Congressional
Primaries and the
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Representation

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Explaining the Ideological Differences between the Two U.S. Senators Elected from the Same State: An Institutional Effects Model

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Taking into account institutional realities such as party primaries, the role of party activists, and national party images that impact on party competition over multiple constituencies,[1] work done subsequently, both theoretical[2] and empirical,[3] has shown that although the centrist pressures identified by Downs[4] are quite real, in two-party competition a considerable degree of party divergence is to be expected.

We focus our attention for this chapter on U.S. senators elected from the same state. We offer an institutional explanation both of when we can expect divided Senate delegations and of the expected ideological differences between senators from the same state of the same and opposite parties.[5] Like Gerber and Morton,[6] the critical distinction we draw is between closed and open primaries.[7]

In the usual closed primary situation, it has been shown theoretically that, ceteris paribus, candidates of each party are likely to be located quite near the median voter of their own party, albeit shifted somewhat in the direction of the overall median voter.[8] Thus, for the usual type of closed primary, candidates of opposite parties are expected to be rather different ideologically, because each is largely mirroring their own party's median voter,[9] and the Democratic median voter is known to be to the left of the Republican median voter in all fifty states.[10] In contrast, if there is an open primary in a state, this generates centripetal pressures on the candidates of each party vis-à-vis the overall median voter, because the primary electorate will no longer be so purely partisan in composition as a reult of the possibility of crossover participation from supporters of the other party.[11]

In their study of U.S. House elections, Gerber and Morton[12] find strong support for the hypothesis that, ceteris paribus, the average ideological extremism of the winners will be greater in closed primaries than in open ones. They explain this finding by the fact that "greater participation by voters outside the party reduces control over candidate nominations by extreme party members and is therefore expected to produce candidates with policy positions closer to the ideal point of the general electorate median voter."[13] The belief that open primaries foster the selection of more moderate candidates is not just a notion confined to the ranks of Public Choice scholars. It is also the common wisdom of political activists and journalists.

In March 1996, California voters authorized by referendum (Proposition 198) the use of an open primary (more particularly, a so-called "blanket primary") for the state. In the *Los Angeles Times*, February 23, 1997, in an op-ed piece, the chair of California's Republican Party is quoted as saying that the new primary rules "would sap the creativity from politics by punishing candidates from the ideological wings of the party and favoring those of the more moderate, and mushy, middle." The staff writer of a later bylined story on the new primary rules accepted this view and opined that "moderate candidates are expected to be favored in an open primary because they have the best chance of attracting voters from other parties."[14]

Here we build on the ideas about the impact of primary type in Gerber and Morton[15]—ideas that inspired the writing of this chapter—by complementing their 1998 analysis of the impact of primary type on ideological extremism in elections to the U.S. House of Representatives, with a study of U.S. Senate elections. We focus in large part on the impact of primary type on ideological differences between senators of the same and of opposite parties elected from the same state, and we look also at the likelihood of divided Senate delegations as a function of primary type.

As noted previously, we distinguish between two types of primary elections: open and closed. Open primaries are those in which voters can choose the party primary in which they want to participate—a Democrat can choose to vote in the Republican primary if he or she so desires. Closed primaries, on the other hand, are restricted to registered partisans—only voters registered in a party can participate in the primary election. There are many subtleties to the specific laws in each of the states.

We expect that, ceteris paribus, in states with open primaries, when senators of opposite parties are elected, the ideological differences between them will be less, on average, than is true for senators of opposite parties elected in states with closed primaries.

On the other hand, in states with open primaries, the presence of crossover voting should increase (at least somewhat) the standard deviation of the ideological composition of the primary electorates, especially that in the party primary of the party whose candidate is most likely to win. This increase in standard devia-

tion of the primary electorate's ideological composition should lead to an increase in the variance across elections in the ideological positions of the nominees chosen by the party. Thus, ceteris paribus, in states with open primaries, when senators of the same party are elected, the ideological differences between them should be greater, on average, than is true for senators of the same party elected in states with closed primaries.[16]

If there is a dominant party and its candidates reasonably reflect the preferences of the overall median voter, it is very unlikely that that party's senatorial candidates will be defeated. Because open primaries more readily permit competition for the overall median voter to take place within the party primaries prior to the general election, we would expect that, ceteris paribus, states with open primaries are less likely to have divided Senate delegations than are states with closed primaries.[17]

The combination of these three hypotheses with the fact that the ideological difference manifested in roll-call-voting behavior between senators of the same party from the same state is far less than that between senators of opposite parties from the same state[18] leads us to an important final hypothesis. On balance, ceteris paribus, the ideological differences between senators elected from states that use closed primaries should be greater, on average, than is true for senators elected in states with open primaries.

