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*The Case for Removing Discretion from Districting*

By

David L. Horn and Charles R. Hampton

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Bandemer:

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## Chapter 1

### “Democracy” and “Representation”: Whose Definition?

At the most fundamental level, discretionary districting ought to be proscribed because it weights the votes of some citizens more heavily than the votes of others. It isn't the fact that gerrymandering often distorts the major party seats-votes relationship that makes the practice so pernicious. Rather, it is in the giving of discretion to certain officials in deciding where district boundaries are to go. It is like giving each of these individuals two votes while giving one vote to each of the rest of us. The democratic ideal says all votes must be weighted equally; not that the votes of Caucasians are to be weighted by a factor of 1.5; and votes of African-Americans by a factor of 0.5. These examples are ridiculous, you say, but they illustrate exactly what is going on when individual officials are given arbitrary power to set district boundaries. It matters not that these officials may be persons of virtue. It is simply wrong to give them—or any person—any right that necessarily has to be taken from somebody else.

It should not take all this space to state what should be so obvious, but when well-meaning people advocate discretionary districting they unwittingly promote the “weighting” of the votes of all citizens by a factor other than 1.00—the only factor that should be permitted in a democratic society. We oppose discretionary districting, then, not so much because of its possible consequences at the ballot box but because of this “weighting” effect it exerts upon the value of every citizen's vote. Most proponents of discretionary districting would concede the point we are making here, but they would probably say our argument is too theoretical; that there is no way we can measure the magnitude of this “weighting,” and therefore, of applying a remedy. If congressional districts are drawn by a legislative process in which a gubernatorial veto is a significant factor, a governor's vote in a congressional election may be worth 100,000 times the vote of the ordinary voter/citizen.

The proponents of discretionary districting, in addition to maintaining there is no realistic alternative, are also likely to believe that only the exercise of discretion by districting experts can achieve other desirable goals in a districting plan. These goals, embodied in what are called result-oriented criteria, will be examined in Chapter 23. When we perform this examination we will see why no plan of geographic districts has ever been offered that satisfies what these experts agree are the major result-oriented criteria.

We begin with the premises of the writers of the Declaration of Independence “that all men are created equal” and have a right to “life, liberty and the pursuit of happiness.” By “men” they meant male property owners of European descent. Two centuries of political evolution in North America have reinterpreted “men” to mean human beings over age 18. To secure “liberty” for all, and to ensure that one man’s exercise of liberty does not impair the rights of others, requires the presence of “good and safe government.” As Thomas Jefferson wrote to Joseph Cabell:

“No, my friend, the way to have good and safe government is not to trust it all to one, but to divide it among the many.”<sup>1</sup>

The “it” Jefferson was talking about was power—political power. This reasoning compels the conclusion that each adult human being is entitled to an equal share of political power.<sup>2</sup> The New England colonists devised a form of government that put into practice this egalitarian ideal: the town meeting, the western world’s best known example of *direct* democracy.

It would be nice if the public business of states, nations, and the world could be conducted by town meeting. There is one obvious reason why it cannot:<sup>3</sup> the number of human beings that can assemble under one roof, and have a chance to be heard within a few hours’ time, is limited. Humankind had to invent a practical alternative for its governance beyond the small community level: *indirect*, or *representative*, democracy. By the end of the eighteenth century political semantics had evolved to where the term “direct democracy” had been replaced by simply

“democracy” and “representative democracy” by the term “republican form of government,” or “representative” government.

The framers of the U.S. constitution chose representative government over direct democracy not only “because of the impossibility of assembling large numbers of people in a single place”<sup>4</sup> but for the additional reason that many of them:

“feared and opposed democracy; representation seemed a desirable way to allow such participation in safety. It meant, as Madison says, 'the delegation of the government ... to a small number of citizens elected by the rest,' instead of the conducting of public affairs by all citizens ‘in person.’”

Once we have conceded the necessity of substituting “representative government” for “direct democracy” we face the question of what constitutes “representation.” That depends on what theory of representation one espouses. Professor Hannah Pitkin has, arguably, written the definitive work on what constitutes “representation,” but it fails to meet our need for simple definitions based on what we encounter in our everyday political experience.

#### *Theories of Representation: How They are Related*

Pitkin concluded that “representation” wasn’t a word with a single meaning, but a concept. We tried to fit the six theories of representation we encounter in our everyday political experience into Pitkin’s framework and the following is what we came up with.

*Geographic Theory.* *Geographic* representation on the basis of plurality choice is the dominant electoral mechanism in the United States today. We would readily agree that a geographic theory of representation is satisfied if everyone can point to a representative of theirs who lives close by. The most prevalent complaint about this theory is that within most geographic districts there are minorities (it might be *majorities* if the representative was elected by a plurality of less than 50

percent) of people whose race, religion, gender ... or views on issues of public policy are not shared by their “representative.”

*Descriptive Theory.* This brings us to a second theory of representation which we call the *descriptive* theory. By this theory people are best represented on the basis of their race, religion, gender, national origin, sexual orientation or some combination thereof. Race, religion or gender is the sufficient condition. The oft-quoted metaphor of President John Adams is relevant here. A representative legislature, Adams said, “should be an exact portrait, in miniature, of the people at large, as it should think, feel, reason and act like them.” Pitkin quotes this statement in launching her discussion of descriptive representation, associating it with the “standing for” theories. We think it might better be associated with the “acting for” theories because Adams seems not so much to be concerned that the legislative body *look* like the electorate (as implied by our descriptive theory) as that it “think” and “act” like it. That a “representative” body *think* like the people it represents leads us to a consideration of four remaining theories that embody the heart of the disagreement between ourselves and proponents of discretionary districting. The first of these is the *party* theory of representation.

*Party Theory.* According to this theory people are best represented on the basis of their presumed allegiance to one or another of a spectrum of political parties sufficiently broad to offer any person a satisfactory vehicle to express his political views. It assumes the U.S. electorate can be divided into a manageable number of ideological groups, each coextensive with one of these parties. By this theory the test of “representativeness” of a legislative body is the degree to which the percentage of seats won by each of these parties matches the percentage of votes, in that jurisdiction, cast for candidates of those parties.

*Major-party Theory.* Among contemporary American scholars, however, the party theory has no acknowledged exponents. Instead, a closely related alternative theory is embraced by a

significant number of political scientists—including some of the most influential. This theory we call the *major-party* theory. As with the party theory, it is assumed that people are best represented on the basis of their presumed allegiance to a political party. However, it is also assumed that there are only *two* ideological groups within the electorate of sufficient size to warrant representation in a state legislature or congressional delegation: Democrats and Republicans. The U.S. electorate is neatly divided into just these two ideological groups, each internally homogeneous and philosophically exclusive of the other. In our political analysis of districting plans to determine whether they are partisan gerrymanders, beginning in Chapter 8, we will refer to such an electorate as a *dichotomous*, or an *idealized* electorate. None of the proponents of this major-party theory explicitly states that he predicates his analysis and policy recommendations upon it. His adherence to it is always *implicit*; always unstated; always silent.

*Dixon*. The outstanding example of such adherence is that of Robert G. Dixon, Jr., the dominant authority on political districting of the late 1960s and the 1970s. In 1968 he wrote a book, *Democratic Representation: Reapportionment in Law and Politics*, that won a Woodrow Wilson award from the American Political Science Association as the best book on its subject that year. He was regarded with near-reverence by some colleagues and he influenced a generation of academics. Although his book is titled *Democratic Representation*, nowhere—in 587 pages of text and 45 pages of appendices—is this term defined. We may infer that “democratic” representation is in contrast to *undemocratic* representation, like the symbolic representation Pitkin cites in the case of monarchs or dictators. His book was written in the wake of the first two rounds of one-person-one-vote judicial rulings and one of its major themes is that the numerical equality of district populations those decisions were leading to would not, by itself, assure truly “democratic” representation. The crucial clue to understanding his view of districting is found in this passage:

“The fact that interests and party strength are not spread evenly by residence is the single most important fact in all apportionment and districting.”



Forty-three pages later we are told what “political elements” deserve a “proportionate voice” under the “representation system”:

“...a fair representation system equitable to *both major parties* and competing interest groups.”

The picture finally becomes complete with these passages:

“...our central concern is *proportionality in political representation*...subgroups such as ethnic minorities, occupational classifications, and economic class categories tend to identify more with one party than another. They thus receive their political representation, at least in a rough way, through one political party or the other.”

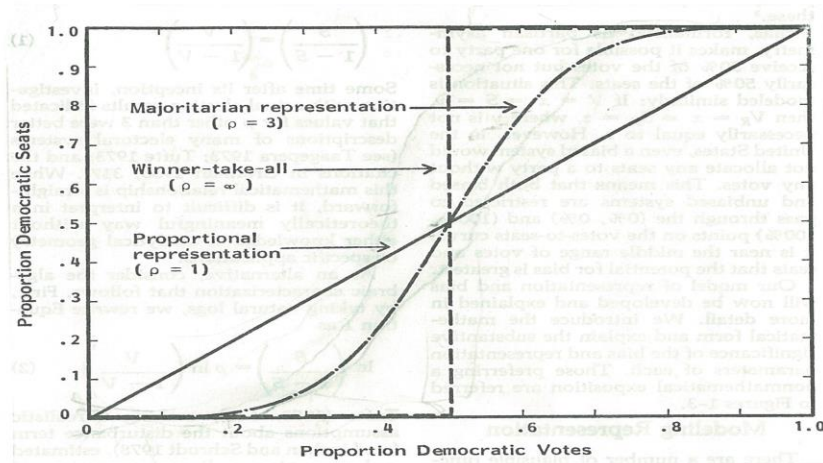
In short, if “both major parties” are afforded “proportionality,” the “interest groups” which find voice through these parties will be taken care of and the system of representation will be “democratic.” We, therefore feel justified in stating that Dixon adhered to the major party theory of representation.

*King.* Another influential proponent of the major-party theory of representation is Gary King of Harvard University. His articles appear regularly in academic journals and he has served as an expert witness in major districting litigation. As with Dixon, his adherence to this theory must be inferred from his writings. His first article (co-authored with Robert X. Browning) to appear in the *American Political Science Review (APSR)* is titled “Democratic Representation and Partisan Bias in Congressional Elections.” The article calls “democratic representation” a “fundamental tenet of democratic theory,” assigns to it the Greek letter  $\rho$  (rho), and presents an elegant mathematical definition of the seats-votes relationship for elections conducted over an historical span of time in the American states. The parameter  $\rho$  is shown to vary from 1.0 to infinity in the two-party model he develops and these end-points define two of the three variants of the major-party theory he

presumably embraces. It is worth reprinting his graph showing how these variants are related.

Consider Figure 1.1.

Figure 1.1  
Variants of the Major-Party Theory of Representation (Unbiased) as  
Quantified by King-Browning



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This figure depicts a seats-votes curve, an analytical tool central to some gerrymander analyses, which we shall introduce in Chapter 8, discuss in detail in Chapter 12, and explain the construction thereof in Appendix H. Here we note a solid, straight line running at a 45-degree angle from zero to unity depicting proportional representation (PR). By this variant of the major-party theory a party gains an increment of  $x$  percent seats in the legislative body for each gain of  $x$  percent in the overall vote in the jurisdiction. Under these circumstances  $\rho = 1$ . The other end-point is the dashed line resembling one giant “step” at 50 percent votes showing winner-take-all representation (WTA). By this variant of the major-party theory a party wins no seats in the legislative body until its vote in the jurisdiction barely exceeds 50 percent. At that point it wins every seat. Under these circumstances  $\rho = \infty$ . The third variant of the major-party theory—majoritarian representation—is shown by the dash-dot line making an S-curve. Rho can be any value between one and infinity but, in practice, it usually runs between 2 and 3. When it equals 3, the formulation is known as the “cube

law,” something that we shall next hear about in Chapter 4. Figure 1.1 depicts majoritarian representation for the cube law. Under majoritarian representation, a party receiving approximately half of the jurisdiction-wide vote will gain an increment of *more* than  $x$  percent of seats for an incremental gain of  $x$  percent of votes. However, as its share of the jurisdiction-wide vote gets closer to 100 percent, it will gain *less* than  $x$  percent of seats for an incremental gain of  $x$  percent of votes.

King/Browning tell us that “convincing arguments can be made in favor of each of these types of democratic representation” and “see no a priori reason to believe that one form...is inherently more fair than the others, *provided that there is partisan symmetry.*” Whereas Dixon seemed to believe that “fairness” in two-party representation required a “proportionate voice” and “proportionality,” King/Browning opt for this less stringent standard. Here is not the place to argue the merits of these alternative standards. Suffice it to say that by symmetry is meant that if Democrats can win 60 percent of the seats with 55 percent of the vote, then it should be that Republicans could *also* win 60 percent of the seats should they get 55 percent of the vote. Our objective here is only to describe these alternative theories of representation, point out how their validity is being silently assumed by various scholars, and show how they are related to each other.

Despite the apparent “fairness” of electoral arrangements designed to bring about major-party proportionality/symmetry to some academics, various persons and groups continue to express dis-satisfaction with the “representation” afforded them by the major party theory. They include, of course, adherents of minor parties. They also include the large segment of the electorate that votes for presidential candidates like Ross Perot, and votes for Democratic and Republican candidates for other offices only because they feel they have no other choice with a realistic chance of winning. In addition, significant numbers of people who consider themselves to be Democrats and Republicans also do not feel themselves well “represented” by this theory. It requires no documentation to assert there are significant differences of opinion over issues of public policy among both rank-and-file Democrats, and among Democratic party office-holders. The same goes for Republicans. Current

issues which divide both major parties range from abortion and homosexuality to health care and “free trade” agreements (NAFTA, CAFTA, WTO).

The major party theory of representation does not assure us how many of the elected Democrats will be pro-NAFTA and how many will be anti-NAFTA; nor how many of the elected Republicans will be “pro-choice” and how many “pro-life.” The displeasure of anti-NAFTA Democrats over electoral systems that yield what they regard as too many pro-NAFTA Democrat legislators, and of pro-life Republicans over electoral systems that yield what they regard as too many pro-choice Republican legislators, stems from the fact that it is more important to them that their representatives share their views on issues than share their party label.

*What-People-Think Theory.* This leads us to consideration of a fifth theory of representation: that people should be represented on the basis of *what they think*. If we return to our New England town meeting paradigm, with its implication that the only reason for having “representatives” is because we can’t all attend the town meeting in person and have to choose surrogates, the logical conclusion is that we would want our “surrogate” to vote the way *we* would vote, if we could be there ourselves. We wouldn’t care what the color of that surrogate’s skin was, or what party label he/she wore. If they were representing us at a national town meeting, we would want them to vote the way we would have voted on NAFTA—or on a host of other issues.

By this theory, the test of the “representation” of a legislative body would not be the Democrat-Republican seats-votes relationship. A better test might be to poll both the representatives and the people who elected them to determine the correspondence of the views on public policy issues of the representatives with those of the electorate. If 67 percent of the electorate were “pro-choice” and 33 percent “pro-life,” then a poll of the representatives should yield the same breakdown. This concept of, and test for, “representation” would conform to Adams’ vision of a legislature as “an exact portrait, in miniature, of the people at large...”

A legislative body that would meet the criteria of this theory cannot be created from an electoral system based upon geographical districts. The only known means of achieving it would be

with a Single Transferable Vote (STV) proportional representation system. This is a much different PR mechanism than the proportional variant of the major-party theory of King/Browning.

It entails overcoming some major practical problems that we shall defer discussing until Chapter 40. If these problems could be overcome, however, and a legislative body elected which passed the “polling” test described above, there might still be persons who were dissatisfied. One might share the following view of Danny Kleinman:<sup>5</sup>

“I don’t want my representative to vote as I would vote, nor to think *what* I think.

Rather I want him to think *as* I would think, but with the advantages of the research of his legislative staff and knowledge I may not have. For example, NAFTA is very complex and I might get it wrong if I had to decide on my own without elaborate study. I would trust my congressman to get it right, however, as long as he shared my *general viewpoint* and represented my *interests*. It’s congruence of *viewpoint* and *interests*, not specific beliefs and policies, that should determine representation...”<sup>6</sup>

Let’s consider the sixth, and final, of the “current theories” we said, “embody the heart of the disagreement between ourselves and the proponents of discretionary districting.”

*Permissive Theory.* This theory we might call the “permissive” theory. By it people can be represented on any basis they wish. Most of them would probably want to be represented on the basis of what they think, but there would be some who might choose to be represented by someone from their geographical area, even if that representative’s views on public policy were opposed to the voter’s.

For this reason, a legislative body elected according to the permissive theory might not pass the “polling” test that is the arbiter of representation mandated by the What-People-Think theory. The means of achieving a legislative body meeting the requirements of this theory is identical to that for achieving one meeting the requirements of the what-people-think theory: STV-PR. That is a great strength of this electoral system: it *does* permit people to choose their representative on *any*

basis they choose. A feminist is free to vote for a candidate of the “Christian Right” who lives in her neighborhood, in preference to a Gloria Steinem who lives in a distant city—if geographic proximity is that voter’s primary requirement.

### *Democracy*

A definition of democracy may be arrived at from two perspectives. First, we may define it in terms of how representative of the polity, as a whole, is the group of individuals who exercise decision-making power in its behalf. If that decision-making body is large and fairly chosen, it will likely be more democratic than one that is small and unfairly chosen. A decision-making body having many members is inherently more democratic (all other factors remaining the same) than one having few members. The ultimate degree of democracy is achieved when the decision-making body is the same as the polity—the New England town meeting. This book’s authors *define democracy as government in which political power is dispersed to the widest extent possible*. It is an ideal—an ideal we may struggle to get closer to but never fully attain. These judgments we regard as self-evident and they lead us straight to the second perspective from which we may define democracy: power. We take it as self-evident that a body in which power is highly dispersed is more democratic than one in which power is highly concentrated.

So we return to Page One where we find Jefferson saying that the way to “good and safe government” is to divide power among the many. It seems like common sense and nothing that should take a whole book to make the case for. Yet, we are about to write an entire book to make the case for “dividing among the many” the power to pre-determine election outcomes in the United States of America by discretionary drawing of congressional and state legislative district boundaries.

The argument of the proponents of discretionary districting boils down to this: the legislative body in question must be “representative.” It will be representative if the districting plan by which it was elected achieves symmetry in the major-party seats-votes relationship. To ensure that the plan achieves bipartisan symmetry discretion must be given to persons chosen by major-party leaders

who will know how to employ political and demographic data to craft a plan that achieves such symmetry.

At the beginning we said we believe “each adult human being is entitled to an equal share of political power.” Discretion must be removed from political districting because it gives enormous political power to a few persons, taking it away from everyone else. It is the antithesis of giving everyone an “equal share of political power.”

Parts I, III, IV and the first half of VI will examine three lawsuits brought against partisan gerrymandering since 1981 to see what can be learned from them. This examination will acquaint us with the four tests for such gerrymandering proposed by academics, extant as of 1990. In part V we show how to remove discretion from districting and introduce two more tests for partisan gerrymandering that appeared after 1990. In the last half of Part VI we present two constitutional arguments that can be made against congressional gerrymandering of any kind, one of which is also applicable to state legislative gerrymandering of any kind. In Part VII we examine the first and only lawsuit in U.S. history to challenge *bipartisan* gerrymandering and discuss two additional cases which erect disturbing precedents. In Chapter 39 of Part VIII we consider alternative remedies and in Chapter 40 of Part VIII return to the question posed by the title of this chapter.

#### Notes

<sup>1</sup> Padover, Saul, *Jefferson: A Great American's Life and Ideas* (New York: Signet, 1952) 6.

<sup>2</sup> This view is consistent with the fact that presidents, governors, and other officials are temporarily permitted to exercise limited powers over the rest of us. Our power is equal to theirs, in the ultimate sense, so long as they are accountable to us. Persons may also be denied their equal share of political power as punishment for crime.

<sup>3</sup> We need to qualify this statement. Kleinman points out that direct democracy “may soon become practical in the main when each household has the means of a cost-free, or nearly cost-free, communication with a computer in the legislature that can register citizens’ votes on pending bills. We may all be able to ‘assemble’ again under one electronic ‘roof’ and only the discussions by those assembled would remain impractical” (Letter to senior author dated 24 February, 1995). Indeed, the 1992 independent presidential candidate Ross Perot has advanced “electronic town hall” proposals that would approximate what Kleinman describes.

<sup>4</sup> Pitkin, Hanna, *The Concept of Representation* (California: University of California Press, 1972) 191.

<sup>5</sup> Kleinman, Danny is a mathematically gifted democracy advocate and personal friend of the senior author.

<sup>6</sup> Letter from Danny Kleinman to senior author dated 24 February, 1995.

## Chapter 2

### The Controversy

*Bandemer v. Davis* will be noted in U.S. political history because it was the first lawsuit whose primary allegation was political gerrymandering ever to go to trial over that issue; and second, because it was the case that finally induced the Supreme Court to say that at least one species of political gerrymandering was—at least in theory—justiciable. But it did lose; and if a political gerrymandering suit is ever to win in the High Court those bringing it would do well to examine *Bandemer* and ponder what factors would have been necessary for the outcome to have been different. A book having this title obviously must begin with a study of *Bandemer*.

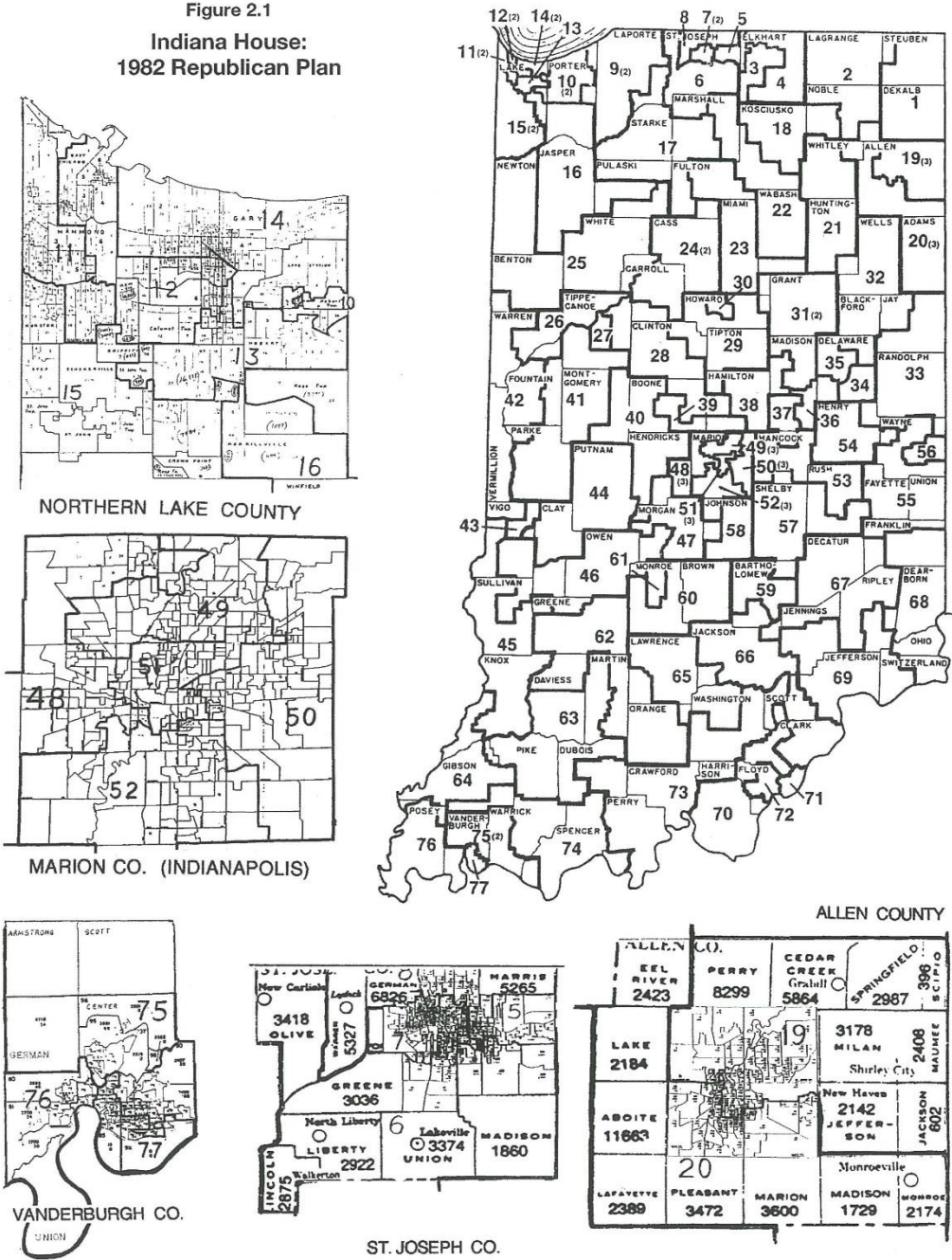
In the spring of 1981 a Republican-controlled legislature passed, and a Republican governor signed into law, districting plans for the Indiana house and senate that were viewed by Indiana Democrats as drawn “for the purpose of minimizing Democratic Party representation and giving proportionally less representation to Democratic Party members than their numbers warrant.” These plans, as slightly modified nine months later, are depicted in figures 2.1 and 2.2 and provide for 100 seats.

#### *The Preceding Plans*

The plans of the preceding decade were also drawn by a Republican legislature—authorship which would lead one to assume they were also partisan plans. The House plan, shown in Figure 2.3, provided: elected from 53 Single-Member Districts (SMDs), thirteen 2-member districts and seven 3-member districts—for a total of 73. The Senate plan, shown in Figure 2.4, was for 50 seat elected from 50 SMDs. These House and senate plans were not “nested,” that is, the senate districts (SDs) were not subdivided to form the house districts (HDs).



Figure 2.1  
 Indiana House:  
 1982 Republican Plan



**Figure 2.2**  
**Indiana Senate:**  
**1982 Republican Plan**

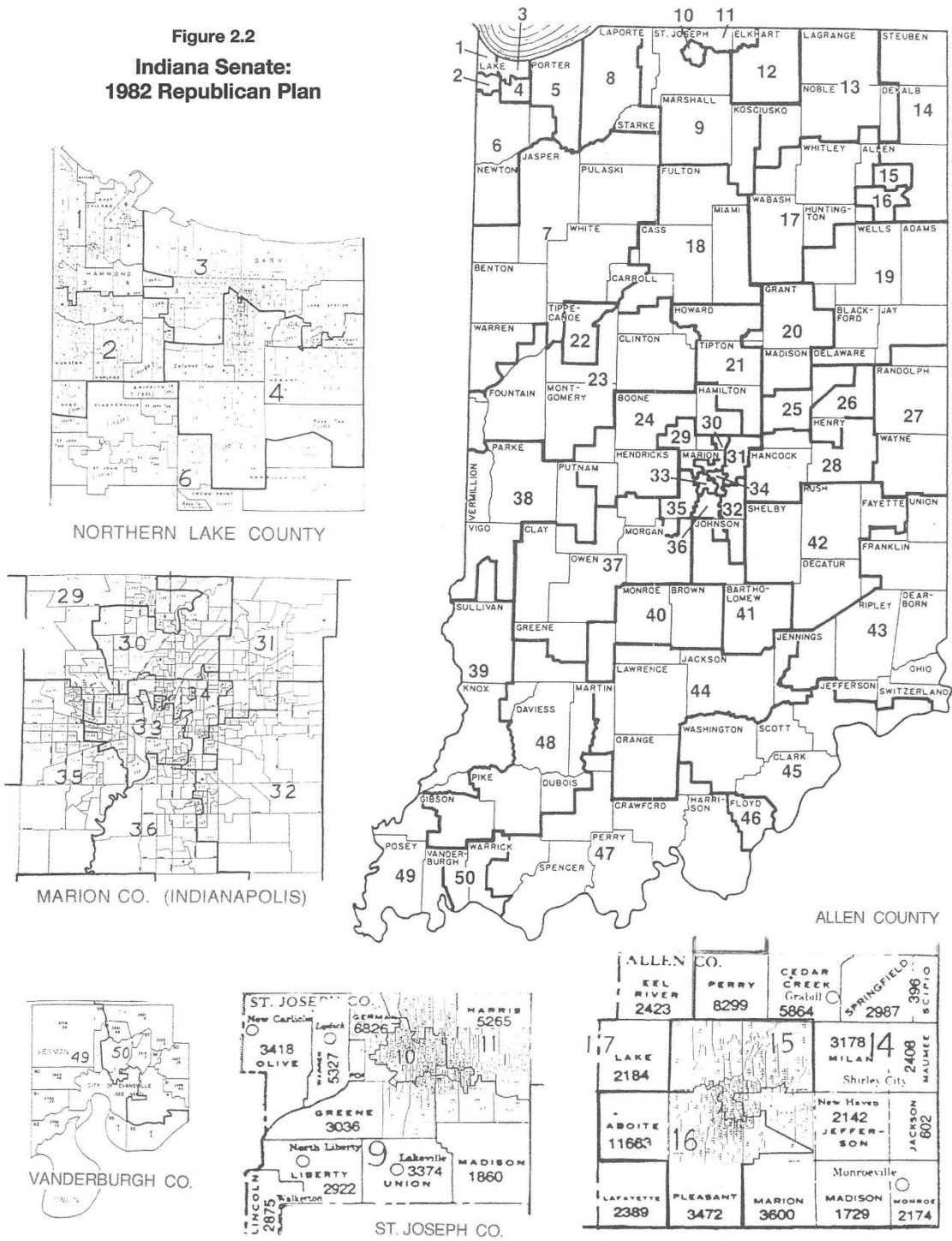
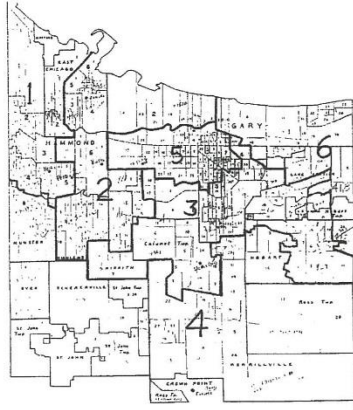
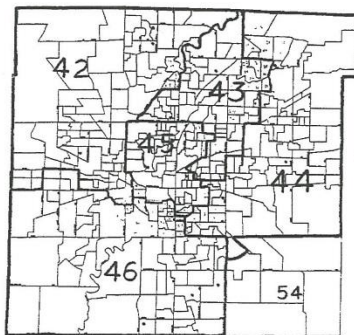




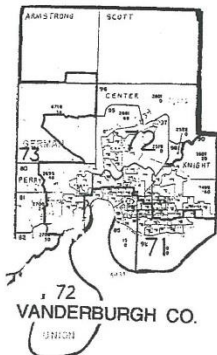
Figure 2.3  
 Indiana House:  
 1972 Republican Plan



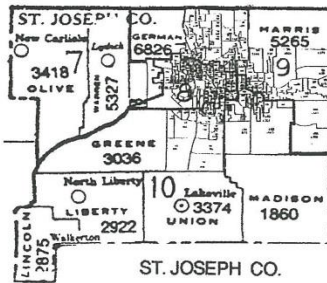
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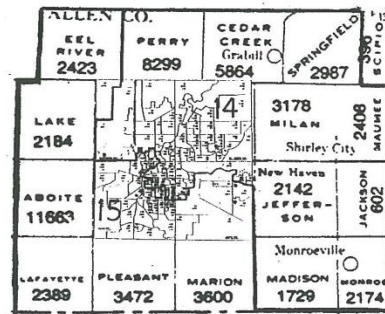
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VANDERBURGH CO.



ST. JOSEPH CO.



ALLEN COUNTY

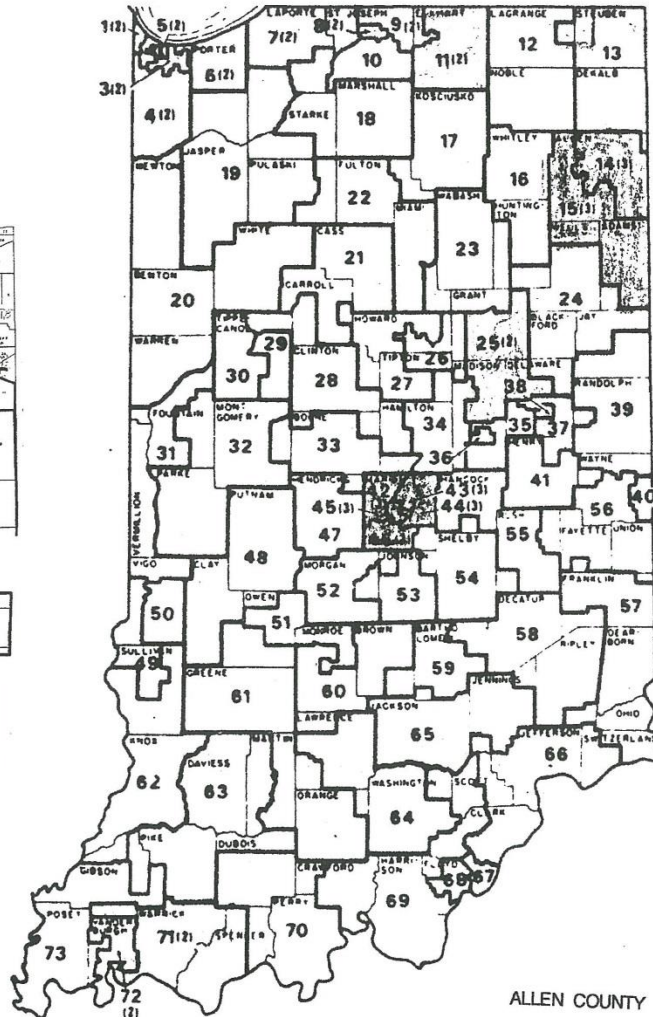
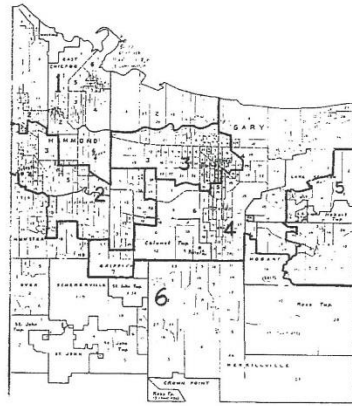
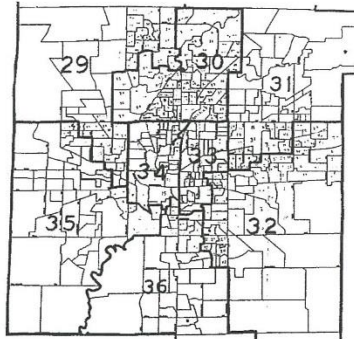


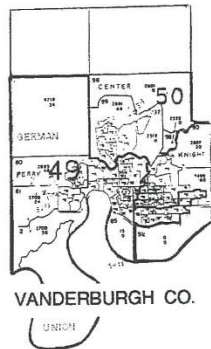
Figure 2.4  
 Indiana Senate:  
 1972 Republican Plan



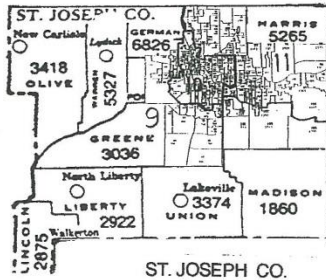
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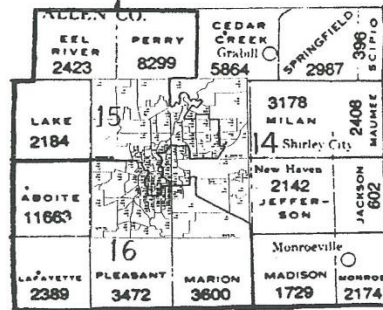
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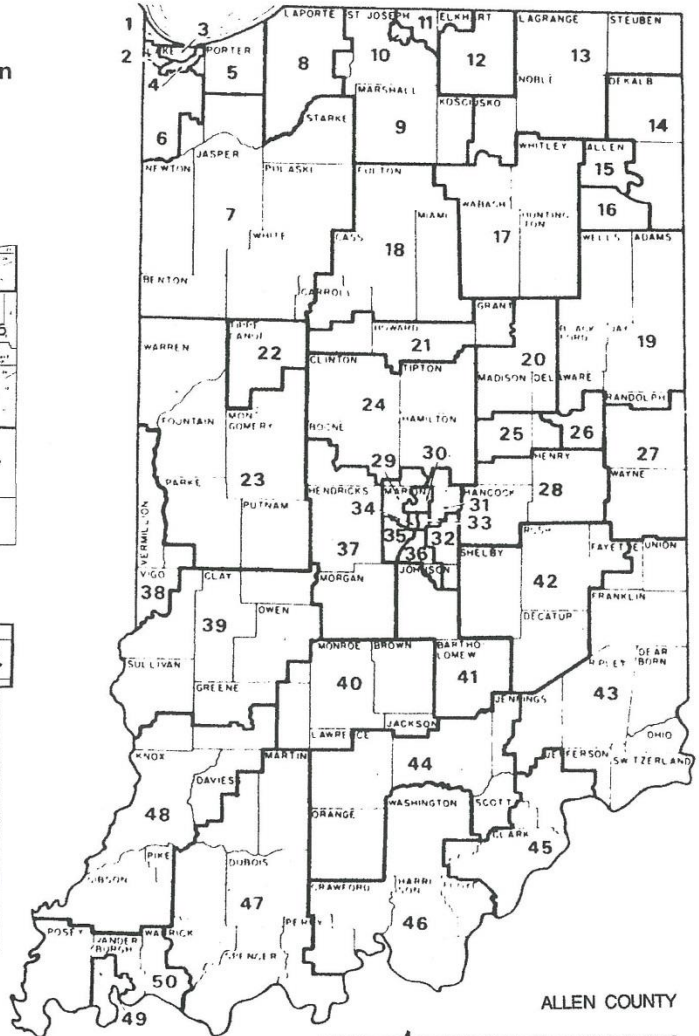
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ST. JOSEPH CO.



ALLEN COUNTY



The House plan had been conceived in the aftermath of litigation over the previous (1965) House plan in *Whitcomb v. Chavis*.<sup>1</sup> That plan had constituted Marion County (the state's largest county containing the city of Indianapolis) as a single district electing 15 members. Plaintiff Chavis, in 1969, received a judgment from the District Court ordering the State to promulgate SMDs for the entire state in time for the 1970 elections. On appeal, defendant Whitcomb persuaded the Supreme Court to stay the ruling because the 1970 census would necessitate a redistricting in 1971 that would presumably correct the constitutional deficiencies. In early 1971 the legislature passed new plans, composed entirely of SMDs, for both House and Senate. But in June, 1971 the High Court "ruled that Multi-Member Districts (MMDs) did not necessarily discriminate against minority groups and reversed the lower court's order,<sup>2</sup> previously stayed, requiring SMDs for both houses. Thereupon, in early 1972, the legislature modified its 1971 House plan to consolidate Marion County's projected 15 SMDs into five 3-member districts; and to perform similar consolidations in other parts of the state so that the plan ended up as described above. The consolidations in Marion and Allen (Fort Wayne) counties advantaged Republicans, but Democrats did not go to court with charges of partisan gerrymandering.

The Republicans' 1982 plan did not create (MMDs) where their 1972 plan had not already done so. Four of the 1972 plan's 2-member districts were eliminated and replaced by SMDs so that the new house plan, to be litigated in *Bandemer*, consisted of 61 SMDs, nine 2-member districts, and seven 3-member districts—for a total of 77.

### *Legislative Process*

The legislative process by which the new plans were adopted excluded Democrats from any meaningful participation. "Vehicle" bills, devoid of specific content, were introduced in February, 1981. As a contrivance, slightly differing versions were passed by the House and Senate, so that a conference committee was necessary. Only Republicans were appointed to this

conference committee. It set up shop in Republican Party headquarters and worked behind closed doors for three months. Days before the mandatory adjournment of the legislature, the plans were made public. A Detroit-based, Republican-oriented consulting firm, Market Opinion Research (MOR) was hired for \$250,000 by the Republican Party to do the technical work. Plans were made public. They were adopted by votes “along party lines” in the House and Senate the final day of the session.<sup>3</sup>

The Republicans made no bones about their intentions. As the trial court majority later noted,<sup>4</sup>

There is a clear impression that [they] felt insulated from challenge merely by adherence to the ‘one-person-one-vote’ principle, which they could easily follow...The result of that attitude is revealed in the remarkably candid statements of both Speaker Dailey and Senator Bosma in their deposition testimony:

MR. SUSSMAN (N.A.A.C.P. Plaintiffs’ attorney): What I would like you to do here again is to give me whatever reasons were operative in your mind in maintaining or creating multi-member districts...48 through 52.

MR. DAILEY: Political.

MR. SUSSMAN: What were the political factors?

MR. DAILEY: We wanted to save as many incumbent Republicans as possible.

MR. SUSSMAN: This (newspaper) article says further “Under further questioning from Townsend about input in actual map drawing, Bosma said ‘You will have the privilege to offer a minority map. But I will advise you in advance that it will not be accepted.’” Is that accurate?

MR. BOSMA: That’s accurate. I might add that I don’t make goals for the opposite team.

To the above should be added one further remark by Senator Bosma, quoted in Plaintiffs' Post-Trial Brief, in which he acknowledged the plans were drawn:

“..to hurt the Democrats as much as possible.”<sup>5</sup>

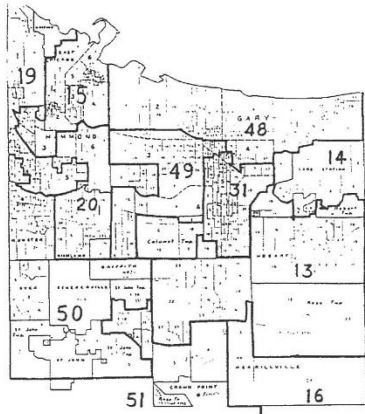
### *The Democrats' Plans*

House Speaker Dailey and Senate Majority Whip Bosma did afford the Democrats “the privilege to offer minority maps.” In the spring of 1981 chief aide to the House Democratic caucus David S. Dreyer (see below) began working, under sponsorship of (black) Democratic Rep. William A. Crawford, on an alternative all-SMD plan for the House. This “Crawford plan” (shown in Figure 2.5) covered only the, “more urbanized” areas occupied by 1972-vintage MMDs, conceding the rest of the state to the Republicans. (To accentuate its salient characteristics district lines are shown only for these areas of the state which differed from the Republicans' plan.)

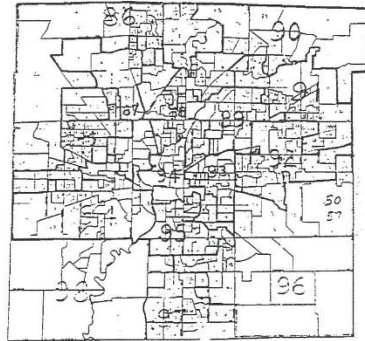
On the Senate side, aides working under the direction of (white) Democratic senator Wayne Townsend began work on a senate districting plan preferred by Democrats. These maps (shown in Figures 2.6, 2.7 and 2.8) were a political football. They exposed a racial divide among senate Democrats when it became impossible for them to agree on a single “Democratic” plan. Figure 2.6 covers only the “Republican” areas of the state where “Democrats” aren't going to win anyway. Figures 2.7 and 2.8, are of the two largest counties where most of the “Democratic” votes are and where a Democratic party nomination for state legislative office may be worth something. On January 18, 1982—six days after filing of the *Bandemer* complaint—the Senate convened to consider non-substantive changes to the senate plan it had passed in 1981. At that time the Democrats offered their plans, which were routinely voted down by the Republican majority.



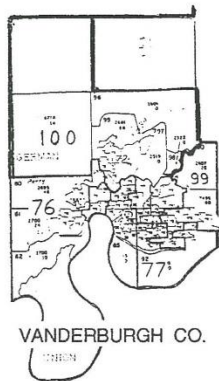
Figure 2.5  
 Indiana House:  
 1982 Crawford Plan



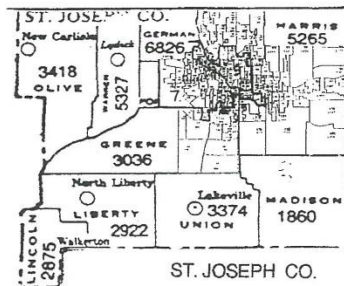
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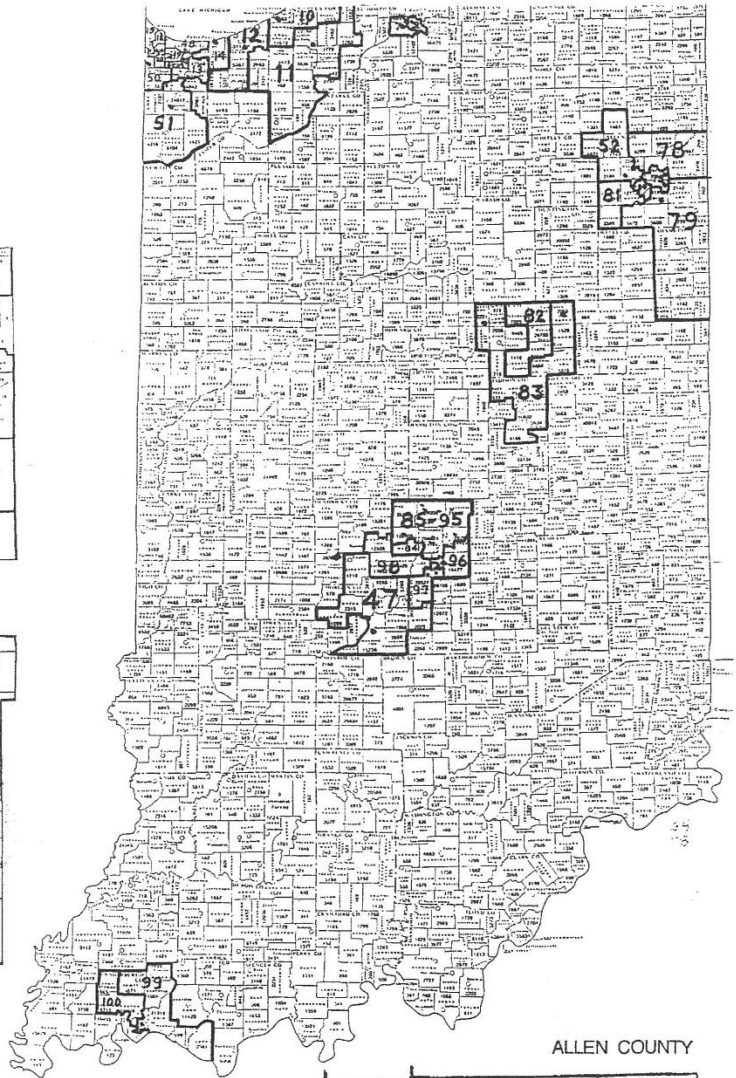
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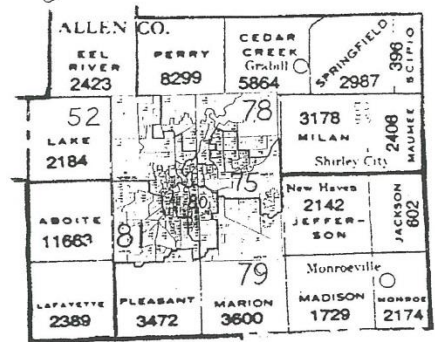
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ALLEN COUNTY





### *The Original Complaint*

Due, in part, to the necessity of first getting another case dismissed in Marion County Court, the Democrats were eight months delayed in filing their suit. When they did so they stated their grievances mostly in terms of the Republicans' discriminatory use of MMDs in their house plan; and unnecessary fragmentation of counties in their senate plan. Six of their seven plaintiffs were from MMDs. Plaintiffs Bandemer, Badili and Pearson were from the city of Fort Wayne where they alleged an urban concentration of Democrats that would certainly have constituted a majority in an urban, single-member district, had been split between and submerged in two 3-member districts dominated by suburban and rural Republicans (see Allen County inset, Figure 2.1). This would be an example of the classic partisan gerrymander technique known as "splitting" or "cracking."<sup>6</sup> Plaintiff Womack was from rural Adams County near Fort Wayne.

Plaintiff O'Rea was a black Democrat from HD 49 in Indianapolis (see Marion County inset, Figure 2.1). Plaintiff Higbee was from heavily Republican Hendricks County, just west of Indianapolis. Plaintiff Richards was from rural, southwestern Greene County—a county divided among "four" senate districts (see inset, Figure 2.2).

Two of the complaint's eight counts alleged violation of the equal protection clause of the Fourteenth Amendment. A third alleged violation of Section 1983 of the Federal Civil Rights Act. The remaining five alleged State of Indiana constitutional violations, one of them being a provision prohibiting unnecessary fragmentation of counties in the creation of senate districts. In addition to the specific harms alleged by its plaintiffs, the most significant feature of the original complaint was its prayer—what remedy the courts were being asked to impose. This brief prayer is reproduced in its entirety as Appendix A-1. It will be seen that this prayer specifies no remedy at all. It merely asks the courts to declare the plans unconstitutional and leaves it to the courts to find a remedy.

Figure 2.6  
 Indiana Senate: 1982  
 Townsend/Carson Plan

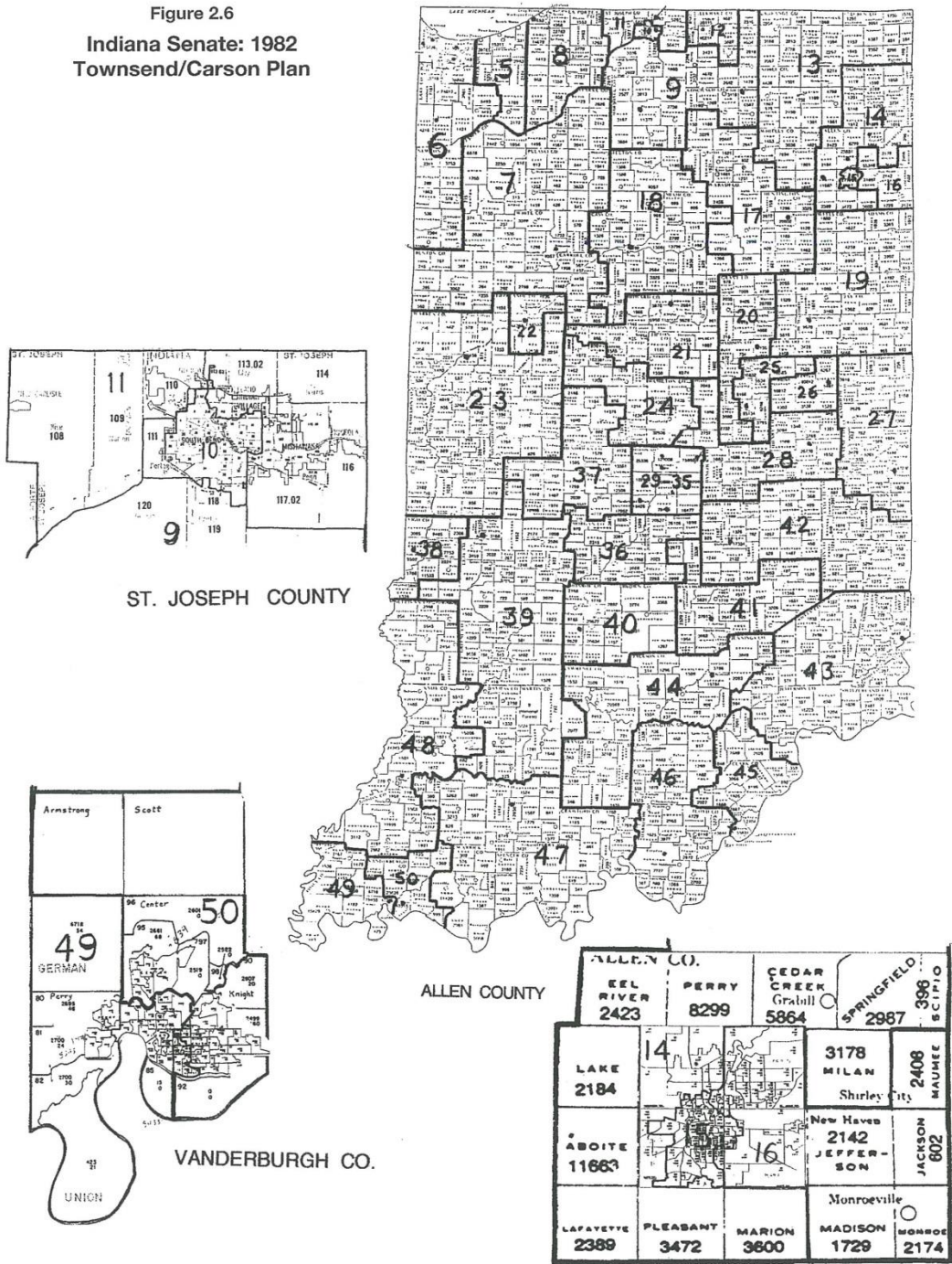
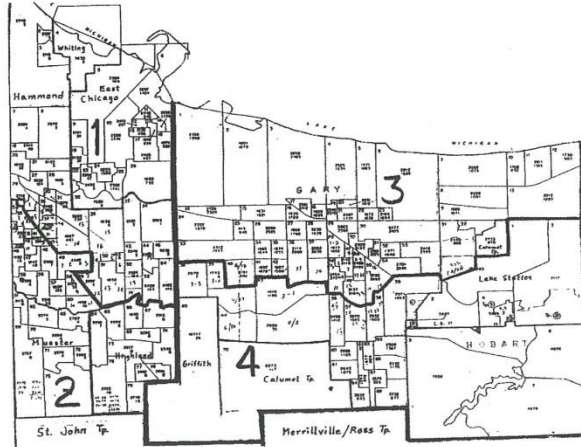


Figure 2.7  
Indiana Senate: 1982 Townsend Plan

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(INDIANAPOLIS)

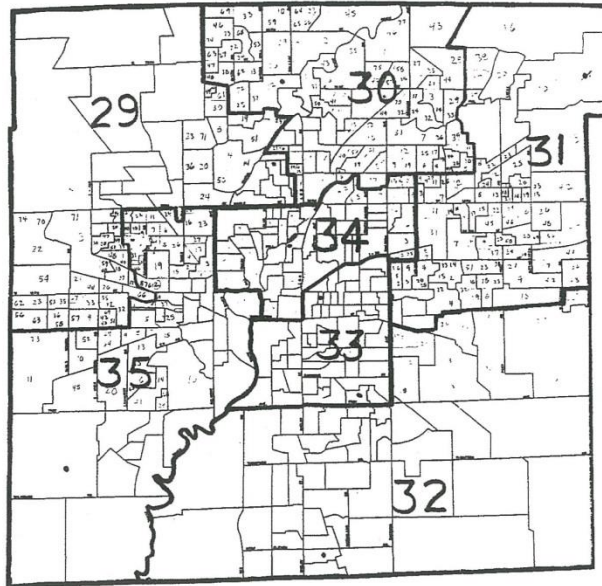
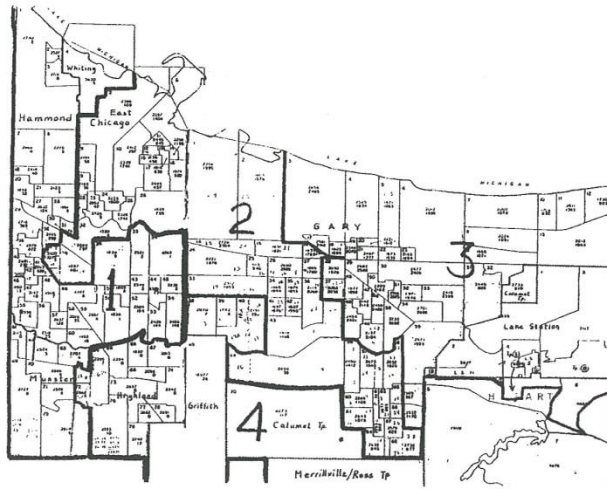


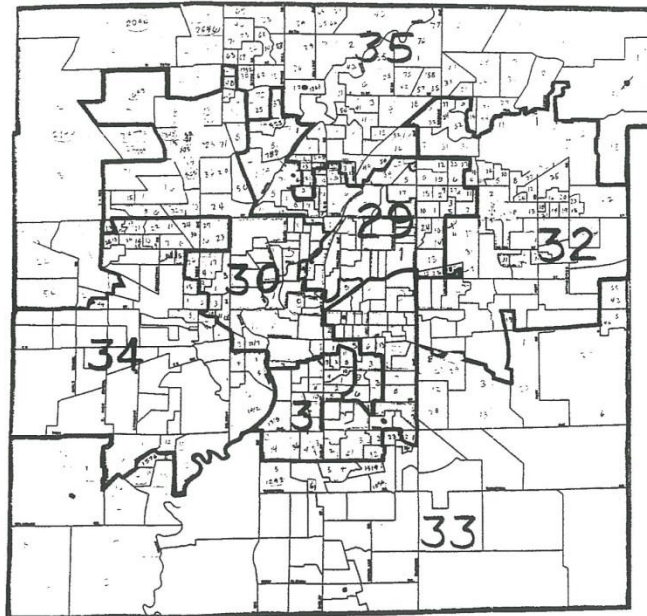
Figure 2.8

Indiana Senate: 1982 Carson Plan

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MARION COUNTY  
(INDIANAPOLIS)



## *The Long Road to Trial*

The Republican (“State of Indiana”) Defendants responded by arguing the Plaintiffs’ claims were foreclosed by the Supreme Court’s rulings in *Whitcomb v. Chavis*<sup>7</sup> and *City of Mobile v. Bolden*<sup>8</sup>—cases in which multimember districts had been upheld. Plaintiffs argued that their case differed from *Chavis* and *Bolden* in that the current Indiana MMDs did not respect county lines; were inconsistently mixed with SMDs; were not jurisdiction-wide; and were not historically based. In their response Defendants cited *Gaffney v. Cummings*<sup>9</sup> and *White v. Regester*<sup>10</sup> to refute Plaintiffs’ argument that excessive fragmentation of counties in creating senate districts violated the state constitution. They pointed to district court-drawn plans at the time of the *Chavis* litigation that fragmented some counties several times, and yet were approved by the Supreme Court.

On March 1, District Judge Noland held a pre-trial conference with the attorneys at which was told the “entire plaintiffs’ case” could be presented “on the order of one day.” Plaintiffs’ lead counsel Ted Boehm summarized it by attacking the house plan’s mixing MMDs and SMDs “solely for the purpose of disadvantaging a political minority.” He said that Defendants “rely on numerical equality, but they have breached every other known standard and have gone too far.” He said the case didn’t have any justification of the type that was found in *Whitcomb v. Chavis*. “That, in a nutshell, is what the case is about.” He added that county lines had been “disregarded” in drawing SDs and concluded that “you could bring the existing [house] plan into conformity with our requirements, rather easily, by breaking up the existing MMDs” mentioning, for the first time, that “any rational plan” would nest two HDs in each SD.

On April 8, Plaintiffs filed an amended complaint, and on April 19 there was oral argument on the motion to dismiss, which was denied on May 3. Depositions got under way in July when Plaintiffs’ attorneys questioned the Republican House and Senate leaders.

They continued in September and October with the questioning of officials of MOR and Republican legislative staffers who had worked on the plans. Though Defendants had made no discovery requests during the summer, they requested information on the Plaintiffs' proposed expert witness in October. This was to be Gordon G. Henderson, a political scientist from Earlham College who had been a consultant/expert witness in several previous districting cases.

Despite all this preparation, 1982 ended with no trial having taken place, but only more written argument going back and forth. On November 2, the first elections under the *Bandemer* plans took place. In a national resurgence from 1980, the Democratic Party gained 25 congressional seats as its aggregate congressional vote went from 50.4 percent to 55.3 percent (see Appendix B). In Indiana the aggregate vote for Democratic House candidates experienced a parallel swing from 46.52 percent to 51.64 percent. This swing enabled them to increase their seats in the 100-member Indiana house from 37 to 43.

For the first six months of 1983 there was no activity on the case. Then, on June 30, the U.S. Supreme Court handed down its decision in *Karcher v. Daggett*<sup>11</sup> with its possibly historic concurring opinion by Justice Stevens. In that concurrence Stevens opined that the real issue in the case appeared to be partisan gerrymandering by the Democrat-controlled New Jersey legislature; but since such a constitutional violation had not been alleged, he could only rule on the basis of what *had* been alleged: population deviations that could not be justified in terms of “a consistently applied state legislative policy.”<sup>13</sup> In an *obiter dictum* that immediately caught the attention of reformers, he proceeded to lay out an equal protection rationale for holding partisan gerrymandering unconstitutional, and went on to enunciate criteria by which districting plans alleged to be partisan gerrymanders could be judged. Here was the first unambiguous signal that plaintiffs making such claims might have at least one vote on the U.S. Supreme Court.

Activity on the case resumed. On July 27 the Defendants' lead counsel William M. Evans subjected Dreyer to a rigorous deposition. Dreyer was made to explain the significance of some 32 maps he had drawn; and of demographic and political analyses he had performed on the various plans over the preceding months. At the trial to come Plaintiffs' attorneys did not attempt to qualify him as an expert witness, but he was clearly their *de facto* expert. A *magna cum laude* graduate in economics from Oberlin College (1962) he received a Harvard law degree (1965); then served in the Peace Corps, and worked in the 1968 presidential campaign of Senator Eugene McCarthy. During the 1970s he worked as a fiscal analyst for Democrats in the Indiana General Assembly, served on the staff of U.S. Senator Birch Bayh, and worked in the campaigns of several Indiana Democratic politicians.

On September 15 the Court set October 12 as the first day of trial. On October 11, Plaintiffs submitted a pre-trial brief that drew heavily on the Stevens concurrence. The stage was set.

#### Notes

<sup>1</sup> *Whitcomb v. Chavis* 403 U.S. 124 (1971).

<sup>2</sup> *Whitcomb v. Chavis* 403 U.S. 124 (1971).

<sup>3</sup> U.S. District Court S.D. Indiana Cause No. IP-82-56-C: Plaintiffs' Complaint of 12 January, 1982, pg. 3.

<sup>4</sup> *Bandemer v. Davis* 603 F.Supp. 1479 (1986) at 1483-84.

<sup>5</sup> Plaintiffs' Post-Trial Brief, pg. 16 quoting Bosma deposition at pg. 110.

<sup>6</sup> This technique will be discussed in Chapter 13.

<sup>7</sup> *Whitcomb v. Chavis* 403 U.S. 124 (1971).

<sup>8</sup> *City of Mobile v. Bolden* 446 U.S. 55 (1980).

<sup>9</sup> *Gaffney v. Cummins* 412 U.S. 735 (1973).

<sup>10</sup> *White v. Regester* 412 U.S. 755 (1973).

<sup>11</sup> *Karcher v. Dagget* 462 U.S. 725 (1983) at 740 and 741.



## Chapter 3

### The Evidence

The “demographic and political analyses” Dreyer was questioned about during his July 1983 deposition would have to develop—to generate—the facts and figures necessary to establish an historic precedent from the witness stand. What Dreyer needed was a tried and proven road leading straight to courtroom victory. What he had was far less: studies of population counts, county fragmentation, multi-member legislative districts, racial geography...and 73 sheets of “political studies.”

#### *Population Deviations*

The thrust of the population study was that the Carson and Crawford plans had smaller deviations from exact equality than did the corresponding Republican plans. The district populations in the Republican plans are given in Tables 7.1 and 7.2. The numbers shown are those reported by the plans’ technical consultant, MOR. Dreyer had several minor disagreements with those numbers and we have three major ones. But we don’t want to get bogged down in arguments of this sort. Let’s assume that MOR is correct and move on.

#### *Fragmentation of Counties*

Dreyer’s “Political Division Study” documented the fragmentation of counties in the Republicans’ senate plan and compared it with that of the Democrats’ Carson plan. Table 7.4 summarizes the essential facts: the Republican plan split 47 counties creating 120 county fragments; the Carson plan split 27 counties creating 65 county fragments.



## *Political Analysis*

Although studies of population equality and fragmentation were essential to making the Plaintiffs' case, the centerpiece of their argument had to be evidence that the Republicans' maps put them at a significant political disadvantage. Dreyer wondered how to do that. In 1983 the academic literature contained only one article detailing how a districting plan could be tested for partisan gerrymandering: a 1978 study by Professor Charles Backstrom.<sup>1</sup> Dreyer was unaware of that article so it is noteworthy that one of his analyses employed a methodology closely approximating Backstrom's and led to almost identical conclusions.

*Choosing a Measure of Underlying Partisan Preference.* Dreyer reasoned that a political analysis had to start by choosing some way to quantify the partisan character of the districts in the plans under examination—how “Democratic,” or how “Republican,” they were. He realized that outcomes of races for state senator or state representative would not be a good way to do that: such races too often were a reflection of the attractiveness of an individual candidate, rather than an affirmation of support for that candidate's party. Neither would be party registration; because, in Indiana, large numbers of voters did not reveal their politics by voting in party primaries; yet they still had definite party preferences in general elections. Election returns from statewide races would be better—but not high-profile races like U.S. Senator because such races often reflected major factors apart from party loyalty. The best indicator of underlying partisan character—to the extent that such existed—would be returns from a *low*-profile statewide race; even better, an “anonymous” statewide race where nothing was known about the candidates save their party labels. So he reasoned in a memorandum to Democratic Party leaders.<sup>2</sup>

When it was finally time to prepare evidence for trial the 1982 elections had taken place. So Dreyer understandably looked at the 1982 results and his memo concluded that the race for Auditor of State, between Democrat Otis Cox and Republican Charles Loos, would be the best choice. The outcome of this race, and of other races in the 1982 general election, is shown in Table 3.1. Later we will see that Dreyer erred in choosing any race from a post-redistricting election: the best

gerrymander analysis is a prospective analysis; that is, one done in terms of what could be known about the political character of the plan *at the time it was drawn*. That would mean choosing from a race in 1978 or 1980. But we will see that the conclusions obtained from Dreyer’s post-redistricting races turn out to be nearly identical to the ones we obtained using pre-redistricting races.

Table 3.1  
**Indiana: Major-Party Vote for Statewide Offices (Staggered 4-Year Terms)**

	1980 (Presidential Year)		1982 (Gubernatorial Year)		Demo. Per Cent
	Repub.	Demo.	Repub.	Demo.	
<b>Governor</b>	<b>1,257,383</b>	<b>913,116</b>	-	-	<b>42.07</b>
<b>Attorney General</b>	<b>1,144,480</b>	<b>930,440</b>	-	-	<b>44.84</b>
<b>Reporter of Courts</b>	<b>1,153,447</b>	<b>904,405</b>	-	-	<b>43.95</b>
<b>Superintendent of Public Instruction</b>	<b>1,155,099</b>	<b>889,598</b>	-	-	<b>43.51</b>
<b>Secretary of State</b>	-	-	<b>890,008</b>	<b>842,226</b>	<b>48.60</b>
<b>Auditor of State</b>	-	-	<b>845,464</b>	<b>883,240</b>	<b>51.10</b>
<b>Treasurer of State</b>	-	-	<b>864,247</b>	<b>852,725</b>	<b>49.70</b>
<b>Clerk of Courts</b>	-	-	<b>871,632</b>	<b>844,450</b>	<b>49.20</b>

Examination of Table 3.1 reveals that three other arguably “anonymous” statewide races also took place in 1982—Secretary of State, Treasurer of State, and Clerk of Courts—and that the outcomes of these races differed little from each other, or from the Auditor's race. They came in just below 50 percent while the Auditor’s race came in just over 50 percent. Dreyer began by aggregating the returns from the Auditor’s race among the districts in the Republican house and senate plans; and then went on to do the same thing for the Carson and Crawford plans. After he had computed Cox’s percentage in each district he then ranked the districts in decreasing order of “Democratic strength.” Table 3.2 shows what he obtained for the 100 seats (77 districts) in the Republican house plan.

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Table 3.2

Democrat Ranking of House Districts of 1982 Republican Plan by Aggregating Vote in 1982 State Auditor's Race†  
(Statewide vote for Democratic candidate Cox was 51.1%)

Rank	District Number	Winning Candidate†	Demo. Percent	Rank	District Number	Winning Candidate†	Demo. Percent
1	14**	BROWN	92.2	51	44	Thomas	49.1
2	"	ROGERS	"	52	57	Moberly	48.7
3	12**	KATIC	84.2	53	8	Taylor	48.1
4	"	HARRIS	"	54	65	McIntyre	47.7
5	51***	CRAWFORD	83.9	55	27	KLINKER	47.7
6	"	SUMMERS	"	56	15**	Fifield	47.6
7	"	DAY	"	57	"	Reppa	"
8	34	GOODALL	67.7	58	21	Stephan	47.1
9	77	HAYS	67.6	59	25	JONTZ	46.4
10	7**	KROMKOWSKI	66.2	60	60	Bales	46.3
11	"	BAUER	"	61	6	Mangus	45.9
12	11**	HRIC	66.2	62	24	Becker	45.6
13	"	PETTERSEN	"	63	20***	Engle	45.2
14	37	CAMPBELL	64.9	64	"	Pond	"
15	45	ROACH	63.9	65	"	Worden	"
16	73	HEEKE	63.0	66	59	HAYES	45.2
17	71	Wathen	61.8	67	29	Regnier	45.1
18	72	COCHRAN	61.4	68	23	Musselman	44.2
19	13	DOBIS	61.2	69	35	Dalley	44.2
20	43	HELLMAN	61.2	70	2	Fox	43.7
21	70	ROBERTSON	60.8	71	16	Roorda	42.5
22	74	PHILLIPS	60.2	72	49***	Keeler	42.1
23	66	BARON HILL	60.0	73	"	Manweller	"
24	76	LUTZ	59.2	74	"	Spencer	"
25	42	CLINGAN	57.5	75	22	Mishler	41.9
26	64	SNIDER	57.4	76	50***	Buell	41.0
27	68	BISCHOFF	56.3	77	"	Harper	"
28	63	HUME	55.1	78	"	Miller	"
29	36	Kiely	54.6	79	19***	Alderman	41.0
30	30	SCHUCK	54.0	80	"	Gaber	"
31	55	UNDERWOOD	53.8	81	"	Harper	"
32	17	COOK	53.6	82	26	JONES	41.0
33	9**	BOWSER	53.6	83	52	Dorbecker	41.0
34	"	Budak	"	84	"	Leeuw	"
35	5	PRICE	53.2	85	"	Schmid	"
36	69	MARSHALL	53.2	86	28	Davis	40.7
37	46	TINCHER	51.1	87	53	Richardson	40.5
38	67	GOBLE	51.0	88	1	Gerig	40.0
39	32	Espich	50.4	89	58	Mullendore	39.9
40	61	SCHULTZ	50.2	90	41	Pool	39.7
41	10**	WILSON	50.2	91	38	Dellinger	39.4
42	"	Ayres	"	92	47	Bray	37.7
43	56	Hibner	50.1	93	48	Burkley	36.4
44	33	Hoover	50.1	94	"	Nelson	"
45	62	Dean	49.9	95	"	Soards	"
46	54	Coleman	49.6	96	4	Warner	35.6
47	75	AVERY	49.3	97	18	Mauzy	34.4
48	"	Becker	"	98	3	Mock	33.8
49	31	TURNER	49.3	99	40	Thompson	33.8
50	"	Duckwall	"	100	39	Donaldson	22.3

†This Table is a copy of Dreyer Deposition Exhibits 017-018 which became Defendants' Trial Exhibit 300

†Names of Democrats are in CAPS; names of Republicans are in Lower Case, first letter capitalized.

