Explaining the Democratic Dynasty

Over the decades scholars have made various attempts to answer the question: does the electoral system by which Americans choose the U.S. House of Representatives confer a built-in advantage on either of the major parties and, if it does, what is the direction and magnitude of that bias? The most recent and thoroughly documented study aimed at answering those questions is a book by James Campbell published in 1996 titled Cheap Seats. The book’s sub-title suggests Campbell’s answer to these questions: The Democratic Party’s Advantage in U.S. House Elections. The issue addressed by Campbell is outside the scope of what we are attempting to accomplish in this book, but the methodology he employs in arguing his thesis could be used as a sixth test for partisan gerrymandering. Therefore, we shall explain it, apply it to the California and Pennsylvania controversies, see what it shows about Ohio, and give it a critique.

In his review of the literature on the issue of structural bias in the U.S. congressional electoral system Campbell is struck by the lack of agreement in the conclusions reached by the country’s leading scholars. “The findings range from the observation of a consistent pro-Democratic bias to a strong but diminishing pro-Republican bias.”\(^1\) To find the reason for the discrepancy he examines the methodologies of the scholars and is drawn especially to the analysis by Professor Gary Jacobson which turns out to be a dual analysis indicating a pro-Democrat structural bias when aggregate national vote is used as the “votes” measure and a pro-Republican bias when mean district vote is used as the “votes” measure. Campbell concludes that the choice of “votes” measure employed accounts for the differing conclusions reached by the
scholars. Then he asks which is the appropriate measure and concludes emphatically that aggregate national vote is the correct measure—for the reasons we reported in Chapter 8.

Campbell’s thesis is that the existence of “cheap seats”—districts of low voter turnout located primarily in the inner cities of the nation’s major metropolitan areas and invariably electing Democratic candidates—is the structural flaw in the electoral system used to elect the U.S. House of Representatives that has inflated the number of Democrats elected to Congress for most of the twentieth century. To document the location and extent of that advantage Campbell employs a mathematically simple methodology in which the key variable is the number of “unwasted votes” required to elect Democratic and Republican candidates, respectively, to Congress. For each individual election a five-step process is specified:

Step 1. Calculate the mean number of votes cast for each party in the contested seats that it won, and the mean number of votes cast at the district level for the winning candidate, regardless of party.

Step 2. Calculate the total number of unwasted votes.

Step 3. Divide the total number of unwasted votes in half, to determine how many unwasted votes each party would have received if the unwasted vote were evenly divided.

Step 4. Divide this half of the total unwasted votes by the mean number of unwasted votes per victory for the party being examined. This indicates how many seats the party would have won if it had received 50 percent of the vote, on the assumption that it was “paying” for seats at its rate of unwasted votes per seat rather than the opposing party’s rate or the mean rate.

Step 5. The number of seats the party would have won at its unwasted votes rate can then be divided by the total seats to put in terms of percentages and subtracted from 50 percent to indicate the direction and extent of bias.
The best way to grasp this methodology is to apply it to a specific election in one of the states we are investigating. Note that Campbell applies his methodology only at the national level (he calls his vote measure the “aggregate national vote”) but we see no reason why it cannot properly be applied at the state level, as well. Let us “run the numbers” on the 1982 congressional election in California—the only election held under the (in)famous “Burton I” congressional districting plan.

