interest groups and the independent Harry F. Byrd, Jr., are named on the plot. See table 8.1 for identification of the interest groups. All interest groups are at or near the periphery of the space. They are concentrated along an axis that runs roughly from the UAW to the ACU.

tions of the senators, with the CCUS being in an interior position among the Republican senators. The second dimension dramatically improves the fit of the LCV—it now votes "correctly" on all roll calls, and its geometric mean probability rises from 0.70 to 0.95. Ralph Nader's CW also fits better in two dimensions—its geometric mean probability rises from 0.59 to 0.67, and the number of voting errors drops from 14 to 10.

Note that a line running at a slight angle through the two-space—from the location of the UAW to the location of the ACU in figure 8.5—provides an axis that comes close to capturing the positions of the 8 interest groups. This finding lends rough support to the implicit one-dimensional spatial model that underlies the use of interest-group ratings as measures of liberalism/conservatism. Projection onto the axis would give results very close to those shown in figure 8.4, including the folded position of the CCUS. The locations of the interest groups are also consistent with the correlations reported in table 8.2.

We also need to make two methodological observations about figure 8.5. First, compared to the senators, the interest groups are imprecisely estimated because the number of votes they cast is so small. The estimated number of standard errors for the interest-group locations are, on average, more than 10 times larger than those for the senators.[12] Nevertheless, the extreme positions of the interest groups are not a consequence of the imprecise estimates.[13] Second, adding the interest groups to the roll call data does not affect the recovery of the legislators. The R^2 (squared Pearson correlation) between the estimated first dimensions with and without the interest groups was 0.99 for the Senate and 0.96 for the House. For the estimated second dimensions with and without the interest groups, the R^2s were 0.99 and 0.98, respectively.

Unfolding the Interest-Group Ratings

In our analysis in the previous section, the only information about the interest groups that we used was those roll calls for which they had announced their positions. This is not identical to the information contained in the ratings. Some groups weight some roll calls when they calculate their ratings (for example, the ADA); other groups count absences as Nay votes (for example, the LCV). Consequently, in this section we analyze the ratings directly as a check on our results.

Figure 8.1 was deliberately designed to be identical to figure 5.1 in Clyde Coombs's classic book *A Theory of Data* (1964). Coombs labeled the common dimension of legislators and midpoints (individuals and stimuli, in his discussion) a "J scale" and the interest-group ratings (the observed individual preference orderings) an "I scale." Coombs stated the problem: "The data consist of a set of I scales from a number of individuals, and the analytical problem is how to unfold these I scales to recover the J scale."

In our earlier work (Poole, 1981, 1984, 1990; Poole and Daniels, 1985; Poole and Rosenthal, 1986), we developed a method of unfolding and applied it to a large collection of interest-group ratings issued from 1959 through 1981. In this model, the ratings are treated as inverse distances—the higher the rating, the closer the legislator is to the interest group. The aim of the analysis is to estimate points representing the

legislators and points representing the interest groups in such a way that the Euclidean distances between the two sets of points reproduce the ratings as closely as possible.[14]

Table 8.3 shows the R^2 between the corresponding legislator coordinates from D-NOMINATE and the interest-group unfolding. Two sets of estimations were analyzed: dynamic estimations for the 1959–81 period and estimations for the 96th Congress only.[15] Like D-NOMINATE, the dynamic unfolding model of the ratings treats the spatial positions of legislators as linear functions of time. The procedure is detailed by Poole and Rosenthal (1986) and Poole (1990).

The unfolding procedure recovers the same first dimension from the interest-group ratings that D-NOMINATE recovers from the whole set of roll calls. The second dimension recovered from the interest-group ratings appears to differ somewhat from that estimated by D-NOMINATE, although the dynamic interest-group analysis for the House—which is based on the largest number of ratings—is closer to the corresponding D-NOMINATE second dimension than are the other estimations.