\*\*2-member district

\*\*\*3-member district

He then decided that his measure of partisan character would be more credible if he did not rely upon a single race, but averaged the Cox-Loos race with one of the other three “anonymous” statewide races. He chose the race between Democrat Patty Evans and Republican Marjorie O’Laughlin for Clerk of the Supreme Court and Court of Appeals and proceeded to aggregate the average of the returns from this and the Cox-Loos race among the districts in the Republican house and senate plans, the Crawford plan, and the Carson plan. Table 3.3 shows what he obtained after ranking the 50 seats/districts in the Republican senate plan.

Table 3.3

Democratic Ranking of Senate Districts of 1982 Republican Plan by Aggregating Average of Vote  
in 1982 State Auditor's and Clerk of Courts' Races†  
(Statewide average of Democratic candidates Cox and Evans was 50.15%)

Rank	District Number	Winning Candidate†	Democrat Percent
1	3	MOSBY	92.4
2	34	CARSON	81.1
<b>3*</b>	<b>1*</b>	<b>MRVAN*</b>	<b>80.4*</b>
4	33	MAHERN	74.5
5	4	<b>BUSHEMI</b>	<b>68.6</b>
6	10	HUNT	65.5
7	46	<b>BAIRD</b>	<b>60.9</b>
8	39	<b>MONK</b>	<b>60.5</b>
9	49	<b>O'DAY</b>	<b>59.9</b>
10	47	<b>O'BANNON</b>	<b>58.9</b>
11	45	LEWIS	57.9
12	26	<b>CRAYCRAFT</b>	<b>56.9</b>
13	48	<b>HUME</b>	<b>56.3</b>
14	2	Potesta	54.7
15	43	<b>Nugent</b>	<b>53.7</b>
16	25	<b>MCCARTHY</b>	<b>53.4</b>
17	38	<b>Dunbar</b>	<b>53.3</b>
18	8	NEARY	52.2
19	19	<b>TOWNSEND</b>	<b>50.3</b>
20	44	Corcoran	50.3
21	42	Hession	49.3
22	6	<b>Niemeyer</b>	<b>48.3</b>
23	50	Server	48.2
24	21	<b>Butcher</b>	<b>48.0</b>
25	40	Duckworth	47.8
26	20	Jessup	47.7
27	27	<b>NICHOLSON</b>	<b>47.4</b>
28	5	Costas	47.0
29	37	Pease	46.4
30	7	Guy	46.0
31	28	Rogers	45.3
32	9	Miller	44.7
33	11	<b>Zakas</b>	<b>44.6</b>
34	18	Justice	44.4
35	17	<b>Snowden</b>	<b>44.1</b>
36	41	<b>Garton</b>	<b>43.9</b>
37	22	<b>GERY</b>	<b>43.8</b>
38	23	<b>Harrison</b>	<b>42.4</b>
39	16	Sinks	41.6
40	30	Blankenbaker	41.6
41	15	<b>McDonald</b>	<b>40.8</b>
42	31	<b>Vobach</b>	<b>39.8</b>
43	14	<b>Worman</b>	<b>39.2</b>
44	35	Mills	39.0
45	32	Bosma	38.8
46	13	Augsburger	38.6
47	36	Borst	38.6
48	12	Shank	37.0
49	24	Parent	32.8
50	29	<b>Duvall</b>	<b>26.8</b>

Note that only the 25 seats indicated in boldface came up for election in 1982. Note further that those 25 included 13 of the 20 districts in which the Cox-Evans average exceeded 50 percent. That average in the districts up for election in 1982 was 51.20. The 25 districts up for election in 1984 included the remaining seven in which the Cox-Evans mean exceeded 50 percent. That average in those districts was only 49.82. Examination of Table 3.3 also shows that in the 1982 election Democrats won 11 of the 13 districts whose Cox-Evans mean exceeded 50, plus 2 of the 12 districts where that mean was below 50, for a total of 13.

*Conclusions Regarding the Underlying Partisan Character of the Districts in the Plans.* The row for “Rank 44” in Table 3.2 reveals that when the 51.1 percent statewide vote for Cox is aggregated among the districts in the 1982 Republican house plan there are 44 districts in which “Democrats” are a majority. Therefore, we can say that if every Cox vote equals a vote for a Democratic candidate for the Indiana House, the Democrats, with 51.1 percent of the vote for Indiana House candidates, would have elected only 44 (out of 100) representatives. This fact suggests a six-seat pro-Republican bias in the plan. That “suggestion” is reinforced when the Cox (“Democratic”) vote is aggregated among the 100 SMDs of the Crawford plan. Here we would find Democrats would have needed a 1.1 percent super-majority of the votes to win a bare majority of 50 seats.

We said that desire for a “more credible measure” induced Dreyer to use an average of the Cox-Evans vote, rather than just the Cox vote by itself, as the index of Democratic “voting strength.” Table 3.3 shows that, if each Cox/Evans vote equals a vote for a Democratic candidate for the Indiana senate, the Democrats, with 50.3 percent of the vote for Indiana Senate candidates, would have elected 20 (out of 25) senators. But here we must be careful. Indiana senators are elected for staggered, four-year terms and which senators come up for election in a presidential year, and which senators come up for election in a gubernatorial year can be decisive when the newly-elected senators are joined to the party’s holdover senators to arrive at the caucus total.

*Dreyer's "Historical Study," his studies regarding "Relative Votes Cast per Seat Won," and regarding the "1982 Election Outcomes Ranked by Plurality" are inconclusive.* Their major conclusion regarding the Republican house plan is that it allocates Republican "voting strength" among the districts far more efficiently than it does Democratic "voting strength." Under this plan, if exactly 50 percent of the electorate, voting on the basis of party preference, chose Democratic candidates for the Indiana house, only 37 of them would be elected. That is a 13 percent partisan advantage for Republicans. It does not matter whether this underlying partisan preference is measured by the Cox vote or the Cox-Evans mean vote. Further, in order to win 50, or 50 percent of, the seats the Democratic preference of the electorate must rise to a super-majority—51.8 percent, if measured by the Cox vote.

But maybe this partisan advantage is not the result of gerrymandering by Republicans, but simply the consequence of political geography that distributes "Republicans" more efficiently than it does "Democrats." Notice that if "Democratic voting strength" is at 50 percent—as measured by the Cox vote—Democrats win only 44 seats.

Even though Dreyer's studies supported the Republicans' claim that geography hurts Democrats, they also suggest that over half of the Republican advantage could be due to gerrymandering. If the Crawford plan is impartially drawn, then the difference between the 44 seats it gives Democrats and the 37 they get under the Republican plan is a 7-seat advantage due to Republican gerrymandering. The Dreyer analysis of the Republican senate plan leads to comparable, but not identical, conclusions as his analysis of their house plan: with "Democratic voting strength" at 50 percent Democrats get 24 seats (48 percent) under their supposedly "impartially-drawn" plan; they get only 19 or 20 seats (38 percent or 40 percent) under the Republican plan—a 2 percent handicap due to geography and another 8-10 percent due to gerrymandering.

*Conclusions Regarding the “Multimember” Study.* Dreyer produced three exhibits depicting how partisan interests could advantage themselves in a districting plan by selective creation of MMDs. In Trial Exhibit 51 he divided the whole state into three MMDs in such a way that Republicans could win two of those seats with less than 50 percent of the statewide vote. In Trial Exhibit 52 he divided Indiana into three MMDs in such a way that Democrats could win two of those seats with less than 50 percent of the statewide vote. In Trial Exhibits 49 and 50 he demonstrated the arbitrary manner in which some counties and cities were districted into MMDs and others were not.

*Conclusions Regarding 1982 Election Outcomes Ranked by Plurality.* To corroborate evidence of pro-Republican bias furnished by the studies based upon estimates of partisan “voting strength” Dreyer ranked the districts in the plans according to actual 1982 election pluralities of the Democratic candidates. This yielded Trial Exhibits 32 and 33. Exhibit 32 is reproduced in Table 3.5. It shows that with 51.64 percent<sup>3</sup> of the aggregate statewide vote the Democrats win only 43 seats. To win the 50th seat they would have to win an additional 1,520 votes in each district; or they would have to win an additional  $50 - 45.4 = 4.6$  percent of the statewide vote, bringing that vote to  $51.64 + 4.6 = 56.24$  percent.

When Table 3.5 is compared with Table 3.2 we can see that the Democratic candidates get approximately the same percentage of seats for the same percentage of votes—whether the calculation is based upon aggregation of a low-profile statewide race (44 seats with 51.1 percent of the vote) or actual election results (43 seats with 51.64 percent of the vote). The statewide election does not predict *which* seats will be won or lost<sup>4</sup>—particularly in the “marginal” districts, but it does a pretty good job of predicting the overall result. Yet this additional evidence of bias, again, does not tell us how much might be due to geography and how much to manipulation.



Table 3.5

Indiana House: 1982 Election Outcomes Ranked  
by Descending Pluralities of Democratic Candidates†

(1) Rank	(2) HD	(3) Democratic Candidate	(4) Plurality	(5) Percent of Vote	(6) Niemi's Percent‡	(1) Rank	(2) HD	(3) Democratic Candidate	(4) Plurality	(5) Percent of Vote	(6) Niemi's Percent‡
1	42	Clingan	15724	100.0	100.0	51	71	Potter	- 1604	44.4	44.4
2	14**	Mosby	14874	100.0	100.0	52	24	Glendening	- 1661	46.0	46.0
3	34	Goodall	14749	100.0	100.0	53	20***	Sheets	- 1874	44.1	44.1
4	74	Phillips	14204	100.0	100.0	54	10**	Esgate	- 1922	44.2	44.2
5	14**	Brown	14049	100.0	100.0	55	62	Wright	- 2117	44.8	44.8
6	12**	Katic	12616	100.0	100.0	56	9**	Gondeck	- 2174	43.0	43.0
7	70	Robertson	12547	100.0	100.0	57	29	Dieselberg	- 2265	44.4	44.4
8	12**	Harris	12292	100.0	100.0	58	15**	Gwyn	- 2328	42.2	42.2
9	67	Goble	11942	100.0	100.0	59	60	Szakaly, Jr.	- 2391	43.1	43.1
10	51***	Crawford	11403	84.7	84.7	60	2	Roe	- 2471	41.3	41.3
11	51***	Day	11394	84.7	84.7	61	50***	Orr	- 2614	42.5	42.5
12	51***	Summers	11355	84.5	84.5	62	20***	Womack	- 2654	41.9	41.9
13	63	Hume	11298	100.0	100.0	63	56	Creech	- 2778	41.0	41.0
14	11**	Pettersen	10463	100.0	100.0	64	35	Landfair	- 2785	42.2	42.2
15	73	Heeke	7043	67.8	67.8	65	75**	White	- 2938	41.5	41.5
16	68	Bischoff	6605	67.9	67.9	66	28	Bowen	- 2940	42.1	42.1
17	7**	Bauer, B. P.	6513	70.0	70.0	67	50***	Charnstrom	- 2940	41.6	41.6
18	17	Cook	6435	65.8	65.8	68	15**	Holtan	- 2944	40.7	<b>40.5</b>
19	7**	Kromkowski	6312	69.3	69.3	69	4	Puro	- 2977	38.6	38.6
20	77	Hays	6215	71.8	71.8	70	50***	Roberts	- 2992	41.4	41.4
21	72	Cochran	5804	66.8	66.8	71	52***	Seyfried	- 3034	41.7	41.7
22	43	Hellmann	5441	63.8	63.8	72	20***	Banning	- 3089	40.3	40.3
23	66	Hill	5162	64.5	64.5	73	52***	Handlon, Jr.	- 3137	41.4	41.4
24	13	Dobis	5068	65.4	65.4	74	19***	Barnets	- 3200	39.1	39.1
25	25	Jontz	4614	61.1	61.1	75	54	Jones, C	- 3234	40.8	40.8
26	45	Roach, Sr.	4343	62.2	62.2	76	19***	Ray, Jr.	- 3277	38.9	38.9
27	11**	Hric	4199	64.0	64.0	77	52***	McQueen	- 3277	41.1	41.1
28	75**	Avery	3794	59.6	59.6	78	23	Montgomery	- 3398	40.5	40.5
29	64	Snider	3660	59.1	59.1	79	19***	Hopkins	- 3433	36.7	38.4
30	76	Lutz	3346	58.7	58.7	80	47	Vandenbark	- 3456	38.5	38.5
31	37	Campbell	3020	58.0	58.0	81	65	Hayden	- 3459	40.5	40.5
32	69	Marshall	2692	56.2	56.2	82	49***	Bowman	- 3705	41.8	41.8
33	9**	Bowser	2681	58.4	58.4	83	49***	Rodman	- 3739	41.7	41.7
34	55	Underwood	2189	56.2	56.2	84	53	Merlau, Jr.	- 3759	39.5	39.5
35	61	Schultz	1782	57.3	57.3	85	36	Turner, R.	- 3950	41.3	41.3
36	46	Tincher	1212	53.1	53.1	86	44	Kirchner	- 4041	39.6	39.6
37	30	Shuck	1034	52.9	52.9	87	49***	Svihlik	- 4110	40.9	40.9
38	27	Klinker	901	52.4	52.4	88	41	Coudret	- 4163	39.0	<b>39.1</b>
39	26	Jones, S.G.	897	53.0	53.0	89	32	O'Rourke	- 4665	38.6	38.6
40	5	Price	891	53.2	53.2	90	48***	Dellinger	- 4864	36.6	36.6
41	10**	Wilson	770	52.6	52.6	91	48***	Richardson	- 4876	36.5	36.5
42	59	Hayes	728	51.8	51.8	92	48***	Graham	- 5001	36.2	36.2
43	31**	Turner, P.E.	547	51.7	51.7	93	40	Baumgardner	- 5411	33.5	<b>33.6</b>
44	21	Auer	- 302	49.3	<b>40.5</b>	94	3	Spelbring	- 5427	31.7	31.7
45	22	Beery	- 521	48.5	48.5	95	18		- 11331	0	0
46	31**	Winger	- 606	48.6	<b>48.2</b>	96	16		- 11524	0	0
47	8	Bauer, B.C.	- 766	47.9	47.9	97	1		- 11558	0	0
48	33	Davis	- 1193	46.8	46.8	98	57		- 12050	0	0
49	6	Francekovic	- 1334	46.5	46.5	99	38		- 12217	0	0
50	58	Vandivier	- 1520	45.4	45.4	100	39		- 14049	0	0

† Dreyer Deposition Exhibit 009A which became Plaintiffs' Trial Exhibit 32

\*\* 2-Member district    \*\*\* 3-Member district    ‡ See section on Majority-win Percentages, Chapter 15



## Notes

<sup>1</sup> Backstrom, Charles, Leonard Robins, and Scott Eller. 1978. Issues in Gerrymandering: an Exploratory Measure of Partisan Gerrymandering Applied to Minnesota. *Minnesota Law Review* 62: 1121- 1159.

<sup>2</sup> “Why the Cox-Loos race is a good race to analyze.” Undated (1983) 7-point typescript memo “from David Dreyer” in *Bandemer v. Davis* case file, Baker & Daniels L.P.A., Indianapolis.

<sup>3</sup> Computed as described in Note 7 to Appendix B. We prefer this estimate to the 51.9 percent used by the parties to the controversy.

<sup>4</sup> The Auditor’s race aggregation falsely predicted Democrat wins in HDs 9, 10, 32, 33, 36, 56 and 71. It falsely predicted losses in HDs 25, 26, 27, 31, 59, and 75. It correctly predicted wins in 36 of 44 districts for a success rate of 81.8 percent.

## Chapter 4 The *Davis v Bandemer* Trial

The first 45 minutes of the trial were devoted to preliminaries, the most noteworthy being Dreyer's declination to seek expert witness status, and to opening statements by the lawyers.

Boehm said Plaintiffs' "core contention...[was that]...the plans were conceived to and did dilute, unconstitutionally, the Democratic vote in...Indiana in both houses [of the legislature]..." He cited the house plan's adoption of MMDs in certain parts of the state, the senate plan's "complete disregard for county lines," and the process by which the bills became law.<sup>1</sup>

Then Evans spoke for the Defendants. He asked, rhetorically: did the districting acts meet the constitutional requirements which have been set forth in the courts? His answer was "yes." First, the plans met the "one-person-one-vote" requirement because their population deviations were on the order of  $\pm 2$  percent. Second, they did not dilute existing black voting strength. Third, they conformed to the preceding plans, making only the "changes that were necessary." Fourth, they avoided pairing of incumbents as much as possible, "doubling up" house Democrats in a few cases only because of the population equality requirement.<sup>2</sup>

### *Examinations of Dreyer and Henderson*

Boehm introduced the depositions of the Republican legislative leaders and MOR consultants. Then he brought Dreyer—the trial's first major witness—to the stand and, in about an hour's time, entered in evidence Plaintiffs' first 52 exhibits.<sup>3</sup> The rapid-fire manner in which the exhibits were introduced (about one per minute) meant that Dreyer spent little or no time explaining their significance. Of the three judges, only Pell actively engaged the lawyers and witnesses with questions and comment. Noland and Brooks were silent almost all of the time. During introduction of these exhibits, Pell, at one point, broke in and asked

what was significant about so-called “anonymous” statewide races and Boehm was able to give a good explanation.<sup>4</sup> Dreyer's direct examination ended with his recounting the process by which the Republican plans were enacted by the legislature.<sup>5</sup>

Boehm next brought to the stand Plaintiffs’ only expert witness, Gordon Henderson described briefly in Chapter 2. Henderson’s curriculum vitae were offered as Plaintiffs’ Exhibit 53. Evans objected to Henderson’s recognition as an expert witness claiming he might qualify as a “political scientist” but not as an expert on districting. Boehm countered and Pell admitted Henderson.<sup>6</sup> It was evident, however, that despite his academic qualifications Henderson really knew a lot less about the evidence being offered than did Dreyer who had prepared it. His discussion of the exhibits was not arresting. He displayed no easy familiarity with the academic literature on gerrymandering and did not even mention the Backstrom/Robins/Eller article<sup>7</sup> which, in 1983, one might have expected an academic expert on gerrymandering to say a lot about. At one point Henderson alleged the Republican districting of Marion County was an example of “cracking.”<sup>8</sup> Yet he was unable to specify just how this was accomplished by pointing to district lines on the maps.<sup>9</sup> Henderson’s testimony lasted less than an hour. Evans’ cross-examination of him was brief and uneventful.<sup>10</sup>

Dreyer was recalled and, after a few additional questions from Boehm, was subjected to lengthy and rigorous cross-examination by Evans.<sup>11</sup> Evans introduced Dreyer’s ranking of the aggregated vote in the 1982 Auditor’s race by HD (reproduced in our Table 3.2). He questioned Dreyer regarding the selection of this race as the indicator of partisan “voting strength.”<sup>12</sup> He followed the same line of questioning regarding Dreyer’s analysis of the SDs given in our Table 3.3.<sup>13</sup> Evans tried to make out that Dreyer was claiming Exhibit 39 predicted outcomes in senate races.<sup>14</sup> Dreyer denied it. Evans questioned Dreyer about the Carson plan;<sup>15</sup> insinuating that it cut an excessive number of township lines in Marion

County.<sup>16</sup> Regarding the attachment of parts of the seven counties surrounding Indianapolis (known as the “ring” counties) to SDs based in Marion County, Evans got Dreyer to concede that the same thing had occurred in the (Republican) 1972 plan.<sup>17</sup> The trial resumed on November 16. During the next two hours Defendants introduced additional exhibits and examined two more witnesses. Then appeared the trial’s other major witness.

### *Direct Examination of Grofman*

Bernard Grofman had sat near Evans on October 16 quietly listening to the testimony of Dreyer and Henderson. Once he had been announced as the Defendants’ expert witness Plaintiffs’ attorneys had sought, without success, to schedule him for a deposition. They were frustrated<sup>18</sup> and did not like the prospect of his taking the stand without their having an opportunity to prepare for what he might say.

After submission of his lengthy resume, and four pages of testimony in which Evans elicited and put into the record information from this resume, Pell intervened by asking whether Plaintiffs intended to “object to his qualifications as an expert.” Boehm said “no,” and the substantive examination got under way.<sup>19</sup> Referring to Dreyer’s “exhibits making comparisons based upon the 1982 auditor’s and clerk of courts’ races,” Evans asked whether this information was “relevant to the issue of partisan gerrymandering involved in the *Bandemer* lawsuit?”

A [This] information...may be of some value in ascertaining political gerrymandering. But in [its] present form [it is] essentially either misleading or irrelevant to a determination of political gerrymandering.

Q And why is that?

A There are basically four problems with the existing exhibits. First of all, the state Auditor’s race or the clerk’s race is...characterized by relatively low interest, low knowledge of candidates and limited or non-existent political issues. And as such, is of only limited relevance to outcomes in races which may, in fact, have known

candidates or genuine local political issues...Secondly, the state auditor's race...[is] unrepresentative. ...a third difficulty with...Exhibits 35 to 44...are that [they] imply a theory of the way in which seats and votes are...related...Implicit in [the] exhibits is the notion that if a party receives a certain percentage of the vote statewide, the fair, the inevitable outcome is, absent political gerrymandering, that the party will receive the same proportion of seats...That model of how SMD plurality, winner-take-all elections operate at the district level is simply mathematically wrong...

One last problem with...Exhibits 35 to 44: ...If, in a state there are a large number of...competitive districts...then in a given...year one party wins most of the competitive seats [it] will be more effective in translating its votes into seats...[and] will, in fact, win...most of the seats in the legislature, even if the two parties begin roughly even in size.<sup>20</sup>

Grofman then offered a short article he had published in 1980<sup>21</sup> depicting the theoretical relationship between seats and votes in a SMD electoral system. This exhibit is nearly identical to the “S-curve” of our Figure 1.1. Grofman had performed a computer simulation, using an idealized electorate, of elections conducted in a 99-district plan in which the spatial distribution of party supporters was determined by randomly drawn district lines. Grofman then compared the data obtained from this simulation with what would be predicted by a formulation known as the “cube law,” and discovered that it “provid(ed) a quite good approximation to the situation where partisan/group strength is randomly distributed across districts.”<sup>22</sup> The “cube law” values differed only slightly from the simulation values. At 45 percent of the vote the cube law predicts that a party will win 35.4 percent of the seats; at 50 percent of the vote 50 percent of the seats; at 55 percent of the vote 64.6 percent of the seats.<sup>23</sup>

This exhibit was to demonstrate Grofman's point that it was misleading for Dreyer's exhibits to imply that lack of proportionality in the seats-votes relationship signaled partisan gerrymandering. Grofman stated that his description of the seats-votes relationships was confirmed by a body of evidence in the political science literature and singled out, in particular, Backstrom/Robins/Eller's characterization of the "extra" seats a party, with just over 50 percent of the vote, might receive as the "balloon effect."<sup>24</sup>

Evans next proceeded to question Grofman regarding how excessive concentration of Democrats in Indiana might be due to geography. We recounted this colloquy in the preceding chapter. Evans then turned to a consideration of the statewide election summary we reproduced in Table 3.1, drawing Grofman's attention to the state senate figures showing Democrats winning 13 of the 25 seats up for election with 53.1 percent of the vote.

Q Does this exhibit present evidence of partisan gerrymandering in the Indiana senate?

A ...it clearly does not present evidence of partisan gerrymandering.

Q Why do you say that?

A ...Exhibit No. 31 shows that the Democratic candidates received 53.1 percent of the total votes cast statewide for candidates for state senate, of whom there were 25, 25 offices.

Q What, if anything, does that indicate on the issue of partisan gerrymandering?

A If I may continue, that 53.1 is half of the equation... The actual outcome in 1982 for state senate in Indiana was that 13 Democrats were elected and 12 Republicans were elected...in other words, 52 percent of the candidates elected were Democrats, whereas 53.1 percent of the total votes for that office were

received by Democratic candidates. That is as close to perfect proportionality as one is ever going to get in real life...So this is as close to proportionality as one is ever going to get, despite the fact we are dealing with a SMD election which...we are very, very unlikely to get proportionality in. So I take this to indicate the absence of even a prima facie case...for the existence of partisan gerrymandering in the state senators election.<sup>25</sup>

Those words concluded Grofman's analysis regarding partisan gerrymandering of the senate districts. Evans then took up the issue of the house districts by comparing the seats-votes outcome for the house elections shown in our Table 3.1 with the results of the individual races reported in Exhibit 32 and our Table 3.7.

Q The question would be, does it present evidence of partisan gerrymandering in the House of Representatives, these two exhibits taken together?

A My response would be that Exhibit 31, taken alone, suggests the possibility of gerrymandering for the state House, because with 51.9 percent of the vote the Democrats are receiving less than 43 percent of the...seats; thus, there is something to be explained. Exhibit 32, at least in part, in my view, provides such an explanation. If one looks at Exhibit 32 and looks at competitive seats...at seats in the 40 percent to 60 percent range, which is one of the standard definitions in political science as to what competitive seat range would be...if one uses districts in the 40 percent to 60 percent range is that, first, many districts are competitive, indeed 50<sup>26</sup> if my arithmetic is correct...Fifty, roughly, of these districts are in the 40 percent to 60 percent range in actual election outcomes. Of those, 16...were won by Democrats and

34 were won by Republicans. If we look at...seats which are won by margins of less than 3,000, there are 39. Twelve of those are won by Democrats; 27 by Republicans. If we look at seats in the margin less than...2,500...Republicans disproportionately win those competitive seats by...17 Republican seats and 10 Democratic seats. ...I can certainly tell you that these were seats that, at least based on 1982 election results, are seats that could have gone either way...these are competitive seats...<sup>27</sup>

The questioning turned to the matter of MMDs. Grofman pointed out that there was nothing unusual about them. Circa 1981, twenty states employed them in electing their houses of representatives, and of these 20 twelve employed MMDs electing more than three members.<sup>28</sup> The next question concerned the defendants' supposedly "neutral" criterion of "least changed plan." Stating he interpreted this to mean "a plan which least affects incumbents," Grofman noted Defendants' Exhibit II which showed that the Republican house plan placed 8 incumbents in districts with other incumbents, whereas Crawford did this to 25; and Defendants' Exhibit SS showing 14 incumbents paired in Carson, as opposed to none in the Republican senate plan.<sup>29</sup>

Now came Grofman's cross-examination by Plaintiffs' lead counsel Ted Boehm.

#### *Cross-Examination of Grofman*

The first series of questions concerned what constituted PR for blacks, and how that depended upon what geographical area one was talking about. The confusing dialogue covered six pages of transcript, in which many numbers were tossed around.<sup>30</sup> It brought out no facts more significant than those we summarized in the preceding section. Then Boehm took up Grofman's critique of Dreyer's exhibits. The cross examination revolved around five



major themes. *The first theme* concerned what was the best measure, in Indiana, of partisan “voting strength.”

Boehn first got Grofman to concede that “high-profile races, such as the U.S. Senate or governor” were not the best for assessing the partisan character of districts because votes for such candidates often reflected their personal qualities more than support for the parties to which they belonged. Then, after further sparring, Boehm secured Grofman’s agreement that “our clerk and reporter of our Supreme Court are not good examples of ‘high profile’ races.” Finally Boehm closed the trap by asking:

So is there any better indicator [than such low interest, low issue races] of just normal party strength, that you are aware of, in this state?

Grofman had to answer “no.” After a few more exchanges Boehm summed up the issue:

I guess all I’m suggesting is that the auditor’s race isn’t all that screwy just because Cox happened to win that year...<sup>31</sup>

Boehm’s *second theme* concerned the issue of what districts can be considered to be “competitive.” The inquiry began with the issue of whether some states had stronger partisan traditions than others. Grofman agreed that this was so and that Indiana had a stronger partisan tradition than states like Oregon or California. Boehm then tried to get Grofman to agree that states with stronger partisan traditions would, over their political histories, exhibit narrower partisan swings than states of a more independent voting tradition. Specifically, Boehm asked whether “45-55 or 46-54” might be a more accurate estimate of historical partisan swing in Indiana than Grofman’s 40-60. Grofman demurred and Boehm bore in harder:

Q All right. But isn’t it a fact that in modern history the major parties have run in that 55-45 band, or very close to it, and never exceeded 56 or 57 percent?

A I believe Lugar's percentage is higher than that band. I do not know the numbers so I cannot comment in any more detail.

Q An individual candidate such as Senator Lugar, may do that. But in terms of party-lines strength, has it ever happened, to your knowledge?

A Again, I don't know what you mean by party-line strength.

Q Well, whatever measure you want to take of normal party voting strength. Has it ever deviated more than five or six percentage points, using 100 as our benchmark, from the 50 percent median?

A Since I have not ever done a study of bench line party-line strength I simply can't answer that.<sup>32</sup>

The obvious measure of "competitive range" for the Indiana house would be the "oscillation" of the aggregate statewide vote for a party's candidates for election to that body. Appendix B (column 7) shows that, from 1970 to the time of the trial, the lowest Democratic vote was 44.4 percent (in 1972) and the highest was 54.7 percent (in 1974). To go back farther, we could use Dreyer's Reporter and Clerk of Courts races, 1954-1982, from an exhibit we didn't have space to discuss. There we would find a low of 42.6 in 1972 and a high of 55.7 in 1974—matching the same years as those of the aggregate vote for the Indiana house. There would be no basis for calling any legislative race outside this range "competitive."

But the real flaw in Grofman's analysis lay not in how to bracket the so-called "competitive" races—whether 60-40, 55-45,  $\pm$  3,000 votes, or  $\pm$  2,500 votes—because, after all, Republicans still won the bulk of those races regardless of where the brackets are.<sup>33</sup> Rather, it lay in defining "competitive" in terms of how much the legislative candidates won by, *rather than in terms of what odds the candidate faced by way of the underlying partisan character of the district*. By Grofman's "40-60" definition the number of those districts a

Democrat has an even chance of winning is the same as the number of those districts a Republican has an even chance of winning. This is not so. Comparison with Table 3.2 shows that Cox—with a super-majority, statewide, of 51.1 percent—carried 17 of those districts and lost 33. Of the 39 “± 3,000” districts Cox carried 13 and lost 26. Of the 27 “± 2,500” districts Cox carried 10 and lost 17. In about a third of those districts the Republican candidates were running uphill, to one degree or another. In about *two-thirds* of those districts the Democratic candidates were running uphill, to one degree or another. When the 1982 legislative election results were in, the number of districts won by Democratic legislative candidates, in each of the three definitional categories, was nearly identical to the number of districts won by Cox. Not the same districts, in all cases, but in overall result the Cox vote turned out to be an excellent predictor.

To say that HD 26 (see Figure 2.1) is a “seat that could have gone either way”<sup>34</sup> because Democrat Stanley Jones won it with 53.0 percent in 1982, while his Party’s candidates for Auditor and Clerk of Courts were getting 41.0 and 38.5 percent, is to ignore the probability of what vote the Democratic candidate would be getting were he/she not Stanley Jones. Similarly, to say that HD 71 (see Figure 2.1) is a “seat that could have gone either way” because Republican Richard Wathen won it with 55.6 percent in 1982, while his Party’s candidates for Auditor and Clerk of Courts were getting 38.2 and 39.2 percent, is to ignore the probability of what vote the Republican candidate would be getting were he/she not Richard Wathen.<sup>35</sup>

It takes time and thought to detect this sophistry, but Boehm had no time to prepare himself for what this witness might say because he had been unable to depose him.

Boehm’s *third theme* dealt with the Dreyer exhibits’ supposedly misleading depiction of the seats-votes relationship. Boehm started in with two “seats-votes” questions that led nowhere. Then he detoured into the issue of PR in the 1982 state senate elections and did not return to Dreyer’s implied mischaracterization of the seats-votes relationship for several minutes.

Finally, he continued with four additional questions in an attempt to correctly define the “balloon effect” which accomplished little but gave Grofman an opportunity to speak with authority.

Here again, Boehm’s failure to depose his adversary’s witness had left him unprepared to discuss the balloon effect and the cube law; and with no rebuttal witness to point out the glaring error in how these concepts were applied to the seats-votes relationship of the 1982 Indiana house elections. Both the balloon effect and the cube law better describe the seats- votes relationship, in a two-party SMD electoral system, than does the straight-line one-to-one ratio implied by PR. As Grofman says, if the geographical distribution of supporters of the two parties is “symmetrical” throughout the system, we would expect the seats-votes graph to approximate the “S” curve of his Exhibit R shown in our Figure 1.1, rather than the 45° straight-line included in this figure to indicate PR. The S-curve shows that, if a party gets just over half of the vote, it will get considerably more than half of the seats (the cube law says 64.6 percent of the seats with 55 percent of the vote). Conversely, if it gets just under half of the vote, it will get considerably *less* than half of the seats (the cube law says 35.4 percent of the seats with 45 percent of the vote).

In the 1982 Indiana house elections Republicans got 48.36 percent of the vote—a *minority* vote that, according to the balloon effect and the cube law, should result in their getting *considerably less than* 48.36 percent of the seats—specifically, 45.1 percent of them. Yet they actually got a 57 percent majority of the seats. Conversely, Democrats got 51.64 percent of the vote—a majority vote that, according to the balloon effect and the cube law, should result in their getting considerably more than 51.64 percent of the seats—specifically, 54.9 percent of them. Yet they actually got a 43 percent minority of the seats. Rather than a tool for discrediting Dreyer’s exhibits, Grofman’s invocation of the balloon effect and the cube law—and the accompanying introduction of Exhibit R—was, actually, powerful support for the plaintiffs’ case. The “geographical distribution of supporters of the two parties” was definitely *not*

“symmetrical.” The unanswered question: how much of the asymmetry was due to geography, and how much was due to manipulation?

The *fourth major theme* about which Boehm questioned Grofman—sandwiched in between the questions about seats-votes relationships—was evidence of gerrymandering of the senate districts. The dialogue went as follows:

Q ...you said that this Exhibit 31...showed that there was no gerrymandering in the senate, and you took the average and said, well, it came out on average so it must be swell?

A No, what I said—two things. First, the difference between the two sets of Mr. Dreyer’s exhibits are one set...deals with the actual numbers in these races and the other is an hypothetical race based on the results that would have taken place in the districts in terms of the auditor’s contest. That is the first key difference. The second point is that the reason—all that I said—and I believe I can paraphrase what I said correctly—what I said was that the data presented did not present a prima facie case for gerrymandering.

Q That is fine, but they also don’t show that there is no gerrymandering either? I mean, this exhibit isn't simply the entire plaintiffs’ case.

A I have never made a statement stronger than the data do not show a prima facie case.

Q I thought you were concluding there was no gerrymandering based on this data, and you can’t do that.

A On the basis of that data, I cannot conclude much of anything.

Q That’s correct. In fact, on the basis of the ‘82 senate data you can’t conclude anything because half of the senate seats were up?

A Yes. The only conclusion I can make is about the seats that were, in fact, up.

Q So you have to go back and in order to form a view on the senate, look at something other than the actual '82 results?

A Yes, though what you would look at is potentially at issue.

Q Of course. And we have just agreed that the statewide anonymous people are about as good an indicator as we have in this state of party strength?

A If you are asking me how I would project the 1984 election outcomes, having previously disclaimed all ability as a seer, and if you are asking me, would I use the method used by Mr. Dreyer to look at the state auditor's race, the answer is no.

Q What would you look to?

A I would look at a combination of races. I would develop a long run projection equation. I would look, for example, at the incumbency status of individuals. I would look at the way particular individuals do, in fact, differ from party averages. In short, I would do something a lot fancier, but still probably not all that much better than crystal balling, than, in fact, Mr. Dreyer was able to do.

Q And if Mr. Dreyer wasn't attempting to project the 1984 election at all, but simply to show normal pattern voting strength in that district, something like what he did is pretty sensible? He is not trying to predict an election at all. He is recognizing there are individual candidates.

A I'm not prepared to comment on what Mr. Dreyer was or wasn't trying to show, except insofar as the exhibits speak for themselves.<sup>36</sup>

When the other 25 senate seats came up for election in 1984 the aggregate vote for 22 Democratic candidates was 42.3 percent of the total. They won seven of those seats, or 28 percent. This was not "as close to perfect proportionality as one is ever going to get."<sup>37</sup> Dreyer's Exhibit 39 (our Table 3.3) was not an attempt to "project" the outcome of either the 1982 or the

1984 elections. Yet, if one looks at it and simply counts the number of districts carried by Cox, one gets 13 of the “1982” districts and seven of the “1984” districts: the same number of districts their senate candidates actually won in those elections—even if not the same districts in four cases. Not too bad as an indicator of partisan “voting strength.”

One cannot expect an expert witness, hired by the defendants in a gerrymander case, to voluntarily say anything damaging to his clients. It is the job of Plaintiffs’ counsel to wring the whole truth out of him during cross-examination. Considering that he lacked the asset of having been able to depose this witness, Boehm did not-too-bad a job. In retrospect, however, the Democrats might have prepared themselves for an analysis that ignored the partisan character of the 25 “presidential year” districts by modifying Exhibit 39 to differentiate between the “presidential” and “off-year” districts—as we did in Table 3.3. Then, when they had Dreyer offer it, they should have taken ample time and hammered away at the differing partisan character of the ‘82 and ‘84 districts. They might have inoculated themselves against the misleading analysis that followed and prepared the minds of the judges for it. But hindsight is always 20/20.

Boehm’s *fifth major theme* centered on the MMDs. There was an exchange in which he attempted to get Grofman to concede that, viewed in isolation from the rest of the state, the MMDs yielded grossly disproportionate results for Democrats (3 out of 21, or 14 percent with 46 percent of the vote).<sup>38</sup>

The hour was late. After a few final questions there was some discussion of post-trial briefing schedules. Then America’s first and only trial of a partisan gerrymandering lawsuit adjourned.

#### Notes

<sup>1</sup> *Davis v. Bandemer* October 12 Trial Transcript: 16-20.

<sup>2</sup> *Ibid.* 23-27.

<sup>3</sup> *Ibid.* 31-70.

<sup>4</sup> *Ibid.* 58.

<sup>5</sup> *Ibid.* 70-77.

<sup>6</sup> *Ibid.* 85.

<sup>7</sup> *Op. Cit.* Chapter 3 Note 7.

<sup>8</sup> See our reference to this technique in Note 12 of Chapter 2.

<sup>9</sup> *Davis v. Bandemer* October 12 Trial Transcript: 107-08.

<sup>10</sup> *Ibid* 110-117.

<sup>11</sup> *Ibid* 122-170.

<sup>12</sup> *Ibid* 134-145.

<sup>13</sup> *Ibid* 147-163.

<sup>14</sup> *Ibid* 150.

<sup>15</sup> *Ibid.* 163-167.

<sup>16</sup> Our examination of the Republican and Carson senate plans, reported in Table 7.4, shows that *statewide* the Republican plan split 25 townships creating 59 fragments; Carson split only 16 townships creating 42 fragments. However, in *Marion County* Carson split 8 townships creating 23 fragments, whereas the Republican plan split only 6 townships creating 18 fragments.

<sup>17</sup> The “ring” counties were Boone, Hamilton, Hancock, Shelby, Johnson, Morgan, and Hendricks—all of them heavily Republican. A comparison of Figures 2.4 and 2.2 reveals that the 1972 plan attached parts of three of them to Marion County SDs and that the 1982 plan attached parts of five of them. Why the fact that the Republicans had performed such “attachments” in 1972 legitimized their doing so again in 1982 escapes us. At no time did the Democrats make the seemingly obvious argument that the “*Bandoleer*” gerrymander was simply an update of the gerrymander perpetrated by the Republicans in 1972. Dreyer had a chance to make this point, but failed to do so.

<sup>18</sup> Conversation of senior author with plaintiffs' assistant counsel John B. Swarbrick, Jr., 30 January 1990.

<sup>19</sup> *Davis v. Bandemer* October 16 Trial Transcript: 200-204.

<sup>20</sup> *Ibid* 204-209.

<sup>21</sup> “For Single-Member Districts Random Is Not Equal,” pp. 55-58 in *Representation and Redistricting Issues*. 1980. Bernard Grofman ed. Lexington Books.

<sup>22</sup> *Id.* pg. 56.

<sup>23</sup> *Id.* pg. 56.

<sup>24</sup> *Davis v. Bandemer* October 16 Trial Transcript pp. 210-212 citing Backstrom, et al, *Op. cit.* Chapter 3 Note 7 at pg. 1134.

<sup>25</sup> *Ibid* 217-219.

<sup>26</sup> Our count, from Table 3.7, is 53. However, our count is based upon Dreyer’s arguable methodology (as are the methodologies of others) for determining the vote percentages and pluralities of individual candidates in MMDs. If we exclude 3-member HD 49 from our count, it becomes 50 and will agree with Grofman’s. We shall do that.

<sup>27</sup> October 16 Trial Transcript: 219-222.

<sup>28</sup> *Ibid* 223.

<sup>29</sup> *Ibid* 225. Our count on incumbent pairings differs from these numbers, but we shall defer discussion of this issue until Chapter 14.

<sup>30</sup> *Ibid* 235-241.

<sup>31</sup> *Ibid.* 24.

<sup>32</sup> *Ibid* 244-247.

<sup>33</sup> Except that if the 45-55 bracket is employed, Table 3.7 shows there are 16 “competitive” races, with each party winning eight.

<sup>34</sup> *Davis v. Bandemer* October 16 Trial Transcript pg. 221 (quoted in Note 33).

<sup>35</sup> Wathen retired in 1990 and the successor Republican candidate got 43.9 percent, losing the seat.

<sup>36</sup> *Davis v. Bandemer* October 16 Trial Transcript pp. 248-251.

<sup>37</sup> *Ibid* 218 (quoted in Note 31).

<sup>38</sup> *Ibid* 251-252.



## Chapter 5

### The Judicial Resolution

#### *Post-Trial Briefs*

At the conclusion of the trial the judges and attorneys agreed upon an expedited post-trial briefing schedule. The filing deadline for the 1984 elections was less than four months off. If the plans were struck down, time was needed to implement a remedy.

*Plaintiffs' Post-Trial Brief.* Boehm, and his assistants Christopher Scanlon and John Swarbrick, filed a 26-page Post-Trial Brief on December 6, 1983 in which they asserted that the plans “discriminate against Indiana Democrats as a class in violation of the equal protection clause of the Fourteenth Amendment....”<sup>1</sup> They cited Justice Stevens’ concurring opinion in *Karcher* and quoted extensively from it concerning his proposed standard of proof for political gerrymandering claims: first, plaintiffs must “prove that they belong to a politically salient class...whose geographical distribution is...ascertainable...; second, they must prove that... their...voting influence has been adversely affected by the challenged scheme; third, [they] must make a prima facie showing that raises a rebuttable presumption of discrimination.”<sup>2</sup>

Evidence to support such “a prima facie showing” could be “the shape of the district configurations,”...“extensive deviation from established political boundaries,” and the process by which the plan was adopted. If Plaintiffs made such a prima facie showing, the burden would shift to the State to demonstrate that its plan was, nevertheless, justified by “legitimate considerations” and/or “adequate neutral criteria.” If the State could not do so, then the Court should void the plan. Unsurprisingly, the attorneys concluded that their case met all three of Stevens’ criteria. As evidence, they cited inconsistent use of MMDs, fragmentation of political subdivisions, pairing of Democrat incumbents, lack of district compactness and the partisan process of adoption.<sup>3</sup>

They cited figures from Dreyer's historical study to show that "Democrats would have to obtain landslide results of the order experienced in 1958, 1964, and 1974" to gain control of the House of Representatives. Their Exhibit 41 showed that "a Democratic vote approximately of 56 percent would be necessary to win the controlling 51st seat in the House."<sup>4</sup> In response to Grofman's critique of "anonymous" statewide races the attorneys emphasized that their exhibits were offered only to measure the "relative party strength in the districts and demonstrate the built-in bias of the plan in favor of Republicans."<sup>5</sup> In a footnote they took issue with Grofman's definition of "'competitive' as anywhere in the 40-60 range"<sup>6</sup> and attacked Grofman's characterization of the outcome of the 1982 senate elections as "proportional representation" arguing that while 13 of the "1982" SDs might be "Democratic," only five of the "1984" SDs were "predominately Democratic."

The attorneys returned to the issue of the MMDs that had been the focus of the original complaint. They reiterated how the use of 3-member HDs in Marion and Allen counties had "stacked" or "cracked" Democrats in such a way that they were only able to elect 3 out of 21 representatives from those counties—even though their candidates garnered 46.6 percent of the corresponding vote.

*Defendants' Post-Trial Brief.* Evans filed a 39-page post-trial brief in behalf of the defendants on December 23. It consisted of six sections the first of which listed seven criteria Defendants said they followed in crafting the plans. Of these the most notable was "least changed plan" by which they meant their plans "avoided placing two or more incumbents in the same...district."<sup>6</sup> and preserved MMDs from the 1972 plan where the incumbents involved did not want them divided into SMDs. In the second section of the brief Evans again cited the "perfect" PR results in the 25 senate seats up for election in 1982 and again attacked Dreyer's analysis of the SDs, in terms of their underlying partisan character, as an "attempt to crystal ball gaze with a cracked crystal."

Evans then proceeded to make the second and third of the many spurious seats-votes comparisons that characterized this controversy. We think it useful to summarize the various seats-votes comparisons and do so in Table 5.1. After listing six valid comparisons made by Democrats, and the improper 1982 senate comparison made by Grofman, we show the two new comparisons made in this brief. Obviously concerned by the 8.64 percent seats-votes discrepancy resulting from the 1982 house elections, Evans tried to compare the Democrats' 43 percent seats with the statewide vote percentage received by their 1982 Clerk of Courts candidate Evans: 49.2 percent.

This reduces the discrepancy to 6.2 percent. Then he goes another step and compares it with the mean percentage of all five Democrat statewide candidates: 48.9 percent.<sup>7</sup> This reduces the discrepancy to 5.9 percent.

*To whatever extent it may be valid to analyze any districting plan in today's American electorate in terms of Democrat-vs.-Republican bias, there must be some definition of what constitutes "Democrats" and "Republicans."* This is no small problem. One might use party registration figures but, in Indiana, that would leave large numbers of people unclassified. One might define it in terms of who voted for the Party's legislative candidates. But when one such candidate runs as far ahead of his party's statewide ticket as Democrat Stanley Jones did in HD 26 in 1982 it would be ridiculous to call his voters the "real" Democrats. In this imperfect world the most sensible alternative is the one chosen by Dreyer: the vote in an "anonymous"—or, at least, low profile—statewide race. That, as we shall see, is also the choice of Cranor/Crawley/Scheele and Backstrom/Robins/Eller. Grofman attacked this choice, but when pressed by Boehm had no better alternative to suggest.

Table 5.1

## BANDEMER: PROPER AND IMPROPER SEATS-VOTES COMPARISONS

Subject of Comparison	Improper Object of Comparison	Party Making Comparison	Proper Object of Comparison
House seats won by Democrats in 1982 (43)(= 43%)	-	Democrat Plaintiffs (Trial Exhibit 31)	Aggregate statewide vote received by Democrat candidates (51.64%)
Vote received by Democrat auditor candidate Cox in 1982 (51.1%)	-	Dreyer and Democrat Plaintiffs (Defendants' Trial Exhibit 300)	Number of House Seats carried by Cox in 1982 (44)(= 44%)
Vote received by Democrat auditor candidate Cox in 1982 (51.1%)	-	Dreyer and Democrat Plaintiffs (Dreyer Deposition Exhibit 030)	Number of Senate Districts carried by Cox in 1982 (22)(= 44%)
Mean vote received by Democrat auditor & Clerk of Courts candtes. (Cox-Evans) in 1982 (50.15%)	-	Dreyer and Democrat Plaintiffs (Dreyer Deposition Exhibit 019-020)	Number of House Seats carried by Cox-Evans in 1982 (38)(= 38%)
Mean vote received by Democrat auditor & clerk of courts candtes. (Cox-Evans) in 1982 (50.15%)	-	Dreyer and Democrat Plaintiffs (Trial Exhibit 39)	Number of Senate Districts carried by Cox-Evans in 1982 (20)(= 40%)
Vote received by Democrat court reporter candidate Neuhauser in 1976 (49.0%)	-	Dreyer and Democrat Plaintiffs (Trial Exhibit 41)	Number of House Seats carried by Neuhauser in 1976 (32)(= 32%)
Senate districts/seats won by Democrats in 1982 (13) (= 52%)	Aggregate vote received by Democrat candidates in the 25 districts up for election in 1982 (53.1%)	Grofman, Evans, and Defendants	NONE POSSIBLE
Vote received by Democrat Clerk of Courts candte. Evans in 1982 (49.2%)	House seats won by Democrats in 1982 (43)(= 43%)	Evans & Defendants (Post-trial brief, pg. 14)	Number of House Seats carried by Evans in 1982 (35)(= 35%)
Mean vote received by all 5 Democrat statewide candidates in 1982 (48.9%)	House seats won by Democrats in 1982 (43)(= 43%)	Evans & Defendants (Post-trial brief, pg. 14)	Number of House Seats carried by the mean vote of these 5 candidates in 1982 (?)(= ?%)
Mean vote recv'd by Demo. auditor ('82), clerk of courts ('82), & rptr. of courts ('80) candtes. (Cox-Evans-Senegal) (47.8%)	House seats won by Democrats in 1982 (43)(= 43%)	Judge Pell	Number of House Seats carried by the mean vote of these 3 candidates (?)(= ?%)

Given some plausible measure of underlying major-party preference, partisan bias in a districting plan (or “gerrymandering”) becomes a matter of *distribution* of a party’s supporters. Efficient distribution tilts the playing field in a party’s favor; inefficient distribution—as exemplified by over-concentration and dispersion of its supporters—tilts the field against the party. The common-sense way to apply the measure, regardless of what statewide race is employed as the measure, is to compare the measure’s votes with its “seats.” If actual legislative election results are the measure, then for the Indiana House in 1982, the relevant comparison is 43 percent seats versus 51.64 percent votes. If the Cox vote is the measure, the relevant comparison is 44 percent of the seats *carried by Cox* versus his 51.1 percent of the vote—not the 43 percent of the seats won by Democratic candidates. If the Cox-Evans mean vote is the measure, the relevant comparison is 38 percent of the seats *carried by Cox-Evans* versus their 50.15 percent of the vote—not the 43 percent of the seats won by Democratic candidates. These are alternative ways of quantifying the inefficient distribution of “Democratic” support—and they indicate Democrats suffer an 8-12 percent partisan disadvantage—but they are *internally consistent*. Evans may legitimately choose another race—or combination of races—as his measure, so long as he applies it *consistently*.

But Evans was right in asserting that even 8-14 percent seats-votes discrepancies do “not prove partisan gerrymandering.” They prove that Democrats suffered from a distributional inefficiency. They do not prove that the “distributional inefficiency” resulted from Republican manipulation. And here Evans helped his case by attaching “Exhibit B.” Exhibit B was derived from Dreyer exhibits depicting the distribution of partisan support in Marion County’s 739 precincts and revealed that 25 percent of the county’s “Democrats” resided in only 7.6 percent of its precincts. On the other hand, 92% of the county’s “Republicans” resided in 86 percent of its precincts.<sup>8</sup> These statistics were convincing evidence that Marion County Democrats

suffered from inefficient distribution—a distribution not resulting from Republican “gerrymandering” of precinct lines.

*Plaintiffs’ Post-Trial Reply Brief.* Boehm, Scanlon, and Swarbrick filed their rejoinder on January 5, 1984. The main body of this 17-page document claimed their “proof of a partisan gerrymander stands un rebutted.” It briefly affirmed that the first component of Stevens’ standard of proof had been met: Indiana Democrats were a salient class whose geographic distribution had been ascertained by the Republican mapmakers.<sup>9</sup> Turning then to the Senate, the brief forcefully stated what we have been saying throughout our commentary: the 1982-senate election results do not demonstrate “proportional” representation. Thirteen of the seats up for election “were either strongly or marginally Democratic.” Exhibit 39 suggested this, and the 1982 elections confirmed it. Exhibit 39 suggests that only 7 of the seats up for election in 1984 are “Democratic.” Exhibit 39 does not predict the outcome of any particular race, but “shows the likelihood of results statewide...and the bias of the plan overall.” In 1982 two Democrats won in “Republican” districts and two Republicans won in “Democratic” districts. “The only meaningful way to look at a plan is in terms of its overall statewide effect...the...map overwhelmingly favors Republicans and handicaps Democrats.”<sup>10</sup>

Turning to the House, the attorneys asserted that “it is difficult to draw meaningful conclusions regarding the fairness of legislative districts from...a particular election in a particular district.”<sup>11</sup> They would have done better had they realized what came to us in the preceding chapter: the Defendants’ definition of “competitive” district in terms of *legislative* election results was bogus. They attacked the “compactness guideline” by saying it was “disregarded.” Yet, their failure to provide any quantitative measurement of the compactness of these or any other districts in any of the plans hurt them. We shall, in Chapter 7, provide such measurements and thereby resolve these competing claims.

Finally, they attacked the “least changed plan” guideline by again arguing that the MMDs in the Republicans’ plans differed from the MMDs employed prior to 1972. As we observed in Note 19 to Chapter 4, all the fuss over whether this “guideline” was being followed missed the point: the plaintiffs should have been arguing that *this was not a legitimate “guideline” because the 1972 plans were also Republican gerrymanders.*

### *The Trial Court’s Opinion, Order and Dissent*

Nearly eleven months passed. The 1984 elections brought the second Reagan landslide and the 1982 Democratic gains evaporated. The aggregate statewide vote for Democratic candidates for the Indiana house dropped from 51.64 percent to 44.40 percent (see Appendix B) and the Democrats lost four seats, putting them back to 39. In the Senate they won seven of the 25 seats up for election, precisely the number implied by Dreyer’s Exhibit 39. Not the same districts in two cases, but the same *number of* districts. On December 13 the Court issued its opinion. For the first and only time in U.S. history a federal court had struck down a districting plan on grounds of partisan gerrymandering.

The judges split over the *Bandemer* claims with Noland and Brooks ruling for the Democrat plaintiffs and Pell filing a dissent supporting the Republican defendants.<sup>12</sup> Their opinion revealed that the Court majority had bought the plaintiffs’ argument:

“The parties have presented voluminous statistical data and argue the figures support their position in this lawsuit. This Court does not wish to choose which statistician is more credible or less credible. Instead, the Court refers to some basic statistical foundations which appear credible and reliable in making determinations about the impact of the...plan on Democratic candidates. Most significant is...that in 1982 Democratic candidates for the Indiana house earned 51.9 percent of all votes cast...However, only 43 Democrats were elected...it is possible this disparity is explained

by the Republicans fielding better candidates...The Court would readily concede this possibility, but the disparity between the percentage of votes and number of seats won is...a signal that Democrats may have been unfairly disadvantaged...”<sup>13</sup>

*Pell’s Dissent.* In his dissent Pell noted that “the Supreme Court...never has addressed directly the justiciability of a political gerrymandering claim,” and said he did not reach that constitutional question because he believed “the facts of this case do not demonstrate a political gerrymander.”<sup>14</sup> He stated the plaintiffs had failed to prove that the plan has diluted their voting strength as Democrats.”<sup>15</sup> Noland/Brooks had “emphasize[d] two numerical comparisons to prove vote dilution”: the 51.64 percent votes-to-43 percent seats discrepancy in the house and the 53.1 percent votes-to-52 percent seats discrepancy in the Senate. Pell did not think these figures signaled vote dilution. First, he quoted the Backstrom passage cited in Stevens concurrence, the defendants’ post-trial brief, and Note 22 of this chapter to argue that these discrepancies may “be the result of natural advantages.” He then proceeded to grossly misapply Backstrom’s methodology. We shall discuss the correct application of that methodology in Chapter 10. For the present, we describe only what Pell did. He correctly selected an “average of several statewide partisan races from recent elections” to arrive at a “base voting strength of the Democrats statewide.” Those races were ones that had also been employed by Dreyer:

<i>Contest and Year</i>	<i>Democratic Percent of Total Vote</i>	<i>Demo. Percent of Major-Party Vote</i>
Auditor of State, 1982	50	51
Clerk of Courts, 1982	42	40
Reporter of Courts, 1980	43	43
Average . . . . .	47	48



What he should then have done was to calculate the average of these three statewide races in *each of the plan's 77 HDs and 50 SDs, and count up the number of those districts in which "Democrats" were in a majority.* Had he done so he would have found them to be a majority in about 30-32 HDs, and in 15-17 SDs—proportions far short of their “46.8” percent of the statewide vote.

Instead, Pell finished his analysis by making an apples/oranges comparison of his “46.8” percent “base voting strength” with the 43 percent of seats the Democrats won in 1982 (when their statewide vote was over 50 percent), noting that this 3.8 (actually, 4.8) percent deficiency was not horrendous. Then he made an even more far-fetched comparison of his “46.8” with the 52 percent of the senate seats won by the Democrats in 1982, indicating a 5.2 (actually, 4.2) percent advantage for the Democrats! The foregoing counterfeit seats-votes comparisons have been added to Table 5.1 (rows 10 and 11).

### *The Appeal*

The Democrats had won a temporary victory, but Pell's dissent laid the foundation for their eventual defeat. On January 16, 1985 the Republicans appealed the decision to the U.S. Supreme Court. The case, for the first time, received national attention and as 1985 progressed, other parties from geographically and ideologically disparate quarters joined the struggle. We shall continue to focus upon the argument as made by the primary litigants themselves, as found in their pleadings. We begin with the plaintiffs' motion to affirm.

*Motion to Affirm.* Boehm/Scanlon/Swarbrick fired the first salvo in the form of a 21-page brief that was short on legal argument and focused mostly on reciting the evidence they had earlier proffered. It repeated the statement from their Post-Trial Brief that “the 51st most Democratic House district was...5.6 percent shy of the amount needed to unseat the majority.”<sup>18</sup> It maintained that the Court “has long stated that an apportionment plan that invidiously discriminates against a *political* group violates the equal protection clause.” That principle had

first been stated in *Fortson v. Dorsey*<sup>19</sup> and had been reiterated in six subsequent Supreme Court cases.<sup>20</sup>

The attorneys reviewed the evidence of discriminatory intent (quoting again from the Dailey and Bosma depositions) and effect. The 51.9 percent votes-to-43 percent house seats discrepancy was restated. Then they attacked the “superficial ‘fairness’” of the senate plan, based upon the 1982 election results, saying the “analysis suffers from a fatal fundamental flaw—it considers only half of the story.” They pointed out that “a slight majority of the statewide vote again in 1984” would likely give the Democrats only seven of the other 25 seats.<sup>21</sup> They called attention to the error in Judge Pell’s 3-race average that we cited in Note 18 and quarreled with his use of percent-of-*total* vote figures that we called attention to in Note 17. They said his “methodology is also flawed” because it averaged a “normal year” with a “Republican year,” leaving out any “Democratic year.” But here the attorneys missed the point. Including a “Democratic year” in the average would not have made the comparison valid. Their methodology was *also* flawed: as we said in our discussion of Pell’s dissent, its gross error lay in comparing the statewide vote in one race (or combination of races) to the number of seats carried in *another* race—rather than to the number of seats carried by the statewide candidate(s) in the race(s) employed as the measure.

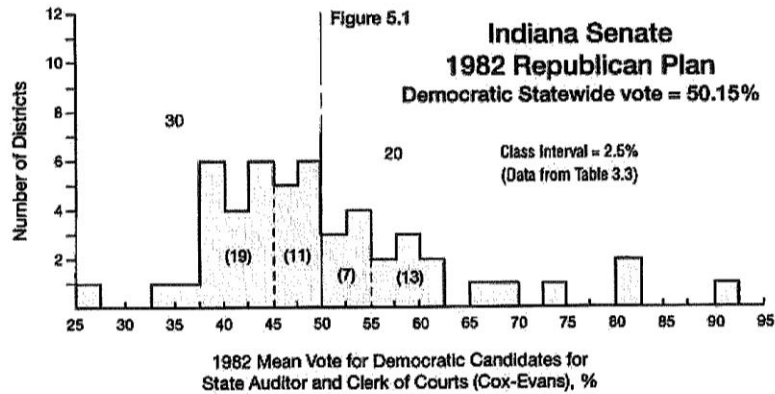
*Brief of Appellants.* As the case went before the Supreme Court, the Republican trial court defendants became the Appellants and the Democratic trial court plaintiffs became the Appellees. *Bandemer v. Davis* became *Davis v. Bandemer*. The ball was in the court of the appellants and they responded with a 41-page brief that contained some sound legal reasoning and more deceptive election statistics. In fact, deceptive statistics are so large a part of the Appellants’ brief and reply briefs that the remainder of this section will focus on this topic and forego comment on the other matters discussed in these documents. There are six deceptive statistics; the first four are presented in the *Brief*.

The *first deceptive statistic* was: “In the 1982 election, following reapportionment, there was an increase of three Democrats in the State Senate and six Democrats in the Indiana House.”<sup>22</sup> Evans did not mention what we noted at the end of Chapter 2: the statewide aggregate vote for Democratic house candidates had taken an upward swing of 5.12 percent: from 46.52 percent in 1980 to 51.64 percent in 1982. In addition, he didn’t mention what we also noted in Chapter 2 about the previous (1972) house plan: this plan had *also* been a Republican plan from which it could be assumed the Party had wrung what partisan advantage it could. If the 1972 plan had been impartially drawn, and the 1982 plan had been a Republican gerrymander, one might expect that whatever seats the Democrats gained as a result of a + 5.12 percent favorable “swing” would be erased by gerrymandering. Therefore, a Democratic gain of six seats would support a conclusion that the 1982 plan wasn’t gerrymandered. However, if the preceding plan had contained a roughly comparable bias, then one could expect a + 5.12 percent swing to give the Democrats a six-seat gain under a successor plan maintaining that same bias. This is what actually happened.

The *second deceptive statistic* involved a matter considerably more complex: the definition of “competitive,” or “marginal” districts. In our critique of the Grofman testimony in Chapter 4, we stated that “the real flaw in [his] analysis lay not in how to bracket the so-called ‘competitive’ races...[but]...in defining ‘competitive’ in terms of how much the legislative candidates won by, *rather than in terms of what odds the candidate faced by way of the underlying partisan character of the district.*” Without acknowledging that he accepted our critique (written 25 years later!) Evans now defined “competitive” in terms of the Democrats’ “45-55” bracket, and also used their “anonymous” statewide races as the measure of partisan character. For the senate—using Dreyer’s numbers from Trial Exhibit 39 (our Table 3.3)—Evans counted 13 “safe” Democratic seats and 18 “competitive” seats which, if they won all of, would give them a majority of 31 seats.<sup>23</sup>

That was getting closer to the truth, but it still fell short. As we noted in our critique of Grofman, the fact that a district falls within a “competitive” range does not mean either party has the same chance of winning it. By the definition we establish in Appendix C, the marginal (= “competitive”) bracket for the Indiana legislature is 44.4 to 53.9. But a Democratic candidate has a far better chance of winning in a district where the Cox vote was 55 percent than he/she does in a district where it was 45 percent. In Chapter 10 we show how one can figure the probability of a party’s winning a district based upon a “political index” derived from races similar to the ones Dreyer used. That methodology would indicate the Democrat’s chances of winning the “55 percent” district were something on the order of 80 percent, whereas in the “45 percent” district his/her chances are more on the order of 20 percent. Therefore, the *distribution* of districts within the “competitive” range is very important.

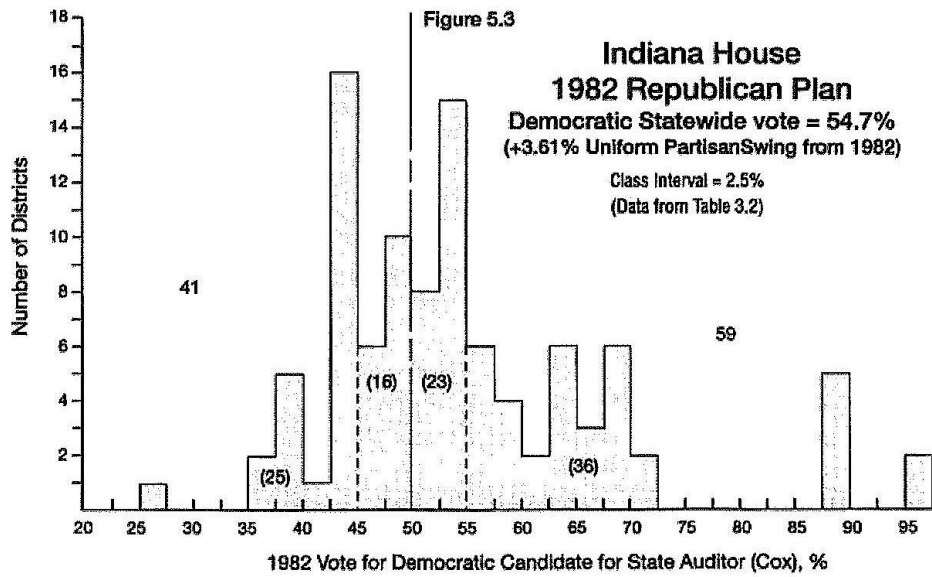
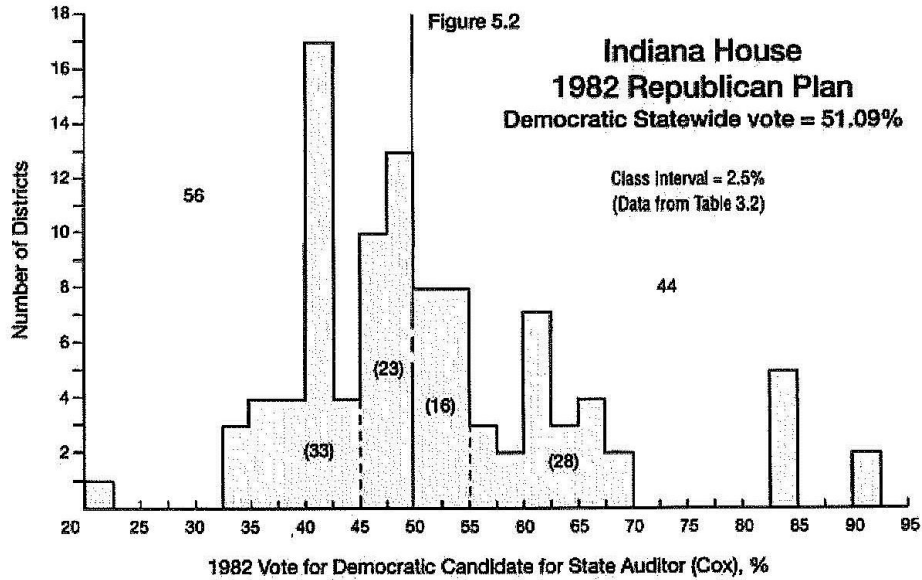
Figure 5.1 depicts the seats-votes relationship for the Indiana senate by means of a frequency distribution, or “histogram.” We shall discuss histograms in greater depth in Chapter 8, but here we simply say that this device gives us a simple pictorial representation of how skewed a districting plan may be in terms of its overall partisan character. Using the data from Dreyer’s Exhibit 39 we note that there are, indeed, 13 “safe” Democratic districts. We also note there are 19 safe Republican districts—so the Republicans have a built-in advantage of six seats, *even if the 18 competitive districts are all of the same partisan character*. When we look at the competitive districts, in the middle, we see that they are *not* of the same partisan character. Eleven of them lean Republican; seven of them lean Democratic. We could expect that in a year when the statewide vote for Democratic senate candidates is 50 percent the party would win only the seven competitive seats that lean Democratic, bringing their total seats to 20<sup>24</sup>—five short of an even split. To win all 18 competitive seats (making their total 31) they would have to get a statewide vote of 55 percent—something they didn’t quite attain, even in their peak (“Watergate”) year of 1974.



Now let's consider the house districts. Using the data from Dreyer's deposition exhibit 017-018 (Defendants' Trial Exhibit 300) given in Table 3.2, Evans counts 28 "safe" Democratic seats and 39 "competitive" seats, for a total of 67.<sup>25</sup> In Figure 5.2 we again depict the situation with a histogram. There are, indeed, 28 safe Democratic seats. There are also 33 safe Republican seats indicating, as above, a built-in Republican advantage of five seats. When we examine the 39 competitive seats we again note a 23-to-16 Republican advantage in the way they lean. But that isn't the whole story. In the senate histogram we were using a vote in which the statewide division was very close to 50-50. Here we are using a vote in which the Democrats have an additional 1.09 percent, and this difference leads to an underestimation of the plan's pro-Republican bias. In this kind of analysis one has to have an even division of the statewide major-party vote. Here is why.