Campbell in California

Democrats put up candidates in all 45 districts in this plan and won 28 seats. Republicans did not field candidates in CDs 3 and 25. Democratic candidates received 2,543,115 votes in the 26 contested districts where they won, so this number is entered in Column (2) of Table 27.1. Column (4) shows they “expended” on average 97,812 votes to win each of those seats. Republican candidates received 2,093,603 votes in the 17 districts where they won, so this number is entered in Column (5). Column (7) shows they “expended” on average 123,153 votes to win each of those seats. The total “unwasted” votes for the two parties is 4,636,718 (Step 2: Column 8) and half that number, 2,318,359 (Step 3) is entered in Column (9). Dividing half the total number of unwasted votes by the mean Democratic unwasted votes per seat (97,812 per Column 4) yields a Democrat entitlement of 23.702 seats, which we enter in Column (10). Dividing half the number of unwasted votes by the mean Republican unwasted votes per seat (123,153 per Column 7) yields a Republican entitlement of 18.825 seats, which we enter in Column (11). The sum of the two major-party entitlements (Column 10 plus Column 11) is recorded in Column (12) as 42.527. This sum will be close to, but not the same as the total number of contested seats, 43. The Democratic entitlement, 23.702 seats, when divided by the sum of the entitlements yields a quotient (Column 13) which says that with 50 percent of the
unwasted votes Democrats will win 55.73 percent of the seats in this election, a bias of 5.73 percent as shown in Column (14).

(Table 27.1 about here)

When we repeat these calculations for the other twenty elections recorded in Table 27.1 we see in Column (14) a very consistent bias in favor of Democrats. Only in 1992 and 1998 does a pro-Republican bias appear and that bias is less than one percent. The two highest bias figures—both exceeding 9 percent—are for 1966 and 2002, years when Democrats had outright control of districting. The least pro-Democrat bias occurs in the decade of the 1990s, when a court-drawn plan was in effect.

Defining “Wasted” Votes

The key to Campbell's methodology lies in his definition of the term “wasted votes.” The commonly accepted use of the term recognizes two types of such votes: Type I wasted votes are those cast for losing candidates and they are the only kind recognized by Campbell. Others, however, recognize a second kind of wasted vote (Type II): the plurality achieved by the winning candidate—votes he receives in excess of those for his nearest opponent, diminished by one. Campbell acknowledges that his stipulative definition of wasted votes is at variance with the more commonly employed (reportive) definition, but he justifies it in a footnote:

Votes are termed “unwasted” or “wasted” on the basis of whether they obtain representation in the legislature. Unwasted votes obtain representation in the election of a candidate (and party) for which the vote is cast. Wasted votes, those cast for losing candidates, do not receive this representation. One might claim that unwasted votes in excess of those necessary to win a seat are wasted. However, these voters do obtain representation. The unwasted votes (beyond the minimum
necessary to win the seat) may better be thought of as an inefficient expenditure of votes rather than a waste of votes. (pg. 251, Note 17)

We think that “inefficient expenditure” versus “wasted” is a distinction without a difference, but Campbell has the right to use any definition he pleases so long as he alerts us to it—which he does. The real issue is whether which definition one employs makes any difference in a partisan analysis. To answer that question we return to California and revisit the election of 1982. A detailed breakdown of that election appears in Table 27.2.

(Table 27.2 about here)

In Columns (4) and (5) we show the breakdown of Campbell’s unwasted votes for the two parties. The 2,093,603 total for Republicans is the same as in Column (5) of Table 27.1. The 2,808,901 total for Democrats is 265,766 higher than the 2,543,115 total of Column (2) for Democrats in Table 27.1 because we include the two uncontested seats in CDs 3 and 25. The pluralities in Columns (6) and (7) become the Type II wasted votes in Columns (8) and (9) of Table 27.2. Note that these columns show wasted votes for each party in each district: either a Type I wasted vote if the party’s candidate loses, or a Type II wasted vote if the party’s candidate wins. Where a Democratic candidate’s victory is so overwhelming that his Type II wasted vote exceeds the Type I wasted vote of his Republican opponent we place an asterisk in Column (8). Where a Republican candidate’s victory is so overwhelming that his Type II wasted vote exceeds the Type I wasted vote of his Democratic opponent we place an asterisk in Column (9). In columns (10) and (11) appear the unwasted votes by our “traditional” definition. When one compares these unwasted votes with their counterparts in columns (4) and (5) we see that the latter differ from the former in each instance in being smaller by the magnitude of the Type II wasted vote they contain. When we total up the statewide-unwasted votes by the two definitions we find the statewide unwasted Democratic vote by Campbell's definition is higher by 2,808,901
- $1,598,122 = 1,210,779$. The statewide unwasted Republican vote per Campbell is higher by
$2,093,603 - 1,006,321 = 1,087,282$.