There are two reasons for this. First, states with open primaries should be less likely to be divided, thus giving rise to only slight differences, on average, between the state's senators. Second, even when states with open primaries are divided in their senatorial delegation, the differences between senators of opposite parties in the open primary states will be less than the differences in the closed primary states. These two effects reinforce each other; and the countervailing effect, namely that senators of the same party from open primary states will be slightly less alike in voting behavior than is true for senators of the same party from closed primary states, is not nearly as important in its overall impact on ideological differences as a function of primary type.[19]

Now we turn to a test of these four hypotheses.

DATA ANALYSIS

We have gathered the relevant data, partisan makeup and Americans for Democratic Action (ADA) scores for senators from all fifty states for the years 1971 to 1996. Hypothesis 1 simply states that states with closed primaries will have more mixed Senate delegations (1 senator from each party). Table 9.1 is a cross tabulation of the type of primary that a state uses to nominate its senators and whether the state has a divided delegation. The hypothesis is clearly supported in our range of data. Both primary types have nearly equal number of observations over our sample period—there are 432 observations with closed primaries and 468 obser-

Table 9.1: Number of Divided and Unified Senate Delegations by Primary Type, 1971–1996

	Unified Delegation	*Divided Delegation*
Closed primaries	202	230
Open primaries	291	177

Chi-square = 22.14
Probability < .001

vations with open primaries. Of those 468 with open primaries, only 177 had divided Senate delegations (37.8 percent). But of the 432 observations for closed primary states, fully 53.2 percent (230) had divided delegations to the Senate. A chi-square test indicates statistical significance at below the .001 level.

Hypotheses 2 and 3 deal with the degree of ideological difference between the two senators in each state. Clearly, in those states with divided delegations, the distance between the two senators will be greater than in those states with a unified delegation. But here we seek to go further than that observation to include as variables both whether the two senators are of the same party and what type of primary election a state uses to elect nominees. Hypothesis 2 states that open primary states with divided Senate delegations will have less ideological difference, measured by the absolute value of adjusted ADA score differences, than will closed primary states with divided delegations. We use the adjusted data for ADA scores as described in Groseclose, Levitt, and Snyder.[20] Table 9.2 uses adjusted ADA scores for each senator and primary type data to breakdown the ideological distance between senators. Again we use data from 1971 to 1996. The pattern is quite clear; those states with open primaries and split Senate delegations have less ideological distance between the two senators on average than do divided delegations in states with closed primaries. States using a closed primary average 46.21 difference, while open primary states average 43.54 difference, a divide of about 7 points on the 100-point ADA scale (the *t*-test indicates statistical significance at the .10 level).

Table 9.2: Average Ideological Difference between Senators in States by Primary Type and Whether Delegation Is Unified or Divided Overall (1971–1996)

Primary Type	*Senate Delegation*	*Average Ideological Difference*	*Number of Observations*
Closed	Unified	12.9	201
Open	Unified	10.6	290
Closed	Divided	33.7	227
Open	Divided	22.5	177

Our next hypothesis deals with only those states with a unified Senate delegation. The average distance between two senators of the same party is only 13.13 points on the adjusted ADA scale. So the difference we are trying to explain is quite small. Hypothesis 3 states that open primary states with unified Senate delegations will have greater ideological differences than will closed primary states with unified delegations.

Table 9.2 shows that the evidence indicates that this hypothesis is not true. In those states with open primaries and two senators from the same party, the average ideological difference is 10.6, while closed primary states with unified delegations averaged 12.9.