Consider Figure 5.3. Here we have taken Dreyer's compilation of the Cox vote from Table 3.2 and added 3.6 percent to the Democrat's vote in each district<sup>26</sup> (that was the result of a 51.09 percent statewide vote) to approximate the situation in 1974 when the Party achieved its historical "peak" vote: 54.7 percent. We see the entire histogram shift to the right, with the Democrats now winning 59 seats.<sup>27</sup> If we use the "45-55" definition, we see there are 39 "competitive" seats—16 of them leaning Republican and 23 of them leaning Democratic. If we think for a moment, we realize the former 16 are not "competitive" seats at all, but safe Republican seats that have survived the maximum Democratic "swing." The latter 23 are the

marginally Republican competitive seats, which fell under the Democratic onslaught. By the same token, Figure 5.2 is labeling as Republican-leaning districts some that are actually safe Republican.

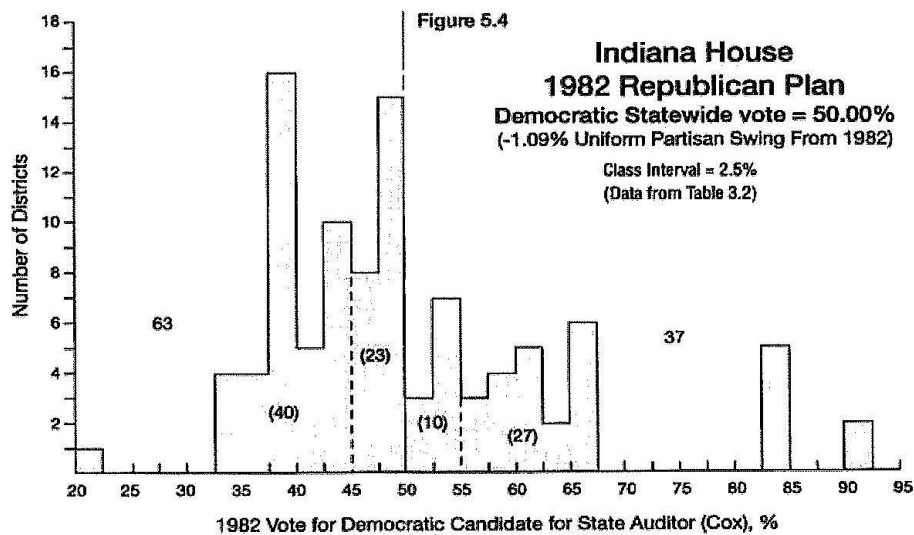


To get the true picture of “competitive” districts we must, therefore, subtract 1.09 percent from the Democratic vote in each district in Figure 5.2 to approximate an even split in the statewide vote. When we do this we get Figure 5.4, which tells us there are 27 safe Democratic seats, 33 “competitive”

seats, and 40 safe Republican seats. Of the “competitive” seats 23 lean Republican and 10 lean Democratic. With 50 percent of the statewide vote, we could expect Democrats to win 37 seats. This is a result far different than that conveyed by Evans’ interpretation of Dreyer’s numbers.

Evans went on to argue, “unconstitutional political gerrymandering must create a gross disadvantage to the weaker political group.” The Democrats suffered no “gross disadvantage.” All they had to do was win 13 of the 18 competitive seats in the senate, and 23 of the 39 competitive seats in the house, and they could “take control of the General Assembly under the challenged...plan.”<sup>28</sup> From the analysis we just conducted we know the hidden assumptions underlying Evans’ use of the adjective “competitive;” and know that all the Democrats needed to do to win control of the House was have another “Watergate” election; and to win the senate was to have a “Watergate” election *in a presidential year* following (or followed by) a good “off-year” election two years previous (or two years subsequent).

But his numbers game did not end with his tricky use of the word “competitive.” Evans now offered his *third, and most outrageously deceptive statistic*. We noted at the beginning of Chapter 3 that the ideal population of an HD was 54,902. One percent of this population would be 549 persons and two percent 1,098 persons. We can also observe from Table 3.1 that 872,430 votes were cast for Democratic state representative candidates or, on the average 8,724 votes per seat. One percent of that number would be 87 votes; two percent 174 votes. Calling 549 “a 1 percent increase in the Democratic vote in each HD,” and 1098 the vote “swing” resulting from a concomitant decrease in the Republican vote in the district, he arrives at 2196 as the swing resulting from “a 2 percent increase in Democrat votes statewide.”



Turning to Exhibit 32 (our Table 3.7) it can be seen that a 2198 vote “swing” would elect Democrat candidate Gondeck giving the Party 56 seats in the house.<sup>29</sup> True, indeed. However, 549 would be closer to a 6 percent “increase in the Democratic vote in each HD” and 1098 would be closer to a 12 percent increase. As we noted in Figure 5.3, the “Watergate” election of 1974 was only a 3.6 percent increase over the vote for Indiana Democratic house candidates in 1982.

Having concluded that “if the Democrats are able to increase their statewide vote by two percentage points...there are enough competitive seats with small enough vote margins that Democrats would sweep into control in the Indiana House,” Evans next attacked the trial court’s reliance upon the lack of PR manifest in the Democrats’ 51.9 percent-votes vs. 43 percent seats performance. Noting that the 51.9 percent figure includes votes cast in races for uncontested seats, Evans unveiled his *fourth deceptive statistic*: the more meaningful thing to compare the Democrats’ 43 percent seats with was 49.6 percent votes because we really should leave out the uncontested races. A still more meaningful vote percentage would be the 45.67 percent one gets when the votes cast in heavily Black/Democratic HD 51 are omitted, as well, because “there was only token Republican opposition” in that district.<sup>30</sup>

We believe that seats-votes comparisons from actual legislative/congressional elections are, at best, a less preferred tool for gerrymander analysis—especially when MMDs are involved



and when there are uncontested races. As we will discuss in greater depth in Chapter 8, including the votes from an uncontested race biases the statewide vote percentage in favor of the party whose candidate runs unopposed. But *excluding* those votes biases the statewide vote percentage in favor of the party not running a candidate. Some investigators have addressed this problem by making statistical estimates of how many votes the party *not* running a candidate *would have* received *had* it run a candidate.<sup>31</sup> That, of course, is guesswork.<sup>32</sup>

*Brief of Appellees.* Boehm/Scanlon/Swarbrick now faced their next-to-last chance to achieve a monumental advance in U.S. constitutional law. Their Motion to Affirm may have been short on legal argument, but this 56-page opus made up for it. Yet they said little of significance that we have not previously noted or discussed. In describing the “political impact of the plan,” the attorneys partially rectified the weaknesses in their claim of discriminatory impact manifest at trial, and in their three subsequent pleadings. They pointed out that if the “1982 baseline party vote” is aggregated among the districts of the Republicans’ plans, those plans “create 62 Republican and 38 Democratic [house] seats” and “30 Republican and 20 Democratic” senate seats. This was a crucial fact. The Democrats should have made it the centerpiece of their claim of discriminatory effect upon them, and hammered away at it. Instead, it gets submerged in additional—and largely irrelevant—statistics and argument about the wrong issue. The “additional statistic” is 50.009 percent, the “Democratic baseline vote” for 1982. It is the number arrived at by summing the major-party votes for Auditor, Treasurer, and Clerk of Courts given in Table 3.1 and taking the Democratic candidates’ percentage of that total.<sup>33</sup>

The “argument about the wrong issue” is a discussion<sup>34</sup> of what was the best measure of “baseline vote.” They argue for the mean of the 1976 court reporter and 1982 clerk of courts’ races (49.1 percent Democratic)—or, alternatively, the mean of these races from 1954 through 1982 (48.8 percent Democratic). They argue with Judge Pell’s choice of three 1980 and 1982 statewide races, completely missing the point we made in our critique of Pell’s dissent: it isn’t so much *what* race—or what combination of races—one employs as it is *what one compares the statewide vote in that race to*. By getting into an argument about “baseline vote” they were

implicitly conceding legitimacy to a flawed methodology they should have been denouncing: comparing the 43 percent house seats won by Democrats in 1982 to the statewide vote in *some other race*. As we said in our critique of Pell, regardless of what total vote from a statewide race—or combination of races—one employs, that total vote must be compared to the *percentage of seats carried by th(os)e statewide candidate(s) when his/her/their vote is aggregated among the districts in the plan*.

Plaintiffs' Exhibit 39 indicated that with 50 percent of the statewide vote in 1982 Democrats could expect to win 13 of the 25 seats up for election; and with 50 percent of the statewide vote in 1984 they could expect to win 7 of the 25 seats up for election. That is exactly the *number* of seats they won in each of those elections. In each election a few Democrats won "Republican" districts—and vice versa. These idiosyncratic outcomes canceled each other with the result being a vindication of Dreyer's methodology. The 1984 election outcome should have put an end to the Appellants' talk about "proportional representation." It didn't.

The most significant topic in the remainder of the brief was the Democrats' attempt to refute Appellants' arguments that "judicially manageable standards" were lacking in political gerrymandering cases. Claiming that "any of several 'bright line' tests" were "available to the Court," Boehm affirmed that the requisite standards "are not merely available, they abound."<sup>35</sup> There were three "bright lines." The first was a "mix of different sized districts." Presence of MMDs signaled gerrymandering and required justification. The second was nesting. Where the number of HDs was an integral multiple of the number of SDs the plans should be nested. If not, then the legislature "must bear the burden of showing a proper state interest."<sup>36</sup> The third "bright line" was "deviation from (*i.e.*, fragmentation of) political units." Left unsaid was how one would decide what was excessive fragmentation for a given population deviation.

With this brief Boehm and his team would persuade the U.S. Supreme Court to say, for the first time, that partisan gerrymandering was justiciable. They would also persuade the Court that the Defendants had intentionally tried to harm the Plaintiffs. But their case for discriminatory

*effect* had not been overwhelming. They had not demolished the four “deceptive statistics” we identified in Evans preceding brief—and there were two more “statistics” on the way. Some members of the Court must have been uneasy as they looked over the horizon and wondered how they would adjudicate the avalanche of gerrymandering cases to come if they affirmed the trial court and their only criteria were Boehm’s three “bright lines.” Beyond that, neither Plaintiffs nor Defendants was saying anything about a remedy—but that did not mean the Court would not have to deal with the matter.

*Reply Brief of Appellants.* Evans was now facing *his* next-to-last chance to preserve his party’s advantage in Indiana even as his party, at the national level, was giving aid and comfort to the Democrat enemy.\* In August 1985 he crafted a 19-page reply to the Indiana Democrats and their assorted allies. For six pages he pounded away at the theme developed in his previous brief and never effectively rebutted by Boehm, that the plans’ adverse impact upon the Democrats was minimal. First, he slammed the Carson and Crawford plans in a footnote that bears quoting almost in its entirety:

“The alternative plans were certainly no better and arguably much worse than the [Republican’ plans]. Indeed, it ill becomes the Democrats to raise an issue of partisan gerrymandering when the Crawford Plan they espouse would have put 16 House incumbents...in SMDs with another incumbent, 13 of whom would have been Republicans. Similarly, in the Senate, the Democrats’ Carson Plan would have put 14 incumbents in the same district with another incumbent, 12 of whom would have been Republicans....In marked contrast to the Democrats’ plans the [Republican plans] place no incumbents in the same district in the Senate, and only two [house] incumbents in the same district *in all of Marion, Lake, and Allen counties. (sic).*”<sup>37</sup>

As we shall see later, these statements were mostly true. The only disingenuous part pertained to house incumbents. What Evans *didn't* say was that, statewide, *six* incumbents had been paired, *all of them Democrats*; and that four of them were *outside* of “Marion, Lake, and

Allen counties.” After more discussion of the Democrats’ 1982 electoral gains and argument over “baseline vote” Evans delivered what may have been the knockout punch. He picked up on his argument that there were enough “competitive” districts in both the house and senate plans that with “more attractive” candidates in a year like 1982 the Democrats could win control of both houses. We have shown (*i.e.*, “deceptive statistic” Number Two) how tricky had been Evans’ use of the adjective “competitive,” and in our concluding comments on the Brief of Appellees noted how the Democrats failed to challenge the deceptive statistics. Now Evans also noted this failure and drew the Court’s attention to it, saying, “The Democrats make no direct response...”<sup>38</sup> The Democrats had filed their final brief, so Evans was now free to offer more deceptive statistics.

As indicated, this document was constructed from Dreyer’s deposition exhibit 017-018. As we noted in our earlier analysis of deceptive statistic Number Two, its first error lay in using a statewide vote that did not represent an even split between the parties but one in which the Democrats were a 1.09 percent majority. This leads to counting as “competitive” seven seats that are actually “safe Republican;” counting as “marginal Democrat” seven seats that are actually “marginal Republican;” and counting as “safe Democrat” one seat that is “marginal Democratic.” Making the proper 1.09 percent correction gives us 40 (not 33) safe Republican, 33 (not 39) “competitive” (or “marginal”), and 27 (not 28) safe Democratic seats. We therefore begin with a 13 percent Republican advantage in safe seats—even when there is an even split in the aggregate statewide vote. (Compare Figure 5.2 with Figure 5.4.)

Further, the 33 “competitive” seats are skewed in favor of Republicans: 23 lean Republican; only 10 lean Democratic. Finally, if each party wins all of and only its safe and marginal seats, the Republicans come out ahead 63-37—even with a 50/50 split in the statewide

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\* Following the 1978 and 1980 elections, Democrats controlled redistricting in most states and Republicans were supporting districting reform efforts in those states. A good example was Ohio, next door, where Republican money was funding a constitutional amendment, proposed by initiative petition, to reform the state’s redistricting procedures. All this we said earlier. Now for the new Evans twist: added to the original table is our

Column 5 giving the actual 1982 election results in these 40 seats; and a second column (Column 6D) indicating seats Democratic legislative candidates would have won had they run as well as their party's Auditor candidate—Otis Cox. After an irrelevant observation Evans goes for the jugular. He says:

“Statistics prepared by the Democrats themselves show that they could have controlled the House ... in 1982 if their losing candidates had not run behind their own ticket ... Combined with the 43 seats they actually won, the Democrats would have gained absolute control with 51 votes if they had been able in 1982 to do as well in the races they lost as the very statewide averages they rely on.”<sup>39</sup>

How does he reach this conclusion? If the Democratic house candidates had won—instead of lost—the “competitive” seats carried by Cox [HDs 36, 9(Budak), 32, 10(Ayres), 56, and 33] they would have had six more. In addition, had the Democrat won “safe” Democratic HD 71, the Party would have had seven. Finally, had Democrat Wilbur Wright won in HD 62, a district lost by Cox but carried by the Cox-Evans mean vote (50.1 percent), the Party would have captured 51 seats—a majority.

The foregoing statements are true. It is also true that the Chicago Cubs could win the next World Series. Let's put Evans' statements in perspective. If we can accept the Cox vote as a reasonable indicator of partisan character, then—in 1982—“Democrats” had a 51.09 percent super-majority in votes, but were a majority in only 44 percent of the seats. Despite this distributional handicap, four of their candidates (Avery, Turner, Klinker, Jontz) ran ahead of “the ticket” capturing marginally Republican seats beyond the seven that moved into the Democratic column as a result of the 1.09 percent partisan “swing.” Two additional Democrat candidates (Hayes, Jones) did even better, winning “safe” Republican seats.

Offsetting these unanticipated gains, however, were four Republican incumbents (Espich, Ayres, Hibner, Hoover) who were able to hold on to marginally Republican seats despite the 1.09 percent “swing;” two other incumbents (Kiely, Budak) held on in marginally Democratic seats;

and a seventh (Wathen) who continued to be re-elected in a “safe” Democratic district. *Both* parties, therefore, had candidates whose personal appeal exceeded that of their party, presumably because they were more “sensitive to the interests of the voters and the issues of the day.”<sup>40</sup> These candidate effects virtually canceled each other, with the resulting election outcome almost exactly what one might have expected on the basis of the political complexion of the districts and the partisan swing.

Evans was saying that all the Democrats had to do to prevail in the face of his party’s gerrymander is have a 1.09 percent partisan swing in their favor; win *every* seat carried by their auditor candidate (Cox), win a seat not carried by Cox but carried by the mean vote of Cox and their Clerk of Courts candidate (Evans, P.), win six of the remaining marginally, and safe-Republican seats—and *then* they would attain a bare majority of 51. Let’s put the shoe on the other foot by figuring how many seats the Republicans would have by this same set of rules: First, give them every seat carried by their 1982 auditor candidate (Loos), if Loos had received 51.09 percent. That means adding 2.2 percent to the Loos vote in each seat, or—what amounts to the same thing. This would give the Republicans every seat beginning with HD 46 on line 37, for a total of 64. Then give them HD 17—the closest district that would have been lost by Loos under this scenario, but carried by the Loos- O’Laughlin mean.<sup>41</sup> Finally, give them the three marginal- and safe-Democratic districts [HDs 9(Budak), 36, and 71] where their candidates ran ahead of the party “baseline,” even when it stood at 51.09 percent. The total comes to 68. By Evans’ logic, his party’s House plan would give it 68 seats for the same electoral performance required of the Democrats to win 51 seats.

We said this artful manipulation of numbers “may have been the knockout punch.” If not that, it did constitute *Evans’ fifth “deceptive statistic.”* If the Democrats were now on the canvas, Evans gave them two more gratuitous blows. The first was his repetition, for the *n*th time, that “the 1982 senate elections resulted in full proportional representation.”<sup>42</sup> Grofman had first thrown that punch at trial, and it was still working. The second was his citation of the seats-votes

differentials resulting from the first election (1972) held under the Connecticut house and senate plans litigated in *Gaffney*. The plans had been justified by the defendant-appellants as an effort to “allocate political power between the parties in accordance with their voting power.”<sup>43</sup> The Supreme Court in 1973 (therefore, in awareness of the 1972 election results) had upheld the plans saying PR had been achieved “within quite tolerable limits.”<sup>44</sup> In elections to the House Republicans had received 8.71 percent more seats than votes; in elections to the Senate 9.70 percent. Each of these discrepancies exceeded the 8.64 percent discrepancy in *Bandemer*. How, therefore, could the High Court rule that 8.64 percent was excessive?

The final kick to the prostrate Democrats was Evans’ sixth “deceptive statistic.”

“Not only is this 1982 Indiana seat-vote differential within constitutional limits, but any difference at all on a district basis can be explained by factors other than partisan political gerrymandering. For example, in the three most populous counties ... the total vote was much greater in 1982 where the Republicans won than where the Democrats won ... the total vote per winning [Republican] candidate ... was 51,277 ... the comparable ... vote per Democratic winning candidate ... was only 32,298. Since it took the Republicans many more votes per winning candidate than it took the Democrats in these three counties, ... the Democrats made more effective use of their votes in winning their seats, and ... the Republicans ‘wasted’ more votes to win their seats ... the [trial] court leaped to its conclusion that there was unconstitutional gerrymandering because it saw a [misleading] ‘signal’ in the seat-vote relationship.”<sup>45</sup>

Evans’ “Votes per Winning Candidate” appear near the bottom of Column 4 for the Republicans; Column 8 for the Democrats. Their derivation can be verified by a brief study of the table. They do nothing to explain the fact that—either statewide, or in these three counties—it was *the Democrats* whose “wasted” votes resulted in an adverse seats-votes discrepancy. The fact that *total votes* cast (*i.e.*, “turnout”) was heavier in areas that elected Republicans than in areas that elected Democrats means nothing. What is significant in these counties is revealed by

comparison of columns (2) and (7): Republicans won their 20 seats with a mean percentage of 59.6—a “safe” but not excessively wasteful margin. Democrats, on the other hand, won their 10 seats with a mean percentage of 87.9—a very wasteful excess.

Another way of measuring wasted votes is, for each party, to add together the votes cast for its losing candidates and the pluralities for its winning candidates in excess of one vote. Below the table are the applicable calculations. Line (A) shows that for the Democrats it is the 414,767 votes cast for their losing candidates, plus the difference of Column (7) minus Column (6)—reduced by one vote per district to reflect that a one-vote plurality is necessary to win each district. Line (C) shows that the 659,269 wasted Democrat votes is 2.80 times the 235,212 wasted Republican votes.

A third way of measuring wasted votes is the way Dreyer did it, as shown in Table 3.5. Add together *all* the votes cast for a party's candidates and divide by the number of races it won. In this set 649,999 votes were cast for the Republican candidates in all 30 races. As Line (D) indicates, dividing this by 20 races won gives 32,500 votes cast per seat won. For the Democrats the corresponding figure is 69,851—2.15 times the votes required to elect a Republican in these 12 districts. Regardless of the methodology employed to calculate a “wasted vote” index of partisan bias, the conclusion is usually the same: the plans are biased against Democrats. The defendant-appellants, by means of deceptive statistics the plaintiff-appellees “made no direct response” to, succeeded in masking the true magnitude of partisan bias in their plans. Yet they had one legitimate argument: this bias was a consequence of geography; not of their manipulation of district boundaries. There was no evidence as to the truth or falsity of that claim.

Evans returned for a final time to the justiciability issue. He argued that a right against *vote dilution* is provided under the Fourteenth Amendment only if a suspect class, (*e.g.*, oppressed minorities) is affected.<sup>46</sup> Democrats, he said: “belong to a political party of enormous wealth and influence ... The spectacle of Democrats seeking to cloak themselves in protections tailored to victims of racist oppression would be amusing if it did not threaten to impinge on the



constitutional protection already afforded racial and ethnic minorities by this Court.”<sup>47</sup>

Here was an equal protection theory that conflicted in a major way with the one advanced by Boehm, rooted in *Beazer's* command that “the state must govern impartially,” and repeated in Justice Stevens’ concurrence in *Karcher*. It would reappear three years later when another panel of judges took up a Republican challenge to a Democrat gerrymander of California’s congressional districts. The Supreme Court would face a major struggle in reconciling these theories. And now the bell was sounding for the final round in *Bandemer*: oral argument before that Court.

*Oral Argument Before the U.S. Supreme Court.* The final round of *Bandemer* would last one hour and 18 minutes. Evans went first. Justice White interrupted<sup>48</sup> asking whether the appellants weren’t arguing that this case shouldn’t be reviewed on the merits because it was non-justiciable—and further, what significance Evans attributed to *Gaffney*. Evans hastened to affirm that, yes, Appellants believed *Bandemer* was not justiciable. He was pushed by White to say he did not consider “even the most extreme example of gerrymandering” subject to judicial review and that he was drawing a line “between partisan gerrymandering and racial gerrymandering.”<sup>49</sup> White came back to *Gaffney*. Evans used the opportunity to make his point that the 1972 seats-votes discrepancies under the *Gaffney* plans had been greater than those under the *Bandemer* plans.

Then Justice Powell broke in asking if the one-man one-vote rule is met, “that’s the end of the case?”<sup>50</sup> Evans said “that is correct” as Powell rephrased his question, maneuvering Evans into successively more extreme positions.<sup>51</sup> Powell took up the issue of intent, asking about the Dailey/Bosma statements which Evans downplayed saying that the Court should look at the “bottom line”: the effect of the plan on the Democrats. Powell followed with questions about the criteria employed in crafting the plans, to which Evans gave his usual answers adding, “you must recognize that no other alternative plan was ever presented in the ... Assembly.”<sup>52</sup> Powell continued with more questions about the exclusionary legislative process which Evans continued to discount emphasizing, instead, the “many marginal districts” in the plans and repeating, for the final time, his claim that “there were 67 seats in the House in the 1982 election

that were either safe Democrat or competitive seats within a 45 to 55 percent range.”<sup>53</sup> The Court recessed for a 42-minute lunch break, following which Evans asked to reserve the balance of his time for rebuttal and permit Boehm to make his presentation.

Boehm began by “correcting ... a few factual misapprehensions that the Court may have gained” from things said by Evans. First, of course, were the Democrats’ alternative plans that *were* “presented to the ... Assembly” but “never saw the light of day.”<sup>54</sup> Second, Evans’ “competitive” districts could be won by Democrats only if “an additional 15 percent of their legislative candidates ... had run an additional 10 percent ahead of the top of the ... ticket.” Referring to the appendix to the appellants’ reply brief as a “manipulation” of Plaintiffs’ data, Boehm asserted that even that data “demonstrates that the high-water mark for the Democrats doesn’t do the job...”<sup>55</sup> Third, the MMDs prior to 1972—in contrast to the current ones—were based on counties and were not “done for invidious discriminatory purposes.”<sup>56</sup>

Justice White asked Boehm if it wasn't true that he would regard any plan that didn't yield “close to perfect PR” as “a violation?”<sup>57</sup> Boehm denied it, saying Democrats did not lay claim “to any specific number of seats;” only freedom “from a statute that arbitrarily ... harms us.”<sup>58</sup> Then, in words indicating he was looking over the horizon and thinking about a remedy, White asked

“What if we were to uphold your claim ... and ... it goes back to the Indiana legislature, and this time they say, the Republican majority says, we can still get the Democrats and that is what we intend to do, but we will kind of preserve county lines in most of them. Now, would that eliminate your claim, or would you still have the claim even though there was some neutral factor they could point to, if their intent was simply to get as much for the Republicans as they could, and that preserving county lines was just a kind of a gimmick?”<sup>59</sup>

Boehm never gave a “yes” or “no” answer. He said “preserving county lines ... just like population equality, is a restriction.” He said, if MMDs were employed, there had to be “a

proper governmental reason” for it; and launched into a lengthy recitation of the adverse impact of the MMDs in Marion and Allen counties upon Democrats.<sup>60</sup> What he said was true, but it did not answer White’s question. He did not see the slippery slope leading into the “reapportionment slough” that White foresaw in *Gaffney*, if the Court held for the appellees.

Boehm skirted close to prescribing a remedy that would obviate any arguments over legislative intent:

“...a procedural remedy whereby you place the drawing of a map in the hands of somebody whose motives are not inherently suspect ...”<sup>61</sup>

Then came this exchange:

WHITE: “When you say something is unfair, it suggests a standard of fairness. Now, just what would be the fairest thing to have done?”

BOEHM: “... the most fair thing to do ... is to have an arbitrary checklist of objective criteria, that you go down until you come to the map that meets most of them. For example, you initially look at the equal population requirement ... Second, how few county lines does it break? Third, how few city lines does it break? Fourth, how compact are they?”<sup>62</sup>

White asked what if the legislature wanted to break city or county lines? Boehm said it would have to justify the fragmentation. White then asked what if such a fragmentation “incidentally discriminates against Democrats?”<sup>63</sup> Here he was getting at something that will occupy our attention for a major portion of this book. But neither White nor Boehm had explored the Unintentional Gerrymander Hypothesis. So the implications of this question were left dangling as Boehm conceded that even if the legislature “played a few games within those parameters,” one “would have accomplished a great deal.”

In a hint of how the case would go Justice Brennan now asked:

“Mr. Boehm, if your view prevails, do you suppose it will make much work for the

judiciary?”<sup>64</sup>

Boehm compared his case to *Baker v. Carr*: “There will no doubt be a time of adjustment, but” the state legislatures will “adapt”—as they did to one-man one-vote. Brennan wasn’t satisfied. He pursued with a similar question to which Boehm replied that plans could be evaluated by “objective, quantifiable” criteria and the states required to justify departures from such criteria. There were a few more exchanges.<sup>65</sup> Then Boehm’s time was up.

It was again Evans’ turn. He fought back on the issue of whether alternative plans had been presented. None, he said, “was presented ...that followed the guidelines that were followed ...”<sup>66</sup> Justice White resumed the interrogation with a series of pointed questions concerning the justification for the MMDs, to which he received only evasive answers. Then Stevens asked on what ground the trial court had voided the plans. Evans said it had been “basically upon a seat-vote ratio,” and then trotted out Deceptive Statistic Number 4 from the Brief of Appellants: “the Court should only consider contested seats ...”<sup>67</sup> Boehm could only bite his fingernails now. He had a chance to shoot that one down in his final brief and hadn’t done it. Here it was (along with five others) to haunt him. Stevens’ final series of questions afforded Evans opportunity to repeat, for the final time, that there were

“no other plans presented to compare with [our plans]. That ... is a fatal defect in the case. Before you get into this quagmire ... political thicket, at least they should have put something before the Court, to see clearly that there was some other way to do it with less damage to the Democrats.”<sup>68</sup>

That ended the oral argument. The Democrats had, of course, presented alternative plans. But the Carson and Crawford plans were not the kind the Democrats needed to win this case and complete “the unfinished reapportionment revolution.” Now came the longest wait.

### *The Supreme Court’s Decision*

On June 30, 1986 the wait was over. Eight months and 23 days after oral argument; four

years, five months and 18 days after the complaint was filed; six years and two months after the first versions of the plans were passed the *Bandemer* round in the unfinished struggle for democracy was over. The Democrat-plaintiffs-appellants lost 2-7.

As might have been predicted from a reading of *Karcher*, and familiarity with the oral argument, the two votes to uphold the trial court were justices Stevens and Powell. The reformers had been defeated—but not routed. In addition to Stevens and Powell, four other justices—White, Brennan, Marshall, and Blackmun—had opined that partisan gerrymandering was justiciable. Only three justices—Burger, Rehnquist and O'Connor—opined that it was a non-justiciable “political” question. Commentary on this decision by lawyers and political scientists has been extensive. In essays which together constitute over one-fourth of the book in which they are printed two of the nation’s leading scholars of the districting issue—Daniel Lowenstein and Bernard Grofman—interpret *Bandemer* in sharply divergent ways.<sup>69</sup> The reader is encouraged to read these essays, as well as this one, and decide for him/herself what makes the most sense. We limit our commentary to what we believe are the decision’s salient themes.

*The Plurality Opinion.* The salient theme emerging from an examination of the plurality opinion is whether there are “judicially manageable and discernible standards” for adjudicating political gerrymandering claims—specifically whether only groups suffering oppression can successfully state such claims. Part III Section B, in five pages of prose that has befuddled most commentators, erects the threshold of discriminatory *effect* that must be attained by a group bringing a partisan gerrymandering claim. That threshold is *not* failure of the complaining group to achieve proportional representation. In its MMD cases involving race the Court had required that the plaintiffs suffer from *additional* handicaps in the political process, besides “a mere lack of PR, to support a finding of unconstitutional vote dilution.” In a sentence whose meaning has become the subject of intense debate Justice White wrote:

“...unconstitutional discrimination occurs only when the electoral system is arranged in a manner that will consistently degrade a voter's or a group of voters' influence on the

political process as a whole.”<sup>70</sup>

A finding of equal protection violation

“... must be supported by evidence of continued frustration of the will of a majority of the voters or effective denial to a minority of voters of a fair chance to influence the political process.”<sup>71</sup>

Not to require more discriminatory effect than the trial court had in *Bandemer* would establish “such a low threshold for legal action” as to “invite attack on all or almost all reapportionment statutes” and “would embroil the judiciary in second guessing what has consistently been referred to as a political task for the legislature ...” It is difficult to carefully read Section B without concluding that Lowenstein is correct.

Part III Section C then measured the magnitude of the discriminatory effect suffered by the *Bandemer* plaintiffs against the threshold established in Section B.

“...is not helpful where the claim is that such districts discriminate against Democrats, for it could hardly be said that Democrats, any more than Republicans, are excluded from participating in the affairs of their party or from the processes by which candidates are nominated and elected.”<sup>72</sup>

With regard to the evidence applicable statewide, however, there is no talk about the Democrats’ evidence being inadequate because they failed to show they suffered adverse discrimination in *other* aspects of “the electoral system.” Instead, White recites about ten inadequacies of the trial court’s findings concerning the districting plans—all this lending support to Grofman’s interpretation. We shall defer our appraisal of these “inadequacies” until Chapter 14. The only point we want to make, at this time, is that there was no point in White’s getting into all this discussion of the districting plans if failure of Democrats to suffer from *other* features of “the electoral system” was going to defeat their claims anyway.

*The Concurrences.* Justice Burger’s two-paragraph separate concurrence was described

by Lowenstein as “a grunt that, if taken seriously, cannot be read as anything less than a renunciation of *Baker v. Carr*.”<sup>73</sup> Justice O’Connor’s concurrence, however, was a thoughtful 17-page treatise with which we, somewhat surprisingly, find ourselves in almost total agreement. She was frightened by the implications of the plurality’s opinion:

“The step taken today is a momentous one, which if followed in the future can only lead to political instability and judicial malaise. If members of the major political parties are protected by the Equal Protection Clause from dilution of their voting strength, then members of every identifiable group that possesses distinctive interests should be able to bring similar claims ... There is simply no clear stopping point...”<sup>74</sup>

She believed “the Court’s reflexive application of precedent” was going to “inject” it

“...into the most heated partisan issues. It is predictable that the courts will respond by moving away from the nebulous standard a plurality of the Court fashions today and toward some form of rough proportional representation for all political groups.”<sup>75</sup>

Going back to *Baker v. Carr*, she examines the criteria it used to define a non-justiciable “political question.” She could not agree with White when it came to Criteria 2 and 3: a partisan gerrymandering claim presents a question where there is “a lack of judicially discoverable and manageable standards” for its resolution. Moreover, it also requires “an initial policy determination of a kind clearly for non-judicial discretion.” The equal protection logic of *Baker v. Carr* does not imply justiciability to partisan gerrymandering because

“The right asserted in *Baker v. Carr* was an individual right to a vote whose weight was not arbitrarily subjected to ‘debasement’ ... The rights asserted in this case are *group* rights to an equal share of political power and representation... *Reynolds [v. Sims]* makes plain that the one person, one vote principle safeguards the individual’s right to vote, not the interests of political groups...”<sup>76</sup>

The Court has recognized “group rights” only in the context of minority discrimination. In such cases there is a “stronger nexus between individual rights and group interests. ... Even

so, the individual's right is infringed only if the...group can prove that it has 'essentially been shut out of the political process.'"<sup>77</sup> Clearly, Democrats and Republicans cannot claim they are members of such groups. These "parties *are* the dominant groups." They are capable "of fending for themselves." Then she asked why a *bipartisan* gerrymander, which the Court approved in *Gaffney*, affected "individuals any differently than a partisan gerrymander, which the Court makes vulnerable to constitutional challenge today."<sup>78</sup> It "employs the same technique" of packing partisan voters into safe districts, wasting their votes, and reducing the influence of independent voters.

"If this bipartisan arrangement between two groups of self-interested legislators is constitutionally permissible, as I believe and as the Court held in *Gaffney*, then—in terms of the rights of individuals—it should be equally permissible for a legislative majority to employ the same means to pursue its own interests over the opposition of the other party."<sup>79</sup>

Indeed, if bipartisan election rigging is permitted by the Constitution, why shouldn't partisan election rigging be permitted, as well? She attributed to the Plurality the following "initial policy determination":

"The Court has in effect decided that it is constitutionally acceptable for both parties to 'waste' the votes of individuals through a bipartisan gerrymander, so long as the *parties* themselves are not deprived of their group voting strength to an extent that will exceed the plurality's threshold requirement. This choice confers greater rights on powerful political groups than individuals; that cannot be the meaning of the Equal Protection Clause."<sup>80</sup>

If Justice O'Connor believes "powerful political groups" should not enjoy "greater rights" than individuals, then shouldn't the Constitution prohibit *both* kinds of gerrymandering, rather than tolerate both kinds? Why the disconnect? She leaves that question unanswered as she concludes her concurrence by arguing that PR is the only manageable standard available to the plurality.



But if PR were made that standard by judicial edict, it would constitute “a fundamental policy choice that is contrary to the intent of the Framers and to the traditions of this republic.”<sup>81</sup>

If there are no judicially discoverable or manageable standards for defining what is and what is not an unconstitutional partisan—or bipartisan—gerrymander, then it is better to permit the continuation of both kinds, even if it does mean that “powerful political groups” will enjoy “greater rights” than individuals.

*The Dissent.* We finally arrive at the opinion of the justices whose attitudes on the issue at stake are closest to ours. But no salient theme emerges from Justice Powell’s five-part 24-page statement. In concurring with the plurality opinion affirming justiciability, but dissenting from its holding that the discriminatory effect of the plans upon the Democrats was insufficient, it touches lightly upon several themes but explores none in depth. The prime example of this is the opening sentence of Part 2-B: “the Equal Protection Clause guarantees citizens that their state will govern them impartially.” Having stated what we regard as the central issue in the whole districting controversy he fails to back it up with supporting argument or citations from the case law. Instead, he wanders off into a discussion of what constitutes “equal representation,” group rights, “neutral factors,” and the failure of the plurality “to enunciate any standard that affords guidance to legislatures and courts.”

Powell and Stevens define an unconstitutional gerrymander in somewhat broader terms than used by the plurality—and this is a major reason why they reach a different conclusion on the merits. Their definition comes from Justice Fortas’ concurring opinion in *Kirkpatrick v. Preisler*: “the deliberate and arbitrary distortion of district boundaries and populations for partisan or political purposes.”<sup>82</sup> This leads Powell to assess the “fairness” of a districting plan not simply by its political effect on the “out” party but also by its “distortion of district boundaries,” its non-“observance of political subdivision lines,” and “the (exclusionary) legislative process by which the challenged plan was adopted.”<sup>83</sup> The dissenters appear to regard these factors as harms in and of themselves. Curiously, Powell distinguishes between

“gerrymandering in the ‘loose’ sense [and] gerrymandering that amounts to unconstitutional discrimination.”<sup>84</sup> Lowenstein, in a scathing analysis, shows how absurd decisions on districting plans could follow from this distinction.<sup>85</sup> Justice White is also “not completely clear as to” the reasons for such a “distinction.”<sup>86</sup> We do not find it helpful either. As we shall argue later, partisan gerrymandering is really a question of partisan *bias*, and bias is a continuum with no “bright line” demarcating what is permissible from what is proscribed. Overall, this dissent is not of the caliber that would lay the foundation for an historic advance in constitutional law. We shall defer further comment on the Supreme Court’s *Davis* decision until Chapter 14.

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## Notes

<sup>1</sup>Ibid., pp. 7-8.

<sup>2</sup>Ibid., pg. 6 (quoting trial court opinion 603 F.Supp. at 1485)

<sup>3</sup>O’Laughlin was the Republican Clerk of Courts candidate. The Loos-O’Laughlin mean vote can be obtained by subtracting the Cox-Evans mean vote in Trial Exhibit 35 from 100; and then adding 2.2. The Cox-Evans mean vote for HD 17 = 52.1; Loos-O’Laughlin = 47.9; Adding 2.2 makes it 50.1.

<sup>4</sup>Reply Brief of Appellants, pg. 9 note 5.

<sup>5</sup>Ibid., pg. 9.

<sup>6</sup>412 U.S. 735, 754 (1973).

<sup>7</sup>Reply Brief of Appellants, pg. 9-10.

<sup>8</sup>Ibid.

<sup>9</sup>Ibid., pg. 17.

<sup>10</sup>Ibid., pg. 9.

<sup>11</sup>Ibid., pp. 10-11.

<sup>12</sup>Ibid., pp. 12-13.

<sup>13</sup>Ibid., pp. 13-14 (i.e., "So, by Gerrymandering, one party could put the other party entirely out of business ... without discriminating against the voters in the other party"?).

<sup>14</sup>Ibid., pg. 16.

<sup>15</sup>Ibid., pg. 18.

<sup>16</sup>Ibid., pg. 21.

<sup>17</sup>Ibid., pg. 22.

<sup>18</sup>Ibid., pg. 23.

<sup>19</sup>Ibid., pg. 25.

<sup>20</sup>Ibid., pg. 26.

<sup>21</sup>Ibid., pg. 27.

<sup>22</sup>Ibid., pp. 27-29.

<sup>23</sup>Ibid.

<sup>24</sup>Ibid., pg. 42.

<sup>25</sup>Ibid., pg. 43.

<sup>26</sup>Ibid., pg. 45.

<sup>27</sup>In an exchange with Berger Boehm used a beautiful analogy: "The fact that the horse with the 50-pound weight might end up winning the race, versus the un-handicapped horse, doesn't mean it's a fair race."

<sup>28</sup>Ibid., pg. 47.

<sup>29</sup>Ibid., pg. 54.

<sup>30</sup>Ibid., pg. 55.

<sup>31</sup>Political Gerrymandering and the Courts. pp, 29-116.

<sup>32</sup>Ibid., pg. 132.

<sup>33</sup>Ibid., pg. 133.

<sup>34</sup>Ibid., pg. 137.

<sup>35</sup>Lowenstein, Op. cit. Note 178 pg. 113 note 40.

<sup>36</sup>*Davis v. Bandemer*, 478 U.S. at 147.

<sup>37</sup>Ibid., pg. 145.

- <sup>38</sup> Ibid., pg. 149.
- <sup>39</sup> Ibid., pp. 151-152 citing plurality opinion at pg. 139.
- <sup>40</sup> Ibid., pg. 154.
- <sup>41</sup> Ibid., pp. 154-155.
- <sup>42</sup> Ibid., pg. 155.
- <sup>43</sup> Ibid., pg. 158.
- <sup>44</sup> 394 U.S. 526, 538 (1969).
- <sup>45</sup> Ibid, pg. 175.
- <sup>46</sup> *Davis v. Bandemer*, 478 U.S. at 165 <sup>xlvi</sup>Lowenstein, Op. cit. Note 178 pp. 92-94 <sup>xlvi</sup>*Davis v. Bandemer*, 478 U.S. at 138.
- <sup>47</sup> Ibid., pg. 17.
- <sup>48</sup> Ibid., pg. 9.
- <sup>49</sup> Ibid., pp. 10-11.
- <sup>50</sup> Ibid., pp. 12-13.
- <sup>51</sup> Ibid., pp. 13-14 (i.e., "So, by Gerrymandering, one party could put the other party entirely out of business ... without discriminating against the voters in the other party"?).
- <sup>52</sup> Ibid., pg. 16.
- <sup>53</sup> Ibid., pg. 18.
- <sup>54</sup> Ibid., pg. 21.
- <sup>55</sup> Ibid., pg. 22.
- <sup>56</sup> Ibid., pg. 23.
- <sup>57</sup> Ibid., pg. 25.
- <sup>58</sup> Ibid., pg. 26.
- <sup>59</sup> Ibid., pg. 27.
- <sup>60</sup> Ibid., pp. 27-29.
- <sup>61</sup> Ibid.
- <sup>62</sup> Ibid., pg. 42.
- <sup>63</sup> Ibid., pg. 43.
- <sup>64</sup> Ibid., pg. 45.
- <sup>65</sup> In an exchange with Berger Boehm used a beautiful analogy: "The fact that the horse with the 50-pound weight might end up winning the race, versus the un-handicapped horse, doesn't mean it's a fair race."
- <sup>66</sup> Ibid., pg. 47.
- <sup>67</sup> Ibid., pg. 54.
- <sup>68</sup> Ibid., pg. 55.
- <sup>69</sup> Political Gerrymandering and the Courts. pp, 29-116.
- <sup>70</sup> Ibid., pg. 132.
- <sup>71</sup> Ibid., pg. 133.
- <sup>72</sup> Ibid., pg. 137.
- <sup>73</sup> Lowenstein, Op. cit. Note 178 pg. 113 note 40.
- <sup>74</sup> *Davis v. Bandemer*, 478 U.S. at 147.
- <sup>75</sup> Ibid., pg. 145.
- <sup>76</sup> Ibid., pg. 149.
- <sup>77</sup> Ibid., pp. 151-152 citing plurality opinion at pg. 139.
- <sup>78</sup> Ibid., pg. 154.
- <sup>79</sup> Ibid., pp. 154-155.
- <sup>80</sup> Ibid., pg. 155.
- <sup>81</sup> Ibid., pg. 158.
- <sup>82</sup> 394 U.S. 526, 538 (1969).
- <sup>83</sup> Ibid, pg. 175.
- <sup>84</sup> *Davis v. Bandemer*, 478 U.S. at 165.
- <sup>85</sup> Lowenstein, Op. cit. Note 178 pp. 92-94.

## Chapter 6

### Enter Norman Primus and the “Citizen” Plans

Norman S. Primus was an air force navigator whose B-29 squadron was headed for the Pacific when World War II ended. He returned to his prewar work as a C.P.A. and found himself in New Jersey by the 1970s. He had wanted to fight the Nazis 35 years earlier, and now he found himself drawn into a new kind of fight against an enemy that was not so readily personified. He held the quaint view that government should not be the province of power elites, but should actually be controlled “by the people.” He found his way to David I. Wells, associate political director of the International Ladies Garment Workers' Union and plaintiff in *Wells v. Rockefeller*. The two connected and an enduring collaboration ensued.

In early 1982, the Primus family relocated to South Bend, Indiana. His son had come to Notre Dame University as the first Hebrew theologian to join the faculty of this bastion of Roman Catholicism; and his daughter-in-law set up practice as an allergist. In semi-retirement at 63, Primus kept the daughter-in-law's accounts in order as he devoted ever-increasing hours to districting. He linked up with the Indianapolis office of Common Cause and became—as he had in New Jersey—head of its districting task force. But that office was not well connected with the players in the *Bandemer* lawsuit, and Primus was kept completely in the dark as the case progressed in 1982-84. He did not hear about the trial until after it was over.

In the fall of 1984 he got wind of the congressional districting litigation under way in Ohio,<sup>1</sup> secured a copy of the Ohio reform proposal and swiftly responded with a thoughtful critique. A few weeks later came the trial court's decision in *Bandemer*. Within a few months Primus was in high gear. Anticipating that the Supreme Court would affirm the trial court, he knew the Indiana legislature would be given a chance to pass a new plan. He was determined that when that moment came that legislature would have before it some plans crafted by persons with no political axe to grind.

### *The 1985 Districting Competition*

Under the aegis of Common Cause/Indiana, Primus distributed to the public, for the first time in U.S. history, a database from which one could draw congressional and/or legislative districts. The document was titled “1985 Indiana Redistricting Sweepstakes” and contained state and county base maps, population tables, tabular forms, and instructions. The county base maps showed the breakdown of the six largest counties, plus two others, by census tracts listing the populations of those tracts. Minority populations were not given, so the resulting plans would be “color blind.”

The contest seeking submissions for House plans and Senate plans offered no cash reward, but Common Cause promised to lobby to have the “best plans” adopted by the General Assembly<sup>2</sup> once the State’s appeal was rejected and the Assembly was forced to adopt new plans.

Primus established six criteria entrants had to follow: Both house and senate plans must (1) have SMDs. Districts had to be (2) contiguous and (3) “compact,” as measured by the statewide sum of their perimeters. (4) The maximum allowable deviation between the most populous and least populous districts (*i.e.*, “total” deviation) for house plans was 7 percent (3,843 persons); for senate plans it was 3 percent (3,294 Persons). (5) Fragmentation of townships was to be minimized. It was not clearly stated, but the (6) decision rule appeared to be that the plan with the highest number of whole counties would be the winner. By summer’s end eight individuals had submitted a total of six House plans and seven Senate plans whose characteristics of these plans are indicated in Tables 6.1 and 6.2.

At a Common Cause press conference in September, Primus announced the winners of the House and Senate contests. The winning plans in both competitions (“H1” and “S1”) were the work of Larry G. Holderly of the Department of Agricultural Engineering at Purdue University. A 45-year old civil engineer, Holderly grew up in nearby White County and taught surveying to

Table 6.1

House Plans: Primus' 1985 Indiana Districting Competition

(1) Plan Number	Counties:		(4) Township Fragments	(5) Sum of District Perimeters, miles	(6) Total Population Deviation
	(2) Whole	(3) Fragments			
H1	61 (31)†	103	59	8,875	3,699
H2	58 (34)	111	72	8,662	3,830
H3	58 (34)	118	57		3,929*
H4	57 (35)	107	56	8,908	3,817
H5	57 (35)	110	78	8,240	7,263*
H6	54 (38)	116	78	8,595	3,722
H7	53 (39)	127	62	8,183	3,725
<i>Bandemer Plan</i>	25 (67)	183	86		2,442‡

\* Exceeds 7% allowable deviation---or 3,843 persons

†Number of counties split

‡Primus mistook this number to be 576 because he---like others---was misled by reports that the "population deviation . . . was 1.05 percent." (See our discussion of this in Chapter 3)

Table 6.2

Senate Plans: Primus' 1985 Indiana Districting Competition

(1) Plan Number	Counties:		(4) Township Fragments	(5) Sum of District Perimeters, miles	(6) Total Population Deviation
	(2) Whole	(3) Fragments			
S1	74 (18)†	53	28	6,648 (21.4)	3,234
S2	73 (19)	52	24	6,308	3,294
S3	73 (19)	54	31	6,138	3,246
S4	68 (24)	60	18		5,620*
S5	67 (25)	61	51	6,410	3,151
S6#	67 (25)	63	32	(34.7)	3,273
<i>Bandemer Plan</i>	45 (47)	120	72		5,134‡

\* Exceeds 3% allowable deviation---or 3,294 persons

†Number of counties split

‡Primus mistook this number to be 1,263 because of misleading reports that the "population deviation . . . was 1.15 percent."

#This plan was submitted by David L. Horn after the deadline

{ } Compactness Index of the least compact district in the plan

forestry students. As seen by an examination of Tables 6.1 and 6.2, he succeeded in splitting fewer counties, in both his house and senate plans, than any other entrant. As seen by the “sum-of-perimeters” compactness measurements listed in Column 5 of these tables, his house plan was less compact than those of at least four others; and his senate plan was less compact than the three others for which this measurement is given. The winning Holderly House and Senate plans are shown in Figures 6.1 and 6.2.

Holderly commented, “I didn't like the look of some of my districts, but concluded that the rules said ‘whole’ and I stuck to that.”<sup>3</sup> Others, as well, didn't like the looks of some of the Holderly districts but Primus remarked, “when you play football there are...rules. Violate one of them and the game goes against you.”<sup>4</sup>

As we noted in Chapter 3, the misleading reports concerning the population deviations of the *Bandemer* plans led Primus (and others) to believe these deviations were too small to be achieved with the relatively crude census tract- and township-level data available to Primus. Consequently, he chose a 7 percent deviation for HDs that would have given the Indiana General Assembly an easy excuse to reject his House plans had *Bandemer* been affirmed and the State been compelled to adopt a new plan. As seen from Columns 2 and 3 of Table 6.1, all of Primus' house plans had far less county fragmentation than the *Bandemer* plan, but the comparison isn't fair if all plans aren't being drawn to the same population deviation. In retrospect, Primus should have specified the 4.45 percent (2,442 persons) total population deviation supposedly achieved by MOR. Then, nobody could have dismissed any of his house plans on grounds that it failed to satisfy “one person-one vote” as well as the State's plan did.

With his senate plans, however, Primus elected a tighter population deviation than he need have. MOR had supposedly<sup>5</sup> achieved a 4.68 percent (5,134 person) total deviation. Primus' 3 percent (3,294 persons) deviation was well under that. But even so—as Columns 2, 3, and 4 of Table 6.2 show—all of his plans had far less county and township fragmentation than the State's

plan. Had they been presented to the General Assembly it would have had no easy excuse for disregarding them.

Nine months later the Supreme Court dashed Primus' hopes of presenting his "citizen" plans to the Indiana General Assembly under circumstances where they would have received serious attention. As he put it to a friend a few weeks after the decision: "Supreme Court sure did bust my bubble."<sup>6</sup> But the window of opportunity had opened: the idea that the public could design districting plans with the same presumption of legitimacy as those prepared by politicians had been revealed. In Indiana the South Bend Community School Corporation had voted to elect, rather than appoint, its board of trustees. Five single-member districts had to be created from scratch and Primus had a way to do it. Drawing upon his experience with the 1985 legislative districting competition, he had formulated a "balanced neutral process" (B.N.P.) for drawing districts for any level of government. He persuaded ten residents of South Bend to submit plans to the Indiana State Board of Education, utilizing B.N.P. criteria, and the Board selected one of them to be its new plan.

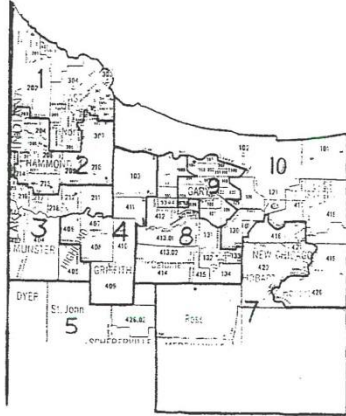
Encouraged by his successes in South Bend, Primus launched his third, fourth and fifth districting competitions for elections to various public offices in 1987 and 1988, all of the time working to build support for his Balanced Neutral Process.

### *The 1990 Indiana Districting Competition*

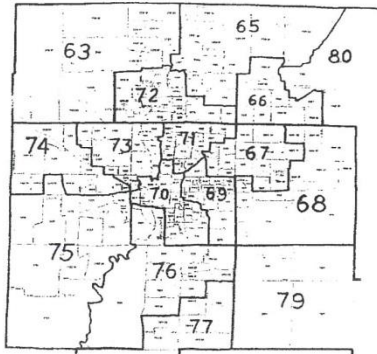
Primus' sixth districting competition was done in collaboration with the Ohio-based Center for Research into Governmental Processes, Inc. (CRGP), an entity established by this book's authors. We had received a grant from the George Gund Foundation in Cleveland to investigate the question of whether—and if so, to what extent—districting plans drawn to best satisfy objective criteria might unintentionally confer a significant advantage upon one of the major parties. This possibility had been raised by a number of scholars. We call it the Unintentional Gerrymander Hypothesis. The only way to test it was to draw plans to best satisfy objective criteria and apply the



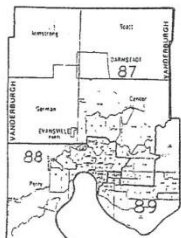
Figure 6.1  
Indiana House:  
1985 Holderly Plan



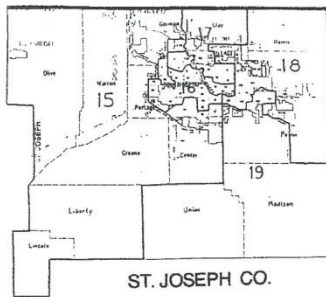
NORTHERN LAKE COUNTY



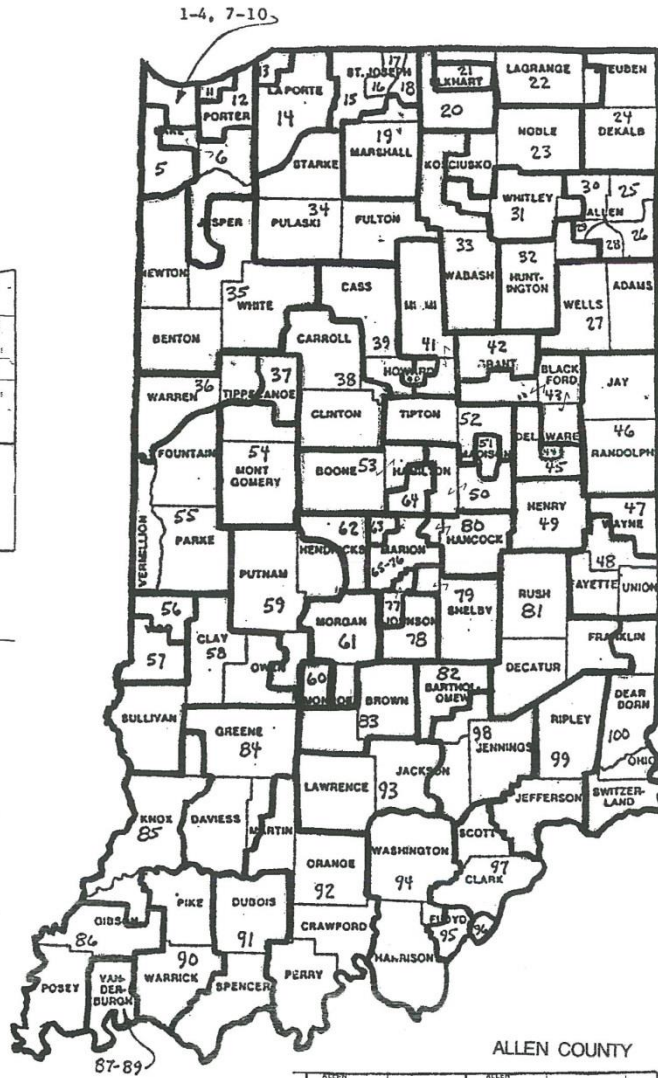
MARION CO. (INDIANAPOLIS)



VANDERBURGH CO.



ST. JOSEPH CO.



ALLEN COUNTY

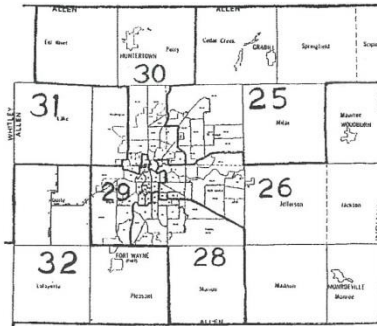
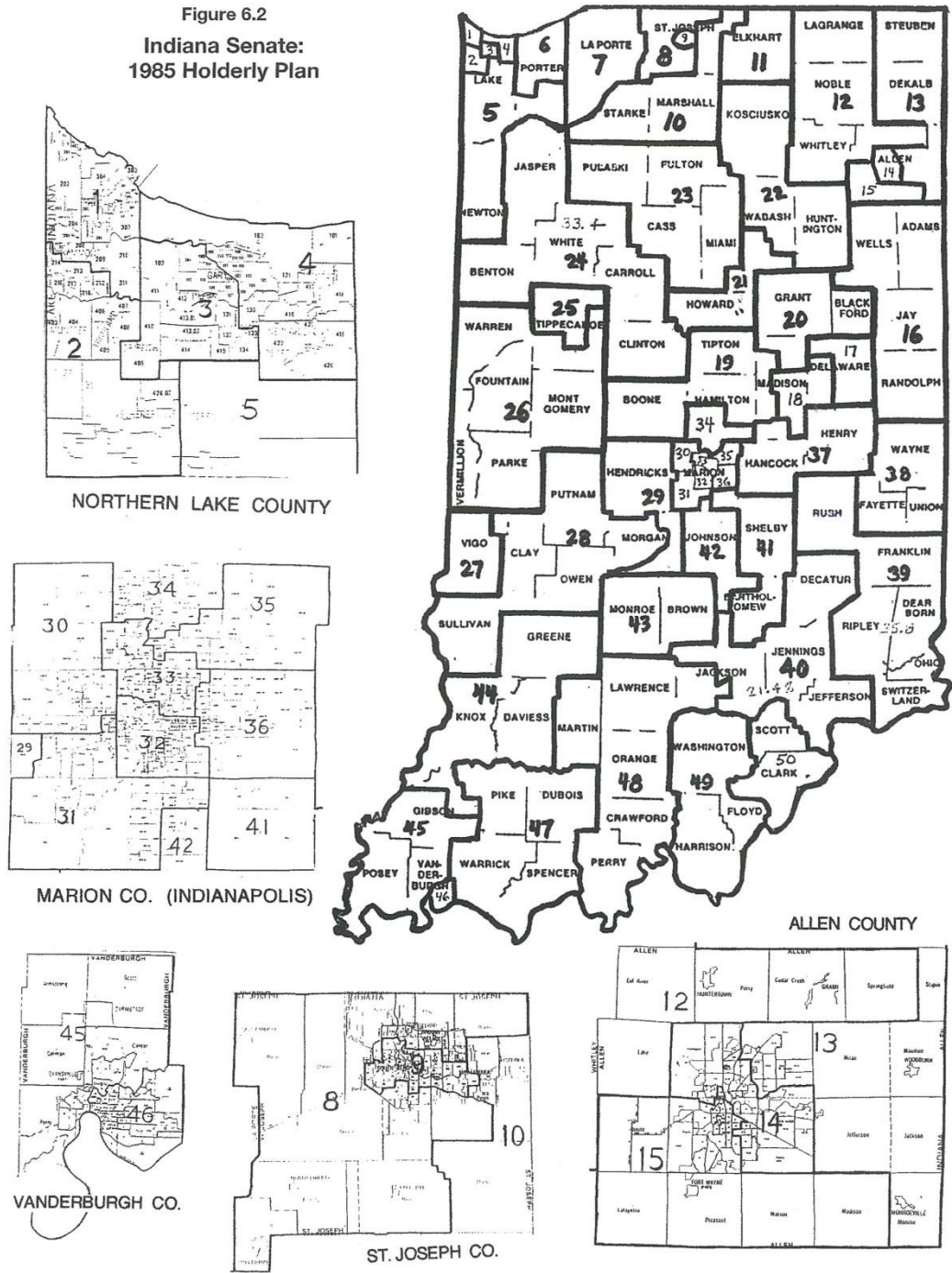


Figure 6.2  
Indiana Senate:  
1985 Holderly Plan



tests for partisan gerrymandering proposed by various scholars to these plans to see how biased they were. The 1985 Holderly plans were drawn to best satisfy objective criteria, but no one knew how much they might actually be biased in favor of Democrats or Republicans.

A corollary to the Hypothesis<sup>7</sup> was that which major party benefited from the plan would depend on which objective criteria were employed, and how they were arranged to define the “best plan.” To test this corollary it was necessary to define the best plan in different ways and see if it made any difference in terms of the plan’s partisan bias. Primus’ B.N.P. was one way to define the best plan, but the Ohio reformers had other ways of doing it. In fact, there were thousands of ways. In consultation with Primus, we decided to do it in three ways by means of a four-part competition. The first part would be to draw the best house plan according to the B.N.P. The second part would be to draw the best senate plan according to the B.N.P. The third would be to draw the best senate plan according to a “compactness threshold” definition which we will describe presently. The fourth part would be to draw the best house plan according to a “fully nested” criterion that we will also describe presently. Space considerations force us to limit our presentation to the last two parts.

*Compactness Threshold Senate Districting.* The compactness threshold definition of the “best” districting plan evolved out of our experience in designing a neutral districting procedure for Ohio during the period 1977 to 1984. We shall discuss the rationale for, and mechanics of this procedure later. For the present, briefly, here’s how it works. Like Primus’ B.N.P., it is a “competitive submissions” procedure in which plans drawn by interested persons and/or groups are evaluated according to objective quantifiable criteria and the plan best satisfying those criteria is declared the “winner.” Unlike the B.N.P, certain of those criteria function as constraints. The principal of these is population equality. In this instance we are making a rule that says that no plan will be considered which has any district not within  $\pm 5$  percent of the ideal district population of 109,804. This means a minimum population of 104,314 and a maximum population of 115,294 ( $\pm 5,490$  persons).

Our second constraint is contiguity and our third, compactness. Compactness can be measured in many ways and in Chapter 23 we will say why we chose what we call the Goedicke Compactness Index, or C.I.  $C.I. = 1257 A / P^2$  in which A is the area of an individual district in any unit of square measure and P is the perimeter of that district using the same unit of linear measure. Inclusion of the constant 1257 makes a circle come out as 100. Years of experience using this measure has taught us that a C.I. of 30 is very attainable in a state like Indiana and districts much below this “threshold” will have strange shapes. So we specified a minimum C.I. of 30 as our third constraint. Since the plan drawers had no good way of measuring the areas and perimeters of the districts in their plans—and, therefore, of accurately computing compactness indices—we included in the kit nine drawings of districts having indices just above, and just below 30. This would enable plan drawers to make “eyeball” comparisons that could warn them if any of the districts they were drawing might disqualify their plan.

“Qualifying” plans are those that meet the above three constraints. To choose the “best” from among them we employ additional criteria as “optimizers.” The primary optimizer is county fragments. Among the qualifying plans, the one with the smallest number of county fragments wins. The secondary optimizer is township fragments. Should two or more qualifying plans have the same number of county fragments, we resolve the impasse by choosing the one with the smallest number of township fragments. The tertiary optimizer is compactness. If two or more qualifying plans each have the same number of county fragments *and* township fragments, then we break the deadlock by picking the one having the highest C.I. for its *least* compact district. With these decision rules there will be no ties.

Only three plans were submitted in this part of the competition. Table 6.3 summarizes the results.

Examination of Column 2 of Table 6.3 shows that all three plans had population deviations within the  $\pm 5$  percent (or  $\pm 5,490$  person) limit that was Constraint Number One. Inspection of the plan maps confirmed that all of their districts were contiguous. So Constraint Number Two was

Table 6.3

Senate Plans: Primus' 1990-91 Indiana Districting Competition:  
Compactness Threshold

(1) Participant	(2) Maximum Population Deviation		(3) Indices of Least Compact Districts in Plan	(4) Counties Split		(5) Townships Split	
	Persons	Percent		Number	Fragments	Number	Fragments
Kenworthy	- 5,457	- 4.97	31.5% (SD 10)	13	37	7	16
	+ 4,868	+ 4.43	39.9% (SD 43)				
			40.2% (SD 23)				
			41.7% (SD 22)				
			42.0% (SD 40)				
		51.4% (SD 45)					
Holderly	- 5,345 + 4,796	- 4.87 + 4.37		16	45	8	17
Prall	- 5,136 + 5,372	- 4.68 + 4.89		17	50	6	13

satisfied. To determine whether Constraint Number Three has been satisfied we, first *assume* that all plans have complied with the “30” compactness threshold and turn to the primary optimizing criterion: county fragments. A glance at Column 4 tells us, instantly, that Kenworthy is the apparent winner since his plan has only 37 fragments.

We can disregard the other plans once we have verified that the “37” is correct *and* that this plan contains no districts with compactness indices below 30. We, therefore, inspect the plan and pick out the districts that appear to be least compact. The plan is depicted in Figure 6.3. The reader can look at Figure 6.3 and make his/her own judgment as to what districts these would be. We picked the six listed in Column 3 of Table 6.3.

With a planimeter and a curvimeter, we measured the areas and perimeters of these “suspect” districts and computed their C.I. values. It is readily apparent that SD 10, in St. Joseph County,<sup>8</sup> is the plan’s least compact district. Because the Kenworthy plan best satisfied the primary optimizer, we need not proceed further. If, however, the Prall plan had 37 county fragments instead of 50, we would have had to go to our secondary optimizer: township fragments. In that event, the Prall plan would have come out on top because its 13 fragments (see Column 5) are fewer than Kenworthy’s 16. When we get to an evaluation of the fully nested house competition, we’ll examine the scenario in which plans are deadlocked as to *both* the primary and secondary optimizers.

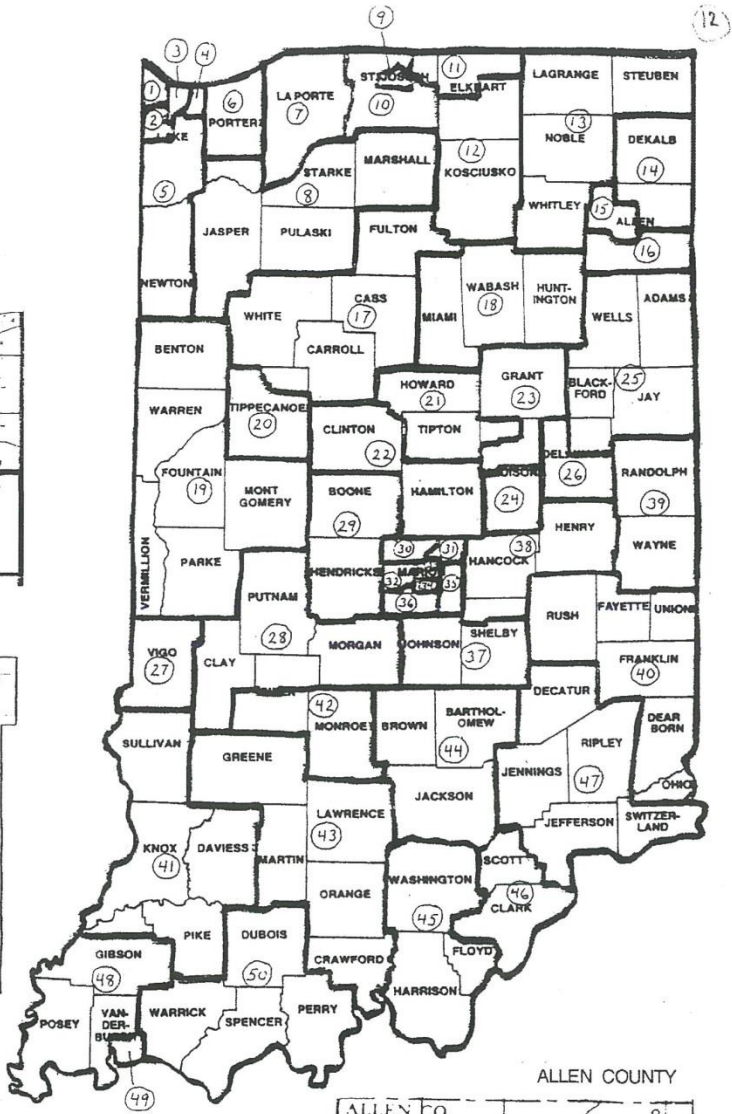
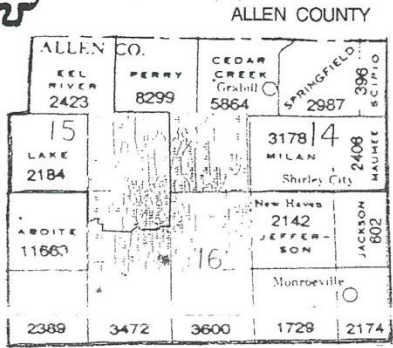
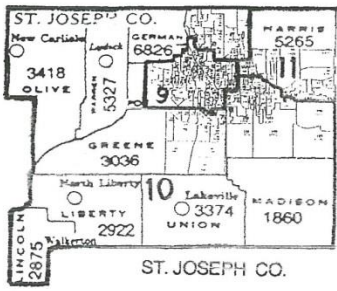
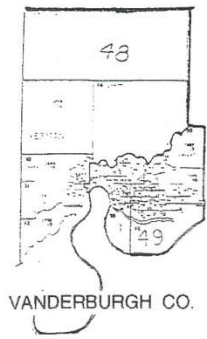
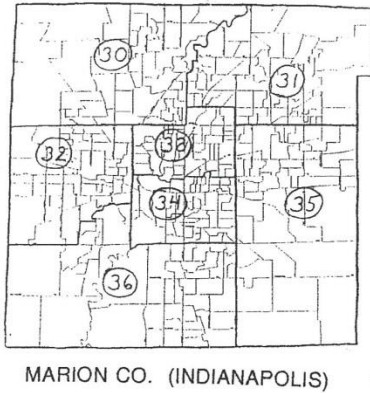
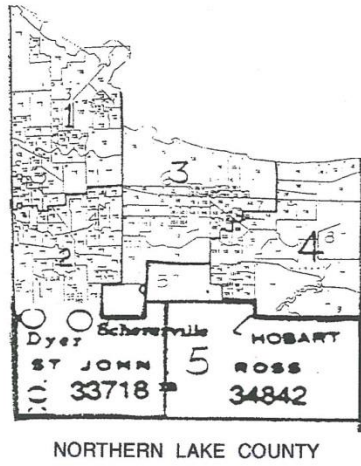
*Fully-Nested House Districting.* In the districting kit, one of the large base maps of the state (and of Marion County) had on it the boundaries of a congressional districting plan. The kit also contained a three-page “Detailed Description of Districts” listing the counties, townships, and “Voting Districts” comprising each CD in the plan—along with their populations. The plan was a composite of plans drawn by Horn and Holderly in early 1986 to get an idea of what a “rational” CD plan for Indiana might look like. It consisted of 10 districts and had a population variance of  $\pm 1\%$ . It split six counties creating 13 county fragments. The mean C.I. of its ten districts was 51.1. The C.I. of its least compact district (CD 9) was 43.<sup>9</sup> The boundaries of its districts can be determined by an examination of Figure 6.4, as we will shortly explain.