Let's do Table 27.1 using our definitions of unwasted votes:

Column (4) = $1,598,122 / 28 = 57,076$ mean winning votes per seat (Democrat)
Column (7) = $1,006,321 / 17 = 59,195$ mean winning votes per seat (Republican)
Column (8) = $1,598,122 + 1,006,321 = 2,604,443$ total unwasted votes
Column (9) = $2,609,443 / 2 = 1,302,221$ = half of total unwasted votes
Column (10) = $1,302,221 / 57,076 = 22.816$
Column (11) = $1,302,221 / 59,195 = 21.999$
Column (12) = $22.816 + 21.999 = 44.815$ = sum of partisan entitlements
Column (13) = $22.816 / 44.815 = 50.91$ = Democrat percent of sum of partisan entitlements
Column (14) = $50.91 - 50.00 = 0.91$ = percent partisan bias from unwasted votes = 0.41 seat

From this exercise we infer a much smaller pro-Democrat bias than when we follow
Campbell’s definition: less than half a seat compared to about 2.44 seats.

**Countervailing Phenomena**

From the common assumption regarding geographic concentration and dispersion of
“Democrats” and “Republicans” one would assume, as does Lowenstein, that the “voting
strength” of Democrats

“…is disproportionately concentrated in compact areas with municipal
boundaries, and dispersed at less than majority levels throughout the rest of the
state. Either major party can find itself in this plight… As it happens, given the
political demographics of contemporary American politics, probably more often
than not...[these demographics] ...will favor the Republicans and disfavor the Democrats."5

We have seen, both in Indiana and California that even in impartially drawn plans there are invariably a few districts with Democratic Indices from 75 to 95, which are not “balanced” by an equal number of districts with Democratic Indices from 5 to 25. So our own observations lend support to Lowenstein’s assertions.

But now we have Campbell looking at many of these same heavily Democratic districts and drawing a seemingly contradictory conclusion: these districts confer an unfair advantage on Democrats because they are low turnout districts which enable the Party to win seats in Congress with a minimal “expenditure” of votes. Our initial reaction is to realize that Lowenstein’s view is predicated upon mean district vote as the measure of “votes” while Campbell’s view is predicated upon aggregate statewide vote as the “votes” measure. Upon further reflection we sense that these differing measures do not tell the whole story: Campbell, in fact, raises the critical question in a hypothetical example he gives:

“...If a Republican won a high-turnout district (200,000 votes) with 51 percent of the vote and a Democrat won a low-turnout district (120,000 votes) with 85 percent of the vote, each would have received the same number of votes in his or her victory (102,000 votes).”6

Which of these tendencies dominates in a particular plan at a given time? In a given state at a given time? In the nation at a given time? Campbell does not answer these questions, but we may get partial answers to the first two in the case of the plans we are scrutinizing. Let’s examine the 1982 California election in “Burton I” again, this time from the perspective of which party wastes the most votes. In Table 27.2 we have (in Column 8) placed asterisks besides the Democrats’ wasted votes in the ten cases where their Type II wasted votes from excessive
pluralities exceed the Republicans’ Type I wasted votes from having lost the election in that
district. In Column 9 we have placed asterisks besides the Republicans’ wasted votes in the
eleven cases where their Type II wasted votes from excessive pluralities exceed the Democrats’
Type I wasted votes from having lost the election in that district. Adding up the Democrats’ Type
II wasted votes in the ten districts cited gives a total of 714,895, which averages to 71,490 votes
per district. Adding up the Republicans’ Type II wasted votes in the eleven districts cited gives a
total of 846,710, which averages to 76,973 votes per district. This comparison shows
Republicans suffering a slightly greater wastage of votes in those districts having the highest
indices for their respective parties.