We also tested Hypotheses 2 and 3 individually for nine Congresses in our data set. Table 9.3 presents the results. The hypothesis dealing with unified delegations is only supported in two of the nine Congresses (99th and 100th Congresses). On the other hand the hypothesis dealing with divided delegations is upheld in seven of the nine. Thus, while we cannot conclude that the primary type has the expected effect when Senate delegations are unified, we feel justified in concluding that our theory about the relationship between primary type and divided delegations is true.

According to Hypothesis 4, the ideological differences between senators with closed primaries should be greater on average than that for senators from open primary states. Table 9.4 breaks down ideological divisions between representatives by primary type. The hypothesis is again fully supported by the data. The average difference between the ADA score of one senator in a state relative to the other senator is 33.7 in states with closed primaries, compared to only an average of 22.5 points in open primary states. This difference is statistically significant beyond the .01 level.

We also include a regression model to further establish the relationship be-

Table 9.3: Test of Hypotheses 2 and 3 for Each Congress

Congress	Years	Unified Delegation Open > Closed	Divided Delegaton Closed > Open
96	1979–80	No	Yes
97	1981–82	No	Yes
98	1983–84	No	Yes
99	1985–86	Yes	Yes
100	1987–88	Yes	Yes
101	1989–90	No	No
102	1991–92	No	Yes
103	1993–94	No	Yes
104	1995–96	No	No

**Table 9.4: Average Ideological Difference between Senators
in a State by Primary Type**

Primary Type	Average Ideological Difference	Number of Observations
Closed	30.5	428
Open	23.2	467

$t = 4.73$, 893 df, probability $< .001$. Ideology is measured using adjusted ADA scores (*see* Timothy Groseclose, Steven D. Levitt, and James M. Snyder Jr., "Comparing Interest Group Scores across Time and Chambers: Adjusted ADA Scores for the U.S. Congress," *American Political Science Review* 93 [March 1999]: 33–50).

tween the type of primary in a state and the ideological cohesiveness of the senators. In table 9.5, the model indicates that after controlling for whether the delegation is divided (which obviously affects the dependent variable) and for the different Congresses, the primary type variable is negative, indicating that the space between the senators increases as we move from open to closed primaries. Thus, the effects of primary type significantly affect whether a state will elect a divided delegation, but beyond that primary type affects the nature of ideology of the senators as well. We also ran separate regressions for each Congress, and the results are still encouraging—the coefficient for the primary type is negative as hypothesized in seven of the nine Congresses (the 96th and 104th are the exceptions). In two of the remaining seven Congresses, the coefficient reaches statistical significance. We interpret these results as further support for our contention regarding a specific relationship between electoral institutions and the representation that is a direct outcome from these elections.

**Table 9.5: Regression Model of Ideological Distance
between Senators and the Effect of Primary Type**

Constant	−34.76	(−1.63)
Primary type	−2.28*	(−2.06)
Divided delegation	33.43**	(29.96)
Congress	0.50*	(2.34)
N	895	
Adjusted R^2	.51	

*$p < .05$
**$p < .001$

Note: Entries are unstandardized regression coefficients with t-statistics in parentheses. The dependent variable is the absolute value of the difference between the adjusted ADA scores of the two senators in each state for each year. Primary type is a dichotomous variable coded "1" if the state uses a closed primary and "2" if it uses open. Divided delegation is also dichotomous, coded "0" if the two senators in the state are from the same political party and "1" if they are from different parties. Congress is coded 104 for the 104th Congress, etc.

CONCLUSION

In 1996, Morris Fiorina wrote that *"differences in nominating processes* [emphasis added] and contrasting perceptions of the comparative strengths of executive and legislative institutions can have nothing to do with split delegations since both senators of a state are nominated in the same manner and both are legislators."[21] The exact meaning of this quote is far from clear, but Professor Fiorina (probably simply due to imprecision in sentence wording) does seem to be suggesting that if two U.S. senators are elected under the same rules, there is no reason for those rules to impact on how different they are from one another (ideologically or in terms of party). Clearly, if Fiorina meant this (and we doubt that he did), the data we have provided in this chapter show that he was wrong. Primary rules do impact both on whether a state will have a divided delegation and on how different the elected senators will be from each other. Those states with closed primaries are more likely to have a divided delegation and because of this are more apt to have greater ideological difference between the two senators of that state. We also hypothesized that primary type will have the opposite effect for unified delegations; the data do not support that contention. Indeed, more times than not, closed primary states have greater ideological difference for unified delegations as well.