Why do the D-NOMINATE results and the interest-group-unfolding results from the second dimension differ? The pattern of correlations between individual interest-group ratings and the D-NOMINATE dimensions (presented in the previous section) suggests an explanation: The interest groups are picking roll calls primarily from the first dimension, so that the ratings contain very little information about the second dimension. To test this hypothesis, we separated the roll calls into two subsets—those chosen by the interest groups and those not chosen—and applied W-NOMINATE to both subsets of roll calls and to all the roll calls. Table 8.4 shows the distribution of the percentage of votes, on the majority side, for all the roll calls, for the chosen subset, and for the nonchosen subset. It also shows the R^2s between the estimated legislator coordinates from the three applications of W-NOMINATE.

The distribution of the roll calls chosen by the interest groups is not representative of the overall distribution—it is skewed toward the closer roll calls. Indeed, more than 70 percent of the roll calls selected by the interest groups have winning margins

Table 8.3 R Squares between D-NOMINATE Dimensions and Interest-Group Unfoldings

Legislators	Senate				House		
	n	Dimension 1	2		n	Dimension 1	2
Dynamic Coordinates: 1959–81							
All	331	.82	.35		1,352	.90	.61
Democrats	167	.78	.39		772	.82	.61
Republicans	142	.58	.21		580	.74	.42
Static Coordinates: 96th Congress							
All	101	.94	.38		438	.91	.37
Democrats	59	.90	.35		278	.86	.30
Republicans	41	.92	.13		160	.70	.17

Note: The dynamic coordinates are from an analysis of all interest-group ratings issued from 1959 through 1981, reported in Poole and Rosenthal (1986). The static coordinates are from a separate scaling of the 96th Congress.

Table 8.4 Differences between Roll Calls Chosen and Those Not Chosen, by Interest Groups in 1979–1980

Majority Percentage	Distribution of Roll Calls (Percent)					
	Senate			House		
	All	Chosen	Not Chosen	All	Chosen	Not Chosen
50–60	32	43	27	27	45	22
61–70	22	30	18	19	26	16
71–80	15	15	15	12	13	12
81–90	11	7	13	11	9	12
91–97.5	9	4	11	14	6	17
97.6–100	12	1	17	16	2	21
All	101[a]	100	100	99	101	100
n (roll calls)	1,054	334	720	1,276	312	964
n (scalable)	928	331	597	1,067	306	761

Legislators	R-Squares of W-NOMINATE Scalings					
	Senate			House		
	All	Chosen	Not Chosen	All	Chosen	Not Chosen
All	.99/.92[b]	—	—	.98/.92	—	—
Chosen	—	.98/.79	—	—	.94/.82	—
Not chosen	—	—	1.00/.95	—	—	.99/.96
n (legislators)	101			438		

[a]Columns do not total 100 due to rounding.
[b]The first number is the R^2 between the estimated first dimensions; the second number is for the corresponding second dimensions.

of 70 to 30 or less, with over 40 percent at 60 to 40 or less. Even though the sample of interest-group roll calls is skewed, W-NOMINATE recovers essentially the same legislator configuration from both samples. The correspondences of the estimated second dimensions for the two samples are weaker than those for the first, but the R^2 is still quite high (0.79 for the Senate and 0.82 for the House), and the correspondences of the estimated second dimensions with those estimated from the total set are all above 0.92. In addition, the increase in geometric mean probability and the increase in correct classification gained from adding the second dimension are about the same in both sets of roll calls.

In sum, the roll calls chosen by the interest groups contain essentially the same amount of information about the second dimension that is contained in the roll calls they do not select. Given this fact, why isn't the second dimension accurately estimated by the group-unfolding analysis?