Comparing the total wasted votes (Type I plus Type II) for both parties we find with the
“traditional” definition that Republicans wasted 468,293 more than did Democrats (i.e.,
2,685,376 - 2,217,083). By Campbell’s definition we find that Republicans wasted 591,790 more
votes than Democrats (i.e., Republican wasted = 3,691,697 [total] - 2,093,603 [unwasted] =
1,598,094; Democrat wasted = 3,815,205 [total] - 2,808,901 [unwasted] = 1,006,304; Difference
= 1,598,094 [Republican] - 1,006,304 [Democrat] = 591,790). Republicans waste the most votes
under either definition, but their wastage is 123,497 greater (i.e., 591,790 - 468,293) under the
Campbell definition.

Conclusion. Campbell’s analysis has been employed in the 1980s California
congressional districting controversy as a retrospective test for partisan bias. From this exercise
we learn that it shows a pro-Democrat bias for the Burton I plan in the election of 1982. That bias
is greater (+ 5.73) when Campbell’s methodology is employed using his definition of wasted
votes than when the “traditional” definition is employed (+ 0.41). Both when we compare the
Type II wasted votes in the most partisan districts, and when we look at the overall wasted votes
in the plan, we find pro-Democrat bias; but that bias is greater when we employ Campbell’s
definition of wasted votes than when we employ the “traditional” definition. We should not be surprised to find a greater number of Republican wasted votes than Democrat wasted votes because, after all, this plan was alleged by Republicans to be a massive Democrat partisan gerrymander. It is also worth noting that there was no even division of the statewide vote in the 1982 election—measured either by aggregate statewide or mean district vote. Our calculations show a Democrat statewide plurality of 123,508, so we should expect Democrats to have a slightly higher number of wasted votes. Yet it is Republicans who have the higher number of wasted votes—by either definition.

Campbell in Ohio

Redistricting for the Ohio General Assembly since 1967 has been a guaranteed partisan process. The state constitution was amended that year to give a state “apportionment board” discretion to draw districts for the Ohio house and senate within guidelines that were vague and susceptible to differing interpretation. Control of the Board is determined by which party wins two of the following three statewide offices in the election next preceding the beginning of a new decade: governor, auditor of state, secretary of state. Ohio Democrats controlled the Board in 1971 and 1981. Ohio Republicans controlled it in 1991 and 2001. Table 27.3 shows the results of applying Campbell’s analysis to the Ohio House for the period 1966-2006.

(Table 27.3 about here)

We see in Column (14) that, excepting 1982, the partisan bias is always pro-Democrat—ranging from a minimum of 0.59 percent in 1992 to a maximum of 7.14 percent in 1980. This bias was substantially the same in the ten elections (average = + 3.30) conducted under Democrat-drawn plans (1972-1990) as it was in the seven elections (average = + 2.73) conducted under Republican-drawn plans.
When our inquiry shifts to the question of which party suffered the greater Type II wasted vote loss we must then conduct an analysis of each of the 21 elections covering the period 1966-2006. To see how different Ohio electoral behavior might be from that of California we did an analysis for the election of 1982. Tables 27.4 and 27.5 compare the Type II wasted votes for the ten districts having the highest Democratic share of the major-party vote for state representative with the ten districts having the highest Republican share of the major-party vote for state representative. In Column (6) of Table 27.4 we see that by the aggregate statewide vote measure Democrats wasted 187,501 votes in the ten most “Democratic” districts. In Column (6) of Table 27.5 we find that Republicans wasted 139,994 votes in the ten most “Republican” districts. From this we see the phenomenon Lowenstein is concerned about is more in evidence than the phenomenon Campbell is concerned about: Democrats waste 1.34 times the votes wasted by Republicans. When we compare the “total vote” totals for the two sets of districts we find the mean turnout in the “Republican” districts is about 37,800 compared to a mean turnout of 29,600 in the “Democratic” districts. The resulting turnout ratio of 1.28 is not as dramatic as some revealed by Campbell and suggests why this is the one Ohio election of the period under study where his analysis yields a pro-Republican bias. If Lowenstein’s preferred measure of mean district vote is employed in this analysis—in which all districts weigh the same, regardless of turnout—the ratio of “vote wastage” rises to 1.79, indicating an even greater disadvantage for Democrats.

(Tables 27.4 and 27.5 about here)

Yet the districting plan under which this pro-Republican bias occurred was crafted by Democrats in the course of a bitter partisan battle in which Republicans filed a Bandemer-style lawsuit alleging unconstitutional partisan gerrymandering.
Can we compare the Type II vote wastage in the 1982 Ohio case we just looked at to the 1982 California case we looked at earlier? Different criteria were employed in the selection of districts: in Ohio we selected the ten most “Democratic” and the ten most “Republican” districts according to the candidate’s share of the major-party vote; in California we selected the ten districts where the Democrats’ Type II wasted votes exceeded the Republicans’ Type I wasted vote and the eleven cases where the Republicans’ Type II wasted vote exceeded the Democrats’ Type I wasted vote. It turns out that the California districts selected were identical to what they would have been had the Ohio criterion been used. We are not comparing apples and oranges. What do we find? The Type II wasted vote in the ten most “Democratic” CDs in California is 714,895 with a mean of 71,490. The Type II wasted vote in the eleven most “Republican” CDs in California is 846,706 with a mean of 76,973. The bias is, therefore, pro-Democrat and the case of the Badham plaintiffs is made stronger.

Campbell in Pennsylvania

Eighteen years after Bandemer another partisan gerrymandering case finally got the attention of four justices of the U.S. Supreme Court. In the next chapter we will make a detailed analysis of this case, Vieth v. Jubelirer. Here we perform Campbell’s analysis on the plan under litigation both to get an idea of how that analysis works in another state and to see if it throws more light on the Pennsylvania controversy. Table 27.6 gives the relevant statistics. We follow Campbell faithfully in deleting uncontested districts from the analysis. Doing so, however, leaves us with a relatively small number of races in most of the years under scrutiny: 13 races of 19 in 2002 and 2004; 17 of 21 in 1992, 1994, 1998 and 2000. We would feel more comfortable with a complete dataset.

(Table 27.6 about here)
In any event, Column (14) shows a fairly consistent pro-Democratic bias, but with one glaring exception: the election of 2004 where a non-trivial pro-Republican bias is evident. In the other years a pro-Democrat bias emerges. This pro-Democrat bias is generally less than what we observed in California; but it would not have been helpful to the Vieth plaintiffs had it been presented at trial.

_a Glimpse at the National Picture_

In his book, Campbell gives a far better national perspective on the wasted votes issue than that gained from what is presented here. In particular, he lists for us the contested races in both the 20 lowest turnout districts and the 20 highest turnout districts in the election of 1990. We have reproduced these lists in Tables 27.7 and 27.8, adding information that gives a more complete picture of what happened in each district. In Table 27.7 are listed the 20 “cheapest” seats in the nation, all of them occupied by Democrats. We added columns showing the Democrat winner’s share of the major-party vote, the number of votes cast for the Democratic and Republican candidates, and the Democrat’s Type II Wasted vote. We note that in 16 out of 20 cases this wasted vote is greater than the vote received by the Republican loser.

(Tables 27.7 and 27.8)

In Table 27.8 are listed the nine of the 20 “most expensive” seats in the nation that elected Republicans in 1990. We see that, overall, the turnout in these districts was about three times that in the 20 “cheapest” districts. No consistent pattern emerges concerning the Type II Wasted vote in these districts. In three or four cases, the elections were close and the Type II Wasted vote was small. In four other cases that vote was moderate. In one case—Minnesota-3—that “wastage” was large. As stated at the beginning of this chapter, it is not within the scope of what we are trying to accomplish in this book to give a definitive answer to the issue posed by the differing
perspectives of Lowenstein and Campbell concerning which party suffers the greater vote wastage. Our purpose in examining Campbell was to show that his methodology could properly be employed as another test for partisan gerrymandering. As presented here, it is used as a retrospective test and we have indicated that what we are interested in are prospective tests. Yet, it takes no genius to realize that one could substitute an “index” election—a statewide election that correlates highly with the vote for a party’s candidates for congressional or legislative office—for the historical votes for district-wide office employed by Campbell; and then adjust the “index” election vote to 50 percent statewide, to arrive at a pretty fair estimate of the anticipated “wasted” votes of whatever category one chooses.

Of course, Campbell’s methodology would present problems if employed as a test for partisan gerrymandering—an obvious one being what threshold of bias would constitute the cutoff point separating a “legitimate” plan from a partisan gerrymander? But that problem occurs with most of the other tests we have considered, as well. Let us take leave of Campbell now and examine another study that appeared in the early 1990s that bears on the question of how to test for partisan gerrymandering.

*Rush in Connecticut and Massachusetts*

Professor Mark E. Rush of Washington and Lee University published a “skeptical inquiry into the gerrymandering controversy” in 1993.9 He never gives a direct answer to the question that is the title of his book: Does Redistricting Make a Difference? But the tenor of the work is that even if it does to “party organizations, incumbent legislators, and myriad interest groups”10 it ought not to the rest of us. Rush is not convinced there is “a clear measure by which groups can be differentiated from non-groups”11 and that Justice Byron White was correct when he said:
We think it most likely that whenever a legislature redistricts, those responsible…will know the likely political composition of the new districts and will have a prediction as to whether a particular district is a safe one for a Democratic or Republican candidate or is a competitive district that either candidate might win… As long as redistricting is done by a legislature, it should not be very difficult to prove that the likely political consequences of the reapportionment were intended.12

Traditional (partisan) gerrymander analysis is predicated upon five “underlying beliefs” which, according to Rush, are:

1. Partisan behavior is consistent from election to election.
2. Therefore, voters can be classified as group members who tend to vote for their group’s candidate most of the time.
3. Therefore, the size of political groups is easily determined by referring to election results.
4. Therefore, the fair representation of groups as well as the denial of fair representational opportunity can be determined simply by comparing the percentage of the vote received by a given group and its percentage of seats in a given legislative body.
5. Finally, it is presumed that votes cast for one party in one district have the same meaning as votes cast for the same party in another district—regardless of who the candidates are.

Since Beliefs 2, 3 and 4 hinge on the validity of Belief No. 1, if that belief can be shown to be false then the whole edifice of partisan gerrymander analysis collapses. The study
conducted by Rush is designed to test the validity of Belief No. 1 and largely succeeds in doing so.

The way to test whether a state’s political groups or parties behave consistently from year to year is to see if outcomes from a previous election for the same office will predict outcomes of current elections. Rush sets up a simple equation to test this hypothesis, employing it initially in a bivariate regression with one independent variable and subsequently, in a multiple regression with from two to eight independent variables.

\[ D\%_t = a + bD\%(t - 1) \]  \hspace{1cm} [27.1]

In this equation \(D\%_t\) is the Democratic percentage of the vote in any given town in year \(t\) and \(D\%(t - 1)\)—the independent variable—is the percentage in the previous election. The intercept, \(a\), represents whatever pro- or anti-Democratic bias may exist statewide, and \(b\)—the slope—represents the propensity to vote Democratic from one election to the next. A slope of unity (1.0) indicates that a party’s percentage in election year \(t\) is exactly what it was in election year \(t - 1\). For the data to use in his study Rush selects returns for Congress, Governor, and State Senate in 134 of Connecticut’s 169 towns and 336 of Massachusetts’ 350 towns for the elections of 1972 through 1986. He chose these states after he had “surveyed the data from some thirty states…because of the good quality of their data and their manageable size.”

**Bivariate Regression Analysis.** Using party registration records in Equation 27.1, Rush found in Connecticut’s 134 towns that the 1980 levels were very predictive of what they would be in 1982 (\(b = 0.99\)) and that other pairings over the period 1972 to 1986 were only slightly less predictive, ranging from 0.93 to 1.02. In Massachusetts’ 336 towns over roughly the same period registration levels were also highly predictive, the corresponding range being from 0.90 to 0.98. Congressional voting was different in Massachusetts’ 336 towns they ranged from 0.22 to 1.07.
The Massachusetts electorate “votes in a manner radically different from that suggested by the registration data.”\textsuperscript{16} Voting for State Senator was also a different story. While the changes depicted are not so pronounced as those that occur at the congressional level…presidential elections play a key role in determining the partisan profile of the state: simply put, Connecticut’s Republicans come out to vote only during presidential election years. The senate data display a marked shift in the number of pro-Republican towns in presidential elections, which number recedes during midterm elections. These cyclical shifts in party fortunes call into question just who the Republicans- and Democrats-in-the-electorate really are at any given time.\textsuperscript{17}

With respect to gubernatorial elections, Rush found, for Connecticut, a wide range of b-values (0.60 to 0.98) indicating, again, a “propensity to vote Democratic” that varied “significantly from election to election.”\textsuperscript{18} In Massachusetts, where b-values ranged from 0.18 to 0.76, he again found “an electorate by no means predictable or consistent in its partisan behavior.”\textsuperscript{19} Even when b-values close to unity indicated a fairly consistent year-to-year electoral performance, the associated coefficients of determination (“R-square”) often revealed a correspondence between a town’s voting behavior in successive elections that was far from perfect. Rush draws particular attention to Connecticut congressional voting between 1974 and 1976 when a b-value of 1.0 suggested a close relationship that was belied by a 0.542 R-square indicating that the 1974 election outcomes in 134 Connecticut towns accounted for only 54.2 percent of the difference between the actual 1976 results and what was indicated by the prediction equation.\textsuperscript{20}

\textit{Multiple Regression Analysis.} If a town’s partisan voting behavior in the previous election often failed to account for even half of that behavior in a succeeding election, what other
“district- and candidate-specific factors” might account for the major part of the discrepancy? To answer this question, Rush expands his prediction equation by adding “dummy” variables (up to seven in one case) he suspects may bear heavily on the discrepancy evident in his bivariate regression analysis. These variables relate primarily to incumbency and redistricting. When he includes these district-specific variables the resulting prediction equations account for much more of the variance. In the case of Connecticut congressional voting from 1972 to 1974, his prediction error is reduced by 300 percent with the R-square increasing from 0.193 to 0.573. He revisits the scattergrams for this case, and for the dozen other cases showing pairs of successive Connecticut and Massachusetts congressional and state senate elections over the period 1972-1986, and plots additional regression lines.

These additional regression lines pertain to certain subsets of his data. For instance, in the 1974 Connecticut congressional scattergram, he computes a regression line for just those towns in “open” CD 2 where Republican incumbent Steele has retired and Democrat Chris Dodd has been elected. These towns show a marked increase in the Democratic share of the vote. But when the data pertaining to CD 6 where Democratic incumbent Ella Grasso has retired are similarly segregated we fail to find a corresponding drop-off in the vote for Democratic successor Toby Moffett. In both states, redistricting occurred between the 1980 and 1982 elections. In Connecticut the changes were minor, with only six towns changing their congressional district and 18 towns being reassigned to a different state senate district. In Massachusetts redistricting wrought bigger changes because the state lost a seat in Congress: 69 towns were moved among CDs and 60 towns were moved across state senate district lines. Rush found in all cases that the relocated town, rather than remaining faithful to the party of the congressperson or state senator that had been its former representative, tended to acquire the political coloration of its new
incumbent congressperson or state senator. He concludes, “redistricting alone can result in marked changes in the partisan behavior of towns that are moved—especially when moved between districts controlled by different parties.”

Rush presents indisputable facts about voting behavior in two New England states. His conclusions differ sharply from those of Kernell and Grofman who, as we saw in Chapter 17 (see Table 17.3) correlated 1978 and 1980 vote for California statewide offices, aggregated by census tract, with each other and with votes for district-wide offices and found the correlations to be “remarkably high.”

In their view:

…the question is simply whether or not voters in different areas of the state demonstrably differ in their relative propensities to support candidates of a given party. If so, then those who draw district lines can make sensible predictions about the likely consequences of alternative districting plans…

Rush’s conclusions also differ from those of Backstrom, Robins and Eller who found in the 1974 Governor’s race a satisfactory measure of the partisan character of Minnesota senate districts and from those of Cranor, Crawley and Scheele who found in the 1980 race for Superintendent of Public Instruction a satisfactory measure of the partisan character of Indiana state legislative districts. As we shall see in the next chapter, Rush’s conclusions are also at odds with those of Allan Lichtman who found that by averaging the vote for 19 statewide offices over the preceding decade one could obtain a satisfactory measure of the partisan character of the Pennsylvania congressional districting plan of 2002.
Without trying to resolve the argument between these scholars at this point, we can observe that Rush was asking a somewhat different question than were the other scholars. He was asking how much the vote for a district-wide office in year $t - 2$ was predictive of the vote for that same office in year $t$. The other scholars—and we, ourselves in our derivation of Democratic indices for 1980s districting in Indiana and California—were asking what statewide race, or combination of statewide races, when aggregated among the districts of a plan, best predicted future electoral outcomes under that plan. It would have been helpful had Rush applied his methodology to California congressional districting in 1980-82—or had correlated vote for statewide offices in Connecticut/Massachusetts in 1980-82 with vote for his district-wide offices. He may have discovered some interesting differences in the political cultures of these disparate states. As it is, we are left with another apples/oranges comparison and some interesting speculation. One conclusion we can draw is that Rush is assuming the courts will require a far higher degree of predictive certainty in assessing the partisan character of districting plans than what has been assumed by the other scholars before it finally strikes down a districting plan as an unconstitutional partisan gerrymander. In this assumption he may be right.

Notes

1 Campbell, James E. 1996. pg. 74.
2 Ibid, pg. 92.
3 This point is obscured by Campbell, both in his simplified example on page 92 where he says “the number of seats the party would have won at its unwasted votes rate can then be divided by the total seats...” and in the application of his methodology to the elections of the period 1954-1992 where he says (pg.111) “The number of seats that the Democrats would have won... is divided by the total number of contested seats in the election...” Kleinman has pointed out that if the total number of contested seats is used as the denominator in the seats percentage calculation two different values of bias will result depending which party’s share is “being examined.” In the case of the 1982 congressional election in California, if the contested seats total of 43 is used as the denominator the pro-Democrat bias is $[(100)(23.702/43)] - 50 = + 5.12\%$. The pro-Republican bias is $[(100)(18.825/43)] – 50 = - 6.22\%$. Using total entitlements (42.527) as the denominator yields a 5.73 percent bias whichever way you figure it.
4
5 Lowenstein, Daniel H. 1990. pg. 93.
6 Campbell, Op cit. Note 1, pg. 106.
10 Ibid, Pg. 1.
11 Ibid, Pg. 15.
12 478 U.S. at 128-29.
14 Ibid, pg. 82 Table 5.3.
15 Ibid, pg. 83 Table 5.4.
16 Ibid, pg. 84.
17 Ibid, pg. 86.
18 Ibid, pg. 91.
19 Ibid, pg. 92.
21 Ibid, pp. 97-98.
23 Ibid, pg. 119.
24 Ibid, pg. 96.
26 Ibid, pg. 290.