Of course the difference in primary type is not the only factor affecting the ideological difference (similarity) between two senators from a state. Other research has linked the likelihood of mixed Senate delegations to demographic heterogeneity of a state,[22] to policy balancing,[23] and to long-term partisan realignments.[24] Other important factors include whether the state allows straight party vote with one lever,[25] as well as the proportion of independents among registered voters.[26]

NOTES

1. See the following reviews of how institutional complexities may be taken into account in spatial models: James M. Enelow and Melvin J. Hinich, eds., *Advances in the Spatial Theory of Voting* (New York: Cambridge University Press, 1990). Bernard Grofman, ed., *Information, Participation, and Choice: "An Economic Theory of Democracy" in Perspective* (Ann Arbor: University of Michigan Press, 1993). Bernard Grofman, "Toward an Institution-Rich Theory of Political Competition, with a Supply-Side Component," in *Information, Participation, and Choice: "An Economic Theory of Democracy" in Perspective*, ed. Bernard Grofman (Ann Arbor: University of Michigan Press, 1993). Melvin J. Hinich and Michael C. Munger, *Ideology and the Theory of Political Choice* (Ann Arbor: University of Michigan Press, 1995).

2. For example, Peter Aranson and Peter C. Ordeshook, "Spatial Strategy for Sequential Elections," in *Probability Models of Collective Decision Making*, ed. R. Niemi and H. Weisberg (Columbus, Ohio: Merrill, 1972). James S. Coleman, "The Positions of Political Parties in Elections," in *Probability Models of Collective Decision Making*, ed. R. Niemi

and H. Weisberg. Alberto Alesina, "Credibility and Policy Convergence in a Two-Party System with Rational Voters," *American Economic Review* 78 (1988): 796–805. Rebecca Morton, "Incomplete Information and Ideological Explanations of Platform Divergence," *American Political Science Review* 87, no. 2 (1993): 382–92. David Baron, "Electoral Competition with Informed and Uninformed Voters," *American Political Science Review* 88, no. 1 (March 1994): 33–47. Guillermo Owen and Bernard Grofman, "Two-Stage Electoral Competition in Two-Party Contests: Persistent Divergence of Party Positions with and without Expressive Voting" (presented at the annual meeting of the Public Choice Society, Long Beach, California, 1995).

3. Charles Bullock and David Brady, "Party, Constituency, and Roll Call Voting in the U.S. Senate," *Legislative Studies Quarterly* 8 (1983): 29–43. Morris P. Fiorina, *Representatives, Roll Calls, and Constituencies* (Lexington, Mass.: Lexington Books, 1974). Bernard Grofman, Robert Griffin, and Amihai Glazer, "Identical Geography, Different Constituencies, See What a Difference Party Makes," in *Developments in Electoral Geography*, ed. R. J. Johnston, F. Shelley, and P. Taylor (London: Croom Helm, 1990). Keith T. Poole and Howard Rosenthal, "The Polarization of American Politics," *Journal of Politics* 46 (1984): 1061–79. Catherine R. Shapiro, David W. Brady, Richard A. Brody, and John A. Ferejohn, "Linking Constituency Opinion and Senate Voting Scores: A Hybrid Explanation," *Legislative Studies Quarterly* 15, no. 4 (November 1990): 599–623.