For one thing, the second dimension is not very important in relation to the first dimension. During this time period, the first dimension typically classifies about 80–82 percent of the roll call votes correctly. The second dimension typically adds about 2–3 percent to the correct classifications, and the geometric mean probability climbs about 0.02–0.04. All in all, the second dimension, although important, is minor as compared to the first dimension. Consequently, the variation across legislators of the ratings—which are based on relatively small samples of roll calls—due to the addi-

tion of the second dimension will be quite small and will be sensitive to voting errors by legislators. The NOMINATE method is less sensitive to errors, even when applied only to the roll calls chosen by the interest groups, because it pools all the roll calls chosen by all the interest groups in estimating the positions of legislators.

To demonstrate the sensitivity of ratings in estimating the errors of legislators, we performed an experiment in which we constructed ratings based on perfect voting by senators and interest groups on the roll calls the groups chose for the 96th Senate. We used both the roll call coordinates and the legislator coordinates (shown in figure 8.5) estimated by W-NOMINATE. But rather than using the actual votes on each roll call, we used the votes predicted by W-NOMINATE. This procedure generated perfect spatial voting. When the ratings are constructed—using the roll calls actually selected by the interest groups—from perfect voting, the second dimension is recovered almost as ac-curately as the first (R^2s of 0.88 and 0.85, respectively).

Thus, an unfolding analysis of the ratings in one dimension produces essentially the same results as W-NOMINATE. Beyond the first dimension, the ratings contain very little information because the ratings are noisy evaluations of legislator locations on a second (or higher) dimension. Better results can be obtained by pooling all the information about the voting records of the legislators and the interest groups. This pooling occurs when one treats the interest groups as legislators and analyzes the augmented roll call data with NOMINATE.

Using the Interest Groups to Estimate a Joint House-Senate Scaling

The fact that the interest groups are regarded here as "legislators" who are, so to speak, members of both chambers makes it possible to apply NOMINATE to the House and Senate simultaneously by assuming that the interest groups occupy the same spatial position within both chambers. Ideally, those roll calls for which the sub-stance was identical in both the House and Senate should be treated as a single roll call with 535 voters. Examples include veto-override and conference-report votes.

In the 96th Congress, there were only two veto-override votes—one override and President Carter's attempt to impose an oil-import fee; and the other was on special bonuses for Veterans Administration doctors. The VA-doctor-pay veto was overridden unanimously in the Senate and by a 401 to 5 vote in the House. These margins were too lopsided for the vote to be scaled by W-NOMINATE for either chamber. However, the oil-import vote was scalable, and we treated it as a single roll call in both chambers.

With respect to conference-report votes, we found only seven roll calls for which identical bills were being voted on. Most conference report votes were very lopsided, and many were passed by a voice vote in the Senate, leaving very few votes for analysis.

Even when the text of the bill is identical in both houses, however, the political interpretation of the vote within the two chambers may differ. For example, the Panama Canal Treaty was ratified in 1978 by the Senate, but the House felt its prerogatives were being trampled on because the treaty disposed of government property. The 1979 vote on the conference report on implementation of the treaty failed by a close margin of 192 to 203 in the House on September 20. This first vote on the report appeared to exhibit a great deal of position-taking in the "turf war" between the tw

houses. A vote was more directed at the substance of the treaty occurred five days later, and the report was approved by a vote of 232 to 188. On the same day, the twenty-fifth, the Senate, too, passed the report by a vote of 59 to 29; we combined the House and Senate votes on the twenty-fifth into one roll call.

Table 8.5 shows the eight roll calls (one veto override and seven conference reports) that were combined. In the estimation, we used all the groups shown in table 8.1.[16] The two-dimensional results are displayed in figure 8.6. Not surprisingly, the estimated legislator coordinates from the combined scaling are virtually identical to those coordinates estimated in the separate scalings done without the interest groups. The R^2 between the two sets of coordinates for the first dimension for the House of Representatives was 0.99, and for the second dimension, 0.98. The R^2s for the Senate were both 0.99. The distribution of the senators and representatives over both dimensions is approximately the same.[17]

In the combined one-dimensional scaling, 12 of the 28 interest groups are exterior to the members of Congress, and another 6 groups are near the ends. The CCUS is again in the interior, and it is joined by several other labor, business, and farmers' interest groups. Adding the second dimension dramatically increases the number of groups exterior to the legislators—20 of 28 are now indeed on the rim of the space, and the UMW, though not on the rim, is also clearly toward the exterior.