This fully nested competition consisted of ten “mini-competitions”: one for the division of each CD of the given plan into 10 contiguous HDs. The maximum population variance among these districts could not exceed  $\pm 5\%$ , or  $\pm 2,745$  persons. The rules for each of these “mini-competitions” were the same as those for the compactness threshold senate plan competition, with one exception: instead of having fewest township fragments as the secondary optimizer we specified fewest fragments of municipal corporations (cities or towns). Also, as suggested in our evaluation of the senate compactness threshold competition, it became necessary here to use the tertiary optimizing criterion: compactness.

Five individuals submitted plans, with each entering all ten “mini-competitions.” Table 6.4 summarizes the results. From it we see that the Kenworthy entry won in five districts; the Prall and Horn entries in two districts each; the Holderly entry in one district. In CDs 2, 3, 4, and 7 the winning plan was readily determined on the basis of the primary optimizer: fewest county fragments. It was only further necessary to make compactness measurements in the winning plans for these districts to verify that all HD compactness indices were above the 30 minimum. It can be seen that the 31.1 minimum of Prall’s CD 2 passed muster. So, too, for the 35.9 minimum in CD 3; the 34.1 minimum of CD 4; and the 32.8 minimum for CD 7—all Kenworthy entries.



Figure 6.3  
 Indiana Senate:  
 1990 Compactness  
 Threshold Plan



Determining the winner in the other districts took more work. In CD 1 all five entries had the same number of county fragments: eleven. Turning to city fragments, we were able to narrow the choice to Horn and Kenworthy since their 9 city fragments were less than the 11 fragments of the other plans. We then took two compactness measurements in the Horn plan, and five in the Kenworthy plan, to determine that the 47.0 of Horn's HD 1 was the highest minimum. In CD 5 we also had to resort to the tertiary optimizer. Three plans were all tied as to county fragments and city fragments. We had to measure six HDs in each of these plans to discover that Holderly's HD 47 had the highest minimum: 51.6. In CD 6 the same three contestants were again tied at county and city fragments. Four measurements in the Holderly and Kenworthy plans—and two in the Horn plan—found Holderly and Kenworthy still tied, with minimum indices of 47.7. This impasse presented us with the need for a quaternary decision rule.

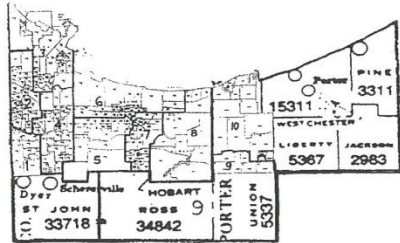
That rule is one we developed in 1978 and will discuss in Chapter 30. Suffice it here to merely state it:

If the least compact districts of two or more qualifying plans have the same C.I., when rounded to two significant figures, compare the compactness of the *next* least compact districts of those plans, and choose the plan whose district has the highest C.I., when rounded to two significant figures. If no plan can be chosen after comparing the next least compact districts, compare the third least compact districts, and so on, until one plan emerges as the preferred one.

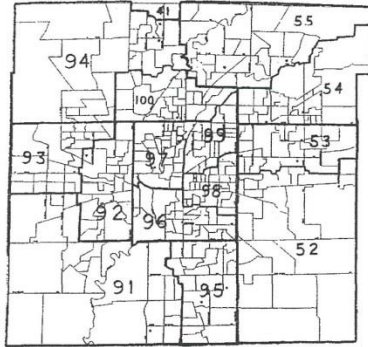
Applying this rule, we find that the next least compact HDs in these plans are *also* tied—at 49.6. Therefore, we have to look at the third least compact districts and now we find that Kenworthy's 54.8 beats Holderly's 49.7.



Figure 6.4  
 Indiana House:  
 1990 Fully Nested Plan



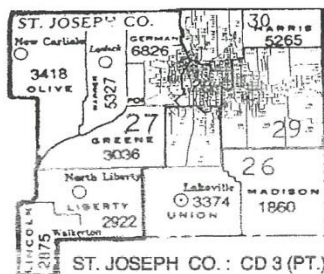
CONGRESSIONAL DISTRICT (CD) 1  
 (NORTHERN LAKE & PORTER COUNTIES)



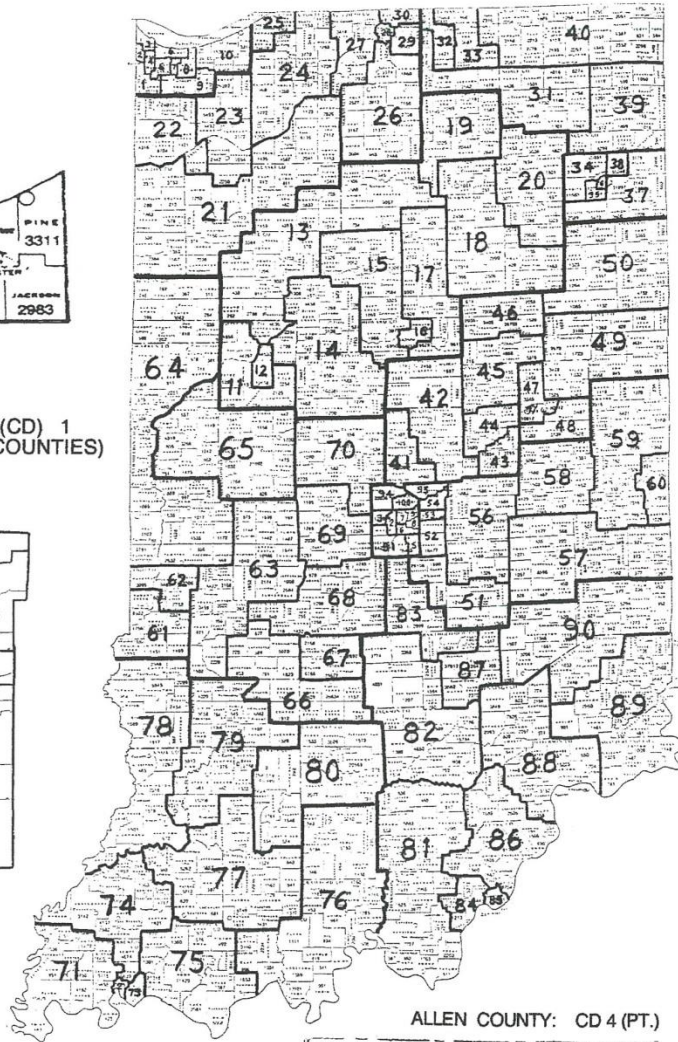
MARION CO. (INDIANAPOLIS)  
 CD 10 (ENTIRE); CD 6 (PART)



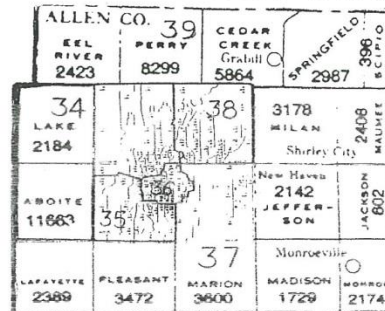
VANDERBURGH CO.:  
 CD 8 (PT.)



ST. JOSEPH CO.: CD 3 (PT.)



ALLEN COUNTY: CD 4 (PT.)



In CD 8 Holderly and Kenworthy are again tied on county and city fragments, but seven compactness measurements resolve the matter in favor of Kenworthy's 36.1. In CD 9 Horn and Kenworthy are deadlocked at 9 county and zero city fragments; but Horn's next-highest minimum C.I. of 45.9 wins out over Kenworthy's 42.7. Finally, in Marion County's CD 10, county fragments are irrelevant and three plans have the same number of city fragments. Six compactness measurements in each plan are required to satisfy us that we have located the highest minimum.<sup>10</sup> It is Prall's HD 99 with a C.I. of 49.1. The resulting statewide plan is a composite of the winning plans in the ten CDs. It is show in Figure 6.4. We established an HD numbering system based upon the numbers of the CDs. The HDs within each CD are numbered consecutively with the highest

Table 6.4

Senate Plans: Primus' 1990 Indiana Districting Competition: Balanced Neutral Process

(1) Participant	(2) Total Population Deviation		(3) County Fragments		(4) Township Fragments		(5) Sum of District Perimeters, miles		(6) Ranking Totals
		Rank		Rank		Rank		Rank	
Prall	6,012 ( 5.5%)	2	60	4	18	3	2,592	1	10*
Holderly	2,558 ( 2.3%)	1	53	3	20	4	2,616	2	10*
Lucid	12,629 (11.5%)	4	32	1	17	2	2,700	3	10*
Kenworthy	8,734 ( 8.0%)	3	39	2	15	1	2,790	4	10*

\*Tie

numbered being 10 times the number of the CD. CD 1 will contain HDs 1-10; CD 2 will contain HDs 11-20, etc. Knowing this, the reader can now study Figure 6.4 and ascertain the location of the CD boundaries. Two of the insets (*i.e.*, Marion Co., Northern Lake and Porter counties) show complete CDs. Also, on the state map, the CD boundaries appear as heavier lines.

In two CDs we took the liberty of melding the plans of two or more drawers to arrive at a composite solution that satisfies the criteria better than did that of either individual. In CD 1 we merged the plans of Horn and Kenworthy, using HDs 2-4 from Horn and HDs 5-10 from Kenworthy (HD 1 was the same in both plans). In CD 5 we merged the plans of Holderly, Horn, and Kenworthy using HDs 43 and 44 from Horn, HDs 45 and 46 from Kenworthy, and HDs 47 and 48 from Holderly. (HDs 41,42,49, and 50 were identical in all three plans.)

The occurrence of identical solutions raises an interesting question: what is the probability of “convergence”? That is, if we had a large number of plans—instead of just the 3 to 5 plans we are dealing with here—competing to best satisfy objective measurable criteria, such as we have in these Indiana competitions, how likely would it be that identical “winning” plans will be submitted by two to several contestants? We offer Table 6.5 to document the extent to which identical solutions were proffered by just the five entrants in this competition.

The 1985 and 1990 Primus competitions have provided us with three additional house plans, and four additional senate plans, that give us a wider perspective on the “political” plans that were at issue in *Bandemer*. In terms of the stated purpose of the 1985 competition, these plans would have been of little value had the trial court been upheld and the Indiana General Assembly been forced to draw new plans. As noted earlier, except for the 1985 and 1990 Holderly senate plans, these “citizen” plans could have been dismissed because their total population variances exceeded the 4.45 percent supposedly achieved in the *Bandemer* plans. Also, as we shall see in the next chapter, the three house plans could have been dismissed because they all contained fewer “majority-minority” seats than the five that characterized the Republicans’ plans.

Table 6.5  
Senate Plans: Primus' 1990 Indiana Districting Competition: Balanced Neutral Process  
(Two Additional Plans Included)

(1) Participant	(2) Total Population Deviation		(3) County Fragments		(4) Township Fragments		(5) Sum of District Perimeters, miles		(6) Ranking Totals
		Rank		Rank		Rank		Rank	
Prall	6,012 ( 5.5%)	3	60	5	18	3	2,592	1	12
Holderly	2,558 ( 2.3%)	1	53	4	20	4	2,616	2	11*
Lucid	12,629 (11.5%)	6	32	1	17	2	2,700	3	12
Kenworthy	8,734 ( 8.0%)	4	39	2	15	1	2,790	4	11*
Doe	9,249 ( 8.4%)	5	44	3	30	5	2,880	5	18
<i>Bandemer</i> Plan	5,134 ( 4.7%)	2	120	6	72	6	2,967	6	20

\*Tie

In retrospect, had Primus been correctly informed as to the population variances in the State’s plans, and had he realized the importance of the race issue, he could have modified his 1985 criteria to require the same 4.45 percent house—and 4.68 percent senate—variances claimed for the State’s plans. He could also have provided African-American populations in his database and specified that house plans contain at least five, and senate plans at least two, majority-minority

districts. That would have made his plans supremely relevant had the legislature, or the trial court, been faced with the necessity of drawing new plans. However, the real value of the “citizen” plans was not as prospects for adoption had the *Bandemer* plaintiffs won, but as a yardstick with which to measure the *political character* of the *Bandemer* plans had they—the “citizen” plans—been available to the trial court in October-November, 1983.

In the next eight chapters we shall perform our own analysis of both the “political” and “citizen” plans, and in Chapter 15 offer our conclusions as to how availability of the “citizen” plans might have affected the outcome of the litigation. Before we launch into this political analysis, however, there is another factor in the *Bandemer* history we must relate.

### *The Ball State Professors*

In Chapter 5’s account of the oral argument on October 7, 1985 we mentioned that waiting in line outside the Supreme Court building were three Ball State University professors who were doing a political analysis of the *Bandemer* plans, John Cranor, Gary Crawley and Ray Scheele. Their analysis would be presented four days later in a paper,<sup>11</sup> and published another three years after that.<sup>12</sup> The professors were politically sympathetic to the Democrats and had put much labor into the collection of data for their analysis. That data deserves a review from the perspective of what impact it would have had on the litigation had these scholars finished their study two years earlier; had they been in touch with the Plaintiffs’ legal team at that time; and had they been employed as additional expert witnesses for the plaintiffs at trial. It probably would have had little. Both the initial inquiry of their 1985 paper and the revised analysis of their 1989 article got bogged down in trying to establish a significant relationship between fuzzily defined variables (i.e., “competitiveness,” “net gain in the proportion of Republican votes added” and “party control”) and the strong partisan bias of the *Bandemer* plans was never convincingly demonstrated.

However, they did come up with the most credible election to use as a measure of partisan character of the districts. Having read and been influenced by Backstrom/Robins/Eller, the professors decided that the proper way to define “Democrats” and “Republicans” was to look at the vote for

candidates in races for “anonymous” statewide offices. They chose a race that was never mentioned during the entire *Bandemer* litigation, and the one our own investigation—as we shall see in Chapter 9—confirms to be the best: state Superintendent of Public Instruction (“SPI”). This office carries a 4-year term and comes up for election in presidential years. In 1980 the party vote for SPI had been 43.51 percent Democrat and 56.49 percent Republican.

They failed to reap full benefit of this choice of “index election” because their analysis was in terms of what happens to *districts*, as opposed to *candidates*. This required matching 1972 districts with 1982 districts and in many cases there were no good matches to be had. That led them into a morass, especially when the statewide number of districts had changed. They tried three lines of analysis with little success, although the third produced results that were more encouraging when they looked at the districts from the perspective of *carryover*—in particular, carryover of the Republican portion of a 1972 district’s base vote. The relationship turned out to be “reasonably good.” The professors achieved their most significant finding not through use of sophisticated computer-solved statistical equations, but with sixth-grade arithmetic. They simply compared the mean carryover ratios for the two parties in each of the three categories of district they had erected on the basis of party control. The pro-Republican bias they discovered, while marked (17 to 23 percent), was hardly dramatic.

But the labors of these scholars—after some false starts—had finally provided additional credible evidence of partisan bias in the *Bandemer* plans. Their study of carryover differentials would have been quite helpful to Boehm/Scanlon/Swarbrick at trial. It isn’t a study that would have been easy for Grofman to poke holes in. But like Dreyer’s evidence, it left unanswered the question of how much of the plans’ partisan bias was due to Republican manipulation, and how much might be due to geography. Both it and the Dreyer evidence also left unanswered a second—and greater—question: given that the plans *did* have a certain degree of partisan bias—intentional or unintentional—what would the magnitude of that bias have to be in order to warrant the plans’

being struck down by the courts? The Primus “citizen” plans give us a key to the answer to at least the first of these questions.

### Notes

<sup>1</sup> *Flanagan v. Gillmor* 561 F.Supp. 36 (1982) (S.D. Ohio) *aff'd Brown v. Brandon* 467 U.S. 1223 (1984).

<sup>2</sup> From flier distributed at press conference.

<sup>3</sup> Primus letter to David L. Horn, September 22, 1985.

<sup>4</sup> *Ibid.*

<sup>5</sup> We say “supposedly” because, in the next chapter, we will report our finding that the plan’s actual total deviation was probably 7.11 percent.

<sup>6</sup> Undated note to David L. Horn (probably late 1986).

<sup>7</sup> We call it the “Robins Corollary” because it was stated most forcefully by Professor Leonard Robins at the roundtable on gerrymandering at the annual meeting of the American Political Science Association, Washington, D.C. September 4, 1988.

<sup>8</sup> See the St. Joseph Co. inset in Figure 6.4—the BNP senate plan—for the shape of this district.

<sup>9</sup> By comparison, the State of Indiana congressional districting plan for the 1980s, also drawn to a  $\pm 1$  percent population variance, split 13 counties creating 27 county fragments. It had a mean C.I. of 35.9 and a minimum C.I. of 19.5.

<sup>10</sup> In all, we made 69 compactness measurements in evaluating these plans.

<sup>11</sup> Cranor, John D., Gary L. Crawley, and Raymond H. Scheele. “The Indiana Gerrymander: the Heart of the Political Thicket.” Paper delivered at the 1985 Annual Meeting of the Indiana Academy of the Social Sciences, Butler University, Indianapolis, IN, October 11.

<sup>12</sup> Cranor, John D., Gary L. Crawley, and Raymond H. Scheele. (1989). “The Anatomy of a Gerrymander,” *American Journal of Political Science*: 33: 222-239.

## Part II.

# Gerrymander Analysis Using the Scholars' Tests for Partisan Bias

## Chapter 7

### Assessing the Physical Characteristics of Districting Plans

In making our own analysis of the *Bandemer* plans the strategy is to compare them with the Democrats' plans, and with the Norman Primus citizen<sup>1</sup> plans, first as to their physical characteristics and then as to their political characteristics. Examination of their political characteristics will involve application of the four prospective<sup>2</sup> tests for partisan gerrymandering that had appeared in the literature as of 1990. After we have discovered what these tests have to say, we will—in Chapter 14—state some preliminary conclusions regarding *Bandemer*. Our final conclusions regarding *Bandemer*—as well as other cases to be investigated—will be held in abeyance until Chapter 40.

When we speak of physical characteristics we mean, for all practical purposes, the attributes of the plans with respect to four criteria: (1) the degree of population equality among districts, (2) the degree of fragmentation of local governmental units, (3) the compactness of districts, and (4) the distribution of minority populations. These are often referred to as “formal” criteria.<sup>3</sup> They are all objective—as opposed to subjective—and quantifiable—as opposed to vague and nebulous. We should have a grasp of all the plans’ physical characteristics before embarking upon a political analysis of them.

#### *Population Equality*

The reader is already familiar with the deviations from population equality of the political plans from their discussion in Chapter 3, and has already seen their summaries in Tables 7.3 and 7.4. Also noted at that time were the listings of population, and population deviation, by district for the *Bandemer* house plan in Table 7.1—and for the *Bandemer* senate plan in Table 7.2. We



have already commented on the false impression conveyed when deviations for these plans were stated in terms of their averages rather than their extreme values. There are several ways to quantify population deviation. In our view the simplest and most meaningful way to do it is in terms of the maximum (+) and maximum (-) values.

Table 7.1  
 INDIANA HOUSE: 1980 POPULATIONS AND COMPACTNESS INDICES (C.I.) OF 1982 DISTRICTS

District	Population	Deviation	Percent	C.I.	District	Population	Deviation	Percent	C.I.
1	†#55,848	+ 946		64	40	54,042	- 860		27
2	†#55,249	+ 347		51	41	†#53,962	- 940		40
3	55,146	+ 244		39	42	54,755	- 147		21
4	54,454	- 448		31	43	54,788	- 114		44
5	54,885	- 17		44	44	54,364	- 538		44
6	54,763	- 139		41	45	54,083	- 819		18
7*	111,544	+ 1,740		68	46	54,665	- 237		26
8	54,595	- 307		33	47	†#53,868	- 1,034	- 1.88	29
9*	†#109,643	- 161		45	48**	162,630	- 2,076		24
10*	110,825	+ 1,021		47	49**	161,947	- 2,759		30
11*	111,692	+ 1,888		31	50**	161,956	- 2,750		36
12*	111,977	+ 2,173		30	51**	162,437	- 2,269		37
13	55,807	+ 905		44	52**	163,928	- 778		44
14*	112,332	+ 2,528		47	53	†#54,279	- 623		28
15*	#115,201	+ 5,397	4.92	51	54	†#54,475	- 427		55
16	55,890	+ 988		32	55	†#53,925	- 977		36
17	†#55,355	+ 453		32	56	†#54,551	- 351		61
18	†#54,041	- 861		45	57	†#54,541	- 361		35
19**	165,327	+ 621		52	58	†#54,690	- 212		54
20**	165,309	+ 603		27	59	†#54,410	- 492		40
21	†#54,972	+ 70		51	60	53,842	- 1,060	- 1.93	45
22	†#55,735	+ 833		32	61	55,152	+ 250		58
23	†#55,341	+ 439		31	62	†#54,255	- 647		25
24	†#55,856	+ 954		46	63	†#55,897	+ 995		31
25	†#55,649	+ 747		28	64	†#54,715	- 187		23
26	#55,490	+ 588		34	65	†#54,058	- 844		41
27	54,115	- 787		67	66	†#55,966	- 1,064	+ 1.94	22
28	55,222	+ 320		31	67	†#55,039	+ 137		36
29	55,559	+ 657		37	68	†#55,445	+ 543		38
30	54,690	- 212		61	69	†#55,571	+ 669		30
31	108,241	- 1,563		47	70	55,182	+ 280		23
32	†#55,876	+ 974		47	71	54,307	- 595		72
33	†#54,541	- 361		41	72	56,284	+ 1,382	+ 2.52	66
34	55,167	+ 265		73	73	†#55,787	+ 885		18
35	53,863	- 1,039		56	74	†#54,756	- 146		24
36	54,891	- 11		31	75*	109,781	- 23		38
37	54,631	- 271		62	76	55,044	+ 142		29
38	#55,259	+ 357		42	77	55,473	+ 571		51 (22.9 <sup>1</sup> )
39	53,844	- 1,058		31	Total:	5,490,224			

\* 2-member district      \*\* 3-member district      # Based upon hard data (34 districts)

Table 7.2

INDIANA SENATE: 1980 POPULATIONS AND COMPACTNESS INDICES (C.I.) OF 1982  
(REPUBLICAN/BANDEMERE) DISTRICTS

District	Population	Deviation	Percent	C.I.	District	Population	Deviation	Percent	C.I.
1	†#108,125	- 1,679		45.4	26	108,876	- 928		47.0
2	#105,947	- 3,857	- 3.51	46.3	27	†#108,648	- 1,156		64.7
3	108,983	- 821		30.0	28	†#108,222	- 1,582		48.2
4	108,175	- 1,629		37.3	29	108,435	- 1,369		27.5
5	†#108,831	- 973		51.9	30	108,408	- 1,396		27.7
6	108,557	- 1,247		47.1	31	108,129	- 1,675		46.7
7	†#107,975	- 1,829		41.2	32	111,438	+ 1,634		33.7
8	†#107,669	- 2,135		56.5	33	109,284	- 520		24.8
9	107,644	- 2,160		43.9	34	108,038	- 1,766		15.8
10	108,450	- 1,354		20.8	35	111,988	+ 2,184		43.2
11	108,736	- 1,068		33.2	36	110,324	+ 520		43.0
12	†#108,967	- 837		71.7	37	#111,754	+ 1,950		39.1
13	†#109,672	- 132		42.5	38	110,582	+ 778		27.9
14	112,349	+ 2,545		32.3	39	109,914	+ 110		26.8
15	111,891	+ 2,087		41.6	40	#111,123	+ 1,319		45.6
16	110,226	+ 422		37.4	41	110,217	+ 413		38.6
17	#107,498	- 2,306	- 2.10	43.8	42	†#111,943	+ 2,139		45.2
18	†#108,368	- 1,436		48.8	43	†#110,268	+ 464		34.0
19	†#108,642	- 1,162		56.4	44	†#111,779	+ 1,975		38.2
20	†#109,524	- 280		53.8	45	111,942	+ 2,138		30.3
21	†#111,097	+ 1,293		41.0	46	111,507	+ 1,703		49.7
22	†#107,847	- 1,957		52.1	47	†#111,713	+ 1,909		23.6
23	†#112,778	+ 2,974	+ 2.71	30.1	48	†#110,828	+ 1,024		29.1
24	#107,919	- 1,885		32.5	49	#113,759	+ 3,955	+ 3.60	34.5
25	111,187	+ 1,383		39.8	50	#109,983	+ 179		29.1
Statewide Total:						5,490,224			
Mean = 39.8									

# Based upon hard data (26 districts)

† Agrees with MOR (19 districts)

The populations of 33 HDs and 22 SDs can be easily verified because those are rural districts made up of entire counties, and entire townships, whose populations are available in public documents. The remaining districts involve urban areas and were defined partly in terms of precincts. Nobody but MOR and the Republican Party knew the populations of the state's precincts. Figuring that out by matching precinct boundaries with census blocks is laborious—and even then involves guesswork. That is because in many cases a precinct boundary will split a census block and no one really knows for certain how much of the block's population is on each side of the precinct line.

For most of the time we were working on this investigation we had not seen the MOR district populations. We estimated the populations of precincts, where necessary, by dividing a township's population (which we knew) in proportion to the SPI vote of the precincts making it up. When we finally saw the MOR district populations we found our estimates to be fairly close to their values, except for the “three major disagreements” alluded to in Chapter 3. Those were HD 15 and SDs 2 and 49. We had what we believe to be the correct precinct maps for Lake County (the location of HD 15 and SD 2) and Vanderburgh County (the location of SD 49). By plotting the district boundaries directly upon U.S. Census Bureau block maps we achieved considerable confidence in our work. We found that (2-member) HD 15 had a population of 115,201 for a deviation of +5,397, or + 4.92 percent. We found that SD 2 had a population of 105,947 for a deviation of - 3,857, or - 3.51 percent, SD 49 a population of 113,759 for a deviation of +3,955, or +3.60 percent. (In Tables 7.1 and 7.2 we use the MOR figures except for three districts in Table 7.1 and seven districts in Table 7.2 where our figures, based on hard data, disagree.<sup>4</sup>) These deviations considerably exceed those claimed by MOR and the *Bandemer* defendants. But even if we are correct, these deviations are still permissible if they make possible achievement of higher standards for other formal criteria. That is the real issue. As we shall see shortly, however, the *Bandemer* plans did not achieve higher standards for other formal criteria.

Listings of population, by district, for the 1972 house and senate plans are given in Tables 9.1 and 9.2. As might be expected, some of these districts are grossly deficient in population equality. Yet, Tables 7.3 and 7.4 show that when they were drawn a decade ago none of those deviations exceeded 1.7 percent. Chapter 9 will make clear why we are interested in the populations of districts that are about to go out of existence. The final thing to note about population deviations of the political plans is the fairly large values for the Townsend senate plan. As noted in Chapter 2, Townsend is identical to Carson except for Lake and Marion counties. Except for two adjacent districts (29 and 30) in Marion County whose deviations were -6.06 and +6.05 percent respectively, that plan would have deviations only on the order of  $\pm 2$  percent. A simple transfer of about 6,500 people from SD 30 to SD 29 would have achieved this. Such fine-tuning of Townsend was ignored probably because, for the Democrats waging the lawsuit, Carson was their alternative. Little needs be said concerning the population deviations of the citizen plans. Except for the Balanced Neutral plans, all were drawn to stay just inside fixed brackets established by the sponsors of the 1985 and 1990 competitions.

#### *Fragmentation of Local Governmental Units*

In *Reynolds v. Sims* the Supreme Court had said “A state may legitimately maintain the integrity of . . . political subdivisions . . . and provide for compact districts . . .”<sup>5</sup> Such “legitimate considerations incident to the effectuation of a rational state policy”<sup>6</sup> could justify population deviations from absolute equality provided (in the case of congressional districting) they were “consistently applied.”<sup>7</sup> In Chapter 6 we saw that Primus, in his 1985 competition, quantified this fragmentation much the way we do except (see Column 2 of Tables 6.1 and 6.2) that he characterized his plans in terms of “whole” counties rather than “split” counties.

Tables 7.3 and 7.4 summarize the fragmentation of counties, cities/towns, and townships for the house and senate plans, respectively. As we noted in Chapter 6, we cannot achieve the degree of comparability we would like because the citizen plans were not drawn to the same

population equality standard, either with respect to each other or with respect to the political plans. We can, nevertheless, make a few observations. Regarding the house plans, if we exclude B.N.P. because of its much greater population deviations and accept our calculation of the maximum (+) deviation of the *Bandemer* plan as 4.92 percent, then the plans drawn with 1980 data all conform roughly to a  $\pm 5$  percent deviation. Comparing just those plans, we see that the *Bandemer* and Crawford plans contain approximately twice as many county and township fragments as the 103-106 range of the Holderly and nested plans. With 207 county fragments Crawford appears to be the worst offender. However, remember that *Bandemer* has only 77 districts as opposed to 100 for Crawford, even though it has almost as many (183) county fragments.

Regarding the senate plans, if we forgive Townsend for its two districts of deviations just over 6 percent and look only at those drawn from 1980 data, then we can again compare within a “rough”  $\pm 5$  percent population deviation framework. Here *Bandemer* clearly stands out as most deficient: 120 county fragments as opposed to the 37-53 range of the citizen plans. With 65 county fragments Carson and Townsend are intermediate. *Bandemer*’s 56 city/town fragments are almost twice as many as the 29-35 range of the citizen plans; its 72 township fragments are three to four times the 15-28 range of the citizen plans.

### *Compactness*

In 1987-93 we conducted extensive research on the topic of district compactness. We were first provoked by Footnote 19 in Justice Stevens’ concurring opinion in *Karcher* that cited “a number of different mathematical measures of compactness” found in “the scholarly literature.”<sup>8</sup> It did not critique these measures or compare them. We were doubly provoked by Lowenstein and Steinberg’s assertion that compactness is not a legitimate criterion for “drafting or evaluating

Table 7.3

## FRAGMENTATION OF GOVERNMENTAL UNITS: INDIANA HOUSE DISTRICTING PLANS

(1)	(2) Population Deviation	COUNTIES		CITIES/TOWNS		TOWNSHIPS	
		(3) Number Split	(4) Number of Fragments	(5) Number Split	(6) Number of Fragments	(7) Number Split	(8) Number of Fragments
<u>"Citizen" Plans</u>							
1985 Minimum Fragments (Holderly)	+ 3.40% - 3.34%	31	103	24	78	22	59
1990 Balanced Neutral Process (B.N.P.)(Lucid)	+ 12.58% - 6.72%	23	81	22	72	15	42
1990 Fully Nested (Composite)	+ 4.97% - 4.98%	33	106	19	65	16	44
<u>"Political" Plans</u>							
1972 State of Indiana (Republican)(73 districts)	+ 0.8 %* - 1 %*	60	157	27	68	30	71
1982 Crawford (Democratic)	+ 2.52% - 1.98%	68	207	33	97	43	122
1982 State of Indiana (Republican) (" <i>Bandemer</i> ")	+ 2.52%† - 1.93%	67	183	29	71	37	89

\*Source: *Reapportionment in the States*. The National Legislative Conference and The Council of State Governments, Iron Works Pike, Lexington Kentucky. June 1972 (page 49)

†This figure is according to Market Opinion Research. Authors' computation shows extreme "+" deviation to be 4.92% (HD 15).

Table 7.4

## FRAGMENTATION OF GOVERNMENTAL UNITS: INDIANA SENATE DISTRICTING PLANS

(1)	(2) Population Deviation	COUNTIES		CITIES/TOWNS		TOWNSHIPS	
		(3) Number Split	(4) Number of Fragments	(5) Number Split	(6) Number of Fragments	(7) Number Split	(8) Number of Fragments
<u>"Citizen" Plans</u>							
1985 Minimum Fragments (Holderly)	+ 1.53% - 1.41%	18	53	12	35	12	28
1990 Compactness Threshold (Kenworthy)	+ 4.43% - 4.97%	13	37	11	29	7	16
1990 Balanced Neutral Process (B.N.P.)(Kenworthy)	+ 4.20% - 3.75%	14	39	11	29	7	15
1990 Fully Nested (Composite)	+ 4.70% - 4.46%	20	53	12	33	8	18
<u>"Political" Plans</u>							
1982 Townsend (White Democratic)	+ 6.05% - 6.06%	27	65	11	28	14	33
1982 Carson (Black Democratic)	+ 1.96% - 1.65%	27	65	13	33	16	42
1972 State of Indiana (Republican)	+ 1.7 %* - 1.6 %*	37	95	21	54	25	59
1982 State of Indiana (Republican) (" <i>Bandemer</i> ")	+ 2.71%† - 1.97%†	47	120	22	56	30	72

\*Source: *Reapportionment in the States*. The National Legislative Conference and The Council of State Governments, Iron Works Pike, Lexington Kentucky. June 1972 (page 49)

†These figures are according to Market Opinion Research. Authors' computation shows extreme "+" deviation to be 3.60% (SD 49) and extreme "-" deviation to be 3.51% (SD 2).

districting plans.”<sup>9</sup> We embarked upon a comparison and critique of compactness measures, finally publishing our findings.<sup>10</sup> The main conclusion we reached from our studies was that the primary value of quantifiable compactness measures was not in testing for gerrymandering, but as a criterion in a procedure designed to remove discretion from districting. We agreed with previous researchers that no one measure of compactness was perfect but also concluded that three “subclasses” of measures were decidedly superior: (1) district area compared with area of compact figure; (2) area/perimeter-squared ratio; and (3) relative second moment of area. We also agreed with the Niemi study that to the extent that compactness measures had utility in gerrymander analysis it was best to compare alternative plans using more than one measure.

In Chapter 33 we will see a comparison using three measures from which we may verify that compactness ranking of the plans is nearly identical regardless of the measure employed. But making such a comparison required resources unavailable in our Indiana study. We had found that the “Compactness Index” proposed by the late Victor Goedicke (one of the measures in the “area/perimeter-squared ratio” subclass, above) and described in Chapter 6 was the best measure for use in a districting procedure. Since it is the easiest to compute of any measure in the three subclasses, above we find it the best single measure for evaluating the compactness of the citizen and political plans we are here considering. We, therefore, made the measurements necessary for computing the compactness indices of all the senate plans and all of the house plans, except the 1972 and 1982 plans that had been done by Professor Niemi. The results for house plans are summarized in Table 7.5 and those for the senate plans in Table 7.6.

In our studies<sup>11</sup> we concluded that the best way to use compactness in comparing districting plans is to determine the average C.I. for all the districts in the plan, and also to note the C.I. of the least compact district in the plan (i.e., the “minimum”). The sum of the average and minimum indices gives the best overall indicator of the compactness of the

Table 7.5

## COMPACTNESS INDICES\* OF INDIANA HOUSE DISTRICTING PLANS

	Average for Plan	Minimum (Least Compact) District	Average Plus Minimum
<b>"Citizen" Plans</b>			
1985 Minimum Fragments (Holderly)	48.9	21.1 (HD 10)	70.0
1990 Balanced Neutral Process (Lucid)	54.1	31.3 (HD 77)	85.4
1990 Fully Nested (Composite)	54.9	31.1 (HD 13)	86.0
<b>"Political" Plans</b>			
1972 State of Indiana (Republican)†	44	19	63
1982 Crawford (Democratic)	37.4	15.7 (HD 94)	53.1
1982 State of Indiana (Republican) ("Bandemer")†	39.5	18 (HDs 45 & 73)	57.5

†Source: Niemi, Richard G. and John Wilkerson. 1990: Table 12.2 (We re-measured the compactness of HD 77 in the 1982 plan, and this lowered the average for that plan by 0.5.)

Table 7.6

## COMPACTNESS INDICES\* OF INDIANA SENATE DISTRICTING PLANS

	Average for Plan	Minimum (Least Compact) District	Average Plus Minimum
<b>"Citizen" Plans</b>			
1985 Minimum Fragments (Holderly)	47.4	21.4 (SD 40)	68.8
1990 Compactness Threshold (Kenworthy)	55.8	31.5 (SD 10)	87.3
1990 Balanced Neutral Process (Kenworthy)	56.4	31.5 (SD 10)	87.9
1990 Fully Nested (Composite)	53.4	29.0 (SD 11)	82.4
<b>"Political" Plans</b>			
1982 Townsend (White Democratic)	44.6	23.4 (SD 48)	68.0
1982 Carson (Black Democratic)	39.9	14.6 (SD 30)	54.5
1972 State of Indiana (Republican)	45.9	21.4 (SD 49)	67.3



Tables 7.5 and 7.6, therefore, list these values for all plans. It is readily apparent from a perusal of these tables that the citizen plans are sufficiently more compact than the political plans that it would have made no difference had we employed other of the more credible compactness measures—in addition to or in lieu of Goedicke. Of the house plans Crawford is the least compact, with *Bandemer*, again, a close second. Fully Nested is the most compact plan, with B.N.P. running second. Of the senate plans Carson is the least compact with *Bandemer*, again, a close second. B.N.P. is the most compact plan with Compactness Threshold less than a percent behind.

We said earlier that low compactness scores do not prove that a plan is gerrymandered. On the other hand, when a plan has such a low compactness score in comparison with other plans drawn to the same population variance, and—at the same time—exhibits more fragmentation of local governmental units than do these other plans “it seems fair to conclude” (in the words of Justice Stevens) “that something may be amiss.”<sup>12</sup> If a plan has an adverse effect upon certain groups and/or individuals compactness comparisons with other plans yielding results such as these would preclude the plan’s authors from defending it on the grounds that these “adverse effects” were the unavoidable consequence of an effort to achieve compactness of the plan’s districts.

### *Distribution of Minority Populations*

In Indiana the only minority of sufficient numbers and geographic concentration to be capable of achieving majority status within a district of 55,000 population is African-Americans, or blacks. In Table 7.7 we report the African-American populations and percentages of house districts situated in counties where that population is sufficient to constitute 13 percent of a SMD. In Table 7.8 we do the same thing for the senate districts, except that the threshold is 10 percent of a SMD.

**INDIANA HOUSE: AFRICAN-AMERICAN POPULATIONS AND PERCENTAGES OF DISTRICTS  
 IN COUNTIES HAVING SUFFICIENT POPULATIONS TO CONSTITUTE 13% OF A SINGLE-MEMBER DISTRICT  
 ---UNDER DIFFERENT PLANS**

Table 7.7

	Marion Co.		Lake Co.		Allen Co.		St. Joseph Co.		Vanderburgh Co.		Madison Co.		LaPorte Co.		Delaware Co.			
	District Populat'n.	%	District Populat'n.	%	District Populat'n.	%	District Populat'n.	%	District Populat'n.	%	District Populat'n.	%	District Populat'n.	%	District Populat'n.	%		
<b>Ceiling: #</b>	155,310	2829	126,051	2296	26,396	48.1	21,604	39.4	11,934	21.7	9,652	17.6	8,662	15.8	7,587	13.8		
<b>"Citizen" Plans</b>	66	13,204	24.3	1	10,475	18.9	16	11,660	21.2	89	8,743	15.7	13	7,778	14.3	44	4,068	7.3
<b>1985 Minimum</b>	67	12,071	22.0	4	10,999	20.0	28	7,100	13.2	8	27,897	50.6	51	8,553	15.8			
<b>Fragments</b>	71	49,414	91.8	8	27,897	50.6	29	6,680	12.5	9	49,902	91.1						
<b>(Holdery)</b>	72	24,268	44.5	9	49,902	91.1	10	18,996	34.5	10	18,996	34.5						
<b>(3)†</b>	73	25,583	47.8	10	18,996	34.5												
<b>1990 Balanced Neutral</b>	58	7,639	13.5	1	8,600	16.0	16	13,680	24.7	98	11,255	20.7	13	7,778	14.3	38	6,487	11.5
<b>Process (Lucid)</b>	65	45,147	88.1	2	8,458	16.0	17	6,518	12.0	17	6,518	12.0	42	7,418	13.9	48	6,353	11.6
<b>(4)</b>	66	31,224	59.1	5	12,382	23.1	36	15,323	29.0	72	11,298	19.9	44	7,324	13.9	25	7,778	14.3
<b>1990 Fully Nested</b>	92	8,850	15.7	3	11,813	22.1												
<b>(Composite)</b>	94	9,455	17.4	5	21,352	38.1												
<b>(4)</b>	97	41,922	80.1	6	44,021	82.2	80	22,233	40.3	80	22,233	40.3	7	13,525	24.2	10	7,789	13.9
	99	40,289	76.4	7	36,553	67.6												
	100																	
	22,013	40.1																
<b>"Political" Plans</b>	87	30,057	55.7	15	16,606	29.7												
<b>1982 Crawford</b>	88	37,419	68.7	31	32,143	57.5												
<b>(Black Democratic)</b>	89	35,298	65.6	48	39,476	70.9												
<b>(7)</b>	94	33,520	62.0	49	36,136	64.6												
	42	25,600	45.5	2	14,200	23.5												
<b>1972 State of Indiana</b>	43	45,700	84.5	3	24,100	40.5												
<b>(Republican)</b>	45	69,200	127.5	5	73,200	121.2												
<b>(5)</b>	49	35,833	66.2	12	34,286	57.5												
	51	99,474	183.5	13	7,407	12.3												
<b>1982 State of Indiana</b>	51	99,474	183.5	14	7,407	12.3												
<b>(Republican)</b>				14	7,407	12.3												
<b>("Bandemer")</b>				14	7,407	12.3												
<b>(5)</b>				14	7,407	12.3												
				78,478	69.9													
				78,478	69.9													

# If all African-Americans in the county could be put in a single district of population 54,902

† Number of majority-minority seats in plan (a 2-member district contains 2 seats; a 3-member district contains 3 seats)

\*\* 2-Member district

†† 3-Member district

† African-American member elected from this district in 1982 (number of "daggers" in multi-member districts indicates number who were elected from that district)

Table 7.8

INDIANA SENATE: AFRICAN-AMERICAN POPULATIONS AND PERCENTAGES OF DISTRICTS IN COUNTIES HAVING SUFFICIENT POPULATIONS TO CONSTITUTE 10% OF A SINGLE-MEMBER DISTRICT UNDER DIFFERENT PLANS

	Marion Co.		Lake Co.		Allen Co.		St. Joseph Co.		Vanderburgh Co.	
	District, Population	%	District, Population	%	District, Population	%	District, Population	%	District, Population	%
Ceiling:*	155,310	141.4	126,051	114.8	26,396	24.0	21,604	19.7	11,934	10.9
"Citizen" Plans										
1985 Minimum Fragments (Holderly) (2)†	30 12,324	11.3	1 17,491	16.1	14 10,774	9.7	9 18,772	17.0	46 11,444	10.5
	32 20,304	18.4	3 57,698	52.7	15 14,518	13.2				
	33 81,214	73.8	4 50,201	45.7						
	35 22,191	20.1								
1990 Compactness Threshold (Kenworthy) (2)	30 25,157	23.6	1 17,058	16.0	15 15,422	14.8	9 20,198	18.4	49 11,462	10.3
	31 16,957	15.0	3 71,534	68.1						
	32 11,359	10.2	4 36,132	34.0						
	33 83,355	74.5								
1990 Balanced Neutral Process (Lucid) (2)	30 25,157	23.6	1 17,058	16.0	15 15,432	14.5	9 20,198	18.4	49 11,462	10.3
	31 16,957	15.0	3 60,320	54.6						
	32 11,359	10.2	4 47,463	43.5						
	33 83,355	74.5								
1990 Fully Nested (Composite) (2)	49 82,281	77.7	2 17,205	16.0	19 17,445	15.9	14 18,092	16.4	37 12,724	11.2
	50 31,468	28.8	3 65,373	59.6						
			4 42,410	38.6						
"Political" Plans										
1982 Townsend (White Democratic) (2)	29 21,139	20.5	1 16,288	14.7	15 22,160	19.9	10 20,101	18.2	49 10,812	9.7
	30 11,726	10.1	3 91,372	82.8						
	34 89,745	83.3	4 16,527	15.1						
	35 11,325	10.5								
1982 Carson (Black Democratic) (4)	29 73,314	67.7	2 57,037	52.7	15 22,160	19.9	10 20,101	18.2	49 10,812	9.7
	30 62,477	57.5	3 66,462	61.3						
1972 State of Indiana (Republican) (2)	29 16,500	12.5	1 14,500	21.1	15 10,500	9.4	10 16,100	18.0	49 7,600	7.7
	30 26,800	27.9	3 87,900	84.8						
	31 19,600	18.5	4 17,000	24.5						
	33 31,200	39.7								
	34 50,200	68.1								
1982 State of Indiana (Republican) ("Bandemer") (2)	30 26,126	24.1	1 18,914	17.5	15 14,210	12.7	10 19,629	18.1	49 10,400	9.3
	31 16,760	15.5	3† 78,360	71.9						
	33 37,375	34.2	4 27,665	25.6						
	34† 63,054	58.4								

\*If all African-Americans in the county could be put in a single district of population of 109,804

†Number of majority-minority seats in plan.

‡African-American member elected from this district in 1982.

Table 7.7 indicates that with respect to the house, “color blind” districting may not be good for blacks in Indiana. The citizen plans were all drawn without regard to race and it can be seen that they are consistently lower in “majority-minority” districts. On the other hand, note that although Holderly shows only one such HD in Marion County, there are two other HDs just under the 50 percent “threshold” which in all probability would elect blacks—absent racially polarized voting. As we know from our study of the *Bandemer* litigation, the 1982 Republican plan was drawn to maintain the status quo in black-majority districts in Lake and Marion counties achieved in their 1972 plan; and Crawford was drawn to increase the number of black-majority districts in those counties in order to afford *statewide* proportional representation by race. Table 7.7’s numbers confirm that these goals were achieved. Table 7.7 also documents that with respect to the *Bandemer* house plan, one white representative (Day [HD 51]) was elected in a black-majority district and two black representatives (Harris [HD 12], Goodall [HD 34]) were elected from white majority districts.

A corresponding table (Table 7.8) shows that a color-blind districting procedure would be unlikely to adversely impact black representation in the Senate. All citizen plans had one black majority SD in each of Lake and Marion counties. As we also know from our study of the litigation, Carson was drawn to increase the number of black-majority districts in those counties in order to afford statewide proportional representation by race. The Carson plan achieved that goal. These observations conclude our physical analysis of the Indiana house and senate plans. In the next chapter we will lay the groundwork for a political analysis of them.

### Notes

<sup>1</sup> Beginning now, we shall drop the quotation marks from around “political” and “citizen” when referring to the plans the reader was introduced to in chapters 2 and 6, respectively.

<sup>2</sup> Retrospective tests for partisan gerrymandering—or, more accurately, for the presence of partisan bias—have been proposed by King (1989a); Gelman and King (1990a); and Niemi/Wright (1990). But the courts need to know if a plan is a gerrymander *before* any election has taken place under it. Therefore, we are mostly interested in *prospective* tests.

<sup>3</sup> Lowenstein, Daniel and Daniel Steinberg, *The Quest for Legislative Disdistricting in the Public Interest: Elusive or Illusory?* (California: UCLA Law Review, 1985); Bernard Grofman, *Excerpts from First Declaration of Bernard Grofman in Badham v. Eu* (California: UCLA Law Review, 1985b).

<sup>4</sup> The district populations in these tables will not add up to the statewide population of 5,490,224 because they are a mixture of the MOR figures and our figures.

<sup>5</sup> *Reynolds v. Sims* 377 U.S. 533, 578.

<sup>6</sup> *Ibid.*, 579.

<sup>7</sup> *Karcher v. Daggett* 462 U.S. 725, 740-41 (1983).

<sup>8</sup> *Ibid.*, 456.

<sup>9</sup> Daniel Lowenstein and Daniel Steinberg, *The Quest for Legislative Disdistricting in the Public Interest: Elusive or Illusory?*(California: UCLA Law Review, 1985) 23.

<sup>10</sup> Horn, et al. 1993a.

<sup>11</sup> Horn, et al. 1993a: pp. 111-12.

<sup>12</sup> *Karcher v. Daggett* 462 U.S. at 758.

## Chapter 8

### Political Analysis: Theoretical Basis Using Idealized Electorate

The political analysis we are about to embark upon requires preliminary attention to three concepts and two troublesome complications which are fundamental to the five tests for partisan gerrymandering we will be considering. The first two concepts are histograms and seats/votes curves. The third concept that is fundamental to all five tests is that of the idealized, or dichotomous electorate—an electorate neatly divided between two sharply defined ideologies, each embodied in a homogeneous political party. In our discussion of the major-party theory of representation in Chapter 1 we advised the reader that this theory implied such an electorate and that we would call it an idealized, or dichotomous electorate.

#### *Properties of Histograms and Seats-Votes Curves*

*Histograms.* In our discussion of the defendants' post-trial brief in Chapter 5 we stated, "partisan bias in a districting plan (or 'gerrymandering') becomes a matter of distribution of a party's supporters." In discussing the appellants' brief to the Supreme Court later in that chapter we introduced the concept of histograms<sup>1</sup> by means of Figures 5.1-5.4 saying we would be discussing them "in greater depth in Chapter 8." We said then that histograms "give us a simple pictorial representation of how skewed a districting plan may be in terms of its overall partisan character."

In Figures 5.1-5.4 and all other histograms that appear in this book we obtained each vertical "bar" of the histogram by grouping together all districts having political indices<sup>2</sup>, or election outcomes, within an arbitrarily selected percentage range. We have chosen that range to be 2.5 percent, which means, for example, that all districts having indices between 42.5 and 45

are grouped together in one “bar.” Statisticians designate the width of this range as the class interval. We could have selected a narrower class interval—say, 1 percent—and obtained a histogram having more “bars,” with each one being shorter. Or we could have selected a wider class interval—say, 5 percent—and obtained a histogram having fewer “bars,” with each one being taller. Which class interval we select will not affect the analytical characteristics (i.e., “parameters”) of the histogram. We just think 2.5 percent has the best visual appeal.

Histogram characteristics are central to the gerrymander analysis employed by McDonald and Engstrom,<sup>3</sup> which we shall consider in Chapter 11. A histogram may be constructed for any division of the aggregate statewide legislative or congressional vote for two parties. In Figure 5.1 it was for 50.15 percent Democrat-49.85 percent Republican. In Figure 5.2 it was for 51.09 percent Democrat-48.91 percent Republican. In Figure 5.3 it was for 54.7 percent Democrat-45.3 percent Republican. In Figure 5.4, in the figures appearing in this chapter, and in most of those that will appear subsequently, histograms will be based upon an even (“50/50”) division of the “statewide vote” because that is the condition under which it is easiest to assess the “fairness” of a districting plan.

*Seats-Votes Curves.* The second concept is the seats-votes curve. It is an alternative way of presenting the same data used to construct a histogram, but it depicts a cumulative relationship in the form of an “S.” Its origins lie in studies of European elections in which voting is typically for or against parties—as contrasted to the United States where voting is increasingly an expression of support for, or opposition to, individual candidates. An article published in Great Britain following its 1950 general election probably did the most to interest American scholars in the “cube law” (mentioned in Chapter 4 in connection with Grofman's *Bandemer* trial testimony). This article contained a seats-votes curve pertaining to the 1945 British election<sup>4</sup>, as well as a histogram for the 1950 election.<sup>5</sup> The American scholar who picked up on this study and who has written most about the seats-vote curve is Richard G. Niemi. Between 1978 and

1990 he published four major articles pertaining to “the curve” and what he believed to be its most important derivative: the swing ratio.<sup>6</sup>

In Chapter 12, when we consider Niemi’s proposal to employ the swing ratio as a measure of gerrymandering, we will give more attention to the various formulations of the seats-votes curve, to the swing ratio, and to the other major parameter derived from the curve: partisan bias. Here we shall only give a brief introduction to these concepts by defining them and providing illustrative examples of them. We might have held off their introduction entirely until Chapter 12 save for the fact that seats-votes curves and histograms are so closely related that it would not be good to depict the histograms of the following five cases without showing, simultaneously, the seats-votes curves which go with them.

The five cases to follow were concocted on the premise that gerrymander analysis employing histogram characteristics and the seats-votes curve can be best understood if we have an idea of what partisan and bipartisan gerrymanders—and “neutral” plans—would look like in terms of their histograms and seats-votes curves. Niemi and Deegan<sup>7</sup> utilize both histograms and seats-votes curves in their theoretical discussion of political districting. Using eight different pairs of figures, they illustrate the relationship between these two devices in describing various districting plans. It is helpful to follow their methodology in illustrating how certain kinds of districting plans appear both as histograms and as seats-votes curves.

Niemi and Deegan’s examples are all of plans which attempt to be “fair” in accommodating conflicting criteria. We add to their examples three others in which the plans are intentionally “unfair” in order to illustrate—at least in theory—how an electorate evenly divided between “Democrats” and “Republicans” could be districted to yield plans having various political characteristics. Whereas they employed a state divided into 100 districts and, in their Figures 4 through 7, posited an electorate in which one of the parties received more than half the total statewide vote we employ here a state divided into 24 districts in which the statewide electorate is evenly divided.



Given: State to be divided into 24 districts of 100,000 voters each.

Statewide electorate of 2,400,000 evenly divided between 1,200,000 “Democrats” and 1,200,000 “Republicans.”

Case 1: Partisan Gerrymander, Democrat: (Figure 8.1)

Create 6 “Republican” Districts:

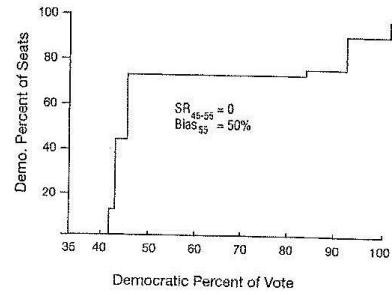
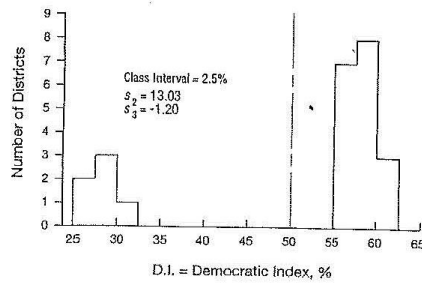
2 @ D.I. <sup>8</sup> = 25.5:	25,500 D	74,500 R	x 2 =	51,000	<del>149,000 R</del>
3 @ D.I. = 28:	28,000 D	72,000 R	x 3 =	84,000 D	216,000 R
1 @ D.I. = 30:	30,000 D	70,000 R	x 1 =	<u>30,000 D</u>	<u>70,000 R</u>
				165,000 D	435,000 R

Create 18 “Democrat” Districts:

7 @ D.I. = 56:	56,000 D	44,000 R	x 7 =	392,000 D	308,000 R
8 @ D.I. = 57.75:	57,750 D	42,500 R	x 8 =	462,000 D	338,000 R
3 @ D.I. = 60.33:	60,333 D	39,667 R	x 3 =	<u>181,000 D</u>	<u>119,000 R</u>
				<u>1,035,000 D</u>	<u>765,000 R</u>
				1,200,000 D	1,200,000 R

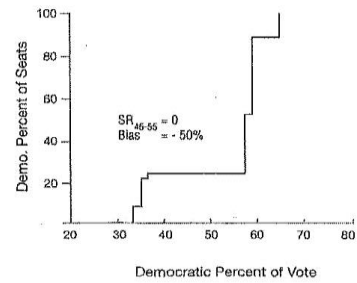
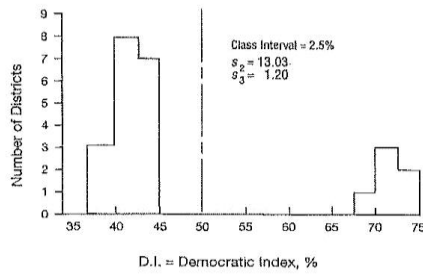
2017/10/19

Figure 8.1  
Partisan Gerrymander: Democratic  
(24 Districts)



Case 2: Partisan Gerrymander, Republican: mirror image of Democrat gerrymander

Figure 8.2  
Partisan Gerrymander: Republican  
(24 Districts)



Case 3: Bipartisan Gerrymander: (Figure 8.3). In a bipartisan gerrymander the “humps” will be about the same size and situated equidistant on each side of the centerline.

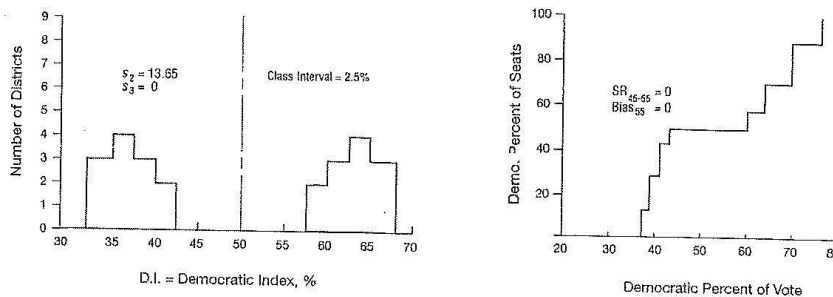
Create 12 “Republican” Districts:

3 @ D.I. = 33:	33,000 D	67,000 R	x 3 =	99,000 D	201,000 R
4 @ D.I. = 36:	36,000 D	64,000 R	x 4 =	144,000 D	256,000 R
3 @ D.I. = 39:	39,000 D	61,000 R	x 3 =	117,000 D	183,000 R
2 @ D.I. = 42:	42,000 D	58,000 R	x 2 =	<u>84,000 D</u>	<u>116,000 R</u>
				444,000 D	756,000 R

Create 12 “Democrat” Districts:

2 @ D.I. = 58:	58,000 D	42,000 R	x 2 =	116,000 D	84,000 R
3 @ D.I. = 61:	61,000 D	39,000 R	x 2 =	183,000 D	117,000 R
4 @ D.I. = 64:	64,000 D	36,000 R	x 4 =	256,000 D	144,000 R
3 @ D.I. = 67:	67,000 D	33,000 R	x 3 =	<u>201,000 D</u>	<u>99,000 R</u>
				<u>756,000 D</u>	<u>444,000 R</u>
				1,200,000 D	1,200,000 R

Figure 8.3  
Bipartisan Gerrymander  
(24 Districts)



Case 4: Neutral Plan: Very Competitive: (Figure 8.4) This case approximates Niemi and Deegan's Figure 3(a). It differs in having a Range of Responsiveness<sup>9</sup> from only 42.5 to 57.5, compared to Niemi's 30 to 70 range; 24 districts represented in 6 "steps" as opposed to 100 districts represented as an angular line; and a mid-point Swing Ratio of 7.5 as opposed to 5.0.

Create 12 "Republican" Districts:

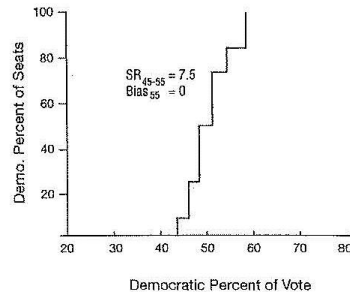
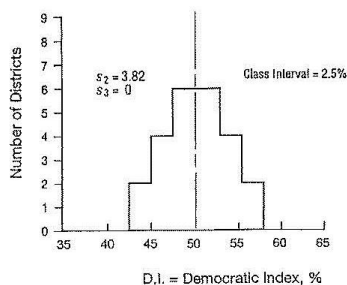
2 @ D.I. = 43:	43,000 D	57,000 R	x 2 =	86,000 D	114,000 R
4 @ D.I. = 46:	46,000 D	54,000 R	x 2 =	184,000 D	216,000 R
6 @ D.I. = 49:	49,000 D	51,000 R	x 6 =	<u>294,000 D</u>	<u>306,000 R</u>
				564,000 D	636,000 R

Create 12 "Democrat" Districts:

6 @ D.I. = 51:	51,000 D	49,000 R	x 6 =	306,000 D	294,000 R
4 @ D.I. = 54:	54,000 D	46,000 R	x 4 =	216,000 D	184,000 R
2 @ D.I. = 57:	57,000 D	43,000 R	x 2 =	<u>114,000 D</u>	<u>86,000 R</u>
				<u>636,000 D</u>	<u>564,000 R</u>
				1,200,000 D	1,200,000 R

R

Figure 8.4  
Neutral Plan: Very Competitive  
(24 Districts)



Case 5: Neutral Plan: Less Competitive (Figure 8.5): This case closely approximates Niemi and Deegan’s Figure 2(a). It has the same 5.0 swing ratio and differs only in having 24 districts represented in 8 “steps,” rather than 100 districts represented as a straight line on the seats-votes curve.

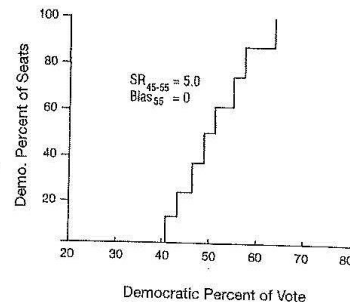
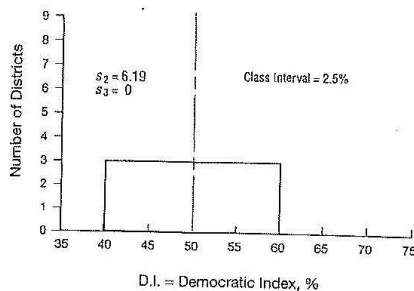
Create 12 “Republican” Districts:

3 @ D.I. = 41:	41,000 D	59,000 R	x 3 =	123,000 D	177,000 R
3 @ D.I. = 43:	43,000 D	57,000 R	x 3 =	129,000 D	171,000 R
3 @ D.I. = 46:	46,000 D	54,000 R	x 3 =	138,000 D	162,000 R
3 @ D.I. = 49:	49,000 D	51,000 R	x 3 =	<u>147,000 D</u>	<u>153,000 R</u>
				537,000 D	663,000 R

Create 12 “Democrat” Districts:

3 @ D.I. = 51:	51,000 D	49,000 R	x 3 =	153,000 D	147,000 R
3 @ D.I. = 54:	54,000 D	46,000 R	x 3 =	162,000 D	138,000 R
3 @ D.I. = 57:	57,000 D	43,000 R	x 3 =	171,000 D	129,000 R
3 @ D.I. = 59:	59,000 D	41,000 R	x 3 =	<u>177,000 D</u>	<u>123,000 R</u>
				<u>663,000 D</u>	<u>537,000 R</u>
				1,200,000 D	1,200,000 R

Figure 8.5  
Neutral Plan: Less Competitive  
(24 Districts)



Cases 1, 2, and 3 supplement Niemi's theoretical analysis and, with Cases 4 and 5, provide a standard for comparison with the 1982-90 Indiana citizen and political plans when these plans are analyzed for partisan bias. The histograms can be described, quantitatively, in terms of their standard deviations ( $s_2$ ) and their skewness ( $s_3$ ).

*Standard Deviation.* A small standard deviation signifies that the districts are bunched tightly around the 50 percent axis of the histogram and that the plan contains a relatively high proportion of marginal districts. In the examples shown here the smallest  $s_2$ , 3.82, occurs in Case 4, the "very competitive" neutral plan. The next smallest  $s_2$ , 6.19, occurs in Case 5, the "less competitive" neutral plan. A large standard deviation signifies that the districts are scattered widely over a spectrum that ranges from heavily Republican to heavily Democrat and that fewer of the districts are marginal. In the examples shown here the largest  $s_2$ , 13.65, occurs in Case 3, the bipartisan gerrymander. The next largest  $s_2$ , 13.03, occurs in Cases 1 and 2, the two partisan gerrymanders.

*Skewness.* The skewness parameter is a measure of the degree to which the centroid ("center of gravity") of the histogram lies to the left, or to the right, of the 50 percent axis.<sup>10</sup> Because the formula for skewness involves the cubing of the distance dimension, the location of this centroid is much more influenced by the distance of districts that lie from the 50 percent axis than the number of such districts. For example, in the "Democratic gerrymander," the six districts located a long distance to the left (negative direction) of the 50 percent axis "outweigh" the 18 districts located a short distance to the right (positive direction) of the 50 percent axis giving the histogram a negative skewness. Therefore, a histogram—as in this example—weighted to the left side will have a negative skewness and suggest pro-Democrat bias in the plan. A histogram weighted to the right side will have positive skewness and suggest pro-Republican bias in the plan.

We say “suggest” in these examples because high skewness does not, by itself, establish a partisan gerrymander. It must be accompanied by a high standard deviation, as well. In Cases 1 and 2 this is so. In the analysis to follow later on we shall note plans with higher skewness than 1.2; but these plans will also feature lower standard deviations and, therefore, be more difficult to characterize as partisan gerrymanders. The symmetrical histograms depicted in Cases 3, 4, and 5 all have zero skewness and we can see from them that zero skewness can suggest either a neutral plan or a bipartisan gerrymander. Coupled with a low standard deviation, as in Cases 4 and 5, it establishes a neutral plan. Coupled with a high standard deviation, as in Case 3, it establishes a bipartisan gerrymander.

*Swing Ratio.* The swing ratio (“SR”) is generally defined as the rate at which a party gains seats per unit increment of votes. More precisely, it is the change in the proportion of seats won by a party divided by the change in the “statewide vote” received by its candidates. As stated at the beginning of this chapter, it is the first of the two major parameters derived from the seats-votes curve. It can vary significantly over the range of the “statewide vote” received by a party’s candidates. We are usually most interested, however, in its value over the 45 to 55 percent range. Consequently, our seats-votes curves will be annotated to indicate their swing ratios as “SR45-55.” A low SR is represented by a “plateau” on the seats-votes curve. As stated at the beginning of this chapter, we shall defer further discussion of the SR until we are ready to apply Niemi’s swing ratio analysis to actual districting plans.

*Bias.* The other major parameter derived from the seats-votes curve is bias. Bias is defined as the difference between the percentage of seats a party wins with a given percentage of the “statewide vote” and that which the other party would have won had its candidates received the same percentage. As with the swing ratio, bias can vary at different points on the seats-votes curve, so we have to specify at what percent of the majority party’s vote we are making this measurement. We usually choose 50 or 55. In a two-party system we assume the seats won by

the minority party are the same as those won by the majority party at  $(100 - v)$  percent,  $v$  being the majority party's percentage of the "statewide vote." This enables us to calculate bias entirely in terms of the majority party's seats and votes percentages. Stated algebraically, and in decimal form, by Danny Kleinman<sup>11</sup>:

Suppose that the Democratic Party candidates throughout the state obtain a fraction  $v$  of the average district vote cast for both parties combined, and win a fraction  $S$  of the seats in the chamber or delegation. Now ask what fraction  $S'$  of those seats it would have won *if* it had obtained the fraction  $1 - v$  of the total votes cast—instead of  $v$ . In a perfectly symmetrical scheme  $S'$  would equal  $1 - S$ . An excess [a positive value for  $S' - (1 - S)$ ] indicates a bias in favor of the Democrats, while a deficiency indicates a bias in favor of the Republicans, and  $S' - (1 - S) = S' + S - 1$  measures the degree of 'partisan bias.'

Bias is synonymous with *asymmetry*, or lack of symmetry in the seats-votes curve, and is the major focus of analysis by Gelman and King—as we shall see in Chapter 26. In the foregoing Case 1 it can be seen that, with 50 (or 55) percent of the vote ( $v$ ) Democrats get 75 percent of the seats ( $S$ ). At 45 percent of the vote ( $1 - v$ ) they also get 75 percent of the seats ( $S'$ ). Therefore,

$$\text{Bias} = S' + S - 1 = 0.75 + 0.75 - 1 = 0.50 \quad [\text{Figure 8.1}]$$

By study of figures 8.2-8.5 the reader can verify that Case 2 features a 50 percent pro-Republican bias and Cases 3-5 demonstrate zero bias.

In this chapter's opening paragraph we stated there was a "third concept" and two "troublesome complications" that were "fundamental" to all five tests for partisan gerrymandering. The "third concept"—that of an idealized, or dichotomous electorate—we shall not elaborate upon at this time. We merely want to bring it to the reader's attention so that, as he reads the next 31 chapters, he will be aware of this unstated assumption.



### *Troublesome Complications*

*Aggregate Statewide vs. Mean District Vote.* The reader may have noticed in the narrative up to this point the presence of quotation marks around the words “statewide vote” and wondered what was the reason. In the controversy over the 2002 Pennsylvania congressional districting plan litigated in *Vieth v. Jubelirer* there was agreement over one number: the statewide percentage of seats won by Democratic candidates in the general election of 2002. It was 7/19, or 36.84 percent. At issue was which measure of the “statewide vote” should it be compared to: aggregate statewide vote or mean district vote? These measures are defined in Appendix C and the definitions given there should be clearly held in mind.