4. Anthony Downs, *An Economic Theory of Democracy* (New York: Harper and Row, 1957).

5. A variety of other reasons have been offered for party divergence, such as the "two constituencies thesis that heterogeneity in the electorate contributes to divided Senate delegations and strong differences between the two senators if they happen to be of opposite parties" (Bullock and Brady, "Party, Constituency, and Roll Call Voting; cf. Gi-Ryong Jung, Lawrence W. Kenny, and John R. Lott Jr., "An Explanation for Why Senators from the Same State Vote Differently So Frequently," *Journal of Public Economics* 54 [1994]: 65–96), incumbency-related effects (see, e.g., Scott L. Feld and Bernard Grofman, "Incumbency Advantage, Voter Loyalty, and the Benefit of the Doubt," *Journal of Theoretical Politics* 3, no. 2 [1991]: 115–37), and realignment (Thomas L. Brunell and Bernard Grofman, "Explaining Divided Senate Delegations 1788–1996: A Realignment Approach," *American Political Science Review* 92 June 1998: 391–99). See general review in Bernard Grofman, "In Two Party Competition, Why Do We Have So Much Party Divergence?: A Review and Synthesis of a Baker's Dozen's Worth of Proffered Explanations" (unpublished manuscript, School of Social Sciences, University of California, Irvine, 1997). The literature on voter policy balancing (e.g., Alberto Alesina, and Howard Rosenthal, *Partisan Politics, Divided Government, and the Economy* (New York: Cambridge University Press, 1995). Elisabeth R. Gerber and Adam Many, "Incumbency-Led Ideological Balancing: A Hybrid Model of Split-Ticket Voting," [paper presented at the annual meeting of the Midwest Political Science Association, 1996]) may also be relevant to understanding this issue. We offer our institutional focus as complementary to that of other approaches.

6. Elisabeth R. Gerber and Rebecca B. Morton, "Primaries and Strategic Voting," (unpublished manuscript, Department of Political Science, University of California, San Diego, 1995). Gerber and Morton, "Primary Election Systems," *Journal of Law Economics and Organization* 14, no. 2 (1998): 304–24.

7. We may classify party primaries in a number of different ways; and it is common for authors to distinguish, for example, between closed and semiclosed primaries and among

several types of open primaries; for example, those where all voters may vote in whichever primary they choose and may defer that choice until election day, those where voters may vote for some offices in one primary and for other offices in the other primary (blanket primaries), and those where candidates of both parties run on the same primary ballot, with the two top vote getters, regardless of party affiliation, entering into a subsequent runoff if no candidate receives a majority in the primary (nonpartisan primary [a.k.a. jungle primary]). Here, however, to maintain reasonable cell sizes for purposes of hypothesis testing, we have kept to the simplest possible dichotomy. We list in the appendix the classification of each of the 50 states according to dichotomized primary type. Our classification is the same as that in Gerber and Morton ("Primary Election Systems," 304–24). However, we have done some further preliminary analyses not reported here in which we look to see if more finely tuned distinctions among primary types would be advantageous in developing and testing more precise hypotheses. Because of small n's for certain primary types, our general answer so far is no.

8. The shift toward the overall median can be expected to be greater if there is a large number of independents in the electorate (Shapiro, Brady, Brody, and Ferejohn, "Linking Constituency Opinion," 599–623).

Aranson and Ordeshook, "Spatial Strategy." Coleman, "The Positions of Political Party." Owen and Grofman, "Two-Stage Electoral Competition." Gerber and Morton, "Primaries and Strategic Voting." Gerber and Morton, "Primary Election Systems."

9. The ideological position of the candidates in any constituency is a function not merely of that candidate's party, but also of the ideological characteristics of the voters in that constituency; for example, a typical Democrat in a conservative constituency is to the right of a typical Democrat in a liberal constituency (Bernard Grofman, William Koetzle, Michael McDonald, and Thomas Brunell, "A New Look at Split-Ticket Outcomes for House and President: The Comparative Midpoints Model," *Journal of Politics* 62, no.1 [2000]: 34–50). As we show here, it is also a function of the institutional incentives for party convergence/divergence.

10. To establish the finding that Republican median voters are uniformly to the right of Democratic median voters in each state, Grofman, Koetzle, McDonald, and Brunell ("A New Look at Split-Ticket Outcomes") classify voters according to the seven-point party ID scale (with leaners classed with identifiers) and look at state-level data from the 1988–90–92 NES Senate study. These data yield sample sizes of well over a hundred for all states.

11. Picking the lesser of two evils is, we believe, a much more common strategy in terms of motivating crossover voting in open primaries than is deliberately seeking to ensure the nomination of a weak candidate of the opposite party, especially because we would anticipate that the likelihood of crossover voting is greatest when one party tends to dominate the state's senatorial politics and voters of the other party cross over to vote in its primary. Compare with the following: Christopher Hanks and Bernard Grofman, "Turnout in Gubernatorial and Senatorial Primary and General Elections in the South, 1922–90: A Rational Choice Model of the Effects of Short-Run and Long-Run Electoral Competition on Turnout," *Public Choice* 94, no. 3–4 (1998): 407–21; and Bernard Grofman and Theodore Arrington, "Party Registration Choices as a Function of Political Competition: A Test of a Strategic Model of 'Hidden Partisanship'" (unpublished manuscript, School of Social Sciences, University of California, Irvine, 1996).