The recovery of the interest groups in the combined scaling is almost the same as that from separate scalings of the House and Senate. A comparison of figure 8.5 with figure 8.6 shows that the interest groups common to the two scalings are recovered in nearly the same positions.

With respect to the eight identical votes, the fit was quite good. Table 8.5 shows the classification results for two dimensions. As expected, constraining the cutting lines to be the same increases the classification errors vis-à-vis the separate scalings. But the respective PREs (recall that the PRE controls for the margin of the roll call) are fairly close in magnitude.[18]

Figure 8.6 shows the estimated cutting line for the veto-override vote and for the conference-report vote on the bill to implement the Panama Canal Treaty. The cutting line for the veto override forecasts a nearly unanimous vote because President Carter's veto was overridden by a margin of 335 to 34 in the House and 68 to 10 in the Senate. Of more interest is the Panama Canal Treaty implementation vote. As we noted above, the vote was 232 to 188 in the House and 59 to 29 in the Senate. In the separate scalings, counting pairs and those announced as voting, 362 of 428 representatives were correctly classified, as were 80 of 97 senators, for a total of 83 errors. In the combined scaling, the total number of errors is 91—or an 82.7 percent correct-classification rate.

We estimated President Carter's position by assuming he "voted" on the roll calls chosen by Congressional Quarterly to construct its presidential-support score. President Carter's "votes" were a good fit to the spatial model. In one dimension, the geometric mean was 0.71, with 83.4 percent of 463 roll calls being correctly classified. In two dimensions, the geometric mean was 0.72, with 85.1 percent being correctly classified.

In two dimensions, President Carter is positioned almost exactly midway between the northern and southern wings of his party. On the first dimension, Carter is considerably to the left of his party median—18 Democratic senators are to his left and 41 are to his right. The numbers for the House are 52 and 226, respectively. In fact, only

Table 8.5 Identical Roll Calls in the 96th Congress

| Roll Call Number and House of Congress		Yeas	Nays	Errors		PRE[a]		Subject Matter
				NOMINATE	Combined	NOMINATE	Combined	
House	463[b]	236[c]	192	66[d]	72[e]			
Senate	310	64	33	17	20			Panama Canal implementation
Total		300	225	83	92	0.63	0.59	
House	468	219	205	109	99			
Senate	309	71	23	16	18			Establishment of Department of Education
Total		290	228	125	117	0.45	0.49	
House	527	301	112	78	78			
Senate	363	79	18	15	23			Emergency program of energy conservation
Total		380	130	93	101	0.28	0.22	
House	672	254	138	87	85			
Senate	506	43	37	21	24			Chrysler loan guarantees
Total		297	175	108	109	0.38	0.38	
House	800	305	109	79	77			
Senate	575	66	34	12	15			Windfall-profits tax on crude oil
Total		371	143	91	92	0.36	0.36	
House	885	326	82	31	29			
Senate	644	65	25	14	13			Food-stamp authorization
Total		391	107	45	42	0.58	0.61	
House	945	340	37	37	38			
Senate	683	68	12	9	10			Veto override on oil-import fee
Total		408	49	46	48	0.06	0.02	
House	1,237	213	201	48	65			
Senate	986	50	38	32	34			Budget resolution
Total		263	239	80	99	0.67	0.59	

a Proportionate reduction in errors (see chapter 3 for definition).

b VOTEVIEW number of roll call.

c Includes pairs and announced.

d Total number of classification errors from separate NOMINATE two-dimensional scalings.

e Total number of classification errors from combined scaling, with roll calls in this table being constrained to a common cutting line in both houses.
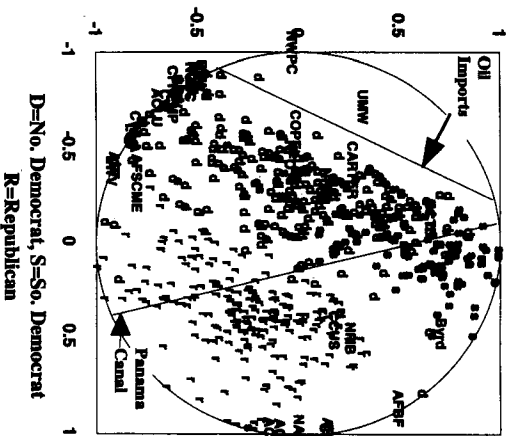
Figure 8.6. Representatives, senators, and 28 interest groups in a common two-dimensional space: W-NOMINATE scaling for 1979–80. The interest groups and Harry F. Byrd, Jr., are named on the plot. The circle shows that W-NOMINATE constrains the estimation to a circle of unit radius. Results are very similar to those in figure 8.5, although a few interest groups have interior positions. The figure also shows the cutting line for roll call votes on oil imports and the Panama Canal.

two southern Democrats, Mickey Leland and Bob Eckhardt, both representatives from Texas, were to Carter's left. On the second dimension, Carter is much closer to his party median—24 senators and 125 representatives are above him, and 35 senators and 153 representatives are below. Of the 105 southern Democrats in both Houses, 86 were higher than Carter on the second dimension. Although one might expect a president with a legislative agenda to adopt, for strategic reasons, positions of moderation, Carter's positions appeared to be more those of a representative agent of his party and certainly not those of a typical southern Democrat.

Summary

We have shown that interest-group ratings confirm this book's basic message that roll call voting is largely accounted for by a low-dimensional spatial model. A major new finding is that most interest groups issuing ratings are to the exterior of the legislators. This is good news for previous studies of Congress that have used ratings as measures of ideology. Although these measures are coarse, they show a high degree of correlation with the W-NOMINATE estimates.

The exterior nature of interest groups is important because, to the extent the interest groups influence legislators, they will be polarizing, moving the legislators away from middle-of-the-road positions. On the other hand, the interest groups that issue ratings are a select group among all interest groups. They are overwhelmingly either labor unions, public-interest organizations, or ideological groups like Americans for Constitutional Action.

Our methods could be applied, however, to a wider array of evaluating groups, cause the key to using the methodology is not having quantitative ratings from group but having positions on a reasonable number of roll calls. For example, ne papers frequently take positions on legislation before Congress. They, too, are eff tively voting on roll calls. Consequently, newspapers could be integrated with the call voting base just as we have integrated interest groups. This approach woul particularly attractive in dealing with American history before World War II when terest-group ratings are hard to come by but when American cities had several ne papers.

A variant of the NOMINATE methodology, called PAC-NOMINATE, provides formation about interest groups—including those that do not issue ratings—from contributions of their political action committees (PACs). In PAC-NOMINATE, interest groups are treated as legislators who vote on incumbents and challeng both playing the role of roll calls. (For a detailed discussion, see McCarty and Po 1995.) Labor PACs, consistent with their ratings, are concentrating their money o whelmingly on liberal Democrats. But the bulk of PAC money comes from corp tions and trade and industry associations. With the exception of oil firms, which ideologically focused, business PACs seem as concerned with policies that affect t policy. (Or, to put it differently, they are more concerned with buying access as v immediate interests than with national policy.) Since their contributions tended to clude only the most liberal Democrats, business PACs were estimated to have mo ate conservative positions. But it is an open question whether the business PACs v truly centrist, or—since in the 1970s and 1980s, the Democrats were presumed li to control the House indefinitely—are merely acting strategically. In any event ideologically oriented interest groups, as this chapter demonstrates, are forces of tremism.