Scholars like Professor James E. Campbell argue for the former measure. Other scholars, like professors Daniel Lowenstein and Gary King, argue for the latter measure. If the same number of people voted in each district both measures would yield the same number. But turnout varies significantly among districts with poor, inner-city and rural districts typically showing low turnout and affluent suburban districts typically showing high turnout. In California congressional elections over the period 1966-2004 (see Table 17.7) the turnout ratio ranged from 2.11 in 1972 to 5.68 in 1992. In Pennsylvania congressional elections over the period 1992-2004 (see Table 28.1) the turnout ratio ranged from 1.47 in 1992 to 1.93 in 1998. Since poor inner-city districts usually elect Democrats, and affluent suburban districts usually elect Republicans, it isn't surprising that Democrat advocates tend to favor mean district vote where each district carries the same weight, regardless of turnout; while Republican advocates tend to favor statewide aggregate vote where the high-turnout suburban districts more heavily influence the “statewide vote” total.

*Uncontested Districts.* The second troublesome complication in seats-votes analysis occurs when one or the other of the major parties fails to put up a candidate in some districts—usually districts where their candidates would face overwhelming odds. This phenomenon was

particularly salient in Pennsylvania in 2002 when the major parties failed to nominate candidates in six of 19 districts—the Republicans in one district (14) and the Democrats in five districts (3, 5, 10, 16, and 19). If we add-in the votes for the party running an unopposed candidate we over-estimate the statewide vote of that party, because we know that if the other party just had a name on the ballot it would have received *some* votes. On the other hand, if we exclude these districts from the total and consider only districts contested by both major parties, we are being unfair to the party which *did* field a candidate—because we are denying it substantial pluralities in its strongest districts which would boost its statewide total.

A compromise is to “impute” votes to the party which failed to nominate a candidate in these uncontested districts—to make a guess of how many votes it *would have* received in that district had it run a candidate. But no one knows the answer to such questions. Gelman and King<sup>12</sup> made a frequency distribution of the proportion of the vote received by a party in a contested district election immediately preceding an election in which that party was unopposed in that district using 132 cases in three states during the period 1968-80. The range was from 51 to 94 percent with a mode at 74 percent. We, therefore, feel justified in imputing 75 percent of the vote in an uncontested district to the major party running a candidate—and 25 percent to the major party not running a candidate.

With these prefatory comments, we can set down six possible ways of stating the major party “statewide vote” in a given state in a given election. For example, take the Pennsylvania congressional election of 2002 shown in Table 8.1.

It is apparent that there is no way to define the “statewide vote” that everyone agrees to. The “Democratic vote” in this example can, arguably, be anything from 40.81 percent to 51.96 percent, depending on what assumptions one chooses to make. When that choice is made, comparison with the 36.84 percent seat-share yields a Democrat deficit (or Republican partisan

Table 8.1  
Six Ways of Stating the "Statewide Vote"  
(Pennsylvania Congressional: 2002)

Use Aggregate Statewide Vote	In Uncontested Districts Give Party Running a Candidate 100% and 0% to Other Major Party		In Uncontested Districts Impute 75% to Major Party Running a Candidate & 25% to Other Major Party		Delete Uncontested Districts from Computation	
	Votes	%	Votes	%	Votes	%
Democrat	1,348,665	42.04	1,567,286	45.20	1,225,342	50.45
Republican	1,859,220	57.96	1,900,328	54.80	1,203,355	49.55
Total	3,207,885	100.00	3,467,614	100.00	2,428,697	100.00
Using Mean District Vote						
Democrat	775.46 /19 =	40.81	875.46 /19 =	46.08	675.46 /13 =	51.96
Republican	1,124.54 /19 =	59.19	1,024.54 /19 =	53.92	624.54 / 13 =	48.04

advantage) ranging from 3.97 percent to 15.12 percent. Our choice is to take the Democratic vote as 45.20 percent (or 46.08 percent) by employing the 75-25 imputation. That is what we did in constructing Tables 17.7 and 28.1 pertaining to the California and Pennsylvania controversies. Imputation of votes is admittedly guesswork. But the other two alternatives are clearly unacceptable.

It is much more difficult to take sides in the aggregate statewide vs. mean district vote controversy. Campbell appears to think it is an open-and-shut matter. He contends

*"...the national vote measure is the appropriate measure. ...the mean district vote can be quite misleading. ...the mean district vote measure is problematic for measuring bias variance in district size and turnout, the assumption of equal weighing is quite erroneous. It is especially dangerous if one party does disproportionately well in high-turnout districts while the opposing party's strength is in lower-turnout districts. ...the mean district congressional vote consistently overstates the Democratic vote and thus makes it appear as though Democrats are deserving of more seats in an unbiased system. For elections from 1954 to 1992, the mean district vote for Democrats exceeded their national vote percentage in every*

election. The difference was typically more than three percentage points...*counting each district equally essentially counts individual voters quite unequally*. A voter from a low-turnout district carries much more weight in the mean district measure than his or her counterpart in a high-turnout district. Since turnout differences are an important source of bias in the electoral system, the mean district vote is an inappropriate measure of a party's appeal in the electorate. It should not be used to examine partisan bias in the electoral system.”<sup>13</sup>

On the other hand, Lowenstein maintains

“...by reason of widespread practice, long-standing tradition, and a basic commitment to civil rights, our system of districting is firmly rooted in population rather than numbers of voters, and that it makes a great practical difference that districting is so based. The votes/seats theorists, by simply counting up statewide vote totals, have attempted either unwittingly or uncaringly to impose a standard for evaluating districting plans which undermines this settled basis for districting.

...in order to fashion a votes/seats theory that is consistent with the actual basis of our system of districting, the method of adding up statewide vote totals must be rejected. Instead, one must add up the percentage of the vote a party has received in each district and divide the total by the number of districts—in short, one must calculate a mean district vote percentage for each party.<sup>14</sup>

It is simply an un-resolvable conflict that hinges on philosophical assumptions rather than fact or logic. In Appendix B the “statewide vote” totals for Indiana are based on aggregate statewide vote, but the water was muddied by the presence of multi-member districts many of which were not fully contested. In Tables 17.7 and 28.1 we list both versions of the “statewide vote” in order to show how much they differ. In these states we construct histograms based

upon both assumptions to see how much difference it makes in the number of districts designated as “Democrat” and “Republican.”

## Notes

<sup>1</sup> Also referred to as frequency distributions by statisticians, and as Constituency Proportion Distributions (CPDs) by the British political geographer Peter Taylor. See Gudgin and Taylor, 1979: Chapter 2.1.1 pg. 14

<sup>2</sup> An analytical tool we define in Appendix C and will be discussing at length in Chapter 9.

<sup>3</sup> McDonald, Michael D. and Richard L. Engstrom. 1990. We shall apply their test to the Indiana plans in Chapter 11.

<sup>4</sup> Kendall, M.G., and A. Stuart, *The Law of Cubic Proportions in Electoral Results* (London: Wiley, 1950) 188 Fig. 1.

<sup>5</sup> *Ibid.*, pg. 194 Fig. 3.

<sup>6</sup> Niemi, Richard and John Deegan Jr., “A Theory of Political Districting”, *The American Political Science Review*, Vol. 72, No. 4 (1978); Richard G. Niemi, “The Relationship between Votes and Seats: The Ultimate Question in Political Gerrymandering”, *UCLA Law Review*, 185 (1985): 1; Richard G. Niemi and Patrick Fett, “The Swing Ratio: An Explanation and Assessment”, *Legislative Studies Quarterly*, Vol. 11, No 1 (1986); Richard G. Niemi, “The Swing Ratio as a Measure of Partisan Gerrymandering”, *Political Gerrymandering and the Courts*, Bernard Grofman, (1990).

<sup>7</sup> Niemi, Richard and John Deegan Jr., “A Theory of Political Districting”, *The American Political Science Review*, Vol. 72, No. 4 (1978).

<sup>8</sup> “D.I.” means “Democratic Index,” a term that is defined in Appendix C and discussed at length in Chapter 9.

<sup>9</sup> For definition see Niemi and Deegan *Op. cit.* Note 7 pg. 1304. Also see our comments on this “result oriented” districting criterion in Chapter 22.

<sup>10</sup> Whereas standard deviation ( $s_2$ ) is defined in every statistics textbook, skewness ( $s_3$ ) is omitted from many. To spare the reader possible frustration here is the definition of skewness:

$$s_3 = [ Sx^3 / n ] \div (s_2)$$

where  $Sx^3 / n$  is the sum of the cubes of the deviations of each value of the variates from the mean of the variates—divided by the total number of variates ( $n$ ). For a lucid explanation of skewness and other properties of frequency distributions see Goedicke. 1953, Chapter 7.

<sup>11</sup> Personal communication by Danny Kleinman to senior author, March 14, 1995.

<sup>12</sup> Gelman, Andrew and Gary King, “Estimating the Electoral Consequences of Legislative Redistricting”, *Journal of the American Statistical Association*, Vol. 85, 410 (1990a): 275.

<sup>13</sup> Campbell, James, *Cheap Seats: The Democratic Parties Advantage in U.S. House Elections* (Ohio: Ohio State University Press, 1996) 81-84.

<sup>14</sup> Lowenstein, Daniel and Daniel Steinberg, *The Quest for Legislative Disdistricting in the Public Interest: Elusive or Illusory?*(California: UCLA Law Review, 1985): 50-51.

## Chapter 9

### Requisite Analytical Tools: Indiana

#### *Population Carryover*

Having given preliminary attention to the fundamental concepts of histograms, seats-votes curves and idealized electorate, we may next proceed to equip ourselves with two requisite analytical tools. That means determining either the voter carryover or the population carryover, for each incumbent in the plan(s) being scrutinized. Voter carryover was the tool employed by Cranor/Crawley/Scheele<sup>1</sup> in Chapter 6 to best demonstrate partisan bias in the *Bandemer* plans. In Table 6.6 they made a further differentiation as to Republican voter carryover, Democratic voter carryover and total voter carryover. We further noted (skeptically) that they applied these measures to *districts*, rather than to *individual candidates*. We shall perform our carryover analysis in terms of individual candidates—specifically, incumbents the *Bandemer* mapmakers knew to be seeking re-election in 1982. This choice will enable us to apply two of the criteria listed in Grofman's test for partisan gerrymandering that we will take up in Chapter 13.

Voter carryover analysis is far more laborious than population carryover analysis. It would be nice to perform both analyses with respect to the *Bandemer* plans and see how they compare. One would expect voter carryover analysis to be more conclusive—but how much more conclusive? We did not have the resources to perform voter carryover analysis with respect to the incumbents we are talking about. The Ball State professors may want to do it. They have the necessary data. They would only have to revise their methodology to make the comparisons between Democrat and Republican *incumbents*, rather than between Democrat and Republican *districts*.

There are two ways of measuring population carryover: (1) as a percentage of the incumbent's old district that is carried over into his new district; (2) as a percentage of the incumbent's new district that is composed of population from his old district. Since in Indiana

the average house district population increased from 51,954 in 1970 to 54,902 in 1980, we might expect that in most cases (1) will be a larger number than (2). In order to compute population carryover one must first determine the current populations of the districts in the old plan, in this case the plan promulgated by the State of Indiana in 1972. Table 9.1 lists the 1980 populations of house districts in the 1972 plan and Table 9.2 lists the populations of that plan's senate districts.

These are our own estimates. After we had made them we found out what the MOR figures were. In 26 of the 73 HDs and in 12 of the 50 SDs our numbers agreed with theirs. These districts are annotated with a (†). We said in Chapter 7, in our discussion of population equality, that we would in this chapter “make clear why we are interested in the populations of districts that are about to go out of existence.” It is simply because we must know the detailed population breakdown of each of these “old” districts in order to know the populations of elements of it that are transferred. It is usually impossible to measure exactly the current populations of the old districts because the Census Bureau eliminates blocks, adds new blocks and changes the boundaries of continuing blocks between successive censuses. Therefore, even the most accurate compilation still involves some guesswork.

In our analysis employing Grofman's *prima facie* indicators (Chapter 13) we shall use the percentage of the incumbent's old district that is carried over into his new district for the Indiana senate plans; and for those cases of the Indiana house plans where the incumbent's new district has the same number of members as his old district. We chose this option because the mapmakers have greater power to achieve a 100 percent goal in terms of percent of old district carried over than they do to achieve a 100 percent goal in terms of new district composed of population from the old. When the new district contains the same number of members as the old district, the analysis will yield nearly identical conclusions whichever definition we apply to population carryover.

Table 9.1

Indiana House: 1980 Populations of 1972 Districts

District	Party of Incumbent	Population	Rank	District	Party of Incumbent	Population	Rank
1*	D	89,839	69	38	D	44,550	70
2*	D	94,372	67	39	R	† 52,582	56
3*	D	95,257	66	40	R	† 48,265	65
4*	R	141,414	2	41	R	† 52,057	59
5*	D	75,967	72	42**	R	171,741	30
6*	R	130,006	8	43**	R	146,171	64
7*	..#	106,889	52	44**	R	167,241	37
8*	D	84,066	71	45**	D	107,361	73
9*	..#	113,791	32	46**	R	157,142	57
10	R	54,058	49	47	R	65,628	7
11*	R	†116,706	26	48	R	† 55,913	35
12	R	† 59,899	15	49	D	49,287	63
13	R	† 59,790	16	50	D	51,554	61
14**	R	167,403	36	51	D	56,391	33
15**	R	161,897	50	52	R	69,057	3
16	R	† 55,385	39	53	R	58,492	23
17	R	† 63,433	10	54	R	† 59,640	17
18	D	† 58,695	21	55	R	59,569	18
19	R	† 66,423	5	56	R	54,235	47
20	D	† 57,422	29	57	D	† 60,028	13
21	R	54,196	48	58	D	† 58,634	22
22	R	† 54,921	44	59	R	† 58,394	24
23	D	53,645	51	60	R	67,780	4
24	R	† 53,196	54	61	R	† 58,317	27
25*	R	106,693	53	62	D	† 53,107	55
26	R	52,227	58	63	D	† 54,726	46
27	R	55,459	38	64	R	† 56,962	31
28	R	57,920	28	65	D	† 58,379	25
29	R	51,632	60	66	R	59,021	20
30	D	63,040	11	67	R	62,448	12
31	D	54,767	45	68	D	† 55,227	41
32	R	† 55,017	43	69	D	† 65,798	6
33	R	73,001	1	70	D	55,385	40
34	R	63,931	9	71*	D	118,141	19
35	R	55,185	42	72*	..#	102,286	62
36	D	45,032	68	73	D	<u>59,985</u>	14
37	R	56,156	34	Statewide Σ:		5,490,224	

Mean population of districts with Democratic incumbents = 50,607

Mean population of districts with Republican incumbents = 57,443

\* 2-member district #2-member district with split representation \*\*3-member district †Agrees with MOR



Table 9.2

## Indiana Senate: 1980 Populations of 1972 Districts

District	Party of Incumbent	Population	Rank	District	Party of Incumbent	Population	Rank
1	D	89,788	46	26	D	98,092	43
2	R	92,419	45	27	R	†101,988	39
3	D	75,967	49	28	R	†114,656	19
4	D	94,457	44	29	R	128,513	3
5	R	131,551	2	30	R	98,558	42
6	R	141,252	1	31	R	110,677	24
7	R	†126,752	6	32	R	116,400	16
8	D	†106,893	35	33	D	82,948	48
9	R	113,997	20	34	D	69,140	50
10	D	84,355	47	35	R	109,605	28
11	R	118,086	14	36	R	107,905	33
12	R	111,246	23	37	R	†127,444	4
13	R	126,172	5	38	R	99,205	41
14	R	110,707	25	39	R	116,391	15
15	R	110,748	26	40	R	124,341	7
16	R	106,486	36	41	R	122,901	10
17	R	109,678	27	42	R	†107,452	34
18	R	†108,073	32	43	R	†119,919	13
19	D	111,192	22	44	R	†115,763	18
20	R	102,061	38	45	D	121,133	11
21	R	108,395	31	46	D	120,569	12
22	D	†116,569	17	47	D	112,578	21
23	R	†108,635	29	48	D	†108,580	30
24	R	123,071	8	49	D	101,050	40
25	R	103,417	37	50	R	122,449	9
Statewide Total:						5,490,224	

Mean population of districts with Democratic incumbents = 99,554

Mean population of districts with Republican incumbents = 114,198

†Agrees with MOR

With the Indiana house plans where a two-member<sup>2</sup> district in the old (*i.e.*, 1972) plan was split to form SMDs, using the percentage of the old district that is carried over into the new district causes a problem. Because the new district is likely to be as little as one-half, or even one-third, the population of the old district it becomes impossible for the incumbent to carry over more than one-half, or one-third, of his old district into that new district. This gives the impression that the incumbent has been badly treated when, in fact, his new SMD may be made up entirely of population carried over from his former. Therefore, in cases where a “new” plan places an incumbent from a 1972 MMD in a SMD, we redefine his carryover as the percentage of the new district that is composed of carryover from the old district. In their voter carryover analysis Cranor/Crawley/Scheele<sup>3</sup> employ this latter definition throughout. This lends a greater consistency to their work, but we believe the advantage gained by employing our dual definition that was expressed in the preceding paragraph outweighs the merits of consistency—in this case.

The major observation to be made of Tables 9.1 and 9.2 is the significant difference in population gains/losses between the districts of Democrat incumbents and those of Republican incumbents. The average 1980 population of a Democrat incumbent representative’s district (50,607) is about 6,400 less than that of a Republican incumbent representative. Note that nine of the ten districts (overall rankings 1 through 10) which gained the most population during the decade are those of Republicans and that the eight districts (overall rankings 66 through 73) that lost the most population during the decade are those of Democrats. The implication of this fact is that new districts drawn in an impartial manner are very likely to show a higher carryover for Democrat incumbents than for Republican incumbents. To reach the new house district population of 164,706 over 57,000 must be added to multi-member HD 45 of representatives Crawford, Day, and Summers—even if 100 percent of their old district is carried over. On the other hand, a minimum of 18,000 must be removed from Rep. Donaldson’s HD 33 to reach the new population. Therefore, it is simply impossible for him to receive 100 percent carryover of his old district (if population deviation is to be close to zero).

A similar pattern obtains for senate districts. The average 1980 population of a Democrat incumbent senator's district (99,554) is about 14,600 less than that of a Republican incumbent senator. Note that the ten districts (overall rankings 1 through 10) that gained the most population during the decade are those of Republicans and that seven of the eight districts (overall rankings 43 through 50) that lost the most population during the decade are those of Democrats. To reach the new senate district population of 109,804 nearly 40,000 must be added to Sen. Carson's SD 34—even if 100 percent of her old district is carried over. On the other hand, a minimum of 31,000 must be removed from Sen. Niemeyer's SD 6 to reach the new population. As with Rep. Donaldson, it is impossible for him to receive a 100 percent carryover. Determination of incumbents' population carryover is the first tool we must have in order to conduct a thorough gerrymander analysis of districting plans.

### *Political Index*

The second of our “requisite tools” for gerrymander analysis is a way to measure the partisan character of the districts in the plans. All of the recognized prospective tests for partisan gerrymandering assume that districts in a plan can, in some measurable manner, be characterized as “Republican” or “Democratic.” But there is no unanimously agreed-upon method for making such measurements. We addressed this issue in 1991, proposed what we called “a more refined predictive technique,”<sup>4</sup> pointed out that it did not always correctly predict election outcomes, but concluded it had validity for making *comparisons* between districting plans. We called it the Horn-Hampton index.

We employ this index to quantify the propensity of voters to support legislative candidates in the state of Indiana in elections conducted under the districting plans of 1981-82 that were litigated in *Bandemer*. As previewed in the computations for “Case 1” and its associated Note 8 in Chapter 8, we call this index the Democratic Index (D.I.) indicating that it states the percentage of the major-party vote we predict the Democratic candidate will receive.

As our formal definition of political index in Appendix C suggests, we could just as easily state it as a Republican Index (R.I.), which would state the expected percentage of the Republican candidate. By this convention,  $R.I. = 100 - D.I.$

In our 1991 paper we specified **three conditions**<sup>5</sup> restricting the application of the index (**the first** being that it has validity for predicting electoral outcomes only in districts where **no incumbent** is running, or “open” districts; the second and third will be cited in the course of the discussion below), and then proceeded to enumerate and discuss eleven rules<sup>6</sup> for its derivation. In accordance with Rule Number One we used previous election results, rather than party registration or survey research. In accordance with Rule Number Two we used statewide contests rather than aggregations of district-wide contests. Following Rule Number Three we employed the most recent election possible: 1980. Following Rule Number Four we used only the vote for major party candidates. (In the race we employ there were no candidates other than those of the major parties.)

Rule Number Five is to use elections that reflect only partisan preferences and are free of idiosyncratic factors. This rule is, arguably, impossible to satisfy so we employ rules Six, Seven and Eight in an effort to minimize the labor in making the choice dictated by Rule Number Nine: Correlate the various statewide elections, precinct-by-precinct, with legislative races in open districts for the same election year and choose whichever of these elections yields either the lowest standard error or the highest coefficient of determination ( $r^2$ ). There were ten statewide elections in Indiana immediately preceding the 1981/82 redistricting. These are the elections we have to choose from. They are given in Table 9.3.

Rule Number Seven says to choose the election whose statewide percentage most closely corresponds to the aggregate vote for the district-wide office that the index is applicable to. On the basis of this rule, Table 9.3 would lead us to choose Treasurer of State as the best correlator with the 1978 legislative races and U.S. Senator as the best correlator with the 1980 legislative

Table 9.3  
Indiana: Statewide Percentages for Democratic Candidates  
in Elections Immediately Preceding 1981 Districting

Secretary of State (Carpenter)	1978	46.3	
Auditor of State (Byrd)	1978	46.3	
Treasurer of State (Ruby)	1978	47.3	
Clerk of Courts (McCullough)	1978	46.3	
President (Carter)	1980	40.2	
U.S. Senator (Bayh)	1980	46.2	
Governor (Hillenbrand)	1980	42.1	
Attorney General (Webster)	1980	44.8	
Superintendent Public Instruction (Loughlin)	1980	43.5	
Reporter of Courts (Senegal)	1980	43.9	
Aggregate Vote for Congressional Candidates	1978	52.5	
Aggregate Vote for Congressional Candidates	1980	49.7	
Aggregate Vote for Indiana House Candidates	1978	49.9*	49.2**
Aggregate Vote for Indiana House Candidates	1980	46.7*	46.5**

\*"Raw" figures per Column (7) of Table in Appendix B

\*\*"Adjusted" figures per Column (8) of Table in Appendix B

racers. Rule Number Eight says that if a single election does not best satisfy Rule Seven, select the two statewide races that bracket the aggregate vote for the district-wide office—and use their mean. Since none of the four 1978 statewide candidates did better than the 49.2 percent aggregate vote for 1978 House candidates, and none of the six 1980 statewide candidates did better than the 46.5 percent aggregate vote for 1980 house candidates, we cannot “bracket” these legislative votes and Rule Number Eight is inapplicable.

Rule Number Six says to construct a matrix of correlations of vote for statewide offices, using counties or other large units of comparison, and choose races that correlate best with each other. Table 9.4 shows such a matrix for the ten statewide elections listed in Table 9.3. These correlations are fairly good, with 11 of the 45 pairs yielding values of  $r^2$  exceeding 0.90. The highest coefficient of determination (0.98) appears in the 1980 races for Reporter of Courts and Superintendent of Public Instruction.

This evidence is more persuasive than that suggested by application of Rule Seven. Rule Number Nine is the arbiter of which race, or combination of races, to choose. In this instance it would require us to correlate each of the ten statewide races with open-district legislative races of the same year and choose whichever one gave the highest correlation. Since our precinct data had

to be hand-copied, and our financial resources were limited, we did not attempt to do this for all ten statewide races. But we did manage to do it for six of those races which, on the basis of Table 9.4, looked most promising: three from 1978 and three from 1980. Table 9.5 lists these races and shows what correlations were obtained with open-district legislative races for the same year.

The 1,154 precincts associated with two of the 1978 races represent open-district contests for seven house and eight senate seats.<sup>7</sup> The 733 precincts associated with the 1980 races represent contests for six house and five senate seats—five additional House races being

Table 9.4  
Indiana: Democratic Statewide Candidates: 1978 & 1980  
Coefficients of Determination for Pairs of Races,  $r^2$

	1980					1978			
	U.S. Sen.	Gov.	Atty. Gen.	Supt. P.I.	Repr. Courts	Sec'y. State	Audi. State	Treas. State	Clerk Courts
<u>1980</u>									
President	.865	.724	.884	.911	.902	.728	.757	.744	.736
U.S. Senator		.772	.872	.862	.874	.678	.709	.697	.694
Governor			.850	.865	.854	.698	.691	.657	.691
Attorney General				.968	.967	.816	.820	.815	.828
Superintendent Public Instruction					.980	.828	.836	.796	.835
Reporter of Courts						.829	.841	.815	.835
<u>1978</u>									
Secretary of State							.954	.934	.948
Auditor of State								.938	.956
Treasurer of State									.935

Table 9.5  
Indiana: Precinct-by-Precinct Correlations of Legislative with Statewide Races

			Multiple Regression
<u>1978 Races</u>			
Secretary of State		1154 pcts.	0.732
Auditor of State		1040 pcts.	0.736
Clerk of Courts		1154 pcts.	0.736
<u>1980 Races</u>			
Attorney General		733 pcts.	0.779
Reporter of Courts		733 pcts.	0.813
Superintendent of Public Instruction		733 pcts.	0.842

unusable. The 1980 correlations are obviously better, and the best of these was for Superintendent of Public Instruction (SPI)—with Reporter of Courts a close second. As we recall from Chapter 6, SPI was also the race chosen by Cranor/Crawley/Scheele to define “Democratic” and “Republican” voters in their study of the *Bandemer* plans. They did not do the laborious statistical work we did to arrive at their choice. They went by their political instincts and common sense. We now have confirmation they were right, so we had little difficulty in choosing this race as the best for our index.

As Table 9.5 shows, we also performed multiple regressions to see how much more of the variance in the dependent variable could be accounted for if we used all three statewide elections as the independent variables. In the case of the 1978 races  $r^2$  increased from 0.736 to 0.739—a negligible amount. In the case of the 1980 races  $r^2$  did not increase above the value of 0.842 attained by the best individual correlation, SPI.<sup>8</sup> This evidence supports the view, expressed in our 1991 paper, which factoring more than two elections into a prediction equation will add little to its efficacy.<sup>9</sup> The enormous additional labor of aggregating two additional races among the districts in the plans we are evaluating cannot be justified by such a marginal increment of statistical certainty.

Eleven open-district legislative races were correlated with, and then regressed against, the corresponding vote for SPI. The Democratic legislative candidates in these races received, in the aggregate, 42.12 percent of the vote—as opposed to 46.5 percent statewide; and that the SPI candidate in these districts received 40.51 percent of the vote—as opposed to 43.51 percent statewide.

*Regression Equation.* Our **third condition** restricting application of the index was that it be **specific for the level of office** for which prediction is sought—the assumption being that voters’ propensity to support a party’s candidates for statewide office may not be the same as

their propensity to support the party's candidates for, let's say, state representative. By this logic, we should not use the "raw" vote for statewide office as the predicted vote for legislative office, but the vote for legislative office given by the regression equation. If the electorate has a tendency to vote 2 percent higher for Democratic statewide candidates than for Democratic legislative candidates, the regression equation should provide evidence for this behavior. We regress the vote for SPI against that for legislative candidates in the 733 open-district precincts to see if there is any such "schizophrenia" in Indiana's voting tendencies. Ordinary least-squares regression yielded the equation:

$$\text{D.I.} = 3.67 + 0.955 \text{ SPI} \quad [9.1]$$

The scatter plot depicting this relationship appears in Figure 9.1.

The scatter plot, and the equation defining the line of its least-squares fit, says that in Indiana Democratic legislative candidates, tend to run ahead of the statewide candidates in open-districts. At 50 percent for the statewide candidates the legislative candidate can expect to receive 1.4 percent more of the vote. Their votes converge, however, so that their vote will be the same at 81.55 percent for the statewide candidate. Beyond that point the legislative candidate will trail the statewide candidate. These inferences are consistent with tabulated information about the selected open-district races, which showed that in 6 of 11 districts legislative candidates lead the statewide candidates; in overall aggregate vote they lead by 1.61 percent.

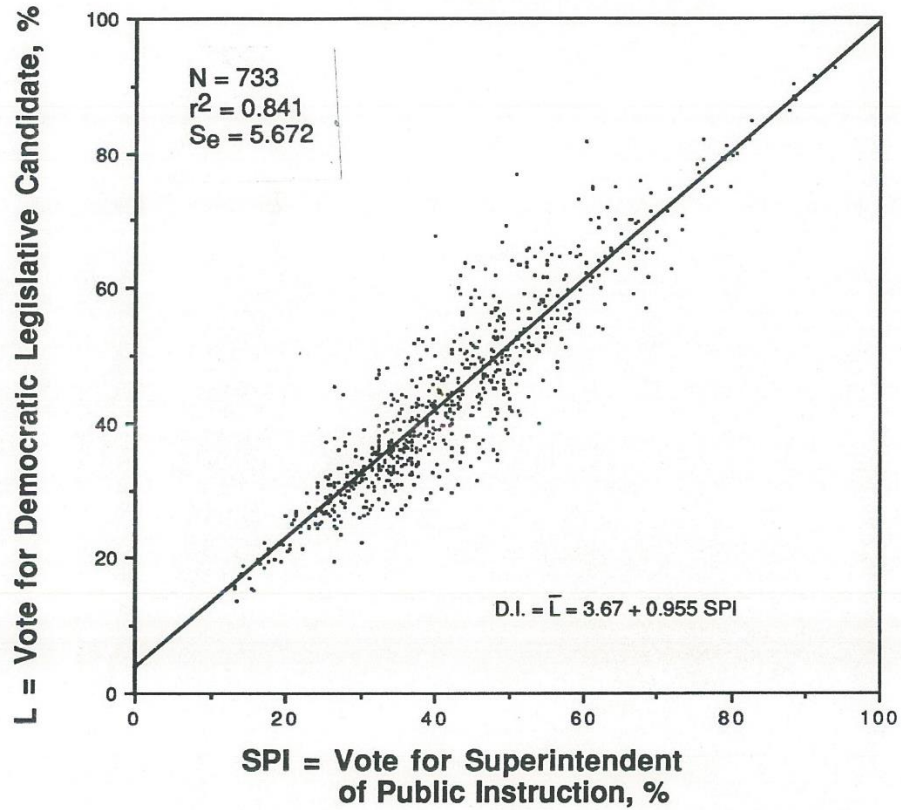
There is a final, very important observation to make about these prediction equations. The **second condition** governing their application was that they were valid only for a **specified level of statewide support** for legislative candidates. If viewed from a statewide perspective, the Indiana equation says that in the year 1980 the theoretical support for Democratic legislative candidates (assuming *that no incumbents are running* and, therefore, that all districts are "open"), expressed as the index, was:

$$\text{D.I.} = 3.67 + 0.955 \text{ SPI} = 3.67 + 0.955(43.51) = 45.22 \text{ percent} \quad [9.2]$$



Figure 9.1

**Linear Regression for Open Legislative Districts**



The statewide vote for SPI that year was 43.51 percent. If we wanted to predict what vote a Democratic legislative candidate might receive at some other level of statewide legislative vote, we would adjust the value of SPI in his district to reflect that change. In the analysis to follow we will want to predict the vote in a particular district when the statewide legislative vote is 50.0 percent, instead of 45.22 percent. Therefore, we set D.I. = 50.0, solve for SPI, and determine what number has to be added to, or subtracted from, SPI to make the adjustment--or "correction":

$$50.0 = 3.67 + 0.955 \text{ SPI}; \text{ SPI} = 48.51; 48.51 - 43.51 = 5.00 = \text{Correction}$$

We would add 5.00 to whatever the SPI was in a particular district, and use that for SPI in the equation, to arrive at the predicted vote for the Democratic candidate in that district. We shall apply this corrected value of SPI in applying the tests for partisan gerrymandering proposed by McDonald/Engstrom, Niemi, and Grofman.

*Uncertainty Estimates.* Every regression equation presents the probability that its predictions will be correct. Based upon its number of data pairs and its standard error of estimate ( $se$ ), we can compute confidence limits associated with any specified win probability. We can say, for instance, that to be 90 percent certain of a Democratic win the Democratic Index must exceed a certain value; to be 90 percent certain of a Republican victory it must fall below another value. More useful for our analysis, however, is a formulation such as depicted in Figure 9.2.

This win-probability curve can be constructed either (1) from raw data in its scatter plot or (2) by statistical analysis employing the standard error of the regression. Here is how it is done by statistical analysis: the shape of our curve will be entirely governed by the magnitude of the regression's standard error, a smaller value leading to a curve that is flatter at low and high values of the index, and steeper at values close to 50 percent. The Indiana curve is defined by the relatively small value of  $se = 5.672$  which gives us a fair degree of confidence in the probabilities we read from it. It can be employed to find the probability of a Democratic win for any value of the Index.

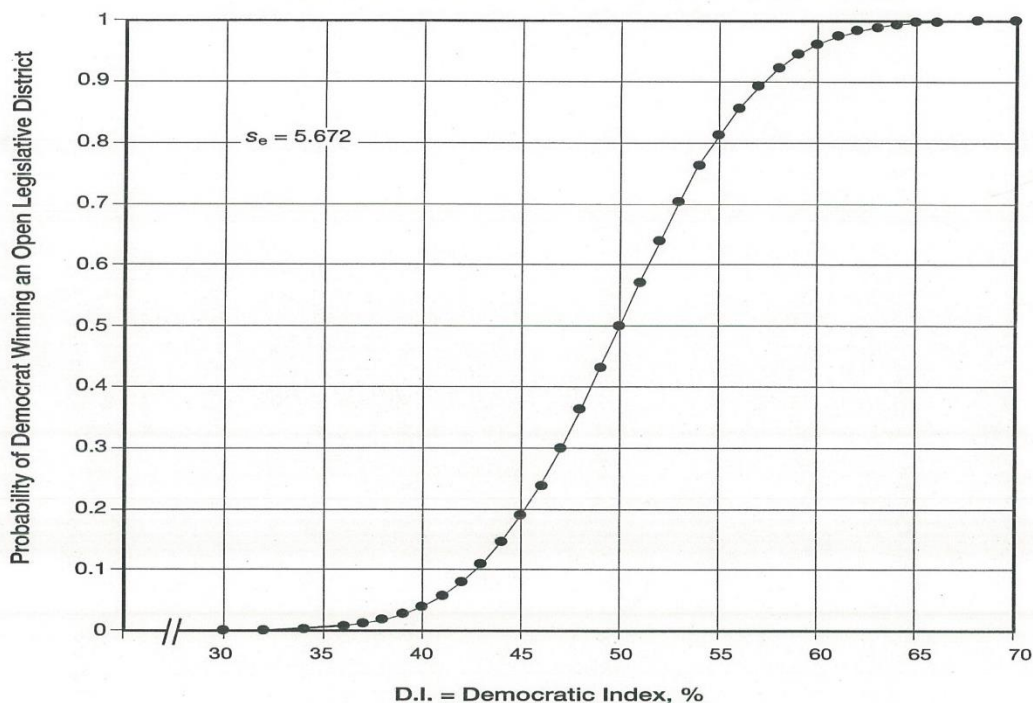
Regression analysis has given:  $D.I. = 3.67 + 0.955 \text{ SPI}$  with  $se = 5.672$

L is the percentage vote for the Democratic candidate in a legislative race. V is the percentage vote for the Democratic candidate in the statewide race for Superintendent of Public Instruction (SPI). D.I. is the mean value of L for a given value of V. We make the following assumptions:

- 1) The actual vote in a precinct has a normal distribution about D.I. and a  $se$  of 5.672.
- 2) The "V" for a legislative district (an aggregation of 100 to 400 precincts) functions like the "V" for a single precinct because the district "V" is a composite of the individual precinct "vs," and in most districts those "vs" have a narrow spread in value.

Figure 9.2

**Win Probability of Indiana Democratic Legislative Candidate as a Function of Democratic Index (1982-1990)**



(D.I. = 3.67 + 0.955 SPI' where SPI' is the 1980 vote for the Democratic candidate for Superintendent of Public Instruction adjusted for partisan swing)

Then, for each value of  $v$ , we can find the probability that a Democratic legislative candidate will receive at least 50 percent of the vote. To sufficient approximation, a prediction interval for D.I. can be based upon

$$D.I. \pm (z)(se)$$

where  $z$  is the standard normal deviate.

To estimate the probability that the Democratic candidate receives at least 50 percent of the vote, set

$$50 = D.I. \pm (z)(5.672)$$

where the sign is chosen to make equality possible. Substituting for D.I. in terms of  $v$  specifies a value for  $z$  and the normal table then yields the estimated probability that the Democratic candidate wins—for the specified value of  $v$ .

For example, consider the case of D.I. = 45 percent:

$$50 = 45 \pm 5.672 z; \quad z = 0.8815$$

The corresponding probability is 0.1890. If D.I. = 55 percent,

$$z = \frac{50 - 55}{5.672} = -0.8815$$

and the corresponding probability is 0.8110.

The confidence we have in a predictive equation, such as this, is entirely dependent upon  $se$ . If  $se$  had been only 1.0, then a D.I. of 49 percent would yield a win probability of 15.87 percent (as opposed to 45.62 percent from our data). A D.I. of 51 percent would yield a win probability of 84.13 percent (as opposed to 54.38 percent from our data). If  $se$  had been zero (*i.e.*, all the points of the scatter plot falling exactly on the regression line), then a D.I. of 49.9 would yield a win probability of zero and a D.I. of 50.1 percent would yield a win probability of 100 percent.

Using this curve we can say, for example, that if the D.I. is 55 percent, the legislative candidate's chances of winning are approximately 81 percent; if the D.I. is 45 percent, the legislative candidate's chances of winning are only about 19 percent. (Remember, we condition these predictions on it being an open-district race with no incumbent running.) These "55" and "45" win probabilities are the basis for the statement in our critique of "deceptive statistic" Number Two in Chapter 5 that just because a district falls within a 45-55 marginal bracket does *not* mean a candidate has a "fifty-fifty" chance of winning it regardless of where in that bracket it is situated. It makes a considerable difference where in that bracket the district is situated.

If the standard error of our regression had been zero, the points in the scatter plot would all have fallen on the regression line. Instead of an "S," Figure 9.2 would consist of a horizontal limb at zero percent probability, from a D.I. of zero to 50; a vertical limb at 50, extending from zero to 100 percent probability; and a second horizontal limb at 100 percent probability

extending from a D.I. of 50 to 100. Such a plot would say that a D.I. of 49.9 percent the Democratic candidate's chances of winning are zero, but that at a D.I. of 50.1 percent his/her chances of winning are 100 percent. An index of such high prediction capability will never be derived from real-world election data.

A final—and significant—observation to be made from this and similar “S-curves” is that districting schemes which cause, say, a one percent change in the D.I. of a candidate's district when it is below 40, or above 60, have very little effect on his prospects of winning. In this instance it would mean less than a one percent change in those prospects. On the other hand, a one percent change in the D.I. of that district when it is near 50 could have a far more serious impact. In this case it could mean as much as a *seven* percent change in the probability of winning—or losing.

*Evaluation.* Since this manuscript is being written about 22 years since the last election took place under the *Bandemer* plans, we are in a position to determine just how accurately our index predicted election outcomes during the life of that plan. During the 1982-1990 decade there were 59 races (out of a potential 430 single-member-district contests) for the Indiana house and senate, which would qualify, as open-district. The index correctly predicted the winner in 52 of these 59 cases (88.1 percent success), with the false predictions skewed toward the losses. The predicted votes correlated with the actual votes to yield a Pearson  $r$  of 0.854 and an  $r^2$  of 0.729. This means our index failed to account for 27 percent of the variance in the actual vote.

Having set forth the rationale for and derivation of the Democratic Index, the second of our major tools for gerrymander analysis, we are now ready to proceed with a political analysis of the Indiana house and senate districting plans of the 1980s. That analysis applies each of the four prospective tests for partisan gerrymandering that had appeared in the literature as of 1990, first to each of the three citizen and three political House districting plans; and second, to each

of the four citizen and four political Senate districting plans. The first and earliest of these tests was proposed by Backstrom, Robins, and Eller in the 1978 *Minnesota Law Review* article first mentioned in Note 7 of Chapter 3 and referred to repeatedly in the course of the litigation. We are finally ready to see how it works by applying it to our six house districting plans.

## Notes

<sup>1</sup> Cranor, John, et al, "The Anatomy of a Gerrymander", *American Journal of Political Science*, Vol. 33, No. 1 (1989): 234-236

<sup>2</sup> In the case of the *Bandemer* plan the only instances where 1972 MMDs were split to form SMDs were the break-up of 2-member HDs 3, 9, 11, and 71. However, crafting the Crawford plan and the three citizen plans, all of them having 100 SMDs, required splitting all thirteen 2-member and all seven 3-member districts from the 1972 plan.

<sup>3</sup> Cranor, John, et al., "The Anatomy of a Gerrymander", *The American Journal of Political Science*, Vol. 33, No. 1 (1989): 232.

<sup>4</sup> Horn, David L. and Charles R Hampton, *Gerrymander Analysis and Remedy: The Case for Removing Discretion from Districting*, (Ohio: University of Akron, 1991) 1, 36.

<sup>5</sup> *Ibid.*, pp. 9, 12.

<sup>6</sup> *Ibid.*, pp. 13-28.

<sup>7</sup> Data were lost by the Lake Co. election records keeper for 114 precincts for the auditor's race; thus the "n" of only 1040 precincts for that correlation.

<sup>8</sup> The standard error ( $s_e$ ) of the multiple regression with three independent variables, 5.669, was only 0.003 less than 5.672 value of the single regression with SPI--as noted below in the discussion of win probability associated with Figure 9.2.

<sup>9</sup> Horn, David L. and Charles R Hampton, *Gerrymander Analysis and Remedy: The Case for Removing Discretion from Districting*, (Ohio: University of Akron, 1991) 17, 23.

## Part III.

*Bandemer:*

What Might Have Happened

## Chapter 10

### Backstrom/Robins/Eller Analysis: Indiana

The test for partisan gerrymandering advocated by Backstrom, Robins, and Eller requires the selection of a statewide election, or combination of elections, that will function as the “base race.” To repeat our quotation of these scholars from our discussion of the plaintiffs’ post-trial reply brief in Chapter 5, this race must be an “adequate indicator of relative strength of the political parties in the state's electorate...an estimate of the percentage of the electorate...that, all else being equal, could be expected to vote for candidates of a particular party, simply because of that affiliation.”<sup>1</sup>

For evaluation of Indiana districting plans drawn in 1981/82 the universe of elections from which the base race must be chosen consists of the four statewide elections in 1978 and the six statewide elections in 1980. These elections (Table 9.1) are the same ones considered earlier in our search for the best election to use in deriving a political index. The same reasoning that led to the choice of superintendent of public instruction (SPI) for our “index” race leads to choosing SPI for the base race in the Backstrom/Robins/Eller analysis.

The base race having been chosen, the next step is to aggregate that race among the districts in each plan, adjusting this aggregation in each district to 50.00 percent by adding or subtracting the appropriate number. Since the majority party (Republican) candidate received 56.49 percent in this race we must subtract 6.49 percent from the Republican SPI vote in each district. The theory behind this adjustment is that we are asking how many districts would each party win if its state legislative candidates received exactly 50 percent of the aggregate statewide vote. The underlying assumption in this analysis is that the base race indicates what seats each party is *entitled*<sup>2</sup> to win based upon the propensity of the electorate to vote for its candidates.



The final step is to count up the number of districts in each plan that each party would be entitled to win when the base race has been adjusted to 50.00 percent. If the plan is free from partisan gerrymandering, there should be an even split. Since there are 100 House (50 senate) seats in the plans we are considering, a 50/50 (25/25) split would define the politically neutral (non-gerrymandered) plan.

### *Application to House Districting Plans*

Table 10.1 summarizes the results when the authors' technique is applied to the earlier (1972 State of Indiana [Republican]) House plan, the three "citizen" house plans, and the Crawford plan, as well as the 1982 (*Bandemer*) House plan under litigation. (A detailed tabulation, listing the base percentage of each district in each plan, is given in Appendix D.) We observe that each of these plans is a partisan (Republican) gerrymander—including that advocated by Democratic Representative Crawford. But the degree of pro-Republican bias varies significantly among the plans.

The most extreme bias is in the *Bandemer* plan, under which the Democrats get only 36 seats. The next strongest bias is in the 1972 Republican plan, under which the Democrats get 41 seats. Then there is a "break" between this plan and the remaining four: the three citizen plans and the Crawford plan each give the Democrats 43 or 44 seats. There appears to be no significant difference among them concerning this measure of partisanship.

It may be asked whether it would make a significant difference in the partisan breakdown if some other statewide race had been chosen as the base race. To investigate this question we aggregated the vote for five additional statewide races among the districts of just the *Bandemer* plan: two other races from 1980 and three from 1978. Table 10.2 summarizes the results.

Table 10.1  
Backstrom/Robins/Eller Analysis: Alternative Indiana House Plans: Summary

(1) Plan	(2) Republican Seats	(3) Democratic Seats	(4) Democratic Seats per McDonald/Engstrom
1972 State of Indiana (Republican)	59	41	41
1982 State of Indiana (Republican)("Bandemer")	64	36	36
1985 Minimum Fragments (Holderly)	56	44	44
1990 Balanced Neutral (Lucid)	57	43	43
1990 Fully Nested (Composite)	56	44	44
1982 Crawford (Democratic)	57	43	43

Table 10.2  
Alternative Statewide Races Employed as the Base Race,  
1982 State of Indiana (Republican)(Bandemer) House Plan: Summary

Statewide Race	Republican Percentage	Adjustment to 50.00%	Republican Seats	Democratic Seats
1978 Secretary of State (Simcox [R] vs. Carpenter [D])	53.68	- 3.68	64	36
1978 Auditor of State (Loos [R] vs. Byrd [D])	53.40	- 3.40	64	36
1978 Clerk of Courts (O'Laughlin [R] vs. McCullough [D])	53.61	- 3.61	66	34
1980 Attorney General (Pearson [R] vs. Webster [D])	55.16	- 5.16	62	38
1980 Reporter of Courts (Wertler [R] vs. Senegal [D])	56.05	- 6.05	63	37
1980 Supt. Public Instr. (Negley [R] vs. Loughlin [D])	56.49	- 6.49	64	36

We note a 5-seat range in the partisan breakdown depending upon which race is chosen as the base race: the race indicating the most Republican bias (66 seats) is Clerk of Courts; the race indicating the least Republican bias (62 seats) is Attorney General. In litigation, using this test as the measure of partisan gerrymandering, one might expect Democrats to argue that Clerk of Courts should be employed as the base race, which would indicate the strongest Republican gerrymander. Republicans, on the other hand, might be expected to argue that Attorney General should be employed as the base race—indicating the weakest Republican gerrymander. Critics of this technique might point to these differing verdicts and argue that what race is chosen as the base race is too subjective a matter to warrant judging a plan's constitutionality on the basis of it.

On the other hand, we observe that a Republican gerrymander of at least 12 seats is indicated, regardless of what statewide race is employed as the base race.

*Application to Senate Districting Plans*

As in the analysis of Indiana house districting plans, we employ the Republican vote for Superintendent of Public Instruction as the base race, aggregate it among the districts in each plan, and subtract 6.49 percent from that vote in each district. We count up the number of districts in which Republicans have a majority and compare that with the number of districts Republicans are entitled to win, if their candidates receive exactly 50 percent of the aggregate statewide vote. Again, if the plan is free from partisan gerrymandering, there should be an even split. Since there are 50 seats in the plans we are considering, a 25/25 split would define the politically neutral (non-gerrymandered) plan.

Table 10.3 summarizes the results when this test is applied to the earlier (1972 State of Indiana [Republican]) plan, the four “citizen” plans, and the Democratic Townsend and Carson plans, as well as to the 1982 (*Bandemer*) plan under litigation. We observe that each of these plans is a partisan (Republican) gerrymander—including those offered by Democratic senators Carson and Townsend. But the degree of pro-Republican bias varies significantly among them.

Table 10.3  
Backstrom/Robins/Eller Analysis: Alternative Indiana Senate Plans: Summary

(1) Plan	(2) Republican Seats	(3) Democratic Seats	(4) Democratic Seats per McDonald/Engstrom
1972 State of Indiana (Republican)	30	20	20
1982 State of Indiana (Republican) (" <i>Bandemer</i> ")	31	19	19
1985 Minimum Fragments (Holderly)	29	21	21
1990 Compactness Threshold (Kenworthy)	29	21	21
1990 Balanced Neutral (Kenworthy)	29	21	21
1990 Fully Nested (Composite)	28	22	22
1982 Carson (Democratic)	28	22	22
1982 Townsend (Democratic)	28	22	22

As with the House plans, the most extreme bias is in the *Bandemer* plan. Under it the Democrats get only 19 seats. The next strongest bias is in the 1972 Republican plan, under which the Democrats get 20 seats. Next are three of the four citizen plans, which award the Democrats 21 seats. Finally, and least biased, is the Fully Nested citizen plan and the two Democratic plans which award the Democrats 22 seats. Even these plans, however have a three-seat bias in favor of the Republicans.

When we performed this analysis on the house plans, we asked whether it would make a significant difference in the partisan breakdown if some other statewide race had been chosen as the base race. To answer the same question for the senate plans we aggregated the vote for the same five additional statewide races among the districts of just the *Bandemer* plan. Table 10.4 summarizes the results.

We note a 3-seat range in the partisan breakdown depending upon which race is chosen as the base race: the races indicating the most Republican bias (32 seats) are Attorney General and Reporter of Courts; the races indicating the least Republican bias (30 seats) are Secretary of State and Clerk of Courts. In litigation, using this test as the measure of partisan gerrymandering, one might expect Democrats to argue that Attorney General or Reporter of Courts should be employed as the base race, which would indicate the strongest Republican gerrymander. Republicans, on the other hand, might be expected to argue that Secretary of State or Clerk of Courts should be employed as the base race—indicating the weakest Republican gerrymander. As in our analysis of the house plans, critics might point to these differing verdicts and argue that selection of the base race is too subjective a matter to warrant judging a plan's constitutionality on the basis of it. On the other hand, we observe that a Republican gerrymander of at least 5 seats is indicated, regardless of what statewide race is employed as the base race.

Table 10.4

Alternative Statewide Races Employed as the Base Race,  
1982 State of Indiana (Republican)(*Bandemer*) Senate Plan: Summary

Statewide Race	Republican Percentage	Adjustment to 50.00%	Republican Seats	Democratic Seats
1978 Secretary of State (Simcox [R] vs. Carpenter [D])	53.68	- 3.68	30	20
1978 Auditor of State (Loos [R] vs. Byrd [D])	53.40	- 3.40	32 or 31*	18 or 19*
1978 Clerk of Courts (O'Laughlin [R] vs. McCullough [D])	53.61	- 3.61	30	20
1980 Attorney General (Pearson [R] vs. Webster [D])	55.16	- 5.16	32	18
1980 Reporter of Courts (Wertzler [R] vs. Senegal [D])	56.05	- 6.05	32	18
1980 Supt. Public Instr. (Negley [R] vs. Loughlin [D])	56.49	- 6.49	31	19

\* As reported in Chapter 9 Note 4, the precinct returns from Lake County for the 1978 auditor's race were lost or destroyed and therefore not available to us. The outcomes in SDs 1 - 4 (in that county) were so lopsided that we could, with confidence, classify them as "Democratic." In the case of SD 6, however, we could not make a good guess because the 1978 Secretary of State race gave it a base percentage of 48.1, making it "Democratic," and the 1978 Clerk of Courts race gave it a base percentage of 51.1, making it "Republican". This uncertainty over SD 6 leads to uncertainty in the statewide total.

At the conclusion of our application of this test to the Indiana house plans we deferred further discussion of it until we could see how it works when applied to the senate plans. Having now done so, we can observe that this test has an extremely low threshold: its definition of a partisan gerrymander is so all-inclusive that it encompasses plans drawn by the “other” party. The present findings are consistent with what these scholars discovered in their first application of this test: to the 1971 plan for the 67-member Minnesota senate. In that study they concluded that according to their base race, that court-drawn plan gave the Democrats 32 seats, compared to the 34 seats a “neutral” plan should give them. That meant the plan was a pro-Republican gerrymander—by two seats. In the 1972 elections, however, Democrats with a 49.9 percent minority of the aggregate statewide vote won a 37-seat (55.2 percent) majority under this plan and some of them thought it must have been a pro-Democrat gerrymander.<sup>3</sup> The lesson these examples teach is the importance of viewing the base race not as a *predictive* measure, but as the arbiter of *entitlement*.

### *Adjusting District Lines to Achieve “Political Fairness”*

What is the proper remedy when this test reveals a plan to be a partisan gerrymander? The authors say that the plan should be made “fair” by transferring precincts containing over-concentrations (*i.e.*, “packed”) of voters of the disadvantaged party into marginal districts of the advantaged party.<sup>4</sup> With a little map study we confirmed that such transfers could be done for both the Indiana house<sup>5</sup> and Indiana senate<sup>6</sup> plans.

We should conclude this section with a qualification. Backstrom/Robins/Eller do not say that the districting authority—or a court—should be free to engage in whatever boundary manipulation it takes to achieve the proper number of seats for each party. They speak of “the band of discretion”<sup>7</sup> subject to “limitations”<sup>8</sup> imposed by the traditional districting criteria of “population equality, . . . compactness, and subdivision lines.”<sup>9</sup> The limitations they applied in their case study were what they understood to be those laid down by a federal court in the 1971-1972 litigation in Minnesota. They imply that if adjustments to achieve “fairness” necessitate going outside these limits of compactness and non-fragmentation, then the plan must retain some degree of “unfairness.” In viewing Carson as the foundation upon which a “fair” senate plan could be created these authors might say that some of its districts are too far below an acceptable compactness standard (see Table 7.6). If so, then it seems to us they are undercutting their argument that political “fairness” should take precedence over making districts “look beautiful”<sup>10</sup> by imposing inevitably arbitrary standards of compactness and non-fragmentation. We shall consider this issue further in Chapter 18.

### *Preliminary Commentary*

The foregoing examples demonstrate that it is entirely possible, in the case of Indiana districting for the 1980s, to apply the Backstrom/Robins/Eller (B/R/E) test and, when that test indicates the presence of a partisan gerrymander, their proposed remedy. We can see from its application here that it gives a clear, unambiguous verdict on the question: “Is it a partisan

gerrymander?” It also leaves no doubt in the mind of a legislature what sort of changes in an existing plan must be made to craft a new one that will meet the B/R/E standard. We note that the test gives somewhat different answers depending on what statewide election is chosen as the base race. However, in the case of the *Bandemer* plans, it does not matter a whole lot, because whatever election is chosen the verdict is the same. We shall hold back on a full critique of this test until we have seen how it might have worked in other states. In concluding this chapter we address two further issues:

(1) *Was this test employed by anyone in the course of the Bandemer litigation?* In our Chapter 5 critique of Judge Pell’s dissent to the trial court’s opinion we stated that he “grossly” misapplied this test and should have calculated “the average of these three statewide races in each of the plan’s 77 HDs and 50 SDs and count[ed] up the number of those districts in which ‘Democrats’ were in a majority.” This would not have constituted a fully correct application of the test, but it would have yielded an “apples-to-apples” comparison of votes to seats revealing a strong bias against Democrats. What, then, would have been a fully correct application of the test? In the scholars’ own words:<sup>11</sup>

“Judge Pell misapplied our measure. He chose several statewide races to average as a partisan index (a very acceptable procedure), but then compared the statewide index on his measure to the proportion of legislative seats won, rather than subtracting to reach 50 percent and recalculating the index for each district and then counting up the majority’s districts.”

The three statewide races used by Pell yielded a Republican statewide mean vote of 52.2 percent. If he had aggregated that mean in each of the *Bandemer* HDs; subtracted 2.2 percent from each of those aggregations to approximate a 50.0 percent Republican statewide vote; and then counted up the number of *seats* in which Republicans were still a majority, he would have found that number to be something like 62-64. That would have meant a 12-14 seat advantage for the Republicans—a clear partisan gerrymander by the scholars’ standard.

But then the scholars made three partial errors of their own. They say in the preceding footnote of the same article,<sup>12</sup> and again in a subsequent article,<sup>13</sup> that their measure “was, however, used correctly in the Appellants’ Brief to the Supreme Court.” Strictly speaking, it was not. The Appellants had aggregated their “baseline” vote among the districts of the *Bandemer* plans and counted up the number of “Democratic” districts; but their “baseline” vote was from the 1982 election. It should be an election that occurred *prior* to redistricting. On the other hand, it makes little difference in the substantive conclusion in this instance whether pre-1981 or post-1981 elections are employed as the base race. A second, partial error is that correct application of the B/R/E test requires subtraction of 0.15 percent from each of the Democrats’ district aggregations (of the Cox-Evans vote) before counting up their seats. But again, 50.15 is so close to 50.00 that failure to do so probably made no difference.

The third partial error was the assumption that the Democrats had *not* employed the B/R/E test until they wrote their brief to the Supreme Court. *To the extent that they had done it in that brief* they had also done it much earlier. In examining Dreyer’s evidence in Chapter 3 we noted that in his deposition exhibit 010 he had adjusted both his district aggregations of the Cox vote (by - 1.09 percent) and the Cox-Evans mean vote (by - 0.15 percent) to project how many seats the Democrats could be expected to win under the *Bandemer* plans given an even split in the statewide vote. That projection was 37 house and 20 senate seats. We incorporated those findings in our Table 3.4 noting that Deposition Exhibit 010 “never became a trial exhibit” and commenting that “with such credible evidence it is remarkable the Democrats did not” make 010 the spearhead of their attack upon the Republicans’ plans but instead, offered a barrage of *other* numbers that did little to help their cause. The Democrats had, in a backhanded sort of way, applied the B/R/E test to the *Bandemer* plans before trial and then, in their brief to the Supreme Court, mentioned their findings in passing.

Backstrom and his colleagues cannot be faulted for not knowing what was in deposition exhibits that never reached the courtroom but the Democrats *can* be faulted for being aware of the 1978 B/R/E opus and never following its clear instructions on how to prove a partisan



gerrymander. These scholars' work was cited again and again during the litigation, by plaintiffs-appellees, by defendants-appellants, by trial court judges and by Supreme Court justices—and always cited *approvingly*. Whether one employs the 1980 SPI vote and gets 36 house and 19 senate seats, or employs the 1982 Cox-Evans vote and gets 37 house and 20 senate seats, the B/R/E test clearly says the *Bandemer* plans were Republican gerrymanders. Had the Democrats followed the B/R/E play book they would have arrived at the Supreme Court in much better shape for the climatic battle. Judge Pell might have still dissented, but then he would either have had to reach the question of justiciability or say that the B/R/E methodology was flawed. Justices White, Marshall, Brennan, and Blackmun would have had difficulty in avoiding a similar dilemma.

In addition to their “partial” errors discussed in the preceding three paragraphs, the scholars make a second statement that is almost totally error. In the same passage cited in Notes 11 and 12 they go on to say:

“Additionally, an exhaustive analysis of the Indiana redistricting plan, *which applies our methodology*, conclusively demonstrates that it was a gerrymander in favor of the Republicans. Cranor, Crawley and Scheele...”

In Chapter 6 we devoted a table and 2- 3 pages of text to report what was in both the professors' 1985 paper and in their 1989 article which expanded upon that paper. The Ball State professors applied their own methodology to the *Bandemer* plans; not that of Backstrom/Robins/Eller. The only possible way one could say that Cranor/et. al employed the B/R/E methodology is that they aggregated the vote for the best election to use as the base race (SPI) among the districts of the *Bandemer* plans and reported that aggregation in Column 11 of Appendix A and Column 12 of Appendix B to the 1985 paper. If one subtracts 6.49 percent from the “raw” SPI vote in these columns one is doing what is required to complete the B/R/E test. That operation takes about a half-hour. Cranor/Crawley/Scheele didn't do it—or, if they did it, did not report their findings.

We did do it and reported our findings in Tables 10.1–10.4 of this chapter: 36 House seats and 19 Senate seats.

(2) *Primus' Citizen Plans Provide the First Key.* The second and final issue is that application of the B/R/E test to the citizen and political plans gives us a tentative answer to the first of the troubling questions stated in the final paragraph of Chapter 6: how much of the *Bandemer* plans' partisan bias was due to Republican manipulation and how much might be due to geography? We first raised this question in Chapter 3 in discussing Table 3.4. *If the Crawford plan were impartially drawn*, it looked like six of the 13 seat Republican advantage might be due to geography, leaving a 7-seat advantage gained through manipulation. In the case of the senate plans we asked how much of the 5-seat Republican advantage might be due to geography. If the Carson plan was impartially drawn, a 4-seat Republican advantage due to manipulation was indicated. But the authorship of the Crawford and Carson plans made them suspect.

The question was next raised in Chapter 4 in connection with Evans' direct examination of Grofman at trial. Again, the answer could only be speculative. The question arose a third time in Evans' post-trial brief when he offered evidence that Marion County Democrats were inefficiently distributed. It arose a fourth time in Pell's dissent attributing the plans' bias to "the heavy concentration of Democratic voters in urban areas." It arose a fifth time in Evans' Brief of Appellants where he quoted B/R/E and challenged anyone to draw an alternative districting plan that would not waste Democratic votes. We commented then that "neither party" had credible evidence on the wasted votes issue. The question was not raised explicitly in oral argument before the Supreme Court or in its opinion, concurrences or dissent. But having been raised so effectively at trial, in Pell's dissent, and in Evans' briefs it is hard to believe that it did not have subliminal impact upon the perceptions of the seven justices that voted to reverse the trial court. It should have. This is the factor referred to three paragraphs ago that could have gotten these jurists off the hook had they not been persuaded by Evans' deceptive statistics,<sup>14</sup> and the Democrats' failure to properly use the B/R/E test, that the plans' discriminatory effect upon

Democrats was minimal. Had they been forced to acknowledge that the discriminatory effect was severe the lack of credible evidence that it was not due to geography would have compelled the conclusion that the discrimination was invidious and, therefore, a ruling to uphold the District Court.

But Primus' 1985 and 1990 competitions gave us the alternative plans not available at the time of Evans' challenge. Even though most of these plans could have been disregarded by the legislature because of failure to meet population or minority representation standards, they were of inestimable value because they give us believable answers to this geography/wasted votes question. When the B/R/E test is applied to these plans a political pattern emerges that is obvious to any reasonable observer. With respect to house districting the three citizen plans—authored by Holderly, Kenworthy, Lucid, and Prall: people with no political axe to grind who are trying to win a competition to best satisfy objective criteria—all give the Democrats 43 or 44 seats. This is powerful evidence that geography does indeed hurt Democrats: to the tune of 6 or 7 seats. But when we compare them to the *Bandemer* plan we see that they also give the Democrats 7 or 8 *more* seats than allowed them by the Republicans. A reasonable person would ascribe *that* differential to gerrymandering.

With respect to senate districting, three of the four citizen plans give the Democrats 21 seats, the fourth 22 seats. This is also powerful evidence that geography hurts Democrats: to the tune of 3 or 4 seats. But again, when we compare them with the *Bandemer* plan we see that they also give the Democrats 2 or 3 *more* seats than allowed them by the Republicans. A reasonable person would also ascribe that differential to gerrymandering.

Given its authorship, we might have expected Crawford to give Democrats more than 44 seats. Remember, however, that Crawford adopted for its own 60 of the Republican plan's districts. Whatever the reason for that decision, it means that partisan advantage for Democrats would have to be achieved within a restricted 40-seat framework. That would explain how, even acting out of partisan motives, they made only an 8-seat pickup. Given their authorship, we

might also have expected Carson and Townsend to give Democrats more than 22 seats. As we noted in our study of Carson's Lake County districts in the preceding section, however, Senator Carson appears to have been more interested in electing black senators than Democratic senators. Finally, we should note that the Democrats could be certain none of their plans would ever be adopted. They could afford to posture, if they wanted to. Had the districting power been in *their* hands, we cannot assume their plans would have been Carson and Crawford.

#### Notes

<sup>1</sup> Backstrom, Charles Herbert, Leonard S. Robins, and Scott Eller. *Issues in gerrymandering: an exploratory measure of partisan gerrymandering applied to Minnesota*. (Minn: Minnesota Law Review Foundation, 1978): 1131.

<sup>2</sup> This is the single most important word to understanding the theory behind this test. It is employed by the scholars themselves when, in a key passage, they say, "The most common result of gerrymandering...is...the majority party's arrogation of dominance in far more seats than it is *entitled* to." Backstrom Backstrom, Charles Herbert, Leonard S. Robins, and Scott Eller. *Issues in gerrymandering: an exploratory measure of partisan gerrymandering applied to Minnesota*. (Minn.: Minnesota Law Review Foundation 1978): 317.

<sup>3</sup> Backstrom, Charles Herbert, Leonard S. Robins, and Scott Eller. *Issues in gerrymandering: an exploratory measure of partisan gerrymandering applied to Minnesota*. (Minn: Minnesota Law Review Foundation, 1978):1147.

<sup>4</sup> *Ibid.*, at pg. 1143, Note 63; and Table 1, Appendix at pg. 1153.

<sup>5</sup> By starting with the 1985 Holderly house plan and manipulating district lines in Lake, Delaware, Marion, Vanderburgh and Jackson/Lawrence counties. That could net Democrats the needed 6-seat pick-up.

<sup>6</sup> By starting with the Carson senate plan and performing creative surgery in Lake, Madison and Vanderburgh counties. That could net Democrats the requisite 3-seat pick-up.

<sup>7</sup> Backstrom, Charles Herbert, Leonard S. Robins, and Scott Eller. *Issues in gerrymandering: an exploratory measure of partisan gerrymandering applied to Minnesota*. (Minn.: Minnesota Law Review Foundation, 1978):1143-44.

<sup>8</sup> *Ibid.*, pg. 1144.

<sup>9</sup> *Ibid.*, pg. 1145.

<sup>10</sup> Backstrom, Charles H. Quoted from Roundtable on Gerrymandering APSA Annual Meeting Washington D.C. September 4, 1988.

<sup>11</sup> Backstrom, Charles Herbert, Leonard S. Robins, and Scott Eller. *Issues in gerrymandering: an exploratory measure of partisan gerrymandering applied to Minnesota*. (Minn.: Minnesota Law Review Foundation, 1978) 305 (Note 107).

<sup>12</sup> *Ibid.*, pg. 304 Note 106.

<sup>13</sup> Backstrom, Charles Herbert, Leonard S. Robins, and Scott Eller. *Issues in gerrymandering: an exploratory measure of partisan gerrymandering applied to Minnesota*. (Minn.: Minnesota Law Review Foundation, 1990)154-55 (text and Note 8).

<sup>14</sup> Beginning now, we are dropping the quotation marks from this phrase.

## Chapter 11

### McDonald-Engstrom Analysis: Indiana

The second of our tests for partisan gerrymandering became known to some members of the academic community in 1988 as a draft chapter in an anthology due for publication in 1990.<sup>1</sup> The authors of the test, Professors Michael McDonald and Richard Engstrom, describe it only in this anthology. In our first mention of this test at the beginning of Chapter 8 we said that histogram characteristics were “central” to it. When we next mentioned it in Chapter 10 we said it assumed that “districts in a plan can, in some measurable manner, be characterized as ‘Republican’ or ‘Democratic.’” They do not tell us how to accomplish this characterization. In their 25-page article<sup>2</sup> they apply the test to an hypothetical districting plan of 3 districts made from 9 building blocks containing 100 persons each. All voters belong to either the “Blue” party or the “Green” party. The overall makeup of the jurisdiction is 47 percent Blue and 53 percent Green, with the distribution of Blue voters varying from 12 to 95 per building block. It is possible to construct 10 different plans from these building blocks, and they do so.

They do not apply their test to any actual districting plans. To do so would entail two serious problems: (1) as suggested above, how to quantify the partisan character of the electorate in a real-world districting plan, and (2) how to construct *all* possible districting plans for an actual state composed of thousands of building blocks. In our attempt to apply this test to legislative districting plans proposed for Indiana in the 1980s we shall employ the Democratic Index (D.I.), whose development we described in Chapter 9, as our measure of partisan character. Since it is impossible to construct all possible legislative-districting plans for this situation, we shall simply use this test to compare the political plans and the citizen plans; then see what conclusions we can draw. We begin with a consideration of our six plans for the Indiana house.

### *Application to House Districting Plans*

The first step is to construct histograms for these plans as described in Chapter 8, using the D.I. of each district, adjusted for an even division of the statewide vote, as the measure of its partisan character. These histograms are shown in Figures 11.1-11.6. Note that they follow the convention of the histograms of Chapter 5 using a 2.5 percent class interval and vertical dashed lines to mark off the marginal districts in the center. Next we computed the standard deviation ( $s_2$ ) and skewness ( $s_3$ ) statistics pertaining to each histogram, annotated these parameters to those histograms, and tabulated them in Columns (4) and (7) of Table 11.1.

Since we constructed those histograms using an index corrected for the hypothetical situation of an even split in the “statewide” vote for these house races, we do not have to go through the computations employed by the authors to apply the cube law<sup>3</sup> to determine what number of districts each party is supposed to win.<sup>4</sup> If a plan is politically neutral, an even split in the statewide vote should result in an even split in the number of districts won. Since the total number of seats in this case is 100, a 50/50 split would have to be the acceptable outcome according to the authors' Rule No. 1.<sup>5</sup>

The most desirable value of  $s_2$  a plan could have is the one closest to the value of  $s_2$  obtained by averaging that of all possible plans.<sup>6</sup> As noted above, determining this value is impossible in the real world. The only feasible alternative is to average this value for the six plans we are comparing. It turns out that the range of  $s_2$  values for these six plans is fairly narrow (0.96 percent), so we might assume the value obtained by averaging all possible plans would not fall much outside this range. As recounted above, we tabulated  $s_2$  for each plan, obtained the average (11.84), and then tabulated each plan's deviation from that average in Column (5). Then, following the example in the authors' Table 8.3, we ranked each plan according to these two parameters in order to determine which plans, if any, dominate which other plans. The rankings are given in Columns (6) and (8).

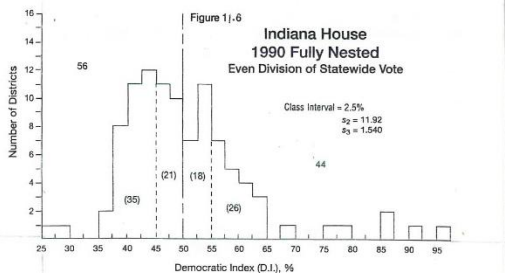
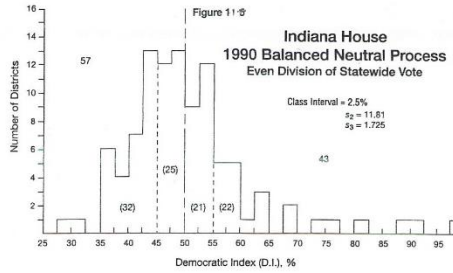
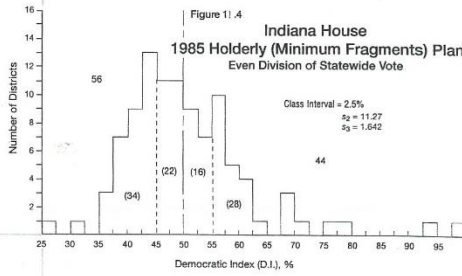
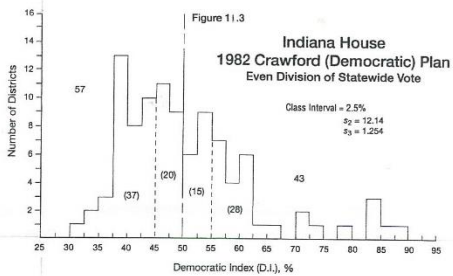
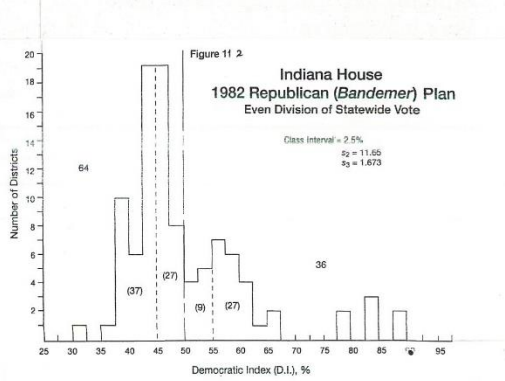
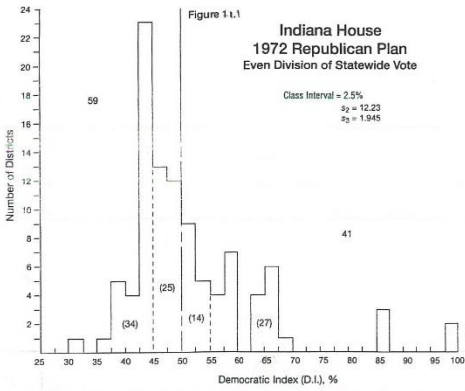


Table 11.1

McDonald-Engstrom Analysis: Indiana House Districting Plans

(1) Plan	(2) Figure Number	(3) Number of Democratic Seats (out of 100)	Dispersion: Standard Deviation			Symmetry: Skewness (pro-Republican)		(9) Number of Marginal Districts; (Repub./ Demo.)
			(4) s <sub>2</sub> Value	(5) Deviation from s <sub>2</sub>	(6) Rank	(7) s <sub>3</sub> Value	(8) Rank	
1972 Republican	11.1	41	12.23	.39	5	1.945	6	39 (1.79)
1982 Republican ( <i>Bandemer</i> )	11.2	36	11.65	-0.19	3	1.673	4	36 (3.00)
1982; Crawford (Democrat)	11.3	43	12.14	.30	4	1.254	1	35 (1.33)
1985 Holderly (Minimum Fragments)	11.4	44	11.27	-0.57	6	1.642	3	38 (1.38)
1990 Balanced Neutral (BNP)	11.5	43	11.81	-0.03	1	1.725	5	46 (1.19)
1990; Fully Nested	11.6	44	11.92	.08	2	1.540	2	39 (1.17)
$\Sigma = 71.02 \div 6 = 11.84 = s_2(\text{mean})$								

By the foregoing analysis the acceptable outcomes are those that yield a 50/50 split. However, none of these plans yields more than 44 “Democratic” seats. If we rigorously apply the authors’ Rule Number One, there are no acceptable outcomes, since all plans—including the plan offered by Democratic Representative Crawford—give the Republicans at least 6 more seats than does an even split. To make any use of this analysis we shall have to modify it further by excluding the two plans with the strongest Republican bias. When we consider just the three citizen plans and the Crawford plan, we see that the Crawford plan dominates the Holderly plan and Fully Nested plans. That is, Crawford and Nested outrank Holderly both on skewness, and on dispersion as well. Crawford, however, does not dominate either Nested or BNP (higher on skewness but lower on dispersion). Nested does not dominate either Crawford or BNP (higher than Crawford on dispersion but lower on skewness; higher than BNP on skewness but lower on dispersion). BNP does not dominate either Crawford or Nested (higher than Crawford on dispersion but lower on skewness; higher than Nested on dispersion but lower on skewness) so the authors’ Rule Number Two<sup>7</sup> cannot be satisfied. Therefore, we must follow the authors’ Rule Number Three and designate the “undominated set” of BNP, Nested, and Crawford plans as the acceptable solutions. If we add the “dominated” Holderly plan to the two previously excluded Republican plans, we have a total of three that are unacceptably biased and might be classified as partisan gerrymanders.

The results one obtains from this test could depend upon how the political index is calculated. Our experience with using different statewide races to serve as Backstrom’s base percentage however, leads us to doubt whether that would make much difference in this particular application which, on the basis of the authors’ Rule Number One, says all six plans are partisan gerrymanders. Yet, this test for gerrymandering is based upon assumptions too tenuous to warrant condemning the citizen and Crawford plans as partisan gerrymanders—although they may fairly be said to contain a Republican *bias*. Study of the histograms does provide support for the claim that there is a certain amount of “natural” packing of Democratic voters in Indiana: the citizen



(and political) plans all create heavily African-American districts in Lake and Marion counties with Democratic indices exceeding 80. No comparable symmetry exists on the Republican side of the histogram—that is, there are no districts with Democratic indices below 20 in any of the citizen plans—or even in the Democrats’ plan. Despite this “natural” packing of “Democrats” in the citizen and Crawford plans we note that, by this application of the

McDonald-Engstrom test, they have significantly less partisan bias than the 1972 and 1982 State of Indiana (*i.e.*, Republican) plans.

#### *Application to Senate Districting Plans*

Application of this test to the plans for the Indiana senate for the 1980s presents the same problems just cited in our discussion of its application to the six plans for the Indiana house. Since it is impossible to construct *all* possible senate plans for this situation, we shall, again, use this test to compare the political plans and the citizen plans; then see what conclusions we can draw. We continue with a consideration of our eight plans for the Indiana senate. The histograms for these plans are shown in Figures 11.7 – 11.14.

Again, we compute the standard deviation ( $s_2$ ) and skewness ( $s_3$ ) statistics pertaining to the histogram for each plan, and tabulate these values in Columns (4) and (7) of Table 11.2. As we did for the house plans, we skip the computations required to apply the cube law to determine what number of districts each party is supposed to win. If a plan is politically neutral, an even division of the “statewide” vote should result in an even split in the number of districts/seats won. Since the total number of seats in this case is 50, a 25/25 split would have to be the acceptable outcome according to the authors’ Rule Number One.

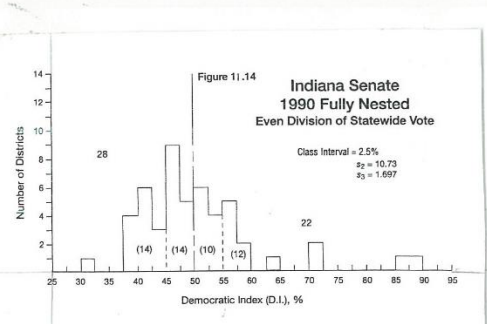
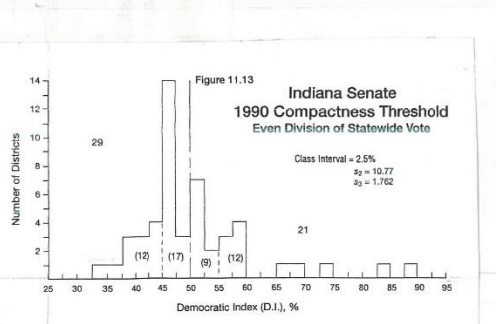
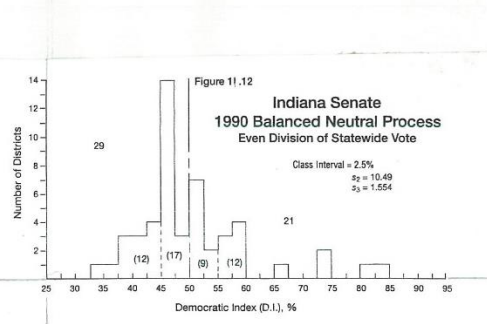
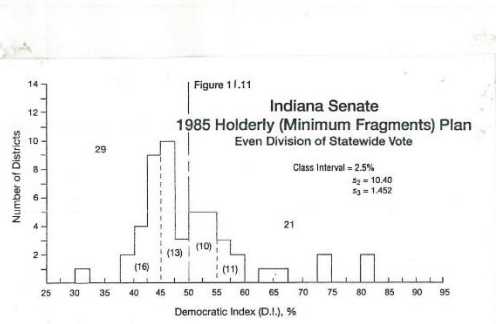
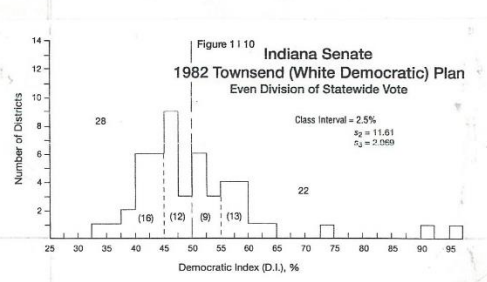
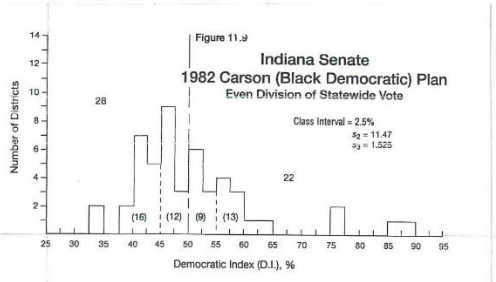
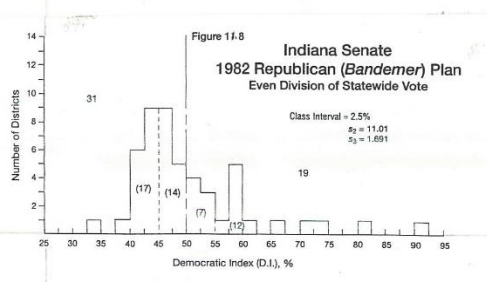
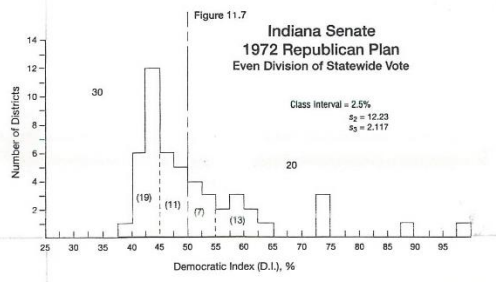


Table 11.2

## McDonald-Engstrom Analysis: Indiana Senate Plans

(1) Plan	(2) Figure Number	(3) Number of Democratic Seats (out of 50)	Dispersion: Standard Deviation			Symmetry: Skewness (pro-Republican)		(9) Number of Marginal Districts; (Repub./ Demo.)
			(4) $s_2$ Value	(5) Deviation from $s_2$	(6) Rank	(7) $s_3$ Value	(8) Rank	
1972 Republican	11.7	20	12.22	1.13	8	2.117	8	18 (1.57)
1982 Republican ( <i>Bandemer</i> )	11.8	19	11.01	-0.08	1	1.691	4	21 (2.00)
1982: Carson (Democrat)	11.9	22	11.47	.38	4	1.525	2	21 (1.33)
1982 Townsend (Democrat)	11.10	22	11.61	.52	5	2.069	7	21 (1.33)
1985 Holderly (Minimum Fragments)	11.11	21	10.40	-0.69	7	1.452	1	23 (1.30)
1990 Balanced Neutral (BNP)	11.12	21	10.49	-0.60	6	1.554	3	26 (1.89)
1990 Compactness Threshold	11.13	21	10.77	-0.32	2	1.762	6	26 (1.89)
1990: Fully Nested	11.14	22	10.73	-0.36	3	1.697	5	24 (1.40)
$\Sigma = 88.70 \div 8 = 11.09 = s_{2(\text{mean})}$								

As we did for the house plans, we average  $s_2$  for the eight plans we are comparing. It turns out that the range of  $s_2$  for these eight plans is fairly narrow (1.82 percent), so we might assume that the value obtained by averaging all possible plans would not fall much outside this range. We, therefore, tabulate  $s_2$  for each plan, obtain the average (11.09), and then tabulate each plan's deviation from the average in Column (5). Then, following the example in the authors' Table 8.3, we rank each plan according to these two parameters in order to determine which plans, if any, dominate which other plans. As before, the rankings are given in Columns (6) and (8).

By the foregoing analysis the acceptable outcomes are those which yield a 25/25 split. However, none of these plans yields more than 22 "Democratic" seats. If we rigorously apply the authors' Rule Number One, there are no acceptable outcomes, since all plans—including those offered by Democratic Senators Carson and Townsend—give the Republicans at least 3 more seats than an even split. As with the application of this test to the house plans, we shall have to modify it further by excluding the two plans with the strongest Republican bias. When we consider just the four citizen plans, plus the two Democratic plans, we see that the BNP plan is dominated by the Carson plan. The Townsend plans to the two previously excluded Republican plans, we have a total of Townsend plan is dominated by the Compactness Threshold, Nested, and Carson plans.

Carson, however, does not dominate either Nested, Compactness Threshold or Holderly. Nested does not dominate either Carson, Compactness Threshold or Holderly. Compactness Threshold does not dominate either Carson, Nested or Holderly. Finally, Holderly does not dominate either Carson, Compactness Threshold or Nested. So, again, the authors' Rule Number Two cannot be satisfied. Therefore, we must follow their Rule Number Three and designate the "undominated set" of Holderly, Compactness Threshold, Nested, and Carson plans as the acceptable solutions. If we add the "dominated" BNP and four plans that are unacceptably biased and might be classified as partisan gerrymanders.

We draw similar conclusions from the application of this test to the senate plans as we did for the house plans: it is based upon assumptions too tenuous to warrant condemning the citizen and Democrats' plans as partisan gerrymanders—although they may fairly be said to contain a Republican *bias*. Once again, study of the histograms provides support for the claim of "natural" packing of (African-American) Democratic voters in Lake and Marion counties, with no comparable packing of Republicans elsewhere. But again, despite this "natural" packing of "Democrats" in the citizen and Democrats' plans, we note that they have significantly less partisan bias than the 1972 and 1982 State of Indiana (Republican) plans.

### *Visual Appraisal of the Indiana Histograms*

This is a good point at which to take a "common sense" look at the best overall representation of the Indiana districting plans available to us: their histograms. It gives us our first hint that a definitive answer to the second of the "troubling questions" stated in the final paragraph of Chapter 6 may never be forthcoming. The question was: what would have to be the magnitude of a plan's partisan bias to warrant its being struck down by the courts? In Figures 8.1 and 8.2 we saw histograms that leave little doubt in the mind of the viewer that they warrant condemnation. The viewer may have had a premonition that no real districting plan will have a histogram like one of these. Now that we have histograms of real plans to look at—even if they

are based upon a quantification of partisan character some scholars will find fault with—that premonition is confirmed.

The classical gerrymander will have a bi-modal<sup>8</sup> histogram with no districts in the “45-55” marginal range. In a partisan gerrymander one of the “humps” will be large, and situated between 5 and 15 percentage points from the 50 percent “centerline;” the other will be small and situated more than 15 percentage points the other side of the centerline. When we look at the histograms for the house plans we see that none of them has a “gap” at the centerline indicating the absence of marginal districts. They all tend to be unimodal, with one large hump centered about 7.5 percent to the “Republican” side of the centerline, falling off abruptly on the Republican side but strung out a long distance in the “Democratic” direction. Of these six histograms the one which tends to be the most bi-modal is that for the 1982 Republican/ Bandemer plan. It has a large hump centered at D.I. = 45 and a small hump centered at D.I. = 83.75. It is the one that most “looks like” Figure 8.2—the Republican partisan gerrymander. It does not have the highest skewness value. But the plan having it (1.945) is the other (1972) Republican plan. The plan with the least skewness (1.254) is the Democrats’ Crawford plan.

Column (9) of Table 11.1 shows that all the plans have a substantial number of marginal districts. But note that the plan having the most (46) is a citizen (*i.e.*, B.N.P.) plan and the plan having the fewest (35) is the Democrats’ Crawford plan—with the 1982 Republican/*Bandemer* plan a close second. More significantly, it shows that in all six plans the marginals are “loaded” in favor of the Republicans. Most significantly, it shows this loading to be most dramatic in the case of the Republican/*Bandemer* plan where the Republican/Democrat ratio is 3.0. The loading is least with the B.N.P. (1.19) and Nested (1.17) citizen plans.

Looking at the histograms for the senate plans, we again see that none of them has a gap at the centerline indicating the absence of marginal districts. Like the House plans, they all tend to be unimodal, but notice that the large hump for the four citizen and two Democrat plans is centered at D.I. = 46.25 percent on the Republican side of the centerline, whereas that of the two

Republican plans is centered at D.I. = 43.75-45.0 percent on the Republican side. Again, all the histograms tend to fall off abruptly on the Republican side<sup>9</sup> but string out a long distance in the Democratic direction. Of these eight histograms the ones which tend to be the most bi-modal are those of the Republicans. The 1982 Republican/Bandemer plan has its large mode centered at D.I. = 45 and its small mode centered at D.I. = 58.75. The 1972 Republican plan has its large mode centered at D.I. = 43.75 and its small mode centered at D.I. = 73.75. Again, they are the ones that most “look like” Figure 8.2—the Republican partisan gerrymander. As it was with the House, the plan having the highest skewness value (2.117) is the 1972 Republican plan. The plan with the least skewness (1.452) is a citizen (i.e., Holderly) plan.

Column (9) of Table 11.2 shows that all the plans have a substantial number of marginal districts. But notice that the citizen plans all have at least two more (23-26) than any of the political plans (18-21) and that the plan having the fewest is the 1972 Republican. As with the House plans, it shows that in all eight cases the marginals are loaded in favor of the Republicans. Again, the more significant comparison is in how these marginals differ in the degree to which they are loaded in favor of the Republicans. The contrast is not as dramatic as it was with the House plans but again, the heaviest loading (2.0) is in the Republican/Bandemer plan. That loading is least with the Holderly (1.30) plan, with the Democrats’ (1.33) and Nested (1.40) plans close behind.

#### *Comparisons with Dreyer and Backstrom*

In the section “Preliminary Commentary” at the end of the previous chapter we asserted that the *Bandemer* plaintiffs/appellants never did properly apply the B/R/E test to the Republican plans because proper application of that test requires use of a *pre*-redistricting election for the base race. On the other hand, we said, “we will shortly discover it makes little difference in the substantive conclusion” whether a pre-1981 or a post-1981 race is employed. That discovery only requires a brief perusal of Figures 11.2 and 11.8. If we compare 11.2, the histogram for the

*Bandemer* house plan constructed from a Democratic Index based on the 1980 SPI vote adjusted for an even statewide division, with Figure 5.4, a histogram for the same plan constructed from the 1982 Cox vote also adjusted for an even statewide division, we get nearly identical results: 36 Democratic seats from the D.I. histogram versus 37 seats from the Cox histogram; 36 marginal seats loaded 3.0-to-1 in favor of the Republicans from the D.I. histogram versus 33 marginal districts loaded 2.3-to-1 in favor of the Republicans from the Cox histogram. If we compare 11.8, the histogram for the *Bandemer* senate plan constructed from a D. I. based on the 1980 SPI vote adjusted for an even statewide division, with Figure 5.1, on the 1980 SPI vote adjusted for an even statewide division, with Figure 5.1, a histogram for the same plan constructed from the 1982 Cox-Evans mean vote which was so close to 50.0 percent as to be not worth adjusting, we also get nearly identical results: 19 Democratic seats from the D.I. histogram versus 20 seats from the Cox-Evans histogram; 21 marginal seats loaded 2.0-to-1 in favor of the Republicans from the D.I. histogram versus 18 marginal districts loaded 1.57-to-1 in favor of the Republicans from the Cox-Evans histogram. We think our D.I. histograms have a better theoretical basis than those constructed from Dreyer's work, and they show more Republican bias, but the differences aren't earth shaking. Our work confirms Dreyer far more than it contradicts him.

The reader may also have noticed a similarity in the values given by our D.I. (adjusted for even division of statewide vote) and Backstrom's adjusted base percentage. Table 11.3 shows this relationship at four different values of the SPI vote from which they were each derived.

A review of Chapter 9 will give the rationale for the figures in Columns (4)-(6). The rationale for the "adjustment" in Column (2) is given on the first page of Chapter 10. We see that when the SPI vote is 43.44 percent the two measures are identical. At lower values of the SPI vote, D.I. is higher than B.P.; at higher values, D.I. is less than B.P. These differences are minor over the 30-70 percent range of the SPI vote within which most of our data fall and there is no value of the "raw" SPI vote that will lead to a district being classified as "Democratic" by one

measure and “Republican” by the other. We think the D.I. has a better rationale, especially because at higher values of SPI it is *less likely* to give the absurd conclusion of Democratic “voting strength” exceeding 100 percent. However, D.I. will also give that absurd conclusion and that is why we shall address the issue of partisan “swing” in the next chapter.

Table 11.3  
Comparison of Backstom’s Base Percentage with Democratic Index

“Raw” (Democratic) SPI Vote	(2) Adjustment	(3) Demo. Base Percentage (B.P.)	(1) Democratic Index (D.I.):			(7) (D.I.) – (B.P.) Difference
			(4)	(5)	(6)	
			SPI	X 0.955	+3.67	
30.00	+6.49%	36.49	35.00	33.43	37.10	0.61
43.44	+6.49%	49.93	48.44	46.26	49.93	0.00
50.00	+6.49%	56.49	55.00	52.53	56.20	-0.29
70.00	+6.49%	76.49	75.00	71.63	75.30	-1.19

The necessity of constructing histograms based upon the D.I. in our attempt to apply the McDonald/Engstrom methodology to a real-world situation has provided us with corroboration of the B/R/E assessment in Chapter 10. We have added a fourth column to Tables 10.1 and 10.3 which affords a comparison of the number of Democratic seats in the various plans according to these two methodologies. We note that the partisan seat count for all 14 plans is the same by either one. The congruence of these assessments makes us wonder if we might be able, by a study of the maps and the political indices of their districts, to pinpoint *where* Republican manipulation was able to carve out the “7 or 8” house and “2 or 3” senate seats they get under the *Bandemer* plans but don't get under the citizen plans.

*Where Did Manipulation Yield Extra Republican Seats?*

*House Districting.* Looking at each major county, or region of the state, we find the most obvious source of “extra” Republican seats to be Allen County. SMDs, drawn according to a neutral procedure, would have almost certainly created at least one “Democratic” HD in the city of Fort Wayne (present in all three citizen plans). The Republicans’ MMDs splitting Allen



County certainly prevented that from happening. Next, the retention of a marginally Republican 2-member district in Laporte County prevented the creation of another likely Democratic SMD around Michigan City (also present in all three citizen plans). Third, a marginally Democratic HD centered around Kokomo (Howard County) appears in all three citizen plans, but the “Kokomo” HD in the *Bandemer* plan is marginally Republican. Fourth, the retention of a marginally Republican 2-member district in Vanderburgh County prevented the likely reduction of Republican seats in the Evansville area from two to one (which happens in two of the three citizen plans). Finally, the much discussed “packing” of Indianapolis Democrats into 3-member HD 51 most likely prevented the election of 3 or 4 additional Democrats from Marion County. The Holderly and B.N.P. plans give Democrats 6 seats in Marion County; the Nested plan gives them 7.

*Senate Districting.* The Holderly, Compactness Threshold, and B.N.P. plans give Democrats two more seats than the *Bandemer* plan; the Nested plan three. The pattern is not as clear as with the house plans, but here are the places where manipulation is most evident: The B.N.P. and Nested plans have a Democratic SD in Allen County that is missing from the *Bandemer* plan. The Nested plan divides St. Joseph County to form two Democratic SDs, whereas the other plans create a single, more heavily Democratic, SD. All three citizen plans divide the Evansville area to form two Democratic SDs, whereas the *Bandemer* plan carves marginally Republican SD 50 out of Vanderburgh and Warrick counties. All three citizen plans have a marginally Democratic SD around Anderson (Madison Co.), but in the *Bandemer* plan it is marginally Republican. Excluding the Evansville and Jeffersonville-New Albany metro areas, the citizen plans all district rural southern Indiana to create six Democratic SDs, while the *Bandemer* plan concentrates “Democrats” in this region into five. On the other hand, in rural northeastern Indiana, the *Bandemer* plan creates a marginally Democratic SD 19 not found in any citizen plan. This might reflect a judgment of the mapmakers that incumbent Democratic

Senator Wayne Townsend from this district was unlikely to be defeated by gerrymandering this area, and such gerrymandering might put some Republican incumbent senators at risk.

In concluding this chapter we would like to make two observations that may already be apparent to the reader. First, the McDonald/Engstrom test, like that of Backstrom/Robins/Eller, has a very low threshold. As we said of the former test, “its definition of a partisan gerrymander is so all-inclusive that it encompasses plans drawn by the ‘other’ party.” Second, it must have become apparent from our study of the 14 histograms exhibited in this chapter that in the real world there will never be a “bright line” segregating legitimate districting plans from partisan gerrymanders. Instead, we are faced with a gradation of bias.

#### Notes

<sup>1</sup> Backstrom, Charles and Leonard Robins, “The Supreme Court Prohibits Gerrymandering: A Gain or a Loss for the States?” *Publis*, Vol. 17, No. 3, (1986): 13-15.

<sup>2</sup> McDonald, Michael D. and Richard L. Engstrom, “Detecting Gerrymandering” Bernard Grofman, *Political Gerrymandering and the Courts*, (California: UCLA Law Review, 1985b).

<sup>3</sup> Go back to the direct examination of Bernard Grofman at trial in Chapter 4 for our previous reference to this concept. Its mathematical definition is given in the legend of Figure 1.1.

<sup>4</sup> McDonald, Michael D. and Richard L. Engstrom, “Detecting Gerrymandering” Bernard Grofman, *Political Gerrymandering and the Courts*, (California: UCLA Law Review, 1985b): 194.

<sup>5</sup> *Ibid.*, pg. 195.

<sup>6</sup> *Ibid.*, pg. 193.

<sup>7</sup> *Ibid.*, pg. 195.

<sup>8</sup> A word employed by statisticians to describe a frequency distribution that, like a Bactrian camel, has two “humps” with a low place in-between.

<sup>9</sup> The fully nested plan so.

## Chapter 12

### Niemi's Swing-Ratio Analysis: Indiana

#### *Preliminary Considerations*

In Chapter 8 we said Professor Richard Niemi had “written most about” the seats-votes curve and one of its two major derivatives, the swing ratio (SR). In a 1990 article he argued the swing ratio could be employed in the detection of partisan gerrymandering.<sup>1</sup> He defined it as “the change in the proportion of seats won by a party that occurs when there is a one percent change in the votes won by that same party,”<sup>2</sup> or as “the percentage change in legislative seats associated with a 1 percent change in legislative votes.”<sup>3</sup> More precisely, as stated in Chapter 8, it is a “one percent” change in its mean (or average) district vote. As we will see in Chapter 26, the swing ratio is “closely related” to  $r$ , called “the representation parameter,” by King and Browning<sup>4</sup> and “responsiveness” by Gelman and King.<sup>5</sup> In Chapter 8 we said we were “usually most interested in its value over the 45 to 55 percent range.” More precisely, we should be most interested in its value over the range of statewide vote bracketed by the historic extremes of major party division. In Chapter 4 we noted those extremes, for the Indiana house, to be 44.4 percent and 53.9 percent. To date Niemi has published only seats-votes curves derived from actual elections. Regarding the vote range over which the swing ratio is computed in such cases, he recommends:

“...we might be interested in the line that best fits the points within five percentage points on either side of the actual election results.”<sup>6</sup>

We were initially disposed to follow this rule, but for reasons to be given shortly we shall not.

*Versions of the Swing Ratio.* Niemi and Fett<sup>7</sup> report that there are two major versions of the swing ratio: the historical swing ratio and the hypothetical swing ratio. The historical

swing ratio<sup>8</sup> was elucidated by Tufte in an article that presented data from several states and countries covering various time periods. It is derived by constructing a regression of a party's percent of seats won in a legislative body against its percent of the aggregate statewide vote for the candidates seeking election to that body.

The second version—the hypothetical swing ratio—is the one elucidated by Niemi and with which we are here concerned. It is constructed from the data of a single election or, alternatively—as we describe in Appendix H—from the political indices of the districts. Niemi constructed hypothetical seats-votes curves, and derived their swing ratios, for the New Jersey congressional districting plan litigated in *Karcher v. Daggett* shown in Figure 12.1<sup>9</sup> and for the Indiana house districting plan litigated in *Bandemer* shown in Figure 12.2. A detailed description of the procedure Niemi followed in constructing his New Jersey curve is given in Appendix H. As described there, Niemi's technique is predicated upon an assumption we call uniform percentage swing. As demonstrated in Appendix H, this assumption causes difficulties at the “high” and “low” ends of the votes scale. We therefore describe an alternative assumption, suggested by Danny Kleinman, called *prorata* swing. In Figure 12.1 the curve for uniform percentage swing is represented by the solid line and the curve for prorata swing (where it differs) is represented by the dashed line.

As shown in Table H.2 (in Appendix H), the aggregate vote share for Democratic congressional candidates in New Jersey in 1982 was 56.86 percent. If we employ this number as the midpoint of the votes range over which the swing ratio is computed, that range will be from 51.9 percent to 61.9 percent. This, we suspect, will not correspond very well with the historic range of congressional vote division in that state: 1982 was a “Democratic year” in most of the country and 56.9 percent ought to be getting near the Democrats' high-water mark. We

Figure 12.1

Seats-Votes Curve: 1982 New Jersey Congressional Districting Plan

(Modified from Richard G. Niemi)

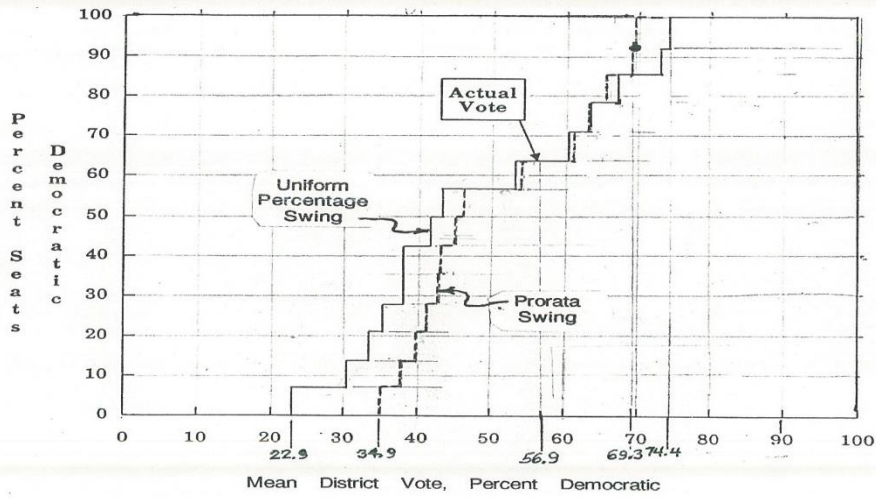
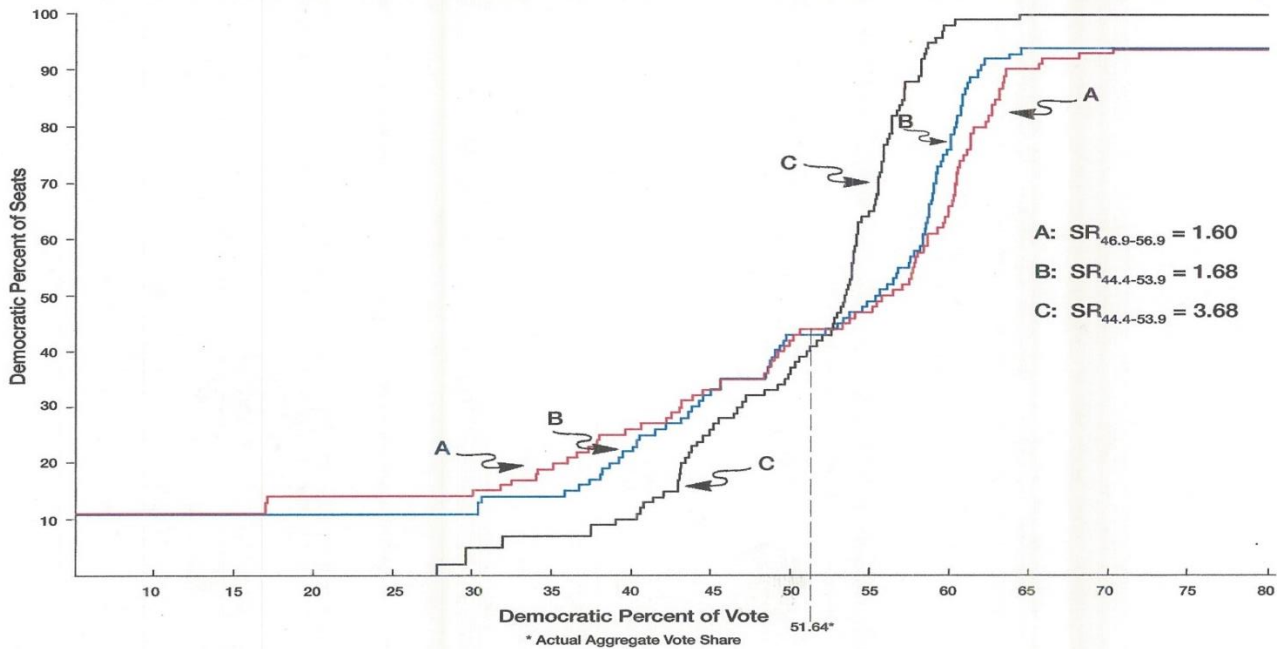


Figure 12.2

Seats Votes Curve for 1982 State of Indiana Republican (*Bandemer*)  
House Districting Plan Based Upon

- A: Actual 1982 Election Results: Uniform Percentage Swing (Niemi)
- B: Actual 1982 Election Results: Pro-Rata Swing
- C: Democratic Index (D.I.) of Districts and Even Division of Mean District Vote



doubt that either party in recent New Jersey congressional elections has received either much over 57 percent, or has not fallen below 51 percent. The situation is like the one we discussed in Figure 5.3 where we concluded that seats within 5 percent (on the “Republican” side) of a midpoint based on the 53.9 percent Democratic vote in the “Watergate election were really not marginal seats, but safe Republican seats. Since we don’t have the figures for New Jersey’s historic extremes in congressional vote split at our fingertips, we think the best alternative is to employ the standard “45-55” range. This means not following Niemi’s rule and it leads to significant differences in our calculations of the swing ratio—as we shall see.

*Uniform versus Random Partisan Swing.* King has criticized uniform partisan swing as “empirically false.”<sup>10</sup> He says:

“The model underlying uniform partisan swing...assumes the absence of any random error. District votes are assumed to move in lock step, swinging back and forth in precisely the same way in response to the same state-level electoral forces. One instance of extra effort by a candidate, a strong challenger, a political scandal, a gubernatorial endorsement, a demographic change, or any other event that would cause a particular district vote to respond slightly differently from the others invalidates this model.”<sup>11</sup>

Niemi, however, has argued that in evaluating a districting plan we need

“a hypothetical measure of what the change in seats would be if votes changed uniformly across districts. ...the assumption of uniform districts is appropriate in this context because the hypothetical swing ratio is designed to measure the structural characteristics of a districting plan. The assumption will not be true in any one instance, but it is useful precisely because it measures what the swing ratio would be if there were no district-level effects such as particularly attractive or unattractive candidates.”<sup>12</sup>

He later reiterated this judgment, saying

“An assumption of uniform changes across districts is surprisingly appropriate...”<sup>13</sup>

Our employment of prorata swing, while constituting (in our view) an improvement over the uniform percentage swing employed by Niemi, remains a uniform swing in the sense that each district “swings” a fixed percentage determined by its partisan character and whether the “swing” is upward or downward from the starting point established by the definitional election. Therefore it does not satisfy King’s criticism that demands recognition that districts swing in a random fashion. Our purpose here, however, is not to pass judgment on which of these scholars is “correct.” Rather, it is to explain how Niemi’s methodology operates “as a measure of partisan gerrymandering,” and to apply it to the Indiana (and subsequently, California and Pennsylvania) controversy. In doing so we must stick with that methodology, modifying it only in ways that do not change its essential character.

In Appendix H we use Niemi’s New Jersey curve to illustrate his technique, highlight some of its assumptions, and introduce our modifications. In the notes beneath Table H.2 we see calculations of the *Karcher* plan’s swing ratio which, as noted above, diverge significantly depending upon what assumptions one makes as to uniform percentage versus prorata swing—and as to vote range. If we adhere to Niemi’s assumptions of uniform percentage swing and a vote range of  $56.9 \pm 5.0$  percent, we get a SR of 1.43. If we assume a 45-55 vote range, it is halved to 0.72. Another combination is possible if we substitute the mean district vote of 58.7 for the aggregate vote share of 56.9 as the midpoint of the vote range. In this instance, the resulting 53.7-63.7 range does not change the SR from what it is under the 51.9-61.9 range. If we substitute our preference for prorata swing, a 45-55 vote range yields a SR of 2.15; a 51.9-61.9 vote range leads to a SR of 1.43; and a 53.7-63.7 vote range gives a SR of 2.15. In sum, these six combinations of swing definition and midpoint-of-range yield three different values for the swing ratio.

Niemi reports a swing ratio of 1.17 for this New Jersey plan that was alleged to be a Democrat gerrymander. As noted above, when we employ his combination of uniform percentage

swing and 51.9-61.9 vote range we get 1.43. We cannot explain the discrepancy. It seems to us that any SR derived from this plan and defined over a 10 percent vote range will have to be a multiple of 0.714. As said, we shall define our swing ratios in terms of prorata swing and a 45-55 percent vote range (unless we know the historic extremes of the major party vote division). Consequently, for the *Karcher* plan, the SR will have to be 2.15. Since we know (from above) that, in Indiana, the historic extremes of vote division are 44.4 percent and 53.9 percent, we shall figure the SRs for our 14 Indiana plans using those end-points and the resulting 9.5 percent vote range. They will be annotated “SR44.4-53.9.”

*Partisan Bias.* Chapter 8 introduced us to the other major parameter derived from the seats-votes curve, partisan bias, and mentioned that it was “the major focus of analysis by Gelman and King.” In their computer program JudgeIt<sup>14</sup> they employ two formulations of bias for evaluating districting plans: (1) its value corresponding to  $v$  for the majority party where an actual election took place under a plan, or where a past election is being simulated under an hypothetical plan, and (2) an average of several bias factors corresponding to hypothetical values of  $v$  that can be employed whether or not an actual election is involved. Niemi, in discussing the New Jersey curve, makes no formal definition of a bias parameter but observes

“...the plan is not neutral between the parties. The Democrats could win 50 percent of the seats with as little as 42.1 percent of the statewide vote; for the Republicans to win half the seats, they would need at least 56.4 percent of the vote. ...note that with 56 percent of the statewide vote, the Republicans would have won 43 percent of the seats...”<sup>15</sup>

Let us put these statements in the notation of Kleinman's definition of bias given in Chapter 8:

$$\text{Bias}_{42.1} = S_{42.1} + S_{57.9} - 100 = 50.0 + 64.3 - 100 = 14.3 \text{ percent}$$

$$\text{Bias}_{43.6} = S_{43.6} + S_{56.4} - 100 = 50.0 + 64.3 - 100 = 14.3 \text{ percent}$$



In contrast to our swing ratio calculations, the notes below Table H.2 show the same bias value of 14.3 percent at a 50/50 division of the statewide vote under either the uniform percentage or prorata swing assumptions. By calculating this parameter at other divisions of the statewide vote we could probably obtain other values, but it is not our purpose here to make such a demonstration. We shall give little attention to the bias parameter again until Chapter 26 since it plays no major role in the prospective tests for partisan gerrymandering extant as of 1990 and applicable to the pre-1991 plans we are analyzing in the states of Indiana and California. We shall simply compute a single bias factor for each plan we are considering, based on a Democrat “v” of 50 percent, and include it along with other information pertaining to that plan.

*Indiana House: Actual Elections.* Niemi constructed a seats-votes curve for the *Bandemer* Indiana house plan before he did his curve for New Jersey. As mentioned earlier, that Indiana curve is shown in Figure 12.2(A). He described its construction in 1985 and reported its swing ratio as 1.48.<sup>16</sup> Again, we have re-calculated this curve using prorata swing and, as in Figure 12.1, added a prorata curve using dashed lines. Using prorata swing and a vote range of 44.4-53.9, we obtained a SR of 1.68 and a Bias<sub>50</sub> of - 14.0 percent. We also attempted to replicate Niemi’s SR calculation of 1.48 using his assumption of uniform percentage swing and recommended vote range of  $51.9 \pm 5.0$  percent. We obtained a SR of 1.60 and a bias of - 18.0 percent. We have supplemented this “*Bandemer*” curve by constructing a seats-votes curve [Figure 12.3(A)] for the 1972 State of Indiana (Republican) house districting plan for the election of 1980. Using the assumptions we specified above concerning swing, vote range, and point for measuring bias we found this curve to have a SR of 2.00 and a Bias<sub>50</sub> of - 14.0 percent. We reiterate that it was constructed from the actual results of that election.

*Theoretical Considerations.* Before applying swing-ratio analysis to the Indiana legislative districting plans under consideration we should review the theoretical relationship of seats-votes curves to their corresponding histograms and how each of these devices depicts districting plans having varying degrees of partisan bias. These relationships were presented in

Chapter 8. We return to it as we consider additional seats-votes curves from actual districting plans.

Cases 1, 2, and 3 of that analysis supplement Niemi's theoretical analysis and, with Cases 4 and 5, provide a standard for comparison with the citizen and political plans when these plans are analyzed for partisan bias. As indicated earlier, the swing ratio can vary significantly over the range of a party's mean percentage of the district vote. As stated above, we shall be seeking its value over the 44.4 to 53.9 percent range and using the notation "SR44.4-53.9." A low swing ratio is represented by a "plateau" on the seats-votes curve.\

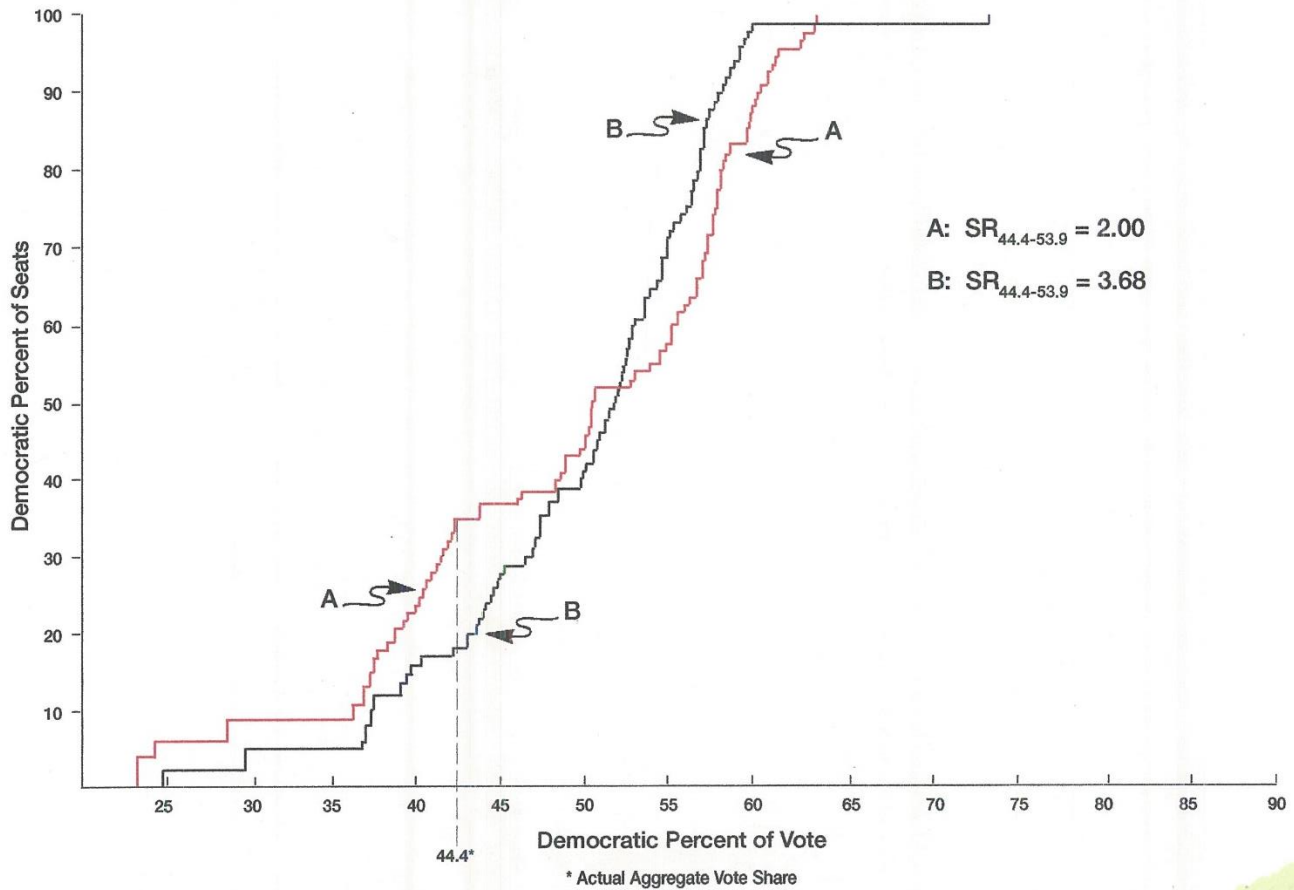
At the end of Appendix H we stated that a hypothetical seats-votes curve could be constructed from political indices of districts as well as from actual election results. Niemi's work has involved only curves derived from the latter, but he recognizes that "it is possible to use some sort of 'normal' vote or other measure of partisan strength, instead of actual votes."<sup>17</sup> For analysis of a districting plan under which no election has yet occurred—or may never occur—construction using political indices is a necessity if the analysis is to have any utility as a prospective<sup>18</sup> test for gerrymandering. As was evident in Chapter 9, derivation of a political index with which to quantify the partisan character of districts in a plan under which no election has occurred presents many problems. We concluded that our index has value as a relative measure of voting propensity—but not as an absolute measure. Since no more credible index has been reported in the literature, we use it here. Appendix H explains how we employ the political index in the construction of a seats-votes curve.

Figure 12.3

Seats-Votes Curve for 1972 State of Indiana (Republican)  
House Districting Plan Based Upon

A: Actual 1980 Election Results

B: Democratic Index (D.I.) of Districts and Even Division of Mean District Vote



The Democratic Index (D.I.) was computed for each of the districts of the six House plans. Since, in each case, it was calculated on the basis of an even split in the statewide vote share for the legislative candidates of the two major parties, there will be comparability among all plans. We again emphasize that because no election has taken place under the Crawford (Democratic) plan, or any of the citizen plans, political analysis of such plans is only possible using a political index. In the case of the 1972 and 1982 State of Indiana (Republican) plans we can augment our analysis with curves constructed from the actual election results of 1980 and 1982—as Figures 12.3(A) and 12.2(A) and (B) demonstrate.

*Theoretical Plans.* We return again to the seats-votes curves depicted in Figures 8.1 through 8.5 to see what light they throw upon our analysis of real world districting plans. We note that the curves associated with the three “gerrymanders” are all characterized by zero swing ratios in the critical 45-55 vote percentage range. In the “Democratic gerrymander” (Figure 8.1) the plateau occurs at the 75 percent seats ordinate. In the “Republican gerrymander” (Figure 8.2) the plateau occurs at the 25 percent seats ordinate. In the “Bipartisan gerrymander” (Figure 8.3) the plateau occurs at the 50 percent seats ordinate. In the two “neutral” plans there are no plateaus depicting a zero swing ratio. Instead, we find steep steps depicting swing ratios of 5.0 (Figure 8.5) and 7.5 (Figure 8.4).

As we might anticipate, no real world districting plans are going to yield seats-votes curves that look exactly like the ones depicted in these theoretical examples. But the examples do serve as benchmarks against which we can compare real world seats-votes curves, and we can reason that the more closely these curves resemble the theoretical examples the more evidence there is for characterizing a given plan as a partisan gerrymander, bipartisan gerrymander, or neutral plan—as the case may be.

*New Jersey and Indiana.* In the New Jersey curve (Figure 12.1) we note that there is no single “plateau,” but rather two long “steps” covering the area between the 57 and 65 percent seats ordinates. This does not fit, ideally, the Democrat gerrymander example but it more nearly approximates that example than any of the other theoretical examples. Most significant is the fact that these “long steps” occur *above* the 55 percent seats ordinate.

In the 1982 Indiana curve (Figure 12.2) we note, again, the absence of a single “plateau.” Because there are 100 seats being graphed—rather than just the 14 for New Jersey—we do not find just two long steps, either. Instead, there are many more smaller steps with two relatively longer ones occurring at about the 33 and 42 percent seats ordinates. This curve fits even less ideally any of those of the theoretical examples but considering its 44.4-53.9 percent votes range, it better approximates the Republican gerrymander example than any of the others. Most

significant is the fact that its longest “steps” occur *below* the 45 percent seats ordinate. In the 1972 Indiana curve [Figure 12.3(A)] we also note the lack of a single plateau. We find, instead, many smaller steps with relatively longer ones occurring at about the 35 and 52 percent seats ordinates. This curve fits the theoretical examples even worse than the 1982 Indiana curve, but it comes closer to the graph of the “Republican gerrymander” than to any other of the theoretical examples. With this background, let us now examine the seats-votes curves for the six Indiana house districting plans that were based upon the political indices of their districts.

#### *Application to Indiana House Districting Plans*

*1972 State of Indiana (Republican) Plan.* First, consider the preceding plan, drawn by a Republican-dominated legislature in 1972. It would be interesting to evaluate this plan with an index based upon what could have been known about its political character in 1972 (i.e., an index derived from the 1970 elections), but we did not have the resources to do that. We have only been able to evaluate that plan retrospectively—that is, with our index derived from a 1980 election. The seats-votes curve for this evaluation is shown in Figure 12.3(B). When we compare Figure 12.3(B) with Figure 12.3(A) we observe that the former has a swing ratio almost double that of the latter: 3.68 versus 2.00. Its Bias50 is - 18.0 percent.

*1982 State of Indiana (Republican, Bandemer) Plan.* To compare with Niemi’s curve [Figure 12.2(A)] based upon the results of the 1982 election we have in Figure 12.2(C) a curve derived from the political indices of the 1982 plan’s districts under a theoretically even division of the statewide vote. Comparison of Figure 12.2(C) with Figures 12.2(A) and (B) shows a relationship similar to that observed when comparing Figure 12.3(B) with Figure 12.3(A): the former has a swing ratio more than double that of the latter: 3.68 versus 1.68. Note also that its Bias50 of - 28.0 percent is the highest of any plan under examination in this chapter.

*The Crawford (Democratic) Plan.* As noted in Chapter 2, 59 of the 100 districts of this plan are identical to those of the 1982 State of Indiana (Republican, *Bandemer*) plan; it differs

from the Republican plan in that it divides the Republicans' 16 MMDs into SMDs favored by Representative Crawford. When the seats-votes curve of this plan is constructed we find it has a swing-ratio—3.89—only slightly higher than the 1982 Republican/*Bandemer* plan. However, its partisan Bias<sub>50</sub> of - 14.0 percent is only half that of the *Bandemer* plan. Its seats-vote curve is not depicted.

*The Three Citizen Plans.* The three plans generated by Primus' 1985 and 1990 districting competitions all have higher swing-ratios than any of the preceding plans drawn by partisan authors. Nothing remarkable is revealed by showing them. Table 12.1 summarizes the swing ratios of the Indiana house plans, as well as their indices of partisan bias. We shall defer overall comment on the swing ratios of the house plans until we see what the same analysis reveals when applied to the senate plans.

Table 12.1  
Swing-Ratios and Partisan Biases of Indiana House Districting Plans

(1) Year of Plan	(2) Plan	(3) Figure	Swing-Ratio		Bias (Republican) at 50%, %	
			(4) Based Upon Political Indices of Districts	(5) Based Upon Actual Election Result (Year)	(6) Based Upon Political Indices of Districts	(7) Based Upon Actual Election Result (Year)
1972	State of Indiana (Republican)	12.3 (B) & (A)	3.68	2.00 (1980)	- 18.0	- 14.0
1982	State of Indiana (Republican) Prorata Swing Uniform Percentage Swing	12.2 (C) & (B) 12.2(A)	3.68	1.68 (1982) 1.60 (1982)	- 28.0	- 14.0 (1982) - 18.0 (1982)
1982	Crawford (Democrat)	-	3.89		- 14.0	
1985	Minimum Fragments (Holderly)	-	4.63		- 12.0	
1990	Fully Nested (Composite)	-	4.32		- 12.0	
1990	Balanced Neutral (Lucid)	12.4	4.63		- 14.0	

### *Application to Indiana Senate Districting Plans*

In our consideration of the six Indiana house plans—and before—we noted the practical problems associated with this analysis. Here we are looking at eight plans, only two under which elections ever took place: the 1972 and 1982 State of Indiana (Republican) plans. In the case of these Republican senate plans we are unable to augment our analysis with curves constructed from actual election results—as we were for the corresponding Indiana Republican house plans. The reason we cannot is the staggered 4-year terms of Indiana state senators we first noted in Chapter 3 and which, in chapters 4 and 5, bedeviled any credible analysis of senate plans based on actual election results. Political conditions may differ markedly between two successive elections. We would, therefore, employ a very dubious methodology if we attempted to construct a seats-votes curve merging election results from, say, 1982 and 1984. Swing-ratio analysis of these senate plans is entirely dependent upon use of a political index. Having recognized this additional problem, let us examine the seats-votes curves for the eight Indiana senate districting plans—each derived from the political indices of the plan’s districts.

*1972 State of Indiana (Republican) Plan.* Like its companion house plan, this senate plan was drawn by a Republican-dominated legislature. As was so for that house plan, we did not have the resources to evaluate this senate plan with a circa 1970 political index. We have only been able to evaluate it retrospectively—that is, with our index derived from a 1980 election. The seats-votes curve for this plan closely resembles that for the subsequent, 1982 State of Indiana /*Bandemer* plan. From the seats-votes curve computations for the 1972 plan we derived a swing-ratio of 4.00 and a Bias<sub>50</sub> of – 20.0 percent.

*1982 State of Indiana (Republican) Plan.* Being the *Bandemer* senate plan, we are naturally most interested in its seats-votes curve. We don’t need to show it. It has a swing-ratio of 3.79 and a Bias<sub>50</sub> of - 24.0 percent. As was the case of its companion House plan, it has the highest partisan bias of any plan under examination in this chapter.

*The Carson and Townsend Plans.* When the seats-votes curves of these plans are constructed we find they have somewhat higher swing-ratios—4.63, each—than either of the Republican plans. Their indices of partisan bias are as low as any belonging to plans under examination in this chapter: - 12.0 percent, each. Their slightly higher swing ratios indicate the presence of more marginal districts. The seats-vote curves for these plans are not depicted. Their characteristics would be intermediate between those of the Republican plans and those of the citizen plans.

*The Four Citizen Plans.* Two of the four plans generated by Primus’ 1985 and 1990 districting competitions have the same 5.05 swing-ratio—which is higher than those of any of the preceding plans drawn by partisan technicians. Little is lost by not showing them. Table 12.2 summarizes the swing ratios of the Indiana senate plans, as well as their indices of partisan bias.

Table 12.2  
Swing-Ratios and Partisan Biases of Indiana Senate Districting Plans

(1) Year of Plan	(2) Plan	(3) Figure	(4) Swing-Ratio (Based Upon Political Indices of Districts)	(5) Bias (Republican), %
1972	State of Indiana (Republican)	-	4.00	- 20.0
1982	State of Indiana (Republican, <i>Bandemer</i> )	18.5	3.79	- 24.0
1982	Carson (Democratic)	-	4.63	- 12.0
1982	Townsend (Democratic)	-	4.63	- 12.0
1985	Minimum Fragments (Holderly)	-	4.42	- 16.0
1990	Compactness Threshold (Kenworthy)	-	5.05	- 16.0
1990	Balanced Neutral (Kenworthy)	-	5.05	- 16.0
1990	Fully Nested (Composite)	18.6	4.84	- 12.0

### Conclusions

From the current analysis we observe that the swing-ratios of the 1985 and 1990 Indiana citizen plans are consistently higher than those of the political plans. If it is debatable whether swing-ratios of 3.68 qualify the 1972 and 1982 Republican house plans as partisan gerrymanders, it ought to be even more debatable that citizen house plans having swing-ratios of 4.32 to 4.63 can be condemned as *unintentional* partisan gerrymanders.

In our analysis of the eight senate plans, we face the same problem we did in reaching conclusions regarding the swing-ratios of the six house plans: what is the threshold SR that differentiates a legitimate plan from a gerrymander—especially, when that SR has not been



derived from actual election results? For this analysis we can observe that the SRs of these plans show a consistent progression: lowest are those of the two Republican plans; intermediate are those of the Democrats' plans; and highest are those of the citizen plans. If SRs of 3.79 and 4.00 fail to qualify the Republican senate plans as partisan gerrymanders, then SRs of 4.42 to 5.05 would even less qualify the citizen plans as (unintentional) partisan gerrymanders.

We shall defer further comment upon the efficacy of the swing-ratio as a measure of partisan gerrymandering until we have seen how it functions when applied to the districting controversies in California and Pennsylvania. We now consider the test for partisan gerrymandering proposed by Bernard Grofman.

#### Notes

<sup>1</sup> Niemi, Richard, "The Swing Ratio as a Measure of Partisan Gerrymandering," in Bernard Grofman, ed., *Toward Fair and Effective Representation*. New York: Agathon, 1990.

<sup>2</sup> Niemi, Richard G. "The Relationship between Votes and Seats: The Ultimate Question in Political Gerrymandering," (California: *UCLA Law Review*, 1985, 33:185-212):195.

<sup>3</sup> ; Richard G. Niemi and Patrick Fett, "The Swing Ratio: An Explanation and Assesment", *Legislative Studies Quarterly*, Vol. 11, No 1 (1986): 76.

<sup>4</sup> King, Gary, and Robert X. Browning, "Seats, Votes, and Gerrymandering: Estimating Representation and Bias in State Legislative Redistricting", *Law and Policy Journal*, Vol. 9, No. 3, (1987): 1254.

<sup>5</sup> Gelman, Andrew and Gary King, "Estimating Incumbency Advantage without Bias", *American Journal of Political Science*, Vol. 34, No. 4, (1990): 544.

<sup>6</sup> Niemi, Richard G. "The Relationship between Votes and Seats: The Ultimate Question in Political Gerrymandering," (California: *UCLA Law Review*, 1985, 33:185-212): 195.

<sup>7</sup> Niemi, Richard G. and Patrick Fett, "The Swing Ratio: An Explanation and Assesment", *Legislative Studies Quarterly*, Vol. 11, No 1 (1986): 75, 76, 80.

<sup>8</sup> Edward R. Tufte, "The Relationship Between Seats and Votes in Two Party Systems", *The American Political Science Review*, Vol. 36, No. 2, (1973).

<sup>9</sup> Niemi, Richard G. "The Relationship between Votes and Seats: The Ultimate Question in Political Gerrymandering," (California: *UCLA Law Review*, 1985, 33:185-212): 172-175.

<sup>10</sup> King, Gary, "Representation through Legislative Redistricting: A Stochastic Model", *American Journal of Political Science*, Vol. 33, (1989): 798.

<sup>11</sup> King, Gary, "Representation through Legislative Redistricting: A Stochastic Model", *American Journal of Political Science*, Vol. 33, (1989): 8.

<sup>12</sup> Niemi, Richard G. "The Relationship between Votes and Seats: The Ultimate Question in Political Gerrymandering," (California: *UCLA Law Review*, 1985, 33:185-212): 195-96.

<sup>13</sup> *Ibid.* 172.

<sup>14</sup> Gelman, Andrew, and Gary King, "Enhancing Democracy through Legislative Redistricting", *American Political Science Review*, Vol. 88 (1994): 514.

<sup>15</sup> Niemi, Richard G. "The Relationship between Votes and Seats: The Ultimate Question in Political Gerrymandering," (California: *UCLA Law Review*, 1985, 33:185-212): 173.

<sup>16</sup> *Ibid* 196-200.

<sup>17</sup> From footnote 2 of typescript draft of article cited as "Niemi, 1990" but omitted in the published version of the article. Earlier (Op. cit. Note 1, pp. 204-207) Niemi had expanded upon this suggestion. In this writing he uses the term "normal vote" not as Converse defined it (see our definition of Converse's "normal vote" in Appendix C and reference to his "short term forces" in Appendix H) but as a synonym for "number of party supporters." Niemi asks "But how does one determine the number of party supporters in each district?" He answers his question by acknowledging "votes [for relatively obscure offices] are arguably the best measur..." Our political index is based on the vote for a "relatively obscure office." Therefore, it ought to meet Niemi's requirements.

<sup>18</sup> As opposed to retrospective test. For the distinction refer again to Chapter 7 Note 2.

## Chapter 13

### Grofman's Prima Facie Indicators: Indiana

Twenty-two days after he appeared at the *Bandemer* trial as an expert witness for the defendants, Bernard Grofman signed a declaration, in his role as an expert witness for the plaintiffs, in another partisan gerrymandering case: *Badham vs. Eu*.<sup>1</sup> In the next few years he would insist he had never testified that the *Bandemer* plans were *not* partisan gerrymanders; only that they could not be condemned on the basis of the evidence proffered by Dreyer. In the summer of 1985 he wrote:

“...my testimony in *Bandemer* did not reach a conclusion as to the merits of the allegation of political gerrymandering.”

In fall of 1985 he wrote:<sup>2</sup>

“Neither here nor in my testimony...in the *Bandemer* trial have I expressed an opinion on the merits of the claim that Indiana engaged in purposeful political gerrymandering in 1982. My trial testimony was confined to a review of the adequacy of the statistical materials prepared by one of the plaintiffs’ “expert” witnesses—a person who in fact was not qualified to the court as an expert...and who offered to the court no interpretation of his data and no opinion based on it—and to a summary of the social science research on gerrymandering.

In 1990 he wrote:

“I should note, moreover, that my own testimony in *Bandemer* was not that there was no political gerrymandering in Indiana, but rather that the evidence offered by Mr. Dreyer was too flawed as a basis on which to rest a claim of unlawful gerrymandering effects.”

The thrust of his testimony is amply documented in Chapter 4. The reader can draw his own conclusions. What we address here is this question: if Dreyer's evidence was "too flawed," what was the evidence that should have been offered? The answer, it would seem, lies in the tests Grofman applied to the California congressional districting plans known as "Burton I" and "Burton II." These were summarized on pages 4 and 5 of his first declaration and then published under the caption "Methods of Gerrymandering,"<sup>3</sup> and later republished under the caption "Twelve Prima Facie Indicators of Gerrymandering."<sup>4</sup> These twelve indicators, plus three additional "flags," are listed in Appendix I. One wonders why Grofman did not apply them to the *Bandemer* plans.<sup>5</sup> Whatever the reason, we shall do it now.

The first eight describe a districting plan's political effects. The last four pertain to its physical characteristics. The first eight are relevant to an investigation of all 14 Indiana House and senate plans to determine whether they—intentionally or *unintentionally*—confer a significant advantage upon one of the major parties. Grofman does not claim that the presence of these indicators conclusively proves a districting plan is a partisan gerrymander; only that their presence would shift the burden of proof upon the plan's authors to demonstrate that it was justified.

The indicators suffer from being imprecise and relativistic in their application. In the report of our 1989 Ohio congressional districting investigation<sup>6</sup> we argued: How much "packing" is too much? How much "altering" is too much? Etc. Moreover, how do we measure "packing," "altering," "reducing"... "enhancing?" Grofman does not say, so we shall have to make some rules of our own to apply these indicators to the plans in question. The first assumption we shall make is that we can use our Democratic Index as the measure of partisan "voting strength." We shall use the previous Indiana house and senate districting plans (*i.e.*, the plans of 1972) as our point of reference in applying indicators 4 through 7. We begin by applying these indicators to each of the six house plans, in turn, elaborating our rules in the course of analyzing the first plan.

## *Application to House Districting Plans*

### *1972 Republican Plan*

*Packing.* With respect to Indicator No. 1, we shall assume that a D.I. of over 60 indicates “packing” of Democrats and a D.I. of less than 40 indicates packing of Republicans. This leaves unanswered the question of “balance” in the packing. A plan with one D.I. of 75, and one D.I. of 39, obviously, shows more packing of Democrats than of Republicans. But suppose there is one district of 75 and *two* districts of 39? Which party suffers the most packing? It is not easy to say.

In this Republican plan Table 13.1 shows that packing of Democrats occurs in 9 districts, five of which are 2-member and one of which is 3-member—covering a total of 16 seats. There is a considerable “gap” between the packing in districts 5 (Lake Co.) and 45 (Marion Co.), with heavy African-American populations and Democratic indices of 85 to 100, and the remaining seven districts with Democratic indices from 63 to 67. Packing of Republicans occurs in six districts, one of which is 2-member. The indices of these districts all fall between 31 and 40, indicating a marked lack of “symmetry” with the “packed” Democratic districts, and lead us to conclude that this indicator shows bias towards Republicans.

*Fragmenting.* Discernment of fragmenting (Indicator No. 2) is fraught with the most subjectivity of any of the Grofman indicators. Also termed “submerging,” or “splitting,” fragmenting is a gerrymandering technique that can be viewed as the mirror image of another gerrymandering technique we might call “stringing together.” Fragmenting normally can occur only in counties or regions where the “out-party” is in a minority. In such cases the “in-party” draws districts in such a manner as to prevent formation of a district dominated by the out-party by dividing concentrations of out-party supporters among districts dominated by the in-party. On the other hand, in counties where *in-party* supporters are a minority, pockets of those supporters are strung together to give that party a district. Such a district is likely to be of low compactness.

Table 13.1

Grofman's *Prima Facie* Indicator No. 1:  
Indiana House: "Packing" of Districts Under Different Plans

1972 Republican	1982 Republican	1985 Minimum Fragments	1990 Balanced Neutral	1990 Fully Nested	1982 (Democratic) Crawford
<u>Democrats (9 → 16)</u>	<u>Democrats (9 → 14)</u>	<u>Democrats (13)</u>	<u>Democrats (12)</u>	<u>Democrats (14)</u>	<u>Democrats (17)</u>
HD 5 100.34*	HD 14 89.85*	HD 9 99.49	HD 6 99.73	HD 6 96.77	HD 48 89.33
HD 45 85.81**	HD 51 83.78**	HD 71 93.56	HD 65 92.20	HD 97 90.22	HD 49 85.81
	HD 12 78.08*	HD 8 79.74	HD 7 89.84	HD 7 87.10	HD 15 84.83
HD 38 67.69		HD 1 77.30	HD 66 80.67	HD 99 86.16	HD 94 83.41
HD 2 67.29*	HD 7 66.77*	HD 73 71.60	HD 1 75.72	HD 3 79.99	HD 31 82.99
HD 3 67.25*	HD 77 64.04		HD 16 74.41	HD 5 76.13	HD 88 78.01
HD 8 66.59*	HD 34 61.83	HD 10 69.68			HD 7 72.56
HD 1 64.11*	HD 45 61.50	HD 16 68.81	HD 2 69.20	HD 72 67.55	HD 87 72.12
HD 49 63.77	HD 73 60.99	HD 2 68.42	HD 98 67.74	HD 27 64.63	HD 89 71.86
HD 70 63.20	HD 72 60.26	HD 70 62.57	HD 5 64.69	HD 36 64.29	
		HD 72 61.04	HD 27 63.10	HD 2 62.89	HD 80 65.45
		HD 88 60.98	HD 95 62.58	HD 48 62.20	HD 77 64.04
		HD 97 60.79	HD 64 61.85	HD 28 62.12	HD 34 61.83
		HD 4 60.02		HD 86 60.79	HD 45 61.50
				HD 77 60.39	HD 19 61.21
					HD 9 61.10
					HD 73 60.99
					HD 72 60.26
<u>Republicans (6 → 7)</u>	<u>Republicans (10 → 12)</u>	<u>Republicans (12)</u>	<u>Republicans (12)</u>	<u>Republicans (12)</u>	<u>Republicans (19)</u>
HD 55 39.59	HD 16 39.95	HD 80 39.98	HD 70 39.99	HD 93 39.82	HD 16 39.95
HD 11 39.48*	HD 48 39.85**	HD 61 39.84	HD 49 39.54	HD 22 39.55	HD 47 39.64
HD 52 38.57	HD 47 39.82	HD 54 39.64	HD 82 39.38	HD 42 39.12	HD 38 39.62
HD 47 37.63	HD 38 39.62	HD 6 39.56	HD 12 38.38	HD 91 39.12	HD 53 39.62
HD 17 36.85	HD 53 39.62	HD 12 38.81	HD 60 36.94	HD 23 38.84	HD 85 39.60
HD 33 31.80	HD 3 38.90	HD 53 38.58	HD 30 36.41	HD 33 38.81	HD 96 39.56
	HD 40 38.10	HD 20 37.73	HD 56 35.96	HD 69 38.37	HD 81 38.93
	HD 4 37.91	HD 62 36.78	HD 25 35.81	HD 70 38.16	HD 98 38.92
	HD 18 36.64	HD 77 36.64	HD 52 35.80	HD 38 35.81	HD 3 38.90
	HD 39 30.06	HD 25 35.06	HD 21 35.71	HD 19 35.48	HD 12 38.68
		HD 65 30.50	HD 55 31.51		HD 40 38.10
		HD 64 26.63	HD 54 27.62	HD 55 29.30	HD 4 37.91
				HD 41 26.09	HD 75 37.74
					HD 78 37.13
					HD 18 36.64
					HD 97 36.20
					HD 86 33.31
					HD 90 32.86
					HD 39 30.06

The difficult question in some situations is this: in counties/regions where out-party supporters are in a minority and where the in-party has divided those supporters among several districts, is this a case of gerrymandering by fragmentation or a case of *avoiding* gerrymandering in favor of the out-party by "stringing together" its pockets of strength? The answer to this question would seem to lie in whether the districts in question have "un-natural" configurations. If an out-party district can be formed while maintaining compactness of the districts in the vicinity and without fragmenting local governmental units, then failure to create such a district is gerrymandering by fragmentation. On the other hand, if an out-party district can be formed only by low compactness and by fragmenting local governmental units (*i.e.*, by stringing together) then the in-party is not guilty of gerrymandering by fragmentation. This guideline begs the question of how much

fragmentation of local governmental units has to occur, and how low compactness of the districts has to be, before the configuration can be judged “un-natural?” We shall do the best we can in applying this indicator.

In the 1972 Republican plan Table 13.2 shows that there is no locality where fragmenting of Republicans can be said to occur; and only one locality where fragmenting of Democrats can be said to occur: the city of Fort Wayne, in Allen County, where a concentration of “Democrats” is split between 3-member HDs 14 and 15 so that neither of them achieves a D.I. above 45.4. We would have to conclude that this indicator also shows bias towards Republicans.

The remaining indicators are not relevant to this Republican plan because they can only apply to a “new” plan (*i.e.*, “pairing” and “open-district advantage”); or they can only have significance when the plan in question is compared to a previous plan. Since this *is* the “previous” plan to which the remaining plans are to be compared we cannot evaluate it by Indicators 4/6 and 5/7. Let us, then, move on and consider the 1982 Republican plan—the one litigated in *Bandemer*.

Table 13.2  
Grofman's *Prima Facie* Indicator No. 2:  
Indiana House: "Fragmenting" of Districts Under Different Plans

1972 Republican	1982 Republican	1985 Minimum Fragments	1990 Balanced Neutral	1990 Fully Nested	1982 (Democratic) Crawford
Democrats Fragmented	Democrats Fragmented	No Fragmenting	No Fragmenting	No Fragmenting	No Fragmenting
HDs 14 & 15 (Democratic Indices: 44.33, 45.37)	HDs 19 & 20 (Democratic Indices: 43.84, 45.95)				
Republicans Fragmented	Republicans Fragmented				
None	None				

*1982 Republican (“Bandemer”) Plan*

*Packing.* In this Republican plan Table 13.1 shows that packing of Democrats also occurs in 9 districts, three of which are 2-member and one of which is 3-member—covering a total of 14 seats. Again, there is a gap between the packing in Districts 12, 14 (Lake Co.) and 51 (Marion Co.), with heavy African-American populations and Democratic indices of 78 to 90, and the

remaining six districts with Democratic indices from 60 to 67. Packing of Republicans occurs in ten districts, one of which is 3-member. The indices of these districts all fall between 30 and 40, indicating a marked lack of symmetry with the packed Democratic districts, and lead us to conclude that this indicator shows bias towards Republicans.

*Fragmenting.* As with the 1972 Republican plan, Table 13.2 shows there is no locality where fragmenting of Republicans can be said to occur; and only one locality where fragmenting of Democrats can be said to occur: the city of Fort Wayne, in Allen County, where a concentration of Democrats is split between 3-member HDs 19 and 20 so that neither of them achieves a D.I. above 46. We would have to conclude that this indicator also shows bias towards Republicans.

*Pairing.* This is Indicator No. 3. In a writing seven years after the trial Grofman stated “In Indiana there was no evidence for differential treatment of Democratic as compared to Republican incumbents.”<sup>7</sup> This is a false statement. Table 13.3 shows that Democrats are paired in three districts whereas no Republican is paired, either with another Republican or with a Democrat. We discovered these facts through our own investigation and later found them confirmed when we examined the trial documents.<sup>8</sup> In performing our investigation we noticed that eight of the 63 Republicans elected to the Indiana house in 1980 and 1981 did not seek re-election in 1982.<sup>9</sup> If all eight of them *had* sought re-election, only one pairing would have resulted: a 3-incumbent race in 2-member HD 31. Since the final versions of the *Bandemer* plans were passed on January 19, 1982 and the filing deadline for the 1982 primary was on March 2, it seems reasonable to assume the Republican map-makers knew these members would be vacating and they would not be causing themselves a problem in HD 31. Therefore, our analysis of the house plans shows a minimum of eight open districts created by these Republican retirements, and no 3-incumbent “pairing” in HD 31.

Table 13.3  
 Grofman's *Prima Facie* Indicator No. 3:  
 Indiana House: "Pairing" of Incumbents Under Different Plans

1972 Republican	1982 (2) Republican	1985 Minimum Fragmts.	1990 Balanced Neutral	1990 Fully Nested	1982 Crawford (Democrat)
Not  Applicable	<u>Democrats (3)</u> Drozda D Dobis D  Jontz D Jones D  Doll D L. Hume D	<u>Democrats (6)</u> Hric D Katic D Bauer D Kromkowski D Jontz D Jones D Roach D Felling D D. Hume D Phillips D Avery D Hays D	<u>Democrats (6)</u> Mosby D Fisher D Bauer D Kromkowski D Jontz D Jones D Crawford D Summers D Roach D Felling D D. Hume D Doll D D. Hume D Avery D Hays D	<u>Democrats (6)</u> Katic D Pettersen D Bauer D Kromkowski D Crawford D Summers D Roach D Felling D D. Hume D Heeke D Avery D Hays D	<u>Democrats (3)</u> Hric D Pettersen D Jontz D Jones D Doll D L. Hume D
	<u>Republicans</u>  No Pairing	<u>Republicans (7 + 2)</u> Fifield R Roorda R Ayres R Collins R M. Harper R Worden R Pond R Alderman R Mauzy R Nelson R Soards R Manweller R G. Harper R Dorbecker R Leeuw R Schmid R	<u>Republicans (6 + 2)</u> Ayres R Collins R M. Harper R Worden R Pond R Montgomery R Donaldson R Delliger R G. Harper R Nelson R Soards R Manweller R Leeuw R Schmid R	<u>Republicans (8 + 1)</u> Ayres R Collins R Fifield R Roorda R Mock R Warner R M. Harper R Worden R Pond R Regnier R Dellinger R Nelson R Soards R Manweller R G. Harper R Leeuw R Schmid R	<u>Republicans (4)</u> M. Harper R Worden R Nelson R Soards R Manweller R G. Harper R Dorbecker R Leeuw R
		<u>Bipartisan (6)</u> Pettersen D (47.98) Reppa R Cook D (44.56) Mangus R* Winger D (46.88) Musselman R* Goodall D (49.71) Dailey R Clingan D (51.71) Lash R Goble D* (55.51) Pruett R	<u>Bipartisan (4 + 1)</u> Katic D (51.72) Pettersen D Reppa R Bodine D (50.32) Mangus R Winger D (46.45) Musselman R* Clingan D (51.71) Lash R	<u>Bipartisan (5)</u> Cook D (43.41) Mangus R* Winger D (46.88) Musselman R* Goodall D* (62.20) Dailey R Jontz D (50.70) Lash R L. Hume D* (53.82) V. Becker R	<u>Bipartisan (1)</u> Winger D (47.90) Duckwall R

\*Party having advantage in a bipartisan pairing of incumbents. Number in parentheses is the Democratic Index (D.I.) of the district.

It also turns out that six Democrat incumbents did not seek re-election to the Indiana house in 1982.<sup>10</sup> If all six of them had sought re-election, a pairing in HD 64 would have resulted. We cannot assume the Republican mapmakers knew which Democrat incumbents intended to vacate. Therefore, our analysis shows no open districts created by these Democratic retirements and two Democrat incumbents paired in HD 64.

In their pleadings the Republican defendants/appellants appeared to recognize they had paired a few Democrat incumbents. In his post-trial brief we noted that Evans had carefully qualified his reference to incumbent pairing by saying:



“The Acts have avoided placing two or more incumbents in the same...district *to the extent practicable subject to the one-man one-vote requirement.*”<sup>11</sup>

In his brief to the Supreme Court, Evans again was careful to insert qualifying language:

“The Acts preserved the cores of prior districts...and avoided *where feasible* contests between incumbents.”<sup>12</sup>

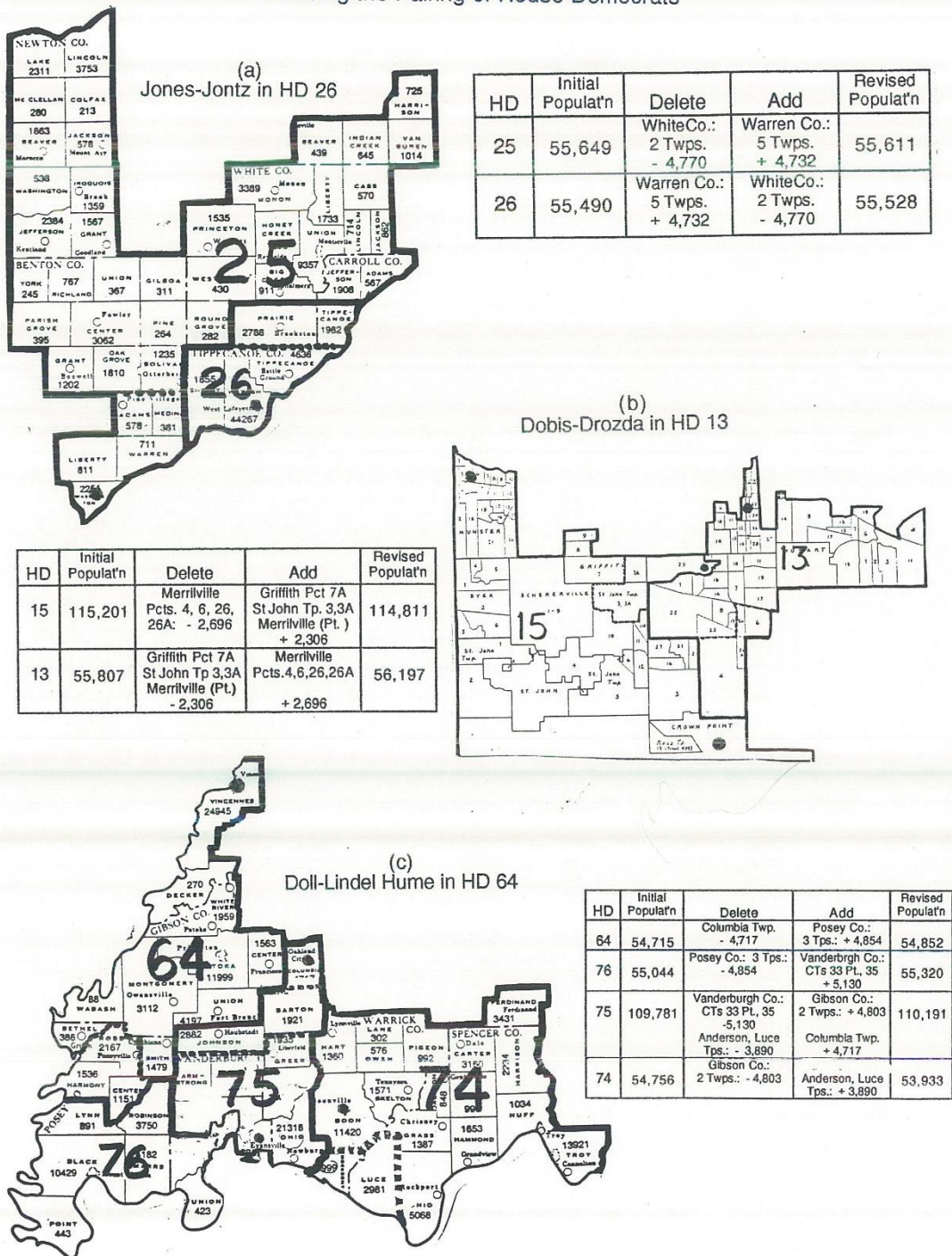
Finally, in Chapter 5 in the opening paragraph of our critique of Evans’ Reply Brief of Appellants, we noted the disingenuous way in which he acknowledged that at least two House incumbents had been paired—not even mentioning they had been Democrats.

How “feasible” and how “practicable” would it have been for the Republican mapmakers to avoid pairing those six Democrats? Figure 13.1 illustrates the situation. A simple “township swap” would have avoided the pairing of Jones and Jontz in HD 26. Avoiding a collision between Dobis and Drozda in Lake County’s HD 13 would have required some precinct swaps in Griffith, Merrillville and St. John Township, but it was do-able. Avoiding a collision between representatives Doll and Lindel Hume in HD 64 would have required a four-district shuffle in Gibson, Posey, Vanderburgh and Warrick counties. But that was also do-able. This exercise leads us to conclude that it was feasible to avoid pairing Democrats with Democrats in these three cases and that the pairing indicator shows a marked bias towards Republicans.

*Open-District Advantage.* Every instance of pairing results in an open district somewhere else, so we note that this Republican plan—in addition to the eight open seats created by voluntary retirement of Republicans—contains three additional open seats resulting from its three pairings (Table 13.4). Does one party have an advantage (Indicator No. 8) in these districts? If the resulting district is “critically marginal”—this is, with a D.I. between 47.5 and 52.5—we shall assume no advantage to either party. Therefore, Table 13.4 shows a Democratic advantage in two districts; a Republican advantage in five districts containing 7 seats; and no advantage in two districts. Overall, we would conclude that Republicans have a 3.5-to-1 open-district advantage.

Figure 13.1

Avoiding the Pairing of House Democrats



*Altering/Preserving Incumbents' Districts.* Indicators 4 and 6 ask whether there is a differential treatment of major party incumbents, whereby the districts of one party's incumbents are largely preserved while the districts of the other party's incumbents are significantly altered. In Chapter 9, introducing our "requisite tool" of carryover analysis, we stated our reasons for

choosing population carryover, rather than voter carryover, as our means of quantifying this indicator. We also explained why we would employ the percentage of the old district carried over...in cases where the old and new districts contained the same number of members; and the percentage of the new district composed of carryover from the old district in cases where an incumbent from a 1972 MMD was placed in a SMD under a new plan.

Next, we must ask how small an incumbent's population carryover has to be in order to conclude that his/her district has been "altered" to such an extent that it is "impossible" for him/her "to represent the bulk of" his/her "former constituents." We shall assume a carryover of less than 50 percent represents such alteration. But here, again, we can see that a 19 percent carryover represents more "alteration" than a 49 percent carryover. Therefore, a considerable degree of relativism exists within this indicator despite all the conditions we have attached to make it quantifiable. However, let us proceed to apply it to the 1982 Republican plan.

Table 13.4

Grofman's *Prima Facie* Indicator No. 8:  
Indiana House: Open-District Advantage Under Different Plans

1972 Republican	1982 Republican	1985 Minimum Fragments	1990 Balanced Neutral	1990 Fully Nested	1982 Crawford (Democratic)
	(9 Districts; 11 Seats)	(29 Districts)	(27 Districts)	(28 Districts)	(16 Districts)
Not Applicable	HD 8: 50.2 HD 19: 43.8 R*(2) HD 22: 42.7 R* HD 25: 43.9 R* HD 43: 58.0 D* HD 49: 45.3 R*(2) HD 50: 43.2 R* HD 55: 48.8 HD 76: 56.9 D*	HD 5: 41.6 R* HD 10: 69.7 D* HD 12: 38.8 R* HD 15: 53.3 D* HD 16: 68.8 D* HD 21: 44.9 R* HD 25: 35.1 R* HD 28: 48.5 HD 29: 50.5 HD 30: 42.1 R* HD 33: 42.9 R* HD 34: 50.5 HD 35: 43.1 R* HD 43: 46.7 R* HD 45: 54.3 D* HD 48: 47.9 HD 54: 39.6 R* HD 56: 58.8 D* HD 59: 44.3 R* HD 66: 47.9 HD 67: 51.1 HD 70: 62.6 D* HD 72: 61.0 D* HD 75: 46.3 R* HD 76: 42.3 R* HD 81: 48.6 HD 88: 61.0 D* HD 92: 55.8 D* HD 97: 60.8 D*	HD 4: 41.9 R* HD 5: 64.7 D* HD 7: 89.9 D* HD 12: 38.4 R* HD 15: 49.2 HD 17: 56.7 D* HD 20: 46.1 R* HD 25: 35.8 R* HD 27: 63.1 D* HD 28: 44.3 R* HD 29: 41.7 R* HD 37: 48.5 HD 41: 47.9 HD 46: 44.8 R* HD 49: 39.5 R* HD 51: 42.6 R* HD 54: 31.5 R* HD 57: 45.0 R* HD 59: 48.3 HD 63: 54.4 D* HD 64: 61.9 D* HD 67: 53.6 D* HD 68: 52.1 HD 70: 40.0 R* HD 75: 47.4 R* HD 91: 56.5 D* HD 98: 67.7 D*	HD 8: 56.2 D* HD 13: 43.2 R* HD 18: 44.3 R* HD 21: 48.1 HD 23: 38.8 R* HD 28: 62.1 D* HD 30: 51.6 HD 32: 45.8 R* HD 35: 44.4 R* HD 36: 64.3 D* HD 38: 35.8 D* HD 40: 40.9 R* HD 41: 26.1 R* HD 45: 47.9 HD 47: 42.9 R* HD 49: 48.5 HD 52: 40.1 R* HD 54: 50.9 HD 57: 47.4 R* HD 62: 57.5 D* HD 71: 53.8 D* HD 72: 67.6 D* HD 76: 56.6 D* HD 86: 60.8 D* HD 93: 39.8 R* HD 96: 59.4 D* HD 99: 86.2 D* HD 100: 56.0 D*	HD 8: 50.2 HD 22: 42.7 R* HD 25: 43.9 R* HD 43: 58.0 D* HD 55: 48.8 HD 76: 56.9 D* HD 80: 65.5 D* HD 81: 38.9 R* HD 82: 43.7 R* HD 84: 52.2 HD 87: 72.1 D* HD 89: 71.9 D* HD 91: 41.3 R* HD 95: 53.9 D* HD 98: 38.9 R*

\*Party having advantage in an open district. Preceding number is the Democratic Index (D.I.) of the district, rounded to one decimal

Table 13.5 summarizes the data with respect to this indicator for all of the House plans. We note, immediately, a strong pro-Republican bias in this Republican plan. Of the 55 Republican incumbents seeking re-election in 1982 not one received less than a 50 percent carryover. On the other hand, of the 37 Democratic incumbents, five receive less than 50 percent carryover, with Rep. Jontz achieving a low of 8.2 percent. We also note bias when we compare the mean carryover of Democratic incumbents with that of Republican incumbents: 70.9 for Democrats compared to 78.8 for Republicans. This bias is more significant than the 7.9 percent differential implies because, as we observed in Chapter 9, the significantly less populous districts of Democratic incumbents would lead us to expect a *higher* mean carryover for them.

*Reducing/Enhancing Marginal Incumbents' Districts.* Indicators 5 and 7 ask whether there is a differential treatment of major party incumbents in “marginal/competitive” districts whereby the “voting strength” of one party’s incumbents is “enhanced” while that of the other party’s incumbents is “reduced.” First we have to define what a “marginal/competitive” district is; then we have to identify which Democrats and which Republicans qualify by this definition; finally, we have to establish how big a change in the incumbent’s “voting strength” constitutes significant enhancement or reduction.

We shall delete the term “competitive”<sup>13</sup> and employ the term “marginal” district, defined as in Appendix C: one in which the major party division falls within the 44.4 to 53.9 percent historic minimum and maximum statewide Democratic vote chosen as the range over which to calculate our swing ratios. Also, as decided in Appendix C, we mean a political index of the district. That index would have to *correspond to* these 44.4 and 53.9 percent brackets. As reasoned in Note 14 to the previous chapter, it means districts vulnerable to such a “swing” would have Democratic Indices in the range 45.3 to 55.6. We see, in the left-hand column of Table 13.6, that nine of the 37 Democrats and 25 of the 55 Republicans qualify. Of the nine Democrats four would qualify as being in “critically-marginal” districts, while 15 of the 27



Table 13.5  
 Summary: Grofman's *Prima Facie* Indicators 4 & 6: Altering/Preserving Incumbents' Districts  
 Indiana House: Incumbents' Population Carryover Under Different Plans\*

Incumbent	1982 Republican	1985 Minimum Fragmnts	1990 Balanced Neutral	1990 Fully Nested	1982 Crawford (Demo.)
<b>DEMOCRATS (37)</b>					
Mean:	70.9 (67.8)**	53.9	66.4	59.4	63.9
Lowest:	8.2	7.0	14.8	7.0	8.2
Number having < 50% Carryover:	5	16	13	14	10
<b>REPUBLICANS (55)</b>					
Mean:	78.8 (84.8)***	63.5	66.5	68.2	78.1
Lowest:	50.9	7.6	19.4	9.9	5.6
Number having < 50% Carryover:	0	18	15	14	5

\*For a detailed tabulation, showing each individual incumbent's carryover, see Appendix J.

\*\*Mean voter carryover in 28 "Democrat-controlled" districts per Cranor et al. Such districts were held by Democratic incumbents for three consecutive terms prior to redistricting. Carryover is defined as percent of new district composed of carryover from old district.

\*\*\*Mean voter carryover in 35 "Republican-controlled" districts per Cranor et al. Such districts were held by Republican incumbents for three consecutive terms prior to redistricting.

Table 13.6  
 Summary: Grofman's *Prima Facie* Indicators 5 & 7: Reducing/Enhancing Marginal Incumbents' Districts  
 Indiana House: Change in Democratic Index of Marginal Incumbents' Districts Under Different Plans\*

Democratic Index (D.I.) = 3.67 + 0.955 SPI' (SPI' = [1980 Vote for Superintendent of Public Instruction] + 5.00)

	1982 Republican	1985 Minimum Fragments	1990 Balanced Neutral	1990 Fully Nested	1982 Crawford (Demo.)
<b>DEMOCRATS (9)</b>					
Number Receiving > 1% Reduction	2	4	3	5	2
Number Receiving > 1% Enhancement	4	5	4	3	4
Maximum Unfavorable Change in Index	- 2.67	- 4.41	- 6.08	- 5.99	- 6.70
<b>REPUBLICANS (25)</b>					
Number Receiving > 1% Reduction	0	6	9	8	4
Number Receiving > 1% Enhancement	12	10	6	9	13
Maximum Unfavorable Change in Index	- 0.75	- 6.22	- 4.96	- 4.43	- 4.81

\*For a detailed tabulation, showing the change in Democratic Index for each individual incumbent, see Appendix K

Republicans fall within this category. In addressing the question of how big a change in index is significant we arbitrarily establish one percent as the threshold.

Having thus refined our definition of this indicator, we note that two (of nine) Democrats and none of the 25 Republicans suffer reduction. The highest reduction for a Democrat is 2.67, while that for the Republican is only 0.75. On the other hand, four Democrats and 12 Republicans receive enhancement. The asymmetry of this indicator is obvious. A definite pro-Republican bias exists with respect to the number of incumbents suffering reduction—and in the extent of that reduction.

*Summary.* We see that all *eight* of these indicators evidence pro-Republican bias, some of them (Nos. 2, 3, 4/6, and 5/7) more dramatically than others. Our conclusion is that this plan has a significant pro-Republican bias. As applied here, do Grofman's indicators establish a *prima facie case* of partisan gerrymandering? When he applied them in his testimony in *Badham v. Eu* he concluded that the 1981-82 California congressional districting plans were partisan gerrymanders favoring Democrats. In that testimony he stated, "eleven of these twelve methods were used"<sup>14</sup> in drawing those plans (including all eight of the indicators we are considering). What verdict would Grofman pronounce on this *Bandemer* plan, now that his own criteria have been applied?

#### *1985 Minimum Fragments (Holderly) Plan*

We performed an analysis similar to that for the 1972 and 1982 State of Indiana (Republican, *Bandemer*) plans evaluating this plan according to each indicator, in turn. To save space we report just this summary of our findings/judgments: The packing indicator shows pro-Republican bias and the open-district advantage indicator a slight pro-Republican bias. The other indicators show no significant bias. Overall, we would conclude that this Holderly plan has a slight pro-Republican bias. (The details pertaining to each indicator may be learned from a study of Tables 13.1 through 13.6.)

### *1990 Balanced Neutral Process (BNP) (Lucid) Plan*

Again, we performed an analysis similar to that for the 1972 and 1982 State of Indiana plans and here report only a summary. The packing indicator shows pro-Republican bias and the open-district advantage indicator a slight pro-Republican bias. The other indicators show no significant bias. Overall, we might conclude that the Balanced Neutral plan has a very slight pro-Republican bias.

### *1990 Fully Nested Plan*

Our analysis yields this summary: Indicator No. 1 shows definite pro-Republican bias, Indicators 4/6 and 5/7 show slight pro-Republican bias, and Indicators 3 and 8 show a slight pro-Democrat bias. Since some indicators point one-way, and others in the opposite direction, we would judge this plan to be politically neutral.

### *1982 Crawford (Black Democratic) Plan*

Indicators 4/6 show definite pro-Republican bias. The slight Democratic advantage by Indicator No. 3 is offset by the slight Republican advantage by Indicator No. 8. The other indicators show no significant bias. Overall, we might conclude that this Democrat-authored plan has a slight pro-Republican bias.

### *Summary for All Six House Plans*

We concluded that the Nested plan was “politically neutral;” and that the Holderly, BNP, and Crawford plans showed a “slight pro-Republican bias.” On the other hand, we judged the 1972 Republican plan (on the basis of only two indicators) as having “bias towards Republicans” and the 1982 Republican (*Bandemer*) plan as having “significant pro-Republican bias.” If we have properly applied the eight of Grofman’s twelve *prima facie* indicators of partisan gerrymandering that measure political effects, we would conclude they reveal the *Bandemer* plan to contain considerably more pro-Republican bias than any of the other four plans we compared

it to. When viewed by itself, the bias of the *Bandemer* plan might be seen as inadvertent. When viewed in the context of four other comparable plans the evidence becomes overwhelming that the bias of the *Bandemer* plan was intentional.

Table 13.7  
Grofman's *Prima Facie* Indicator No. 1:  
Indiana Senate: "Packing" of Districts Under Different Plans

1972 Republican	1982 Republican	1985 Minimum Fragmts.	1990 Compctns Thresh	1990 Balanced Neutral	1990 Fully Nested	1982 Carson (Demo.)	1982 Townsend (Dem)
<u>Democrats (8)</u>	<u>Democrats (6)</u>	<u>Democrats (6)</u>	<u>Democrats (5)</u>	<u>Democrats (5)</u>	<u>Democrats (5)</u>	<u>Democrats (6)</u>	<u>Democrats (5)</u>
SD 3: 89.97 SD 34: 87.60 SD 1: 74.22 SD 33: 73.63 SD 4: 73.19 SD 10: 63.07 SD 49: 61.01 SD 38: 60.46	SD 3: 90.67 SD 34: 80.05 SD 1: 73.92 SD 33: 72.02 SD 10: 66.46 SD 4: 63.21	SD 33: 81.90 SD 3: 81.46 SD 4: 78.99 SD 1: 73.76 SD 9: 65.30 SD 32: 63.78	SD 3: 89.11 SD 33: 84.87 SD 1: 72.68 SD 4: 68.48 SD 9: 65.32	SD 33: 84.87 SD 3: 82.06 SD 4: 73.76 SD 1: 72.68 SD 9: 65.32	SD 49: 84.24 SD 3: 85.12 SD 2: 71.70 SD 4: 70.84 SD 14: 63.33	SD 2: 88.03 SD 3: 85.13 SD 30: 75.64 SD 29: 75.51 SD 10: 63.67 SD 49: 60.39	SD 3: 95.47 SD 34: 90.39 SD 1: 72.81 SD 10: 63.67 SD 49: 60.39
<u>Republicans (1)</u>	<u>Republicans (2)</u>	<u>Republicans (3)</u>	<u>Republicans (6)</u>	<u>Republicans (5)</u>	<u>Republicans (5)</u>	<u>Republicans (4)</u>	<u>Republicans (4)</u>
SD 37: 38.39	SD 24: 37.82 SD 29: 33.05	SD 42: 39.36 SD 29: 37.69 SD 34: 32.00	SD 31: 39.21 SD 14: 38.75 SD 29: 38.26 SD 12: 35.74 SD 22: 34.27	SD 31: 39.21 SD 14: 38.75 SD 29: 38.26 SD 12: 35.74 SD 22: 34.27	SD 46: 39.86 SD 12: 39.21 SD 35: 38.26 SD 27: 37.84 SD 21: 32.18	SD 36: 38.89 SD 33: 38.03 SD 24: 33.43 SD 35: 33.38	SD 32: 39.14 SD 36: 38.89 SD 30: 36.38 SD 24: 33.43

Table 13.8  
Grofman's *Prima Facie* Indicator No. 2:  
Indiana Senate: "Fragmenting" of Districts Under Different Plans

1972 Republican	1982 Republican	1985 Minimum Fragmts.	1990 Compctns Thresh	1990 Balanced Neutral	1990 Fully Nested	1982 Carson (Demo.)	1982 Townsend (Dem)
<u>Democrats Fragmented</u>	<u>Democrats Fragmented</u>	<u>Democrats Fragmented</u>				No Fragmenting	No Fragmenting
SDs 14, 15, & 16 (Democratic Indices: 41.2, 42.0, 43.2)	SDs 15, & 16 (Democratic Indices: 43.8, 44.9)	SDs 14, & 15 (Democratic Indices: 46.9, 46.6)					
		<u>Republicans Fragmented</u>	<u>Republicans Fragmented</u>	<u>Republicans Fragmented</u>	<u>Republicans Fragmented</u>		
		SDs 45 & 46 (Democratic Indices: 53.6, 55.9)	SDs 48 & 49 (Democratic Indices: 53.7, 56.1)	SDs 48 & 49 (Democratic Indices: 53.7, 56.1)	SDs 36, 37, & 38 (Democratic Indices: 53.8, 56.2, 55.0)		

### Application to Senate Districting Plans

Our analysis of the Indiana senate districting plans according to Grofman's indicators is based upon the same assumptions made in our analysis of the Indiana house districting plans. We therefore apply the same methodology. As we did with the citizen and Democrat house plans, above, we report just a summary for each plan and direct the reader to a study of Tables 13.7 through 13.12 if he wants to see the details.



1972 Republican Plan

As noted in our analysis of the house plans, only the packing and fragmenting indicators are relevant to this plan. The packing indicator shows strong pro-Republican bias; the fragmenting indicator shows definite bias towards Republicans. We proceed to consideration of the 1982 Republican plan—the one litigated in *Bandemer*.

1982 Republican (*Bandemer*) Plan

We see that six of eight of these indicators evidence definite pro-Republican bias, and the remaining two (Nos. 3 and 5) neutrality. Some of the indicators (Nos. 1, 2 and 4/6) show more bias than others (Nos. 7 and 8). Our conclusion is that this plan has a significant pro-Republican bias, although less extreme than the *Bandemer* house plan. As we did with respect to that house plan, we ask Grofman whether his indicators establish a *prima facie* case of partisan gerrymandering?

Table 13.9  
Grofman's *Prima Facie* Indicator No. 3:  
Indiana Senate: "Pairing" of Incumbents Under Different Plans

1972 Republican	1982 Republican	1985 Minimum Fragmts.	1990 Compctns Thresh	1990 Balanced Neutral	1990 Fully Nested	1982 (Demo.) Carson	1982 (Dem) Townsend
Not	No	<u>Democrats (1)</u> Hallas D Bushemi D	<u>Republicans (4)</u> Guy R Justice R Duvall R	<u>Democrats (1)</u> Bushemi D Hall D	<u>Republicans (6+1)</u> Costas R Niemeyer R Augsburger R Snowden R Worman R McDonald R Sinks R	<u>Republicans (4+1)</u> Miller R Augsburger R Worman R McDonald R Sinks R	
Applicable	Pairing	<u>Republicans (2)</u> Augsburger R Snowden R Gorton R Hession R	<u>Republicans (4)</u> Blankenbaker R Mills R Borst R Gorton R Corcoran R	<u>Republicans (4)</u> Guy R Justice R Duvall R Blankenbaker R Mills R Borst R Gorton R Corcoran R	<u>Bipartisan (2)</u> Justice R Butcher R Duvall R Blankenbaker R Mills R Borst R	<u>Bipartisan (2)</u> Mirvan D* (55.8) Potesta R Mahem D* (53.5) Bosma R	<u>Republicans (2+1)</u> Miller R Augsburger R Worman R McDonald R Sinks R
		<u>Bipartisan (4)</u> Townsend D Jessup R* (46.4) Mahem D* (53.8) Bosma R Carson D* (81.9) Blankenbaker R O'Day D* (55.9) Harris R	<u>Bipartisan (4)</u> Mirvan D Potesta R* (46.9) Bushemi D Niemeyer R* (44.1) Mahem D* (58.1) Bosma R O'Day D* (56.1) Harris R	<u>Bipartisan (3)</u> Mirvan D Potesta R* (46.9) Mahem D* (58.1) Bosma R O'Day D* (56.1) Harris R			

Table 13.10  
Grofman's *Prima Facie* Indicator No. 8:  
Indiana Senate: Open-District Advantage Under Different Plans

1972 Republican	1982 Republican	1985 Minimum Fragmts.	1990 Compactns Thresh	1990 Balanced Neutral	1990 Fully Nested	1982 (Demo.) Carson	1982 (Dem) Townsend
	(3 Districts)	(10 Districts)	(11 Districts)	(11 Districts)	(12 Districts)	(10 Districts)	(7 Districts)
Not Applicable	SD 11: 47.3 R* SD 31: 42.9 R* SD 45: 57.1 D*	SD 4: 74.0 D* SD 8: 49.8 SD 13: 40.6 R* SD 16: 48.3 SD 19: 41.3 R* SD 30: 43.6 R* SD 35: 44.55 R* SD 36: 45.2 R* SD 45: 53.6 D* SD 48: 52.9 D*	SD 1: 72.7 D* SD 4: 68.5 D* SD 10: 49.9 SD 13: 46.4 R* SD 22: 34.3 R* SD 31: 39.2 R* SD 32: 46.8 R* SD 35: 42.1 R* SD 43: 50.2 SD 47: 54.1 D* SD 48: 53.7 D*	SD 1: 72.7 D* SD 4: 73.0 D* SD 10: 49.9 SD 13: 46.4 R* SD 22: 34.3 R* SD 31: 39.2 R* SD 32: 46.8 R* SD 35: 42.1 R* SD 43: 50.2 SD 47: 54.1 D* SD 48: 53.7 D*	SD 5: 46.9 R* SD 9: 45.5 R* SD 15: 53.0 D* SD 16: 42.9 R* SD 19: 52.1 SD 20: 41.7 R* SD 21: 32.2 R* SD 26: 42.1 R* SD 27: 37.8 R* SD 35: 38.3 R* SD 36: 53.8 D* SD 38: 55.0 D*	SD 2: 88.0 D* SD 11: 52.1 SD 13: 46.4 R SD 15: 53.2 D* SD 16: 41.0 R* SD 24: 33.4 R* SD 30: 75.6 D* SD 32: 41.1 R* SD 34: 45.2 R* SD 36: 38.3 R*	SD 11: 52.1 SD 13: 46.4 R* SD 15: 53.2 D* SD 16: 41.0 R* SD 24: 33.4 R* SD 31: 42.2 R* SD 36: 38.3 R*

\*Party having advantage in a pairing of incumbents, or in an open district. Accompanying number is the Democratic Index (D.I.) of the district, rounded to one decimal.

Table 13.11

Summary: Grofman's *Prima Facie* Indicators 4 & 6: Altering/Preserving Incumbents' Districts  
Indiana Senate: Incumbents' Population Carryover Under Different Plans\*  
Percent of Old District Carried Over into New District

Incumbent	1982 Republican	1985 Minimum Fragmts	1990 Compactns. Threshold	1990 Balanced Neutral	1990 Fully Nested	1982 Carson (Demo.)	1982 Townsend (Demo.)
<b>DEMOCRATS (15)</b>							
Mean:	65.8 (53.8)**	62.5	69.5	69.7	59.4	66.9	80.9
Lowest:	27.6	14.0	8.9	11.1	15.3	11.7	39.4
Number Having < 50% Carryover	6	5	4	4	5	3	1
<b>REPUBLICANS (32)</b>							
Mean:	79.9 (85.4)***	58.4	56.6	56.5	50.8	62.5	64.4
Lowest:	38.6	8.0	21.9	21.9	19.4	13.8	15.9
Number Having < 50% Carryover	2	14	12	12	19	7	6

For a detailed tabulation, showing each individual incumbent's carryover, see Appendix L.

\*\*Mean voter carryover in 14 "Democrat-controlled" districts per Cranor, et al. Such districts were held by *Democratic* incumbents for three consecutive terms prior to redistricting. Carryover is defined as percent of new district composed of carryover from old district.

\*\*\*Mean voter carryover in 20 "Republican-controlled" districts per Cranor, et al. Such districts were held by *Republican* incumbents for three consecutive terms prior to redistricting.



Table 13.12

Grofman's *Prima Facie* Indicators 5 & 7: Reducing/Enhancing Marginal Incumbents' Districts  
 Indiana Senate: Change in Democratic Index of Marginal Incumbents' Districts Under Different Plans  
 Democratic Index (D.I.) = 3.67 + 0.955 SPI' (SPI' = [1980 Vote for Superintendent of Public Instruction] + 5.00)

Incumbent	1972 Repub.	1982 Republican		1985 Minimum Frag.		1990 Comp. Thresh.		1990 Balanc'd Neutral		1990 Fully Nested		1982 Carson (Demo.)		1982 Townsend (Dem.)	
<b>DEMOCRATS</b>															
(3)		Change *		Change		Change		Change		Change		Change		Change	
Neary	50.06	50.13	+ 0.07	50.13	+ 0.07	50.13	+ 0.07	50.13	+ 0.07	50.13	+ 0.07	50.13	+ 0.07	50.13	+ 0.07
Townsend	49.97	50.58	+ 0.61	46.40	- 3.57	49.93	- 0.04	49.93	- 0.04	49.93	- 0.04	50.47	+ 0.50	50.47	+ 0.50
Craycraft	53.20	53.29	+ 0.09	52.35	- 0.85	52.09	- 1.11	52.09	- 1.11	52.09	- 1.11	52.24	- 0.96	52.24	- 0.96
Nbr. Receiving > 1% Reduction	-	0		1		1		1		1		0		0	
Nbr. Receiving > 1% Enhancemt	-	0		0		0		0		0		0		0	
Maximum Unfavorable Change in Index	-	-		- 3.57		- 1.11		- 1.11		- 1.11		- 0.96		- 0.96	
<b>REPUBLICANS</b>															
(15)															
Potesta	54.65	49.06	+ 5.59	45.73	+ 8.92	46.91	+ 7.74	46.91	+ 7.74	71.70	- 17.05	55.78	- 1.13	45.51	+ 9.14
Miller	49.71	45.73	+ 3.98	46.55	+ 3.16	45.60	+ 4.11	45.60	+ 4.11	45.58	+ 4.13	40.07	+ 9.64	40.07	+ 9.64
Manion	49.64	47.30	+ 2.34	49.83	- 0.19	49.91	- 0.27	49.91	- 0.27	2.99	- 3.35	52.13	- 2.49	52.13	- 2.49
Snowden	45.92	46.14	- 0.22	41.20	+ 4.72	45.95	- 0.03	45.95	- 0.03	42.47	+ 3.45	42.60	+ 3.32	42.60	+ 3.32
Justice	47.86	47.86	0	47.86	0	46.48	+ 1.38	46.48	+ 1.38	48.37	- 0.51	47.47	+ 0.39	47.47	+ 0.39
Jessup	47.00	46.02	+ 0.98	46.40	+ 0.60	46.27	+ 0.73	46.22	+ 0.78	46.39	+ 0.61	46.02	+ 0.98	46.02	+ 0.98
Butcher	46.48	46.49	- 0.01	46.56	- 0.08	46.83	- 0.35	46.85	- 0.37	48.37	- 1.89	46.88	- 0.40	46.88	- 0.40
Abraham	50.25	48.65	+ 1.60	50.05	+ 0.20	50.18	+ 0.07	50.18	+ 0.07	50.23	+ 0.02	49.97	+ 0.25	49.97	+ 0.25
Blankenbaker	46.43	46.38	+ 0.05	81.90	- 35.47	47.23	- 0.80	47.23	- 0.80	49.61	- 3.18	33.38	+ 13.05	47.90	- 1.47
Pease	53.15	47.24	+ 5.89	51.16	+ 1.99	45.23	+ 7.92	45.23	+ 7.92	45.22	+ 7.93	53.20	- 0.05	53.20	- 0.05
Duckworth	50.22	50.32	- 0.10	50.23	- 0.01	50.41	- 0.19	50.41	- 0.19	50.37	- 0.15	50.23	- 0.01	50.23	- 0.01
Hession	47.18	47.93	- 0.75	44.34	+ 2.84	41.86	+ 5.32	41.87	+ 5.31	41.58	+ 5.60	48.90	- 1.72	48.90	- 1.72
Nugent	55.42	54.56	+ 0.86	54.25	+ 1.17	52.14	+ 3.28	52.14	+ 3.28	55.26	+ 0.16	55.66	- 0.24	55.66	- 0.24
Corcoran	51.73	50.24	+ 1.49	52.55	- 2.31	49.07	+ 2.66	49.07	+ 2.66	47.54	+ 4.19	50.77	+ 0.96	50.77	+ 0.96
Harris	47.84	48.13	- 0.31	55.94	- 8.10	56.12	- 8.28	56.12	- 8.28	56.24	- 8.40	47.01	+ 0.83	47.01	+ 0.83
Nbr. Receiving > 1% Reduction	-	0		3		1		1		5		3		3	
Nbr. Receiving > 1% Enhancemt	-	6		6		7		7		5		3		3	
Maximum Unfavorable Change in Index	-	- 0.75		- 35.47		- 8.28		- 8.28		- 17.05		- 2.49		- 2.49	

\* + = Favorable Change; - = Unfavorable Change (from perspective of incumbent)

### *1985 Minimum Fragments (Holderly) Plan*

The packing indicator (No. 1) shows pro-Republican bias and the open-district advantage indicator (No. 8) a slight pro-Republican bias. The pairing indicator (No. 3) shows a slight pro-Democrat bias; so do the “carryover” Indicators (4/6). The other indicators (Nos. 2, 5/7) show no significant bias. Overall, we would conclude that this Holderly plan is politically neutral.

### *1990 Compactness Threshold and Balanced Neutral Process (BNP) Plans*

These plans are analyzed together because they are identical as to 38 of their 50 districts. Their remaining 12 districts differ politically in only minor respects. The packing indicator (No. 1) shows definite pro-Republican bias, as does “enhancement” (Indicator No. 7). The open district advantage indicator (No. 8) shows a slight pro-Republican bias. On the other hand, the fragmenting (No. 2) and pairing (No. 3) indicators, as well as indicators 4/6, show slight to definite pro-Democrat bias. The “reducing” indicator (No. 5) shows no bias. With some indicators pointing in one direction, and the others pointing in the opposite direction, the conclusion must be that these plans are politically neutral.

### *1990 Fully Nested Plan*

Indicator No. 1 shows definite pro-Republican bias, and Indicator No. 8 a strong pro-Republican bias. Indicators 2 and 4/6 show definite pro-Democrat bias, and Indicator No. 3 a strong pro-Democrat bias. Indicators 5/7 are inconclusive. Since some indicators point one-way, and others in the opposite direction, we would judge this plan to be politically neutral.

### *1982 Townsend (White Democratic) Plan*

This is a political plan of Democrat authorship, so we should expect it to show a pro-Democrat bias that would mirror the pro-Republican bias of the *Bandemer* plan. In senate debate the Democrats first moved to substitute this plan of Senator Townsend. After his motion failed,

Senator Carson moved to substitute her plan. Her motion also failed. Also, as recounted earlier, the Townsend and Carson plans were identical except for the 5 districts in Lake County and the 7 districts in Marion County. We consider first the Townsend plan: The packing (No. 1) and open-district (No. 8) indicators show pro-Republican bias. The pairing (No. 3) and the altering/preserving (Nos. 4/6) indicators show a strong pro-Democrat bias. The remaining indicators (Nos. 2 and 5/7) point in neither direction. Taking all the indicators together, one might conclude that this Democrat-authored plan has a slight pro-Democrat bias.

### *1982 Carson (Black Democratic) Plan*

We should expect this second political plan of Democrat authorship to show a strong pro-Democrat bias—just as we did the first. However, Senator Carson’s plan turns out to be even weaker in its pro-Democrat bias than Senator Townsend’s. The packing (No. 1) and open-district (No. 8) indicators show definite pro-Republican bias. The pairing (No. 3) indicator shows a strong pro-Democrat bias, and the altering/preserving (Nos. 4/6) indicators show a slight pro-Democrat bias. The remaining indicators (Nos. 2 and 5/7) point in neither direction. Taking all the indicators together, one must again conclude that this second Democrat-authored plan has neither a consistent pro-Democrat bias nor a consistent pro-Republican bias.

*Summary for All Seven Senate Plans.* We concluded that the Minimum Fragments (Holderly), Compactness Threshold, BNP, and Nested plans were all “politically neutral;” that the Townsend plan had “a slight pro-Democrat bias;” and that the Carson plan had no “consistent” bias in either direction. On the other hand, we judged the 1972 Republican plan (on the basis of only two indicators) as having “definite” to “strong” pro-Republican bias, and the 1982 Republican (*Bandemer*) plan as having “significant” pro-Republican bias, albeit “less extreme” than that of the *Bandemer* house plan. Following application of the eight Grofman

*prima facie* indicators that measure political effects to the house plans, we concluded that they reveal the *Bandemer* plan to contain considerably more pro-Republican bias than any of the other plans we compared it to. The same conclusion applies to the *Bandemer* senate plan.

### *Concluding Comment*

Charles Backstrom has commented on these indicators as a measure of partisan gerrymandering as follows:

“...one writer presents a set of twelve ‘features’...which indicate the presence of a gerrymander. In addition, three other ‘flags’—MMDs, gross disproportion in seats/results and lack of competition—signal a possible gerrymander. The problem with this formulation is that all criteria seem equal: there is no guide to what mix of factors would be determinative...”<sup>15</sup>

This is another way of voicing our observation at the beginning of this chapter that these indicators don’t tell us how much packing is “too much?” How much altering is “too much?” etc. We concurrently asked why Grofman never applied his indicators to the *Bandemer* plans, given the importance of this case to such a major political/constitutional issue—and his personal involvement in it. By 1990 he appears to have abandoned his indicators altogether, for his anthology published that year hardly mentions them<sup>16</sup>—even as it featured chapters by Backstrom, McDonald/Engstrom, and Niemi arguing the merits of *their* tests for partisan gerrymandering. Instead, his 34-page commentary appearing therein argues that the *Bandemer* plans should have been judged by a new and even more nebulous set of criteria. We examine this commentary in the next chapter.

## Notes

<sup>1</sup> Grofman, Bernard, “Measures of Bias and Proportionality in Seats Votes Relationship”, *Political Methodology*, Vol. 9 (1983): 58.

<sup>2</sup> Grofman, Bernard, “Toward a coherent theory of gerrymandering: Bandemer and Thornburg”. In *Bernard Grofman, Political Gerrymandering and the Courts*, (New York: Agathon Press, 1990): 60.

<sup>3</sup> Ibid. 544.

<sup>4</sup> Ibid. 117-118.

<sup>5</sup> Did he conceive of them between November 16 and December 8, 1983?

<sup>6</sup> Horn, et al., 1989: pg. 20.

<sup>7</sup> Grofman, Bernard, “Toward a coherent theory of gerrymandering: Bandemer and Thornburg”. In *Bernard Grofman, Political Gerrymandering and the Courts*, (New York: Agathon Press, 1990): 61.

<sup>8</sup> Defendants Trial Exhibit II listed the location of all 1981 house incumbents as to which districts they would find themselves in, under both the *Bandemer* and Crawford plans. It shows that under the *Bandemer* plan, the six Democrat incumbents listed in Column (2) of our Table 14.3 would be paired in HDs 13, 26, and 64, respectively.

<sup>9</sup> Those members, and the 1982 districts in which they would have been seeking re-election, were: DuComb (HD 8), Hunt (HD 19), Fruechtenicht (HD 20), Love (HD 31), Lamkin and Stoughton (HD 49), Miles (HD 50), and Brown (HD 55). A ninth Republican elected in 1980 (Server: HD 75) had left the Indiana house and Rep. Vaneta Becker had been elected by party committee members on Sept. 22, 1981 to fill out his term.

<sup>10</sup> Those members, and the 1982 districts in which they would have been seeking re-election, were: Bodine (HD 5), Bell (HD 9), Felling (HD 46), Doll and L. Hume (HD 64), and Bevers (HD 66).

<sup>11</sup> Post-Trial Brief of Defendants, pg. 7. The italicized portion is the “qualifying phrase” we referred to when we previously cited this passage in Note 16 of Chapter 5.

<sup>12</sup> Brief of Appellants, pg. 30.

<sup>13</sup> In Appendix C we decided to assign this term to a district with a *candidate winning percentage in the most recent election* falling within the chosen range. By this definition we would note that in 1980, of 91 contested races for the Indiana House, 18 were won with less than 55 percent. This would mean 18 incumbents in “competitive” districts. However, the 1980 election was conducted in districts drawn in 1972 and which went out of existence in 1981. Therefore, an analysis of “competitive” districts would be inapplicable to the *Bandemer* plans until at least one election had taken place under them—or until after the 1982 elections.

<sup>14</sup> Grofman, Bernard, Introduction to minisymposium: Political gerrymandering: *Badham v. Eu*, Political science goes to court. 1985. PS. 573.

<sup>15</sup> Backstrom, Charles, et al. “Reapportionment in the Post-Bandemer Era” Constitutional Commentary (1987) pg. 309 (Note 120).

<sup>16</sup> The sole reference to the indicators appears on page 40: “For example, Grofman...identifies [violations of...communities of interest, ill-compact shapes, or excessive crossings of local jurisdictional boundaries] as three of twelve...[prima facie] indicators of gerrymandering...”

## Chapter 14

### Indiana Wrap-up: The Defendants' Test

#### *What the Scholars' Tests Tell Us*

*House Plans.* Having applied all four of the prospective tests for partisan gerrymandering, extant as of 1990, to the Indiana house districting plans, we now have a perspective on these tests not available before.

The first observation is that the “threshold” of what is an unacceptable degree of gerrymandering is much lower for the Backstrom/Robins/Eller and McDonald/Engstrom tests than it is for the tests of Niemi and Grofman.

The second, and equally significant, observation is that, regardless of which of these tests we apply, the degree of pro-Republican bias in the 1982 Republican (*Bandemer*) plan is significantly greater than that of the Crawford, or any of the citizen plans. Only the bias of the 1972 Republican plan is comparable to that of the *Bandemer* plan. At the end of Chapter 11 we noted the “congruence” of the B/R/E and McDonald/Engstrom assessments concerning the number of “extra” Republican seats (“7 or 8”) in the *Bandemer* house plan, as opposed to the citizen plans. By examining the maps we were even able to locate where the Republicans carved out their extra districts.

The Backstrom/Robins/Eller test condemns all six of the plans as partisan gerrymanders—favoring Republicans. It shows the most extreme gerrymander to be the *Bandemer* plan, with 50 percent of the vote giving the Republicans 64 percent of the seats. But even the least biased plans—Holderly and Nested—give the Republicans 56 percent of the seats. Since these plans had been drawn to best satisfy objective criteria, but still awarded a partisan advantage to the Republicans, here was evidence for the validity of the Unintentional Gerrymander Hypothesis. “The Hypothesis” was first alluded to in our account of the final minutes of Boehm’s oral argument before the Supreme Court, in Chapter 5. In the opening paragraph describing Primus’



1990 districting competition in Chapter 6 we said the major purpose of this competition was to determine to what extent The Hypothesis might be true. We see that, indeed, there is some truth to it. But let us defer further comment until we have considered the senate plans.

The McDonald/Engstrom test also condemns all six plans as partisan gerrymanders, based upon the failure of any of them to give the Democrats more than 44 percent of the seats for 50 percent of the vote. But, just as with the B/R/E test, the *Bandemer* plan gives the Democrats the least fair treatment: only 36 percent of the seats. This test assigns the least bias to the Crawford, BNP, and Nested plans.

Niemi's swing-ratio test lacks a "bright line" by which we can unequivocally determine whether a plan is a partisan gerrymander—especially when no election has been held under that plan. Given the results of this test, one could argue that none of these plans is a partisan gerrymander. However, once again, it is the *Bandemer* plan which has the lowest swing-ratio—3.88—and the three citizen plans which have the highest swing ratios: 4.27, 4.56, and 4.85. In this case the Democrats' Crawford plan shares with the *Bandemer* plan the honor of having the lowest SR, with the 1972 Republican plan having the next lowest SR at 3.98. Kleinman argues that:

“Responsiveness...is desirable only up to a point. That point occurs when  $r = 1.0$ . When  $r$  is less than 1.0, of course, the districting system is *unresponsive* (a clearly undesirable feature). But even if we don't make a case for proportional representation, we need not grant that departures from proportionality (which increasing  $r$  within its typical range between 2 and 3 achieves) are desirable.”<sup>1</sup>

While, strictly speaking, Kleinman is talking about the responsiveness parameter  $r$ , rather than the swing ratio,<sup>2</sup> the two measures have the same meaning in the context of his comment.

What he is saying is that while a SR less than 1.0 is bad, a districting plan doesn't get "better" the more its SR increases above 1.0. We have previously noted the lower values of the SR when derived from actual elections than when derived from the political indices of the districts. Since, in gerrymander analysis, it is the inherent partisan character of the districts we are concerned about we should employ the SR defined in terms of political index rather than as defined from election results. With these considerations in mind the conclusion must be that all of the plans—political and citizen—have a sufficient number of marginal districts to avoid being classified as gerrymanders.

Like Niemi's test, the Grofman indicators also lack a "bright line." We find only a gradation of bias among the plans—a bias that is only partially quantifiable. But, here again, it is the *Bandemer* plan that shows the most egregious bias and one of the citizen plans (Nested) that comes out as the most politically neutral.

Taking all four tests together, we find that all pass the swing ratio test. All fail the B/R/E and McDonald/Engstrom tests, but the *Bandemer* plan fails most badly. The Grofman indicators give the worst marks to the *Bandemer* plan; the next worst to the 1972 Republican plan; intermediate ratings to the Holderly, BNP, and Crawford plans; and a neutral rating to the nested plan. The unanswered question: do the *Bandemer* plan's "worst" ratings mean it should be judged an unconstitutional gerrymander? Let us make a similar collective assessment of the Indiana senate plans.

*Senate Plans.* By having applied the recommended tests for partisan gerrymandering to the Indiana senate plans, as well as to the Indiana house plans, we reinforce the perspective on these tests gained earlier. As with the house plans, we observe that the "gerrymander threshold" is much lower for the Backstrom/Robins/Eller and McDonald/Engstrom tests than it is for the tests of Niemi and Grofman. Also, as with the house plans, we note the degree of pro-Republican bias in the 1982 *Bandemer* plan is significantly greater than that of the Carson, Townsend, or any of the citizen plans—with the 1972 Republican plan being runner-up.

The Backstrom/Robins/Eller test condemns all eight of the plans as partisan gerrymanders—favoring Republicans. It shows the most extreme gerrymander to be the *Bandemer* plan, with 50 percent of the vote giving the Republicans 62 percent of the seats. But even the least biased plans—Carson, Townsend, and Nested—give the Republicans 56 percent. This pro-Republican bias of the Democrat and citizen senate plans follows the pattern noted in the citizen house plans and provides further evidence in support of The Hypothesis. The Republicans made a strange argument: compactness standards were “nothing but a policy decision in favor of political groups whose support is evenly distributed about a state” and will lead to<sup>2</sup> “stacking” of the political group (*i.e.*, Democrats) whose supporters “are concentrated.” If they believed this, why weren’t they supporting a compactness standard? How do we explain “this apparently contradictory stance?” The pro-Republican bias of even the citizen plans is due to the “natural” packing of “Democrats” in the heavily African-American parts of Lake and Marion counties. This gives Republicans a built-in advantage. But even if a compactness standard gives them a mild advantage, if they control the districting they can, by drawing non-compact districts, give themselves an even greater partisan advantage. As noted earlier, that advantage appears to be about 7 or 8 seats in the house and 2 or 3 in the senate.

The McDonald/Engstrom test also condemns all eight plans as partisan gerrymanders, based upon the failure of any of them to give the Democrats more than 44 percent of the seats for 50 percent of the vote. But once again, the *Bandemer* plan gives the Democrats the least fair treatment: only 38 percent of the seats. This test assigns the least bias to the Compactness Threshold, Holderly, Carson, and Nested plans.

As noted in our discussion of the house plans, Niemi’s swing-ratio test lacks the desired “bright line.” Again it is the two Republican plans which have the lowest swing-ratios—3.88 and 4.27—and three of the four “citizen” plans which have the highest swing ratios: all 5.44. However,

we concluded in our analysis of the house plans that the best gerrymander threshold was 1.0, based upon political index and values above that do not confer greater virtue. Therefore, this test classifies none of the senate plans as a partisan gerrymander.

As with the house plans, the Grofman indicators show no “bright line” and we find only a gradation of partially quantifiable bias. But again, it is the *Bandemer* plan that shows the most bias and the four citizen plans that come out as politically neutral.

Taking all four tests together, we obtain reinforcement for our conclusions regarding the house plans: all pass the swing ratio test. All fail the B/R/E and McDonald/Engstrom tests but the *Bandemer* plan fails most badly. The Grofman indicators give the worst marks to the *Bandemer* plan and a neutral rating to the four citizen plans. But we are still no closer to an answer to the question: do the *Bandemer* plan’s “worst” ratings mean it should be judged an unconstitutional gerrymander? Let us defer attempting to answer that question while we see what happened in the elections that took place under the *Bandemer* plans.

#### *What Happened in the Remaining Elections Under the Bandemer Plans?*

*House.* The first election conducted under the *Bandemer* plans (1982) has been much discussed. We also took note of the second election (1984) in our analysis of the Trial Court’s Opinion and of the Supreme Court Brief of Appellants in Chapter 5. It is time to examine the outcomes of the three remaining elections of the decade, and review the outcomes of the first two, all in the same context. The best way to do that is by Table 14.1.

Columns (1) - (3) give an ordered ranking of the house plan’s districts, from “most Democratic” to “most Republican,” according to their Democratic Indices. A single, heavy line crosses the table below Rank 36 and D.I. 50.06 demarcating the theoretical Democrat/Republican seat split assuming no incumbents ran and there was an even division of the statewide vote.

Columns (4) - (8) give the election outcomes. In each of these columns appears a double line demarcating the theoretical Democrat/Republican seat split if no incumbents had been

4  
Table 15.1

Electoral Outcomes: 1982 Indiana House (Bandemer) Districting Plan

Demo. Rank	(2) HD	(3) D.I.	(4) 1982	(5) 1984	(6) 1986	(7) 1988	(8) 1990
1 - 21	15 Most Democratic Districts (D.I. > 57.3) (21 seats)		D	D	D	D	D
22	71	57.27	Wathen (I)*	Wathen (I)	Wathen (I)	Wathen (I)	D
23 - 25	3 Next Most Democratic Districts (D.I. 55.98 - 56.94)		D	D	D	D	D
26 - 30	5 Next Most Democratic Districts (D.I. 53.39 - 55.51)		D	Webber (O) (DK) Clingan (I), Cheatham (O), Schultz (I) Goble (I)	D	D	D
31	5	53.12	D	R	Aller (I)	D	D
32	13	53.00	D	Dobis (I)	D	D	D
33	17	51.70	D	Cook (I)	D	D	D
34	62	50.74	Dean (I)	R	Dean (I)	Dean (I)	D
35	8	50.24	Taylor (O)	R	D	Dvorak (I)	D
36	46	50.06	D	Tincher (I)	D	Tincher (I)	D
37	32	49.80	Espich (I)	R	Espich (I)	R	Espich (I)
38	30	49.60	D	R	D	Howard (I)	D
39	9a	49.40	D	Bowser (I)	D	Bowser (I)	D
40	9b	"	Budak (I)	R	Budak (I)	R	Budak (I)
41	44	48.98	Thomas (I)	R	R	R	Crosby (C) ‡
42	55	48.81	D	R	Underwood (C)	Underwood (I)	R
43	21	48.22	R	R	R	R	R
44	24	47.91	R	R	R	Sabatini (O)	Sabatini (I)
45	65	47.22	R	Newkirk (O)	Newkirk (I)	Newkirk (I)	R
46	56	47.04	R	R	Bodiker (C)	Bodiker (I)	Bodiker (I)
47	60	46.97	R	R	R	R	R
48	75a	46.91	Avery (I)	Avery (I)	Avery (I)	Avery (I)	Avery (I)
49	75b	"	R	R	R	R	R
50	54	46.41	R	R	R	Kinser (C)	Kinser (I)
51 - 53	23, 2, 6	46.16 - 39	R	R	R	R	R
54	20a	45.95	R	R	R	R	GiaQuinta (C)
55, 56	20b, 20c	"	R	R	R	R	R
57	31a	45.86	Turner (C)	R	Boatright (C)	Boatright (I)	Boatright (I)
58	31b	"	R	R	Beck (C)	Beck (I)	Beck (I)
59 - 64	57, 49**, 33, 36	44.99 - 45.80	R	R	R	R	R
65	27	44.23	Klinker (C)	Klinker (I)	Klinker (I)	Klinker (I)	Klinker (I)
66	59	44.34	Hayes (C)	R	Hayes (I)	Hayes (I)	Hayes (I)
67	1	44.21	R	R	R	R	R
68	25	43.88	Jontz (I)	Wolf, K. (O)	Wolf, K. (I)	Leuck (I)	Leuck (I)
69 - 72	19**, 29	43.78 - .84	R	R	R	R	R
73	10a	43.54	Wilson (O)	Wilson (I)	Wilson (I)	Wilson (I)	Wilson (I)
74 - 78	10b, 50**, 22	42.72 - 43.54	R	R	R	R	R
79	26	42.60	Jones (I)	Jones (I)	Jones (I)	Jones (I)	R
80 - 84	52**, 41, 28	41.86 - 42.50	R	R	R	R	R
85	35	41.68	R	R	Carmichael (C)	Carmichael (I)	Carmichael (I)
86 - 94	6 Next Most Republican Districts (D.I. 39.62 - 41.63) (9 seats)		R	R	R	R	R
95	53	39.62	R	R	R	R	Wolf, S. (C)
96	3	38.90	R	R	Carter (C)	R	R
97 - 100	4 Most Republican Districts (D.I. < 38.90)		R	R	R	R	R

\* (I) = Incumbent      † (O) = Winner of election in open district      ‡ (C) = Challenger

running and if every seat vulnerable to the partisan swing of that year had fallen to the party benefiting from that swing. In 1982, for instance, the statewide Democrat vote (v) of 51.64 means that every seat having a D.I. higher than 48.36 was theoretically vulnerable to capture by a Democratic candidate. Therefore, we place the double line in Column (4) between D.I. 48.22 and D.I. 48.81. The names appearing above this line are all in italics and belong to the six Republicans who that year won in what were theoretically “Democratic” districts. The names appearing below this line are all in normal font and belong to the seven Democrats who that year won in what were theoretically “Republican” districts. Beside each of these names appears either (I), (C), or (O) indicating whether this candidate who won despite an unfavorable swing was an incumbent, a challenger, or an open district winner.

Column (4) reminds us of Tables 3.2 and 5.2, and it should. These tables ranked the *Bandemer* HDs in descending order according to their 1982 Otis Cox vote. Those tables showed Cox carrying 44 HDs in an election, it will be recalled, in which Cox received 51.09 percent statewide. We observed that Democrats won six HDs that Cox failed to carry, while failing to win seven he did carry. In Table 14.1, where HDs are ranked by their Democratic Indices and the statewide “Democratic” vote is 51.64 instead of 51.09, we find seven Democrats running ahead of the Index and six running behind. In both cases the Democrats running stronger than their party include Avery, Turner, Klinker, Jontz, Hayes, and Jones. Similarly, the Republicans running stronger than their party include Wathen, Espich, and Budak. The reasons the two ways of defining Democratic “voting strength” do not give identical results are (1) the 0.55 percent difference in their demarcation point (which would add Dean to the “high performance” Republicans in Tables 3.2 and 5.2) and (2) the differing estimates of Democrat “voting strength” given by the 1980 SPI vote and the 1982 Cox vote. For example, in HD 10 the D.I. gives 43.54 percent but Cox got 50.2 percent; in HD 36 the D.I. is 44.99 but Cox got 54.6 percent. Despite these differences, the two methods are remarkably similar in their projection of the *number* of seats the Democrats would win in 1982.

Column (2) of Table 14.2 distills the information detailed in Column (4) of Table 14.1. The double line in Table 14.1 says the Democrats should win 42 seats in 1982 with 51.64 percent of the vote. When the six districts lost to “high performance” Republicans are subtracted, and the seven districts won by “high performance” Democrats are added, we get the actual election outcome of 43 seats. Not bad.

Returning to Table 14.1, we next examine the 1984 election. Column (5) of Table 14.1 shows a double line at a D.I. of 55.6 corresponding to a Democratic ebb tide of 44.4 percent—exactly equal to the previous low water mark of 1972. If every district theoretically vulnerable to this Republican surge had fallen the Democrat house delegation would have dropped to 25, as Column (3) of Table 14.2 indicates. But this theoretical vulnerability is based upon an open district assumption, and of the 15 Democratic seats successfully resisting this adverse swing of incumbents held 11. Of the remaining four—all open district winners—two were in normally “Democratic” territory. The other two were Katie Wolf, an exceptionally strong Democrat who took over the seat vacated by Jontz, and Frank Newkirk who captured a normally marginal district in the south. Only one Republican ran ahead of the swing that year: the phenomenal Richard Wathen who continued to hold onto “Democratic” HD 71 in Jeffersonville. The upshot: instead of losing 18 Indiana house seats in the second Reagan landslide, the Democrats lost only 4.

In the 1986 election Column (6) of Table 14.1 shows a double line at D.I. = 49.23. This means a Democratic resurgence indicated by a  $v$  of 50.77.<sup>4</sup> Based upon the Index and the swing Democrats could be expected to win 40 seats. However, once again Democrats who ran ahead of their Index far exceeded Republicans who did. Column (6) of Table 14.1 shows that Wathen and four other Republican incumbents resisted the resurgence. However, 13 Democrats ran ahead of their Index and only 7 of them were incumbents. None of the other 6 was open district winners. They were all challengers and two of them won in what should have been the safest of Republican districts. Somebody had recruited some very strong Democratic candidates. The bottom line of Table 14.2 shows a 9-seat Democratic gain from 1984, bringing the Party to within two

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Table 15.2

Electoral Performance: 1982 Indiana House (Republican/Bandemer) Districting Plan

(1)	(2) 1982	(3) 1984	(4) 1986	(5) 1988	(6) 1990
Open Seats:	21	14	8	7	12
SMDs:	12	10	5	7	6
MMDs:	9	4	3	0	6
Uncontested Seats:	17	20	27	29	27
By Democrats:	6	16	15	14	17
By Republicans:	11	4	12	15	10
Democracy (raw), %	51.90	43.34	46.89	47.01	47.98
Democracy (adjusted), %	51.64	44.40	50.77	49.60	50.87
Seats Democrats should win based on D.I. and swing:	42	25	40	34	40
Minus: Republicans winning "Democratic" Districts:	6	1	5	2	2
Plus: Democrats winning "Republican" Districts:	7	15	13	18	14
= Seats Democrats actually won:	43	39	48	50	52

*Handwritten notes:*  
M...  
T...  
R...  
S...  
CH



seats of an even split. It is hard to avoid the conclusion that had one of the citizen plans been in effect the Democrats would have been swearing in 55 or 56 Indiana house members in January of 1987. Instead, the *Bandemer* gerrymander denied them the fruits won by their remarkable crop of 1986 candidates.

The fourth election under the *Bandemer* plans was in another winning Republican presidential year: 1988. But it wasn't a blowout and the demarcation point of the Indiana legislative vote shifted only slightly in the Republicans' favor. Our adjusted calculation gives the Democrats 49.60 percent which means that all districts with a D.I. less than 50.40 were theoretically vulnerable to the swing. Looking at Column (7) of Table 14.1 we find Wathen and one other Republican incumbent running ahead of their index. But looking below the double line in Column (7) we are astonished to find 18 Democratic candidates running ahead of their index. Column (5) of Table 14.2 shows that based on index and swing Democrats should win 34 seats. But when adjusted for the high performance candidates they make a net gain of 16 and force a standoff for control of the house—after 14 years of Republican domination. Their six successful challengers from 1986 were all now running as incumbents and only one of them failed to hold on to his seat. Eleven of the remaining 13 were incumbents as a result of earlier elections. The other two are an open district winner in critically marginal HD 24 and a challenger in marginally Republican HD 54. There should be little doubt that under an impartially drawn districting plan Democrats would have been in outright control of the Indiana house following this election.

The final election under the *Bandemer* plans witnessed a small swing in the Democrats' direction of magnitude comparable to that of 1986. We put the double line in Column (8) of Table 14.1 at D.I. = 49.13. Above this line are two Republican incumbents who survived the swing. But they don't include Wathen. He retired and a Democrat has picked up the open seat. Below the double line we find 14 Democrats. Column (6) of Table 14.2 tells us that when these

adjustments are made to the 40 seats the Democrats should theoretically win they achieve a net gain of 12—and with it outright control of the house for the first time in 16 years. Of the 14 high performance Democratic candidates eleven are incumbents, but again the Party has come up with some remarkable challengers. One is in critically marginal HD 44 and a second is in supposedly safe-Republican HD 53. The third is in one of the 3-member districts in Allen County which were a focus of much of the litigation and where the Republican stranglehold was finally broken. We shall defer further comment on electoral performance under the *Bandemer* house plan until we have seen what happened in the senate.

#### *What Could the Bandemer Plaintiffs Have Done That Might Have Won for Them?*

We now arrive at the concluding section of the “wrap-up” chapter on *Bandemer* in which we acknowledge ourselves as Monday morning quarterbacks. But even at this point we offer only a partial list of recommendations. The recommendations will not be complete until we reach Chapter 40 after having learned some things from what went on in other states.

*Critique of Grofman.* We begin with our reactions to the commentary of Bernard Grofman—the “examination” we promised at the end of the preceding chapter. We said there that he had “abandoned” his prima facie indicators “in favor of a new and even more nebulous set of criteria.” In his 1990 essay, “Toward a Coherent Theory of Gerrymandering: *Bandemer* and *Thornburg*,” he discusses “four central issues”:

1. What evidentiary “facts were either missing or inadequately demonstrated”<sup>5</sup> in *Bandemer v. Davis* which will be necessary for the High Court to void a districting plan on grounds of partisan gerrymandering?
2. Does the plurality opinion in *Davis* “offer ‘clear and manageable standards’ for determining what constitutes an unconstitutional partisan gerrymander?”<sup>6</sup>

3. Did the Court in *Davis* “set a threshold test” for unconstitutional gerrymandering “so high that no partisan gerrymander...no matter how egregious, could ever meet” it?<sup>7</sup>

4. Do the criteria established for racial gerrymandering in *Thornburg v. Gingles* provide a model for adjudicating cases of partisan political gerrymandering?

Grofman's response to the **first question** is to describe the sort of “facts” that would, if proven, have convinced the plurality to void the plans. His response to the other three questions, in one word, is “yes, no, yes.” Our response to the first question will be to list a number of circumstances, if present—and a number of things, if done—that would have made the plaintiffs’ case more compelling and the plurality’s decision a tougher call; but even so would have failed to bring victory. Our response to the other three questions, in one word, is “no, yes, no.” Grofman concludes his discussion of Question One by repeating his earlier statement about the Democrats gaining 6 house and 3 senate seats in the 1982 elections. This is our old friend, deceptive statistic No. 1 which we examined in the course of our critique of the Brief of Appellants in Chapter 5.

With respect to **Question Two** Grofman, as indicated in our prefatory summary, believes the Court articulated clear and manageable standards for deciding whether a plan is an unconstitutional partisan gerrymander. He says “there are four features of the” plurality opinion that enable us to understand how that opinion *does* set such standards:

(1) Its observation that *Bandemer* was a claim that the plans discriminated “against Democrats on a statewide basis.”<sup>8</sup>

(2) Its insistence on evidence that the plan’s effects “are not likely to be transient.”<sup>9</sup>

(3) Its rejection of “any claim that the Constitution requires proportional representation.”<sup>10</sup>

(4) Its assertion that “a finding of unconstitutionality must be supported by evidence of continued frustration of the will of a majority of the voters.”<sup>11</sup>

The ensuing pages of his essay do nothing to show us how the foregoing “four features” of the *Bandemer* plurality opinion articulate clear and manageable standards for proving an unconstitutional partisan gerrymander. Instead, he gets into a discussion of “projecting” election results that mischaracterizes the tests for partisan gerrymandering we considered in chapters 10 and 12 and attributes to the trial court a split over which method should be used to calculate “baseline Democratic strength.” He goes on to assert the *Bandemer* plurality “recognizes methods 1 and 2 above as the two basic ways to identify partisan voting strength”<sup>12</sup> and “explicitly refused to decide between them.”<sup>13</sup> Lowenstein retorts:

“This is wishful thinking, not only with respect to the fabricated ‘recognition’ of methods 1 and 2, but more important in its unsupported assumption that Justice White expresses interest in any method for identifying ‘partisan voting strength.’”<sup>14</sup>

With respect to **Question Three** Grofman begins by challenging Lowenstein’s interpretation of *Bandemer* as proscribing gerrymandering only in cases where the disadvantaged group has suffered historical oppression. He makes the same point we do (at the conclusion of that chapter’s list of “shortcomings in the trial court’s findings) that if gerrymandering claims were actionable only for groups suffering oppression, “the plurality wasted a lot of wood pulp on irrelevant remarks.”<sup>15</sup> No, he says, “it was the lack of a solid evidentiary record (especially as to predictable future consequences) that impelled the plurality to reject the district court’s finding of unconstitutionality.”<sup>16</sup>

He thinks “the necessary standard of proof can be met if the gerrymandering is sufficiently egregious and...durable in its consequences;” and the example that meets that standard is Burton’s California congressional districting plans. Justice White’s opinion is”

“a remarkable example of views that are both principled and practical—steering a course between the Scylla of encouraging trivial lawsuits and the Charybdis of barring serious ones.”<sup>17</sup>

With the benefit of an additional eighteen years' hindsight, including two decennial redistricting seasons, we offer the opinion that *Davis* is a dead letter. It is not because the High Court plurality (per Lowenstein) believed only groups suffering oppression could bring gerrymandering claims—thus excluding the major parties. It is because *Davis* erected what amounts to an impossibility standard: a degree of partisan bias so extreme that the disadvantaged major party would have to prove that with the disputed plan it could never win a majority of seats under foreseeable circumstances. Given today's "dealigned" electorate, such proof is not possible. We see why as we examine the case of Indiana. We will see further evidence when we examine California and Pennsylvania.

Turning finally to **Question Four**, Grofman professes to see in the success of *Thornburg v. Gingles*<sup>18</sup> a model for success in partisan gerrymandering claims. The *Gingles* test for vote dilution has three components: (1) the minority must be sufficiently large and geographically concentrated as to constitute a majority in a SMD; (2) it must be politically cohesive; (3) racially-polarized voting must be present. Grofman sees "straight-ticket voting"<sup>19</sup> as the political equivalent of racially polarized voting. By his analogy, there would be a minority of straight-ticket voting Democrats in a MMD that is consistently outvoted by a majority of straight-ticket voting Republicans.

For the political analogy to hold "Democrats" and "Republicans" would have to exhibit the same ideological homogeneity as did the blacks in *Gingles*. We will have something to say about the ideological makeup of the American electorate, and of the two major parties, in Chapter 40. If Grofman thinks his *Gingles*-analogy test is workable, why didn't he give us a demonstration by applying it to the Burton plans?

*Our Scenario for a Stronger Showing.* Now it's our turn to say how the *Bandemer* plaintiffs might have done better. We said at the onset of this section that we would "list a number of circumstances...and things, if done" that would have helped the Democrat/plaintiffs. Here they are:

1. They could have deleted Higbee and Richards from the plaintiffs. Neither stated a claim that was ever pursued in the litigation—and should not have been. The rights of Hendricks County citizens are not violated when their county is incorporated in a district “dominated” by Marion County. Similarly, the rights of Greene County citizens are not violated because it is divided among four—or any number of—legislative districts. For the purpose of the claim of unconstitutional partisan gerrymandering being made, the only requirement was for one or more generic “Democrats.”

2. In their complaint they might have assailed the constitutionality of the Republicans’ 1972 plans in tandem with their 1982 plans asserting that the latter were basically a continuation of the former. Their silence about the 1972 plans throughout the entire litigation implied a legitimacy to those plans which permitted the defendants’ criterion of “least changed plan” to appear neutral. So, too, for their justification of the MMDs in terms of their being a continuation of prior practice.

3. With respect to the MMDs, they would have done better to confine their attack to the seven 3-member districts in Allen and Marion counties—with the possible addition of HD 31 because of the Loren Winger situation.

4. If they had known about Primus and he had arrived in the state a year earlier, a set of citizen plans would have been presented to the legislature by the time it reconvened in January 1982 to amend the 1981 *Bandemer* plans. If not available by then, they certainly would have been available by the time of trial. Dreyer might have worked with Primus to develop a more sophisticated database that included political and racial data aggregated by precinct. The specifications could have been changed to require the same population variances as in the Republicans’ plans and a requirement that all submitted plans include a minimum of two minority-majority SDs and five such HDs. With Holderly and Kenworthy plans, comparable by population and racial criteria, the plaintiffs would have had far more credible alternatives to present to the courts than the Carson and Crawford plans.

5. The Republicans' plans might have been carefully checked against the census tract maps. The defendants should not have been permitted to get away with claiming their house plan had a maximum (+) deviation of 2.52 percent when its HD 15 actually had a (+) deviation of 4.92 percent. Similarly, they should not have been permitted to claim senate plan deviations of + 2.71 percent and - 1.97 percent when the actual deviations were + 3.60 percent and - 3.51 percent.

6. If they had known about, and been in touch with, Cranor/Crawley/Scheele ("C/C/S") in the spring of 1981 they might have received valuable volunteer assistance in preparation of the database, particularly in the collection of the SPI precinct returns which the professors were doing for their own research. The professors would have been willing to serve as expert witnesses at trial and they would not have been in it for the money. Their mean voter carryover analysis would have been valuable evidence of bias in the Republicans' plans—especially if it could have been applied concurrently to the citizen plans.

7. They might have engaged Charles Backstrom as their principal expert witness, rather than Gordon Henderson. As we noted earlier, B/R/E was the only test for partisan gerrymandering extant in 1982. In Chapter 10 we demonstrated that regardless of the statewide election employed as the base race, the test showed far more partisan bias in the Republicans' plans than in any other plan. He had been cited in the Stevens *Karcher* concurrence. He was cited approvingly by all parties to the controversy. His political sympathies lay with the Democrats. He wouldn't have been in it for the money. Why not have used him?

8. They might have qualified Dreyer as an expert witness. There is no reason why they could not have done so. Case law has established that an expert witness can be anyone having knowledge about a particular subject exceeding that of the general public.<sup>20</sup> Primus could also have qualified as an expert. Some individuals might be "bigger" experts than others, but the courts are quite competent to judge whose testimony to give the most credence to.

9. They might not have permitted Grofman to testify at trial without having first been subjected to deposition. The Federal Rules of Civil Procedure give plaintiff attorneys subpoena power to compel deposition testimony under threat of contempt proceedings.<sup>21</sup> Boehm had that power and might have used it. We commented in Chapter 4 how he was unprepared for Grofman's testimony concerning the balloon effect and the cube law. That need not have happened.

10. The trial should have taken place prior to the 1982 elections. That would have compelled a political analysis of the plans in terms of their underlying partisan character; in terms of what could have been known about it at the time they were drawn; in terms of what the MOR technicians who drew them knew. As we noted in Chapter 11, the assessments of B/R/E, McDonald/Engstrom, and Dreyer all confirm each other. A pre-election trial would have prevented Dreyer from using the Cox and Cox-Evans votes in his analyses, but that would have been good. He would have had to use other "low profile" races, but we now know that if he adjusted them for an even division of the statewide vote it would not matter which one(s) he chose. His analysis would only have corroborated Backstrom.

Instead, the post-election date of the trial enabled the water to be muddied by the 1982 election results—with very bad consequences for the plaintiffs. Most serious, of course, was the canard about "proportional representation" in the Senate. It enabled Judge Pell to make the ludicrous seats-votes comparison recorded on line 11 of Table 5.1. That gave him a handle on which to hang a plausible dissent, which, in turn, aided the defendants in attacking the decision in their appellants' briefs. The 1984 senate election results should have corrected the impression created by the 1982 senate election results, but they didn't—except for justices Powell and Stevens. With respect to the house plan the post-election trial date gave Grofman a handle on which to hang the "40-60 competitive seats" analysis he attempted. That one, however, didn't seem to get far.



11. At trial the plaintiffs might have limited themselves to a hard-hitting B/R/E analysis by Backstrom followed by the mean voter carryover analysis of C/C/S. That would have kept the focus where it needed to be: on the partisan bias of the Republicans' plans compared to that of the citizen plans—for both house and senate. As we commented early in Chapter 4, the blizzard of exhibits introduced by Dreyer in the trial's first hour, with no explanatory comment by him, prevented a focus on what was worst about the Republicans' plans and may have confused the judges.

12. In his Brief of Appellants Boehm might not have permitted deceptive statistic Numbers One, Two, Three and Four in Evans' Brief of Appellants to go unchallenged. When Numbers Five and Six appeared in the Reply Brief of Appellants he had, of course, no opportunity to respond by written pleading. He might then have allocated some of his precious 40 minutes' oral argument to a slashing attack on Number Five. Since Number Five was built upon the foundation of Number Two, the demolition of Number Two in his Brief of Appellants would have enabled him to demolish Number Five at oral argument without taking a lot of time. He was in serious trouble over Numbers Two and Five. He (and the rest of the world) didn't find out how serious until June 30, 1986 when we all read:

“The appellants argue here, without *a persuasive response from appellees*, that had the Democratic candidates received an additional few percentage points of the votes cast statewide, they would have obtained a majority of the seats in both houses.”<sup>22</sup>

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We said at the beginning of this section that if things had happened as described in the foregoing list of “might haves” and “might not haves” the plaintiffs' case would have been “more compelling and the plurality's decision a tougher call; but even so would have failed to bring victory.” Why do we say that? Because Justice White and his plurality were staring into a

quagmire and the defendants had come up with a test for partisan gerrymandering that trumped B/R/E and all other tests. It was a test that the *Bandemer* plans were able to pass. We call it the Defendants' Test and made it the title of this chapter.

The Defendants' test is somewhat complex, but based on a simple principle: conjure up a set of circumstances—however improbable—under which the out-party *could* have won a majority of seats in the litigated plan. It is embodied in deceptive statistic Number Five and the appendix to the Reply Brief of Appellants. We said we “demolished” deceptive statistic Number Five. We did so only in one sense. We demonstrated that only under an improbable set of circumstances would Democrats be able to win 51 seats in the Indiana house, given this plan, and that under an equally improbable set of circumstances favoring Republicans they would win 68 seats with the same electoral effort. Reasonable people would say that exemplified significant partisan bias. But we did not demonstrate that those circumstances were impossible. Evans and his assistants had been clever in the way they were able to mask the degree of bias in their clients' plans. But Justice White and his plurality were not asking whether the plans were biased. They seemed to be asking whether it would be impossible for Democrats to win a majority of seats under these plans. The answer to their question was “no.” By fielding some incredibly strong candidates in 1986, '88, and '90 the Democrats finally won control of one of the chambers in the Indiana legislature. Boehm's “horse with the 50-pound weight” finally won a race “versus the unhandicapped horse.”<sup>23</sup>

After we have gained added perspective from our studies in Pennsylvania and California we will comment further on Justice White's plurality opinion. For the moment we offer this preliminary comment: it was crafted with such masterful ambiguity that scholars like Lowenstein and Grofman would interpret it in sharply opposed ways; and each of them would say it clearly supports his point of view! Perhaps the following passage (quoted approvingly by Grofman)<sup>24</sup> best exemplifies such craftsmanship:

“...a prima facie case of illegal discrimination in reapportionment requires a showing of more than a *de minimis* effect... In the present, considerably more complex context, it is also appropriate to require allegations and proof that the challenged...plan has had or will have effects that are sufficiently serious to require intervention by the federal courts in state reapportionment decisions.”

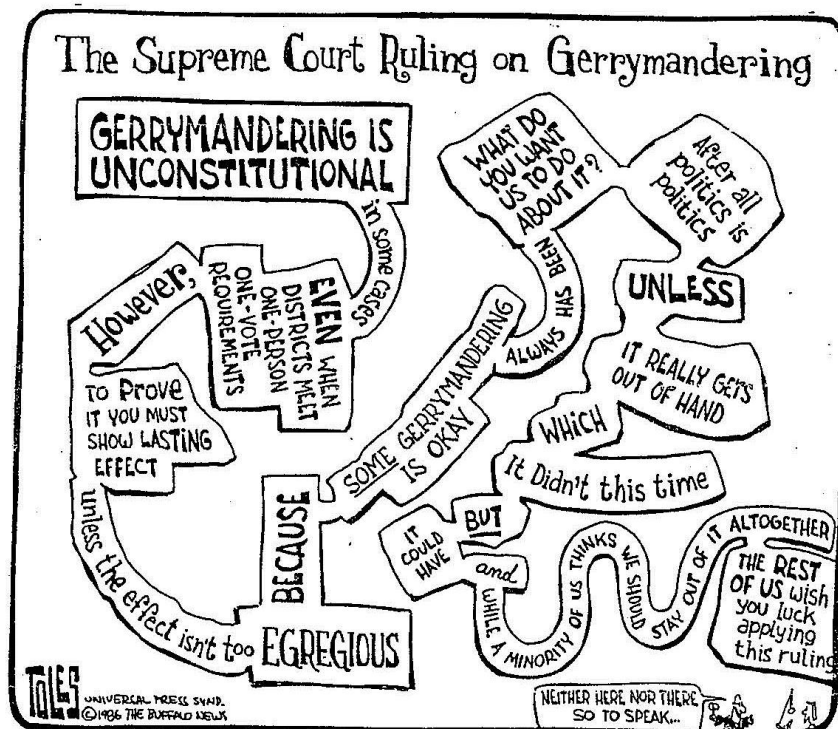
It is not taking excessive liberty with the truth to alter it to read as follows:

To warrant intervention by the federal courts in state reapportionment decisions it is appropriate to require allegations and proof that the challenged plan has had or will have effects that are sufficiently serious to require intervention by the federal courts in state reapportionment decisions.

Prose that requires such minor alteration to produce the above example is fully deserving of the commentary depicted in Figure 14.1.

Figure 14.1

Comment on Plurality Opinion in *Davis v. Bandemer*



TOLES by Tom Toles

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## Notes

<sup>1</sup> Essay entitled “KI, RHO, and BETA” included in letter from Danny Kleinman to senior author, 23 Feb. 1995.

<sup>2</sup> See our initial reference to these “closely related” parameters in the opening paragraph of Chapter 12.

<sup>3</sup> Brief of Appellants, pg. 18.

<sup>4</sup> Note how this value is almost 4 percent higher than when  $v$  is defined in terms of the “raw” vote for Democratic house candidates. The biggest reason for the disparity is that the Democrats ran only one candidate in each of 3-member HDs 19 and 20.

<sup>5</sup> <sup>2</sup> Grofman, Bernard, “Toward a coherent theory of gerrymandering: Bandemer and Thornburg”. In *Bernard Grofman*, *Political Gerrymandering and the Courts*, (New York: Agathon Press, 1990): 20.

<sup>6</sup> *Ibid.*, pp. 29-30.

<sup>7</sup> *Ibid.*, pg. 30.

<sup>8</sup> *Ibid.*, pg. 41 quoting 478 U.S. at 127.

<sup>9</sup> *Ibid.*

<sup>10</sup> *Ibid.*, quoting 478 U.S. at 130.

<sup>11</sup> *Ibid.*, quoting 478 U.S. at 133.

<sup>12</sup> *Ibid.*, pg. 45.

<sup>13</sup> *Ibid.*

<sup>14</sup> Lowenstein, Daniel Hays, “Election Law as a Subject—A Subjective Account”, *L.A. Law Review*. 1199 (1999): 99.

<sup>15</sup> <sup>2</sup> Grofman, Bernard, “Toward a coherent theory of gerrymandering: Bandemer and Thornburg”. In *Bernard Grofman*, *Political Gerrymandering and the Courts*, (New York: Agathon Press, 1990): 48.

<sup>16</sup> *Ibid.*

<sup>17</sup> *Ibid.*, pg. 52.

<sup>18</sup> *Thornburg v. Gingles*: 478 U.S. 30 (1986).

<sup>19</sup> <sup>2</sup> Grofman, Bernard, “Toward a coherent theory of gerrymandering: Bandemer and Thornburg”. In *Bernard Grofman*, *Political Gerrymandering and the Courts*, (New York: Agathon Press, 1990): 53.

<sup>20</sup> Federal Rules of Evidence, Rule 702 says, in part “...a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify...” Dreyer had ample knowledge and experience.

<sup>21</sup> Rule 37.

<sup>22</sup> *Davis v. Bandemer*: 478 U.S. 109 at 135.

<sup>23</sup> See Note 164 to Chapter 5.

<sup>24</sup> <sup>2</sup> Grofman, Bernard, “Toward a coherent theory of gerrymandering: Bandemer and Thornburg”. In *Bernard Grofman*, *Political Gerrymandering and the Courts*, (New York: Agathon Press, 1990): 52 quoting 478 U.S. at 134.

## Part IV.

### *Badham v. Eu*

## Chapter 15

### The Controversy; the Evidence; the Outcome

#### *Burton's Legacy*

Concurrent with the *Bandemer* controversy, a second major assault on the gerrymander was shaping up in California. Congressional, rather than legislative, districting was at issue and the partisan roles were reversed with Republicans challenging a districting plan authored by Democrats who controlled the governorship and both chambers of the legislature. The 1980 census mandated an increase in the state's congressional delegation from 43 to 45 and Democratic congressman Phil Burton was going to make sure his party did not squander the opportunity that presented itself. Governor Jerry Brown and the Democratic leadership in the legislature were quite willing to let Burton take charge of the congressional districting.

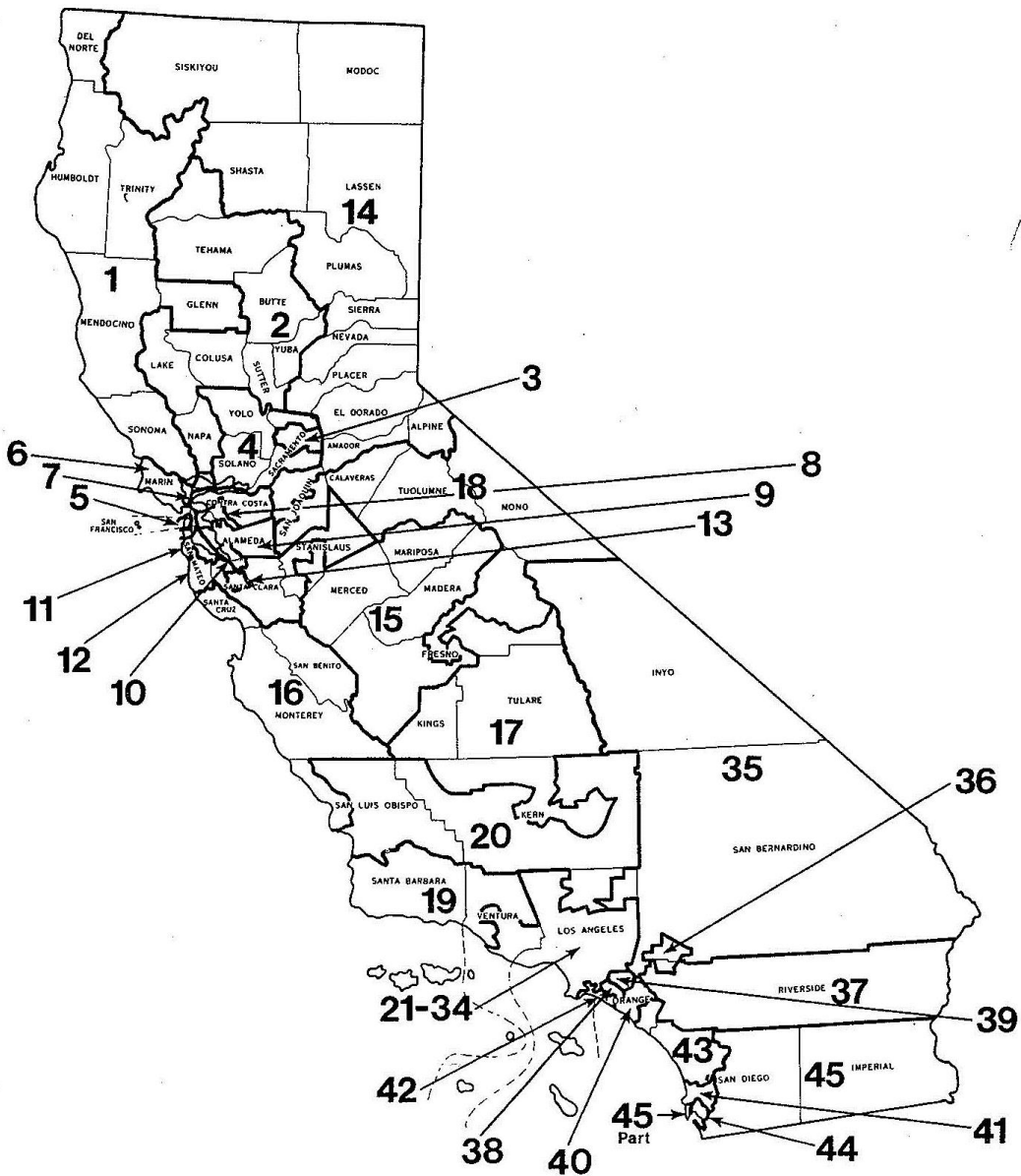
Burton had an encyclopedic knowledge of the political geography of northern California and, therefore, no urgent need of computers and/or expert consultants. He employed Michael Berman, political consultant, brother of Assemblyman Howard Berman, to work out technical problems in Los Angeles County; and hired Leroy Hardy, political scientist at Long Beach State College, to work out technical problems in San Diego County and other parts of the state. The plan was put together in the summer of 1981. In early September it passed both houses of the legislature on party-line votes; and was signed into law as Assembly Bill 301 (A.B. 301) by Governor Brown on September 16. Figure 15.1 depicts this plan which came to be called "Burton I."

Like his Indiana Republican counterparts, Representative Dailey and Senator Bosma, Burton was frank about the motives of those who crafted the plan. At a two-hour press conference on September 9 Burton said of his brother, Congressman John Burton's district, "Oh, it's gorgeous. It curls in and out like a snake. . . It was my contribution to modern art."<sup>1</sup> Before he

Figure 16.1

# CALIFORNIA

Districts Established September 16, 1981



died in 1983 Burton described his strategy in redistricting: “The most important thing you do, before anything else, is get yourself in a position (to) draw the lines for (your own) district. Then, you draw them for all your friends before you draw anyone else’s.”<sup>2</sup>

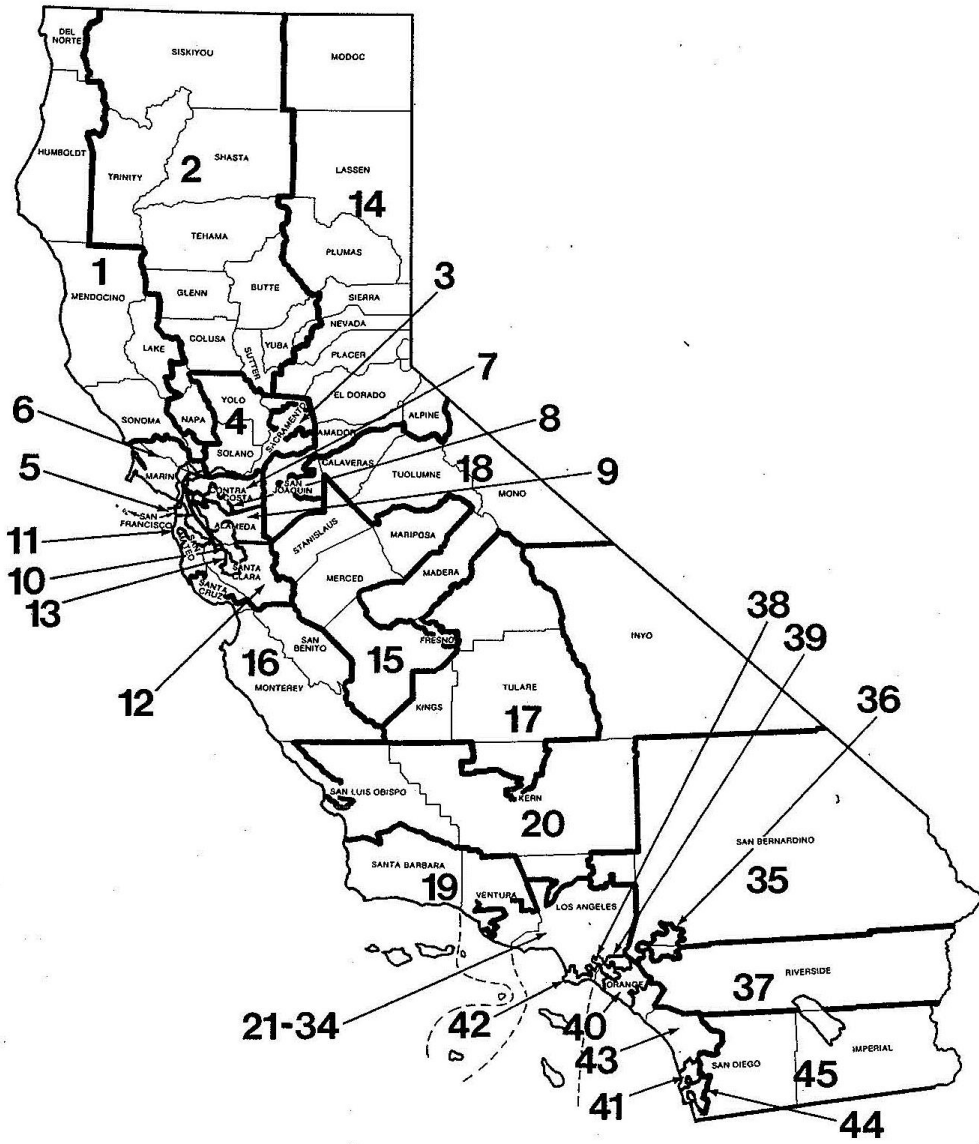
Republicans immediately began gathering signatures for a referendum on A.B. 301 and by collecting over 800,000 valid signatures by December 15 qualified it (along with referenda on the Democrats’ plans for the California Assembly and Senate) for the June 1982 primary election ballot. With the 1982 general election only ten months away and the applicable primary five months away, there was now the question of what districts to use for these elections. The parties went to court and on January 28, 1982 the state Supreme Court ruled 4-3 that the only practical and constitutional alternatives available for use as the temporary court plans for the 1982 elections were the 1981 legislatively passed plans. In a vigorous dissent one justice pointed out the “intolerable anomaly” that should the voters reject the Democrats’ plans, the new legislature elected under those same plans would draw districts applicable for the rest of the decade. This is exactly what happened.<sup>3</sup>

In June the referenda passed with majorities exceeding 60 percent. In November, Democrats gained six seats, changing the makeup of the state’s congressional delegation from 22-21 to 28-17 Democratic. But Republican Attorney General George Deukmejian won the governorship over Democrat Los Angeles Mayor Tom Bradley. This turnover in the governorship impelled Democrats to hurry through a second round of districting plans before Democrat Governor Jerry Brown left office. In a special session of the legislature in December, 1982, the Democrat majorities revamped Burton I and the companion plans for the California assembly and senate which the voters had voided in June. Governor Brown signed the new bills into law the morning of his last day in office—January 2, 1983. The new congressional plan, bearing the designation A.B. 2X, came to be known as “Burton II.” It is depicted in Figure 15.2.



Figure 16.2<sup>5</sup>  
**CALIFORNIA**

Districts Established January 2, 1983



Despite some changes in the numbering and in the shapes of some districts Burton II was, politically, a dead ringer for Burton I—as we shall see.

### *The Sebastiani Initiative*

Still, the Republicans wouldn't give up. In early 1983 another initiative drive was launched by Assemblyman Don Sebastiani to enact new districting lines more favorable to Republicans. Young heir to his family's wine fortune, Sebastiani had the wherewithal to launch the initiative drive without financial help from the Republican Party. The plans, covering Assembly, Senate and congressional districts were prepared by Republican consultant Joseph Shumate using data from the Rose Institute.<sup>4</sup> The plans not only promised to wreck havoc among Democrats, but threatened Republican incumbents as well, buttressing Sebastiani's reputation as a loose cannon, a "sectarian jerk," and a "loon."<sup>5</sup> But Sebastiani's right-wing allies exerted sufficient pressure to extract a \$300,000 pledge from the Republican State Committee and a commitment from Governor Deukmejian to let the electorate vote on the maps at a special election set for Dec. 13.

Democrats, charging Sebastiani's maps would reduce the power of minorities and women, brought suit in the State Supreme Court arguing that the state constitutional provision mandating a redistricting every decade should be construed as permitting only one redistricting per decade. The Court bought this argument and in a party-line vote ruled Sebastiani off the ballot. We do not depict the Sebastiani congressional plan but we shall do a political analysis of it in Chapters 18-21.

### *The Litigation*

While Sebastiani and his friends pursued another initiative/referendum, other Republican leaders decided the time had come to challenge partisan gerrymandering as a violation of the U.S. Constitution. They engaged the San Francisco law firm of Dobbs & Nielson and on March 8, 1983 filed a 21-page complaint in U.S. District Court for the Northern District of California

alleging A.B. 2X was in violation of (a) Article 1 section 2 of the U.S. Constitution, (b) Section 1 of the Fourteenth Amendment to the U.S. Constitution, and (c) Article XXI of the Constitution of the State of California (which sets forth procedures and standards governing the drawing of the state's congressional districts).

The thirteen named plaintiffs were headed by Congressman Robert Badham of CD 40 in Orange County. The others included two state assemblymen, three city Councilpersons, a mayor, a former county chairman and five rank-and-file Republican voters. The sole named defendant was March Fong Eu, the California Secretary of State. The prayer of this complaint (reproduced in its entirety in Appendix A-2) was much more specific than that of the *Bandemer* plaintiffs. Besides seeking a declaration that the plan was in violation of the U.S. and California constitutions, and a prohibition against conducting any electoral processes under it, the plaintiffs asked the Court to promulgate its own plan if the legislature failed to adopt, "in timely manner," a new plan that met "constitutional standards and guidelines enunciated by the Court."

The three-judge Court, noting that an outcome "favorable to the plaintiffs on any of their state claims" might obviate "the need to address the federal constitutional issues," elected to abstain from involvement in the case so that the plaintiffs' state-law claims could first be resolved by the California courts. The Badham plaintiffs appealed this ruling to the U.S. Court of Appeals, but it was affirmed. They then filed a petition for writ of mandate in the California Supreme Court where they were again unsuccessful. On December 12, 1983 they requested the three-judge court to reassert jurisdiction and for leave to file a second amended complaint abandoning the state-law claims. In June, 1984 the three-judge court "concluded that the state-law issues were still implicit in the case and that the basis of abstention...was still valid, and...again ordered the parties to seek resolution of the issues in state court."<sup>6</sup> Plaintiffs appealed but again the U.S. Court of Appeals affirmed and the U.S. Supreme Court denied certiorari.

Meanwhile, the State defendants had filed a suit in the Superior Court in Los Angeles "seeking a declaration of the validity of A.B. 2X." The three-judge Court "viewed that pending

litigation as a possible...vehicle for resolving the state claims” and effort was “made to reach stipulations which might enable those issues to be tried by the state court.” But “the parties could not reach agreement” and again returned to the three-judge Court and “jointly requested that” it “vacate abstention and allow them to proceed to trial on plaintiffs’ second amended complaint.” With some concern about whether the state law issues had really been removed,” the three-judge Court agreed to vacate abstention and reassert jurisdiction.” Following argument on the State’s “motion to dismiss plaintiffs’ second amended complaint,” the three-judge Court concluded that its’ “wisest course was to await the final outcome of *Bandemer v. Davis* which then was pending before the U.S. Supreme Court.” Noting that the “plaintiffs’ second amended complaint raised issues virtually identical to those before the Supreme Court in *Bandemer*, [it] ordered all proceedings stayed pending” the High Court’s decision.<sup>7</sup> By now it was September 19, 1985 and oral argument before the High Court on *Bandemer* was scheduled for October 7. The Democrat defendants, by superb legal footwork and friendly courts, had been able to stall the Republican lawsuit for two and one-half years without even getting to the point where the lower court rules on the defendants’ motion to dismiss. Now the Republicans would have to wait another nine months before this initial phase of the litigation could be consummated.

The Supreme Court’s decision on *Bandemer* came down June 30, 1986. The *Badham* plaintiffs were granted leave to file a third amended complaint. Defendants again moved to dismiss. Oral argument on this motion took place on December 5, 1986. The three-judge Court took the case under advisement. It granted the defendants’ motion on April 21, 1988—over sixteen months later. The *Badham* plaintiffs quickly appealed the dismissal to the Supreme Court. On January 17, 1989 the High Court issued its terse four-word ruling: the judgment is affirmed. Thus ended nearly six years of struggle. Notice of the affirmance included a statement that three justices would have noted probable jurisdiction and set the case for oral argument: Justice Stevens, Justice Kennedy, and Chief Justice Burger.<sup>8</sup> If one more justice had noted probable jurisdiction, the appeal would have been heard. But many suspect the reason Burger

noted probable jurisdiction was to get the issue back before the Court in hopes a majority would emerge that would rule gerrymandering a non-justiciable issue. Recall that by this date Justice Powell had retired and his replacement was Antonin Scalia.

### *Grofman's Evidence*

The fact that *Badham* never went to trial does not prevent us from learning what evidence the Republican plaintiffs planned to lay before the Court had they been granted a trial—and how the Democrat defendants would have dealt with it. We noted above that the three-judge Court abstained from taking jurisdiction in the case instructing the plaintiffs to first seek resolution of their state-law claims in the California courts. The plaintiffs were frustrated in their attempt to do so and returned to the three-judge Court on December 12, 1983 asking for leave to file a second amended complaint abandoning the state-law claims—and with a plea that it assert jurisdiction. Their pleadings included “declarations” by professors Bernard Grofman and Gordon Baker who had been retained as expert witnesses by the plaintiffs. For their part, the defendants retained Professors Nelson Polsby and Bruce Cain as their expert witnesses and their declarations appeared in the pleadings filed by the defendants in early 1984.

At the end of 1984 came the Indiana trial court’s decision holding for the plaintiffs in *Bandemer*. This got the attention of the political science community and was undoubtedly what motivated the editors of the American Political Science Association’s (APSA) quarterly publication *PS* to devote a large portion of its Summer 1985 issue to a “mini-symposium” titled “Gerrymandering: Political Science Goes to Court.” The mini-symposium consisted of extensive excerpts from the declarations of the four professors, plus a humorous commentary titled “Expert vs. Expert: Lessons from *Badham v. Eu*” in which the writer identifies “five techniques of argument” employed by the professors. The order of the declarations is Grofman-Baker-Cain-Polsby-Grofman, meaning that Cain/Polsby were able to rebut the initial statements of Grofman/Baker but only Grofman got a second bite of the apple. The mini-symposium is mostly a duel between Cain and Grofman centered on the evidence developed by Grofman.

Grofman's starting point is Justice Stevens' concurring opinion in *Karcher v. Daggett*,<sup>9</sup> handed down seven months earlier, in which Stevens "enunciates three elements that a claim of unconstitutional gerrymandering must satisfy before that claim ought to be considered justiciable.

Plaintiffs must provide:

- (1) a demonstration that they 'belong to a politically salient class...whose geographical distribution is sufficiently ascertainable that it could have been taken into account in drawing district boundaries.'
- (2) a demonstration that 'in relevant district or districts, or in the state as a whole, their proportionate voting influence has been adversely affected by the challenged scheme.'
- (3) 'a prima facie showing that raises a rebuttable presumption of discrimination.'"<sup>10</sup>

Grofman then states that "each of these three elements is easily met." California Republican voters are "a politically salient class whose distribution is certainly ascertainable." (Or *are* they? . . .when the same electorate in the same election chooses Ronald Reagan and Alan Cranston by 60 percent margins.) The second element is even harder to pin down: certainly Republican voting influence has been adversely affected by the Burton plans, but *how* adversely? Have the Burton plans cost Republicans six seats? Four seats? Two seats? One seat? And how many seats does it have to be before the map is unconstitutional? Grofman doesn't try to answer questions like these but, instead takes the same path the *Bandemer* plaintiffs took: he compares the percent of the aggregate major-party vote for the district office in question received by candidates of the "in" party with the percent of seats the "in" party won. Democratic congressional candidates in California in 1982 received 51.6 percent<sup>11</sup> of the two-party vote but won 62.2 percent of the seats—a 10.6 percent deviation from proportional representation. This may be compared to the 8.64 percent discrepancy suffered by the *Bandemer* plaintiffs.

Finally, what is required for a “prima facie showing?” Here is where Grofman’s twelve prima facie indicators come in. (Refer, again, to Appendix I.) We met those indicators in Chapter 13 when we applied them to the plans at issue in *Bandemer* and wondered why Grofman had not done so. Here we will see how he applied them to the Burton plans.

*Packing.* (Indicator No. 1) In our *Bandemer* analysis we opted to use our Democratic Index, rather than party registration, to quantify the partisan character of the districts at issue. That was partly because in Indiana, like in many other states, one becomes a party member only by voting in that party’s primary—which means the majority of voters are legally independents. In California, when one registers to vote she is asked to state a party preference—even though she may never vote in a primary of that party. This requirement leads to about 89 percent of California voters identifying themselves with one of the major parties. Under such a system party registration figures give a more accurate picture of the electorate. Grofman cannot be faulted for using party registration figures as the measure of partisan “voting strength” in his analysis, but he can be faulted for not setting a threshold percentage of registration and measuring *all* 45 districts against that threshold. He cites two districts (CD 21 and CD 22) as examples of packing.

In 1980, Republicans accounted for 44.9 percent of total registration and 50.45 percent of major-party registration in CD 21.<sup>12</sup> In 1980, Republicans accounted for 44.9 percent of total registration and 50.45 percent of major-party registration in CD 21. In CD 22 they comprised 53.8 percent of total registration and 58.54 percent of major-party registration. If Republicans are “packed” in CD 21, then we must consider them as packed in all districts having a higher percentage of registered Republicans than in CD 21. From Table 15.1 we can see that packing of Republicans occurs in four additional districts: 39, 40, 42, and 43. To be sure, we must examine the districts at the other end of the partisan continuum to see if Democrats suffer packing, as well. If more than 44.9 percent of total registration defines packing of Republicans, then by symmetry it ought to also define packing of Democrats. Table 15.1 lists seven districts where Democrats account for more than 60 percent of total registration. In fact, in 34 of the 45 districts in this plan

Democrats comprise more than 44.9 percent of total registration. It would be difficult to condemn Burton II as an unconstitutional partisan gerrymander on the strength of Indicator No. 1.

*Fragmenting.* (Indicator No. 2) We discussed the problems encountered in applying this indicator to the Indiana plans in Chapter 13. We are looking for concentrations of “out” party voters who have been split among several districts dominated by the “in” party so that the “out” party fails to be a majority in any of them. Unsurprisingly, no concentration of Democratic voters appears to be fragmented by this plan. Grofman suggests that fragmenting of Republicans takes place in CD 27 where Democrats “cut one Republican incumbent’s seat to bits.”<sup>13</sup> When we examine the 1973 Masters’ plan (Figure 15.3) we note that CD 27 runs along the Pacific Ocean shoreline from Rancho Palos Verdes to Topanga Beach, stringing together mostly Republican communities to create the least compact CD<sup>14</sup> in that plan. Arguably, this is not a “natural” configuration and it leads some people to wonder if the Masters were as non-partisan as generally assumed. One gerrymander technique is to string together isolated pockets of adherents of the favored party into a single district in which they can be a majority—invariably with a heavy sacrifice of compactness. One can argue that the 1973 CD 27 is a good example of such manipulation. Grofman appears to be arguing here that *failure* to string together these Republican communities constitutes gerrymandering-by-fragmentation.

*Pairing.* (Indicator No. 3) The difficulty in applying this indicator is that congressional incumbents tend to change their legal residences fairly often, making it sometimes difficult to locate where they lived at the time of redistricting. It is also relevant whether the map-makers knew an incumbent was going to voluntarily vacate his seat at the time the lines had to be drawn.

One thing both sides of this controversy agreed on was who was paired at the time of redistricting. At the time of the 1982 primary, no Democrat incumbent was paired, either with another Democrat incumbent or with a Republican incumbent. On the other hand, Republicans



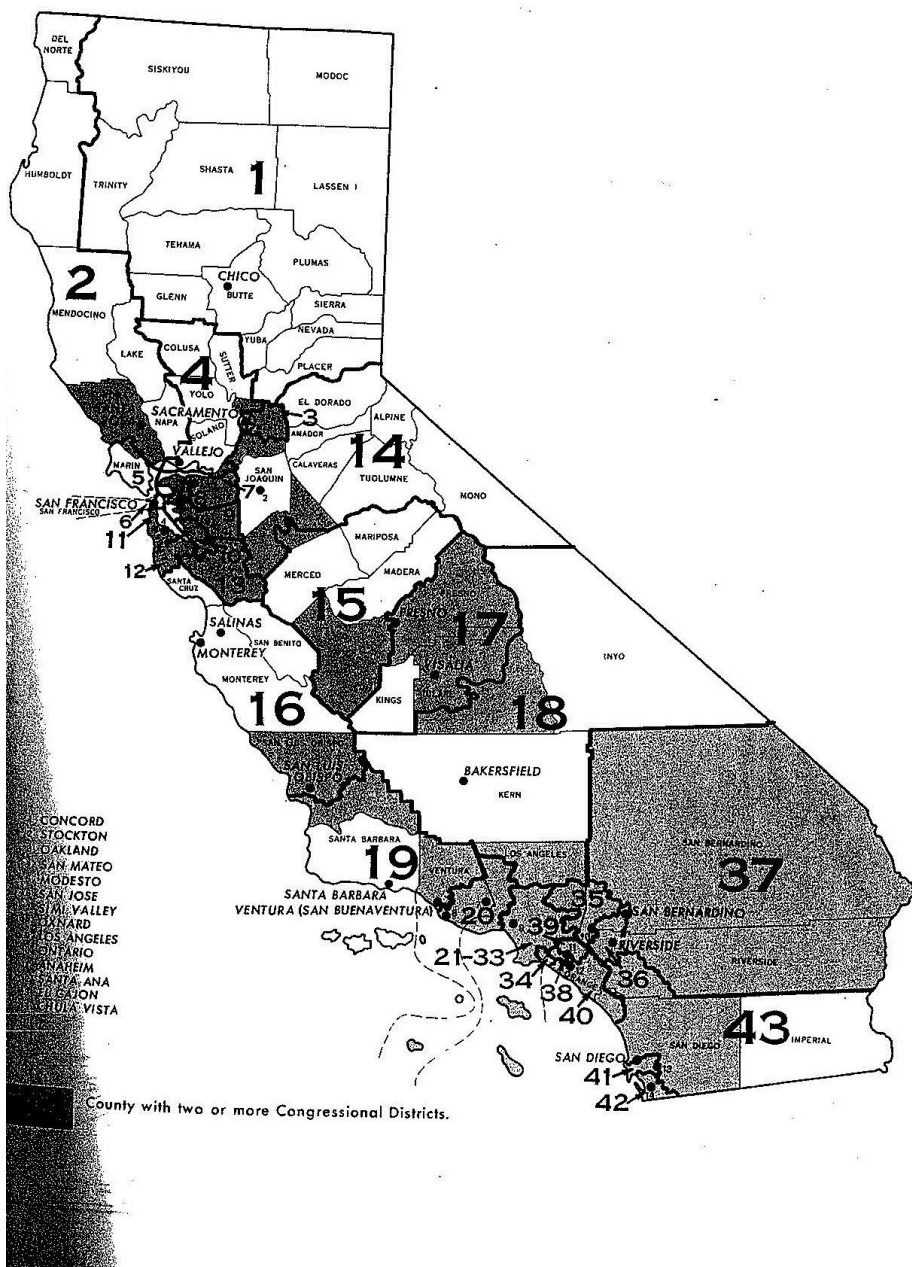
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 Table 18.1  
 Burton II "Packing" as Measured by Party Registration

"PACKING" OF REPUBLICANS			"PACKING" OF DEMOCRATS		
CD	Republican Percent of Major-Party Registration	Republican Percent of Total Registration	CD	Democrat Percent of Major-Party Registration	Democrat Percent of Total Registration
22	58.54	53.8	29	86.91	81.7
43	58.22	49.6	31	80.07	73.5
40	58.02	50.3	28	78.08	70.9
39	55.39	49.3	25	76.47	68.9
42	50.84	45.2	5	73.90	60.6
21	50.45	44.9	34	70.74	64.8
			10	70.34	60.0

Districts Established November 28, 1973

Figure 18.3

5



suffered three pairings with two of their incumbents involved in each pairing: Fiedler and Goldwater in CD 21; Moorhead and Rousselot in CD 22; Dreier and Grisham in CD 33. Rather than face Fiedler in the primary, Goldwater ran for U.S. senator. Rather than face Moorhead in the primary, Rousselot moved into adjoining CD 30 and “paired” himself with Democrat Martinez in the general election—and lost. Grisham opted to face Dreier in the primary and lost. These pairings provided Democrats with three additional opportunities to take over seats occupied by Republicans. They indicate strong partisan bias on the part of the map-makers.

*Open-District Advantage.* (Indicator No. 8) In Chapter 13 we observed that “every instance of pairing results in an open district somewhere.” So the three pairings have resulted in three open districts in addition to the two due to the two-seat expansion of the state’s congressional delegation. Finally, we must add four more open districts created by the voluntary retirement of one Democrat Incumbent (John Burton) and three Republican incumbents: McCloskey, Dornan,<sup>15</sup> and Burgener. Note that the total of nine districts is comprised, in part, of one district formerly represented by a Democrat and six districts formerly represented by Republicans. We are looking for partisan advantage in these nine districts. In chapter 13 we ruled that no advantage would be assigned to either party if the district was “critically marginal,” and defined “critically marginal” in terms of our Democratic Index. Here we will follow Grofman by measuring partisan advantage in terms of “registration edge”—that is, by subtracting Republican percent of total registration from Democrat percent of total registration. For the nine open districts Table 15.2 shows major-party registration, total registration and registration edge.

We note that in each district the registration figures for Burton I and Burton II are nearly identical, differing, at maximum, by 2.0 percent and in most cases being less than 1.0 percent. We notice a clear break of about 20 percent in registration edge between Levine and McCandless which suggests that a “critically marginal” district might have a Democratic percentage

Table 15.2  
Burton I<sup>15</sup> & II Open Districts

CD	Democrat % of Major-Party Registration		Total Registration: Burton I		Total Registration: Burton II		Winner of 1982 General Election, Party
	Burton I	Burton II	Democrat Percent	Registration Edge	Democrat Percent	Registration Edge	
34	70.60	70.74	64.6	37.7	64.8	38.0	Torres (D)
44	67.91	67.65	57.4	30.3	57.5	30.0	Bates (D)
6	69.17	66.46	56.9	31.5	54.9	27.2	Boxer (D)
18	67.57	66.45	61.4	31.9	60.4	29.9	Lehman (D)
26	65.53	65.82	59.4	28.1	59.7	28.7	Berman (D)
27	64.79	64.48	56.2	25.7	56.1	25.2	Levine (D)
37	52.95	52.97	47.3	5.3	47.3	5.3	McCandless (R)
12	51.07	51.05	44.4	1.9	43.6	1.8	Zschau (R)
43	40.59	41.78	34.7	-16.1	35.6	-14.0	Packard (R)

Between 53 and 64 percent of major-party registration, and a Democratic percentage between 48 and 56 percent of total registration. If so, then the map-makers created no critically marginal open- districts. Instead, they created six safe Democratic districts and three safe Republican districts—a two-to-one advantage for Democrats. Compare that with the pre-districting ratio of one safe Democrat to six safe Republican districts in this group and a strong pro-Democrat bias may be inferred from Indicator No. 8.

*Altering/Preserving Incumbents' Districts.* (Indicators No. 4 and 6) Grofman does not isolate these indicators in his analysis, but lumps them with Indicators 3, 5 and 7 in a generalized discussion captioned “Differential Treatment of Republican and Democratic Incumbents” which does not deal with carryover.<sup>16</sup> As in our Indiana study, we combine Indicators 4 and 6 because they are two sides of the same coin. We quantify them by choosing population carryover as our analytical tool. Finally, we employ whichever of the following definitions of carryover yields the larger number: the percentage of the incumbent’s old district carried over into his new district, or the percentage of the incumbent’s new district that came from his old district. The results of our computations, based upon this methodology, appear in column (2) of Table 15.3.

Table 15.3 shows a greater-than-25 percent spread in the mean carryover between Democrats and Republicans. It reveals that nine of 21 Republicans had less than 50 percent carryover—the lowest having less than 7 percent—while no Democrat had less than 59 percent. This amplification of his Indicators 4/6 might have enabled Grofman to make a stronger case, but

without impartially-drawn plans to provide a benchmark we are left wondering how much of this partisan bias might have been unavoidable.

Table 15.3

Grofman's *Prima Facie* Indicators 4 & 6: Altering/Preserving Incumbents' Districts  
California Congressional: Incumbents' Population Carryover Under Different Plans

Incumbent	Burton I	Halliwell	Morrill Aa	Morrill Ba	Morrill Ca	Morrill Da	Sebastiani
<b>DEMOCRATS (22)</b>							
Matsui	100	69.8	68.4	81.6	85.6	68.4	45.3
Fazio	82.9	53.6	33.9	80.6	80.7	47.8	51.3
J. Burton	85.5	27.6	46.8	78.5	78.5	31.5	54.3
P. Burton	79.3	89.8	63.6	34.9	34.9	85.6	82.9
Miller	99.8	83.6	86.0	77.9	77.9	86.0	86.5
Dellums	99.8	79.9	85.3	86.3	86.9	85.3	86.3
Stark	87.6	63.0	85.9	95.6	96.8	85.9	89.0
Edwards	84.7	78.1	78.6	22.2	82.8	78.6	85.6
Lantos	82.9	95.4	79.4	69.9	69.9	91.3	89.5
Mineta	74.3	84.7	79.0	25.0	25.5	86.9	91.9
Coehlo	76.0	24.4	69.2	69.9	64.5	55.8	51.5
Panetta	100	100	33.9	80.6	80.6	95.3	95.7
Beilenson	79.3	37.2	12.4	12.4	12.4	12.4	12.6
Waxman	83.8	59.9	73.8	78.0	75.3	78.0	41.5
Roybal	82.8	74.6	88.8	90.3	90.6	90.3	29.6
Dixon	75.6	48.8	63.4	62.6	63.4	62.6	68.3
Hawkins	87.8	56.4	29.4	29.4	29.4	29.4	57.5
Martinez	64.7	48.0	49.5	51.5	53.2	51.5	77.4
Dymally	76.7	67.2	10.8	10.8	10.8	10.8	80.3
Anderson	59.3	61.3	64.9	64.9	64.9	64.9	23.3
Brown	69.6	60.7	60.5	60.5	60.5	60.5	60.6
Patterson	91.0	9.0	18.7	18.4	18.4	18.4	72.7
<b>Mean:</b>	<b>82.9</b>	<b>62.4</b>	<b>58.3</b>	<b>58.3</b>	<b>61.1</b>	<b>62.6</b>	<b>65.2</b>
<b>Lowest:</b>	<b>59.3</b>	<b>9.0</b>	<b>10.8</b>	<b>10.8</b>	<b>10.8</b>	<b>10.8</b>	<b>12.6</b>
<b>Number Having &lt; 50% Carryover</b>	<b>0</b>	<b>6</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>5</b>
<b>REPUBLICANS (21)</b>							
Chappie	61.9	32.0	34.3	24.6	20.4	69.8	90.1
Clausen	92.5	100	98.8	98.8	98.8	98.8	79.6
McCloskey	53.7	73.7	87.6	37.8	37.8	95.7	91.9
Shumway	46.4	76.2	68.1	73.6	69.8	54.5	68.5
Pashayan	74.5	37.1	59.3	30.1	34.6	45.9	43.8
Thomas	83.5	75.7	43.6	84.4	80.0	79.9	28.0
Lagomarsino	94.2	77.8	41.7	93.8	91.7	71.7	70.9
Goldwater	19.2	66.9	20.2	89.5	16.7	20.2	48.6
Fiedler	6.8	56.1	74.0	43.9	73.5	68.5	24.8
Moorhead	59.0	89.1	89.3	89.3	89.3	89.3	70.1
Rousselot	32.6	52.5	55.7	55.7	55.7	55.7	44.5
Dornan	60.2	53.0	71.7	71.7	71.7	71.7	24.4
Grisham	40.7	56.3	75.9	71.7	70.6	71.7	68.3
Lungren	43.8	69.5	68.3	64.7	64.7	64.7	44.8
Dreier	43.0	61.6	56.2	56.2	58.3	56.2	67.4
Lewis	55.2	10.8	5.6	5.7	4.1	5.7	7.0
Dannemeyer	99.4	30.5	81.1	81.3	81.3	81.3	97.7
Badham	87.6	75.7	61.2	68.7	68.7	68.7	64.1
Lowery	58.7	95.2	16.5	16.5	16.5	16.5	55.5
Hunter	26.6	94.2	84.0	84.0	84.0	84.0	98.3
Burgener	43.1	80.6	60.5	51.0	51.0	51.0	58.1
<b>Mean:</b>	<b>56.3</b>	<b>65.0</b>	<b>59.7</b>	<b>61.6</b>	<b>59.0</b>	<b>62.9</b>	<b>59.4</b>
<b>Lowest:</b>	<b>6.8</b>	<b>10.8</b>	<b>5.6</b>	<b>5.7</b>	<b>4.1</b>	<b>5.7</b>	<b>7.0</b>
<b>Number Having &lt; 50% Carryover</b>	<b>9</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>4</b>	<b>8</b>

*Reducing/Enhancing Marginal Incumbents' Districts.* (Indicators No. 5 and & 7) In our Indiana study we made some definitions to tighten-up the meaning of this pair of indicators, but here we will continue to follow Grofman. First, we don't look at all incumbents, but only those who are in "marginal" districts. Second, we employ registration edge as our analytical tool rather than political index. Third, we define "marginal" as a district where the incumbent's "victory margin" in the preceding election was less than 55 percent of the total vote—rather than in terms of a political index. These definitions give us 10 "marginal" districts following the 1980 election: three held by Democrats (CDs 5, 11 and 36); seven held by Republicans (CDs 1, 2, 21, 27, 35, 41 and 42). Following the 1982 elections, these definitions give us six "marginal" districts: five held by Democrats (CDs 1, 6, 30, 36 and 38); one held by a Republican (CD 17). Table 15.4 lists these districts and their registration edges, with the first part showing the post-1980 marginals and the second part showing the post-1982 marginals.

Grofman does not examine the post-1982 marginals at the same place in his declaration where he deals with the post-1980 marginals. In discussing the post-1980 marginals, he states that the three Democrat marginal incumbents (in CDs 5, 11 and 36) "were enhanced...by adding net Democratic registration..."<sup>17</sup> We note from Table 15.4(A) that two of these incumbents received more than one percent enhancement: Brown with 4.1 percent and John Burton with 9.3 percent. Five of the seven post-1980 marginal Republicans (two of whom received double-digit enhancement.) are not mentioned at all.<sup>18</sup> The two Republican post-1980 marginal incumbents who do receive attention are Clausen and Dornan. Clausen's "new" CD 1 received 92.5 percent of its population (Table 15.3, column 2) from his "old" CD 2—a high carryover. He suffered a slight increase in Democrat registration edge [2.2 percent per Table 15.4(A)]. It is Dornan who takes the real hit. Although he receives a fairly good carryover (60.2 percent per Table 15.3), he suffers a massive increase in Democrat registration edge: 20.7 percent.

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Table 10.4(A)  
Grofman's *Prima Facie* Indicators 5 & 7: Reducing/Enhancing Marginal Incumbents' Districts  
California Congressional: Change in Democratic Registration Edge of Marginal  
Incumbents' Districts, 1980 to 1982

Incumbent	Democratic Registration Edge, Percentage Points		
	1980 Districts (1973 Masters')	1982 Districts (Burton I)	Change*
<u>DEMOCRATS (3)</u>			
J. Burton	24.4	33.7	+ 9.3
Lantos	21.6	22.5	+ 0.9
Brown	24.2	28.3	+ 4.1
Maximum Unfavorable Change in Regist'n. Edge	-	-	- 0.1
<u>REPUBLICANS (7)</u>			
Chappie	15.1	12.3	+ 2.8
Clausen	18.4	20.6	- 2.2
Fiedler	30.4	- 3.9	+ 34.3
Doran	6.1	26.8	- 20.7
Dreier	8.4	0.9	+ 7.5
Lowery	5.6	- 3.3	+ 8.9
Hunter	25.2	0	+ 25.2
Number Receiving > 1% Reduction	-	-	2
Maximum Unfavorable Change in Regist'n. Edge	-	-	- 20.7

5  
Table 10.4(B)  
Grofman's *Prima Facie* Indicators 5 & 7: Reducing/Enhancing Marginal Incumbents' Districts  
California Congressional: Change in Democratic Registration Edge of Marginal  
Incumbents' Districts, 1982 to 1984

Incumbent	Democratic Registration Edge, Percentage Points		
	1982 Districts (Burton I)	1984 Districts (Burton II)	Change*
<u>DEMOCRATS (5)</u>			
Bosco	18.0	19.7	+ 1.7
Boxer	31.6	27.2	- 4.4
Martinez	34.7	34.9	+ 0.2
Brown	27.9	28.3	+ 0.4
Patterson	17.4	19.0	+ 1.6
Maximum Unfavorable Change in Regist'n. Edge	-	-	- 4.4
<u>REPUBLICAN (1)</u>			
Pashayan	18.1	16.3	+ 1.8

\* + = Favorable Change; - = Unfavorable Change (from perspective of incumbent)

Grofman discusses the post-1982 marginal incumbents in an earlier part of his declaration captioned “Packing and Fragmentation of Republican Voting Strength.”<sup>19</sup> The six persons meeting his “marginal” incumbent definition are listed in Table 15.4(B). We note that four of the five Democrats receive slight enhancement. The fifth (Boxer) receives a modest reduction (4.4 percent), but when one starts with a 31 percent registration edge such loss is not threatening. The sole post-1982 marginal Republican incumbent (Pashayan) receives an inconsequential 1.8 percent enhancement. Grofman says these seats “are the only ones which are at all likely to change hands...”<sup>20</sup> and that, of these six, Republicans “are very unlikely to pick up” any but CDs 1 and 38. He was prescient. Republicans did capture CD 38 in 1984 and held it for the rest of the decade. There were no turnovers in 1986 or 1988. In 1990 Republicans captured CD 1 and CD 44, while Democrats captured CD 17. In CD 1 a Peace & Freedom Party candidate, by taking 14.8 percent of the vote, caused Bosco’s defeat. In CD 44 Democrat incumbent Jim Bates was the center of a controversy involving alleged sexual harassment. In summary, Grofman uses Indicators 5/7 to demonstrate a pro-Democrat bias in the Burton plans that could have made the difference in electoral outcomes in CDs 1, 6, and 27 at various points in the tenure of those plans.

*Disregarding “Formal” Districting Criteria.* After applying his eight indicators which use political effects to detect gerrymandering, Grofman concludes his prima facie case with a section captioned “Disregarding of Standards for Redistricting” that addresses the “formal” criteria (Indicators No. 9, 10, and 11 of Appendix I). The discussion actually deals only with No. 9, compactness, and is descriptive rather than quantitative. Singled out for opprobrium are CDs 6, 12, 27, 32, 38, 42 and 44. Several years later, compactness measurements were published for the 1973 Masters’ and Burton plans that make quantitative comparisons possible. These measurements are reported in Tables 15.1 and 15.2 and summarized in Table 15.4. Compactness comparisons with the 1973 Masters’ plan show mean values of 18 and 20 for the Burton plans compared to 38 for the Masters.’ They show minimum values of 5 and 6 for the Burton plans compared to 15 for the Masters.’ One can argue these comparisons are not totally fair because the

Masters' plan was for only 43 districts, whereas the Burton plans had to divide the state among 45 districts. Even with that caveat, the Burton districts appear unjustifiable. We turn now to the declaration of Professor Gordon Baker.

*Baker's Declaration.* Baker, a political scientist at the University of California, Santa Barbara, had been one of the two principal consultants<sup>21</sup> to the 1973 Masters charged by the California Supreme Court with drafting new congressional and legislative districting plans after the 1972 impasse in the legislature. He begins with an historical review of the gerrymander issue, nationally and in California. He discusses standards for limiting gerrymandering embodied in the new Article XXI of the state constitution ratified by the voters in 1980. He recounts how the 1973 Masters developed guidelines for redistricting prior to drawing their plans and how their congressional plan "reflected a sensitivity to shifts in voter support."<sup>22</sup> He finally addresses the issue of whether the Burton plans are gerrymandered. Referring to the maps of the 1973 Masters' and the Burton plans that comprise his six exhibits, he asks "can the distorted district lines and frequent breaching of county lines be justified by some legitimate state objective? Or, is the only explanation political and partisan?" He focuses upon Los Angeles County stating

"The tortuous district lines cannot be explained either by the kinds of criteria developed by the Masters in 1973 or by the fresh state constitutional requirement of 1980 regarding the integrity of city and county boundaries and of geographical regions. Political considerations... appear to be the only rationales possible. ...a visual comparison of the 1981 and 1982 plans reveals a substantial increase in boundary contortions. ...Districts 27, 32, and 42 deserve special attention as the most flagrant examples of boundary manipulation. ...it is difficult to identify a single district that does not appear at least partially suspect. The obvious question is whether these tortuous lines can be justified by any neutral criteria whatsoever."<sup>23</sup>



Baker seems to feel no need for sophisticated statistical or other analytical techniques to detect gerrymandering. He just looks at the squiggly lines and fragmented counties and cities and concludes a *prima facie* case exists and the State should bear the burden of justification.

### *Cain's Defense*

*The APSR Article.* Bruce Cain, at the time of this controversy, was professor of political science at the California Institute of Technology in Pasadena. A connection with Assemblyman Richard Alatorre, chairman of the Assembly Elections and Reapportionment Committee, led to Cain's retention as the Democrats' chief consultant on districting for the 80-seat Assembly. This experience led to his writing a book, *The Reapportionment Puzzle* that has been widely read. Of more immediate relevance, however, is a paper he presented at the 1983 meeting of the APSA, "Assessing the Partisan Effects of Redistricting," which two years later appeared in the *American Political Science Review*.<sup>24</sup> We would do well to examine this article.

The article's purpose "is to assess the reality behind the politician's perception that redistricting matters." He perceives two strategies at work, partisan and bipartisan. If the strategy is partisan, it will have two components: partisan reconstruction and incumbency removal. Partisan reconstruction implies distributing the "in" party's voters efficiently while distributing the "out" party's voters inefficiently. Incumbent removal implies fragmenting an incumbent's district or taking other measures that will induce him to move to another district, run for some other office, or retire. In a passage quoted with relish by Grofman, Cain states:

"The key then to the partisan gerrymander is that incumbents in the party controlling redistricting will be treated differently from those in the party that does not."<sup>25</sup>

There are several ways to measure the partisan effects of "reconstruction." Grofman employed "registration edge" to show which candidates benefited from or were harmed by a districting scheme—and to what extent. Similarly, Cain says:

“The simplest class of methods compare district registration or vote totals before and after the territorial changes caused by redistricting... Another popular method is to take the vote totals for candidate  $j$  in the last election, subtract the votes  $j$  won in the areas  $j$  loses...and add the votes for candidate  $k$  who ran for the same legislative office in the same election in the areas that have been transferred from  $k$  to  $j$ .<sup>26</sup> ....Finally,...it is instructive to compare the totals received by some statewide candidate under the various proposed boundary changes.”

The foregoing methods each have their particular flaws which a “second class of methods ...tries to eliminate...by utilizing a multivariate estimation procedure to combine several pieces of information. One such technique...is to develop an expected vote model in which a candidate’s vote at time  $t$  is regressed on various demographic data and on a statewide candidate’s vote.” Another such method, and the one employed by Cain, is “to estimate the probabilities of the Democrats and Republicans winning various seats, given information about changes in registration and incumbency status as a result of the plan. ...the model is estimated with a probit procedure using the registration, incumbency, and outcome data from the 1980 election... The new registration and incumbency data resulting from the new boundaries are then inserted into the estimated equation, yielding probit scores that can be converted into probability estimates.”

Using the foregoing technique, Cain turns to a consideration of Burton I and the 1973 Masters’ plans. The following propositions test whether a plan has “the pattern of a partisan strategy”:<sup>27</sup>

- 1) Some number of marginal Democratic seats should have been strengthened.
- 2) Some number of marginal Republicans should have been weakened.
- 3) Some number of strong Democrats should have been weakened to assist marginal Democrats.
- 4) Some number of strong Republicans should have been made even stronger.

Were any marginal Democratic seats “strengthened”? Cain looks at the four Democratic incumbents who gained most in Democratic registration from Burton I (