12. Gerber and Morton, "Primaries and Strategic Voting." Gerber and Morton, "Primary Election Systems."

13. Gerber and Morton, "Primary Election Systems."

14. Dave Lesher, "Bill Proposes Changes in New Open Primary Law," *Los Angeles Times*, March 1, 1997, p. A1.

15. Gerber and Morton, "Primaries and Strategic Voting."

16. Of course, the magnitude of this effect may not be that large, especially if crossover voting is limited in scope. The evidence from the handful of studies that have been done suggests that many voters never shift between primaries; however, voter turnout in primaries may be higher, ceteris paribus, in states with open primaries than in states with closed primaries (see literature review in Gerber and Morton, "Primary Election Systems").

17. If the identifiers of one party outnumber the identifiers of the other party, it might appear that the preponderant party's candidate would essentially always win, because, ceteris paribus, the candidate of the party whose voters comprise a clear preponderance of the electorate should be more likely to be closer to the overall median voter. However, this is too simplistic. Bernard Grofman, Samuel Merrill, Thomas Brunell, and William Koetzle ("The Power of Ideologically Concentrated Minorities," *Journal of Theoretical Politics* 11, no. 1 [1999]: 57–74) have shown that we also need to take into account the ideological concentration of supporters of the two parties. If the minority party's supporters have a much lower standard deviation with respect to ideology than is true for the larger party, then the candidate of the minority party may still be closer to the overall median voter than is the candidate of the preponderant party. Thus, a constituency, such as a state, can be much more competitive than the relative balance of party identifiers in it would seem to indicate. In this chapter, however, we shall focus on institutional effects associated with primary type rather than on variance considerations or other factors.

18. Poole and Rosenthal, "The Polarization of American Politics." Grofman, Griffin, and Glazer, "Identical Geography."

19. Studying senators of the same and of opposite parties from a given state under various types of primary rules provides us a kind of "partial" natural experiment. Because one of our comparisons is between senators of the same state, we do not need to worry as much about constituency factors that may produce differences in electoral outcomes. Of course, as noted earlier, electoral constituency and geographic constituency need not coincide.

20. Timothy Groseclose, Steven D. Levitt, and James M. Snyder Jr., "Comparing Interest Group Scores across Time and Chambers: Adjusted ADA Scores for the U.S. Congress," *American Political Science Review* 93 (March 1999): 33–50.

21. Morris P. Fiorina, *Divided Government*, 2d ed. (Needham Heights, Mass.: Allyn and Bacon, 1996), 43.

22. Bullock and Brady, "Party, Constituency, and Roll Call Voting."

23. Fiorina, *Divided Government*.

24. Brunell and Grofman, "Explaining Divided Senate Delegations."

25. Nineteen states permitted voters to vote some type of a straight party ticket with one mark in the 1996 election. See Richard G. Smolka, ed. Election Administration Reports, February 24, 1996.

26. Martin P. Wattenberg, *The Decline of American Political Parties, 1952–1992* (Cambridge, Mass.: Harvard University Press, 1994).

APPENDIX 9–A

Classification of States by Primary Type

Closed Primaries	*Open Primaries*
Arizona	Alabama
California	Alaska
Colorado	Arkansas
Connecticut	Georgia
Delaware	Hawaii
Florida	Idaho
Kansas	Illinois
Kentucky	Iowa
Maine	Louisiana
Maryland	Michigan
Massachusetts	Minnesota
Nebraska	Mississippi
Nevada	Missouri
New Hampshire	Montana
New Jersey	North Dakota
New Mexico	Ohio
New York	South Carolina
North Carolina	Tennessee
Oklahoma	Texas
Oregon	Utah ·
Pennsylvania	Vermont
Rhode Island	Virginia
South Dakota	Washington
West Virginia	Wisconsin
	Wyoming

Source: Bott (1990), Table 1.3, pages 22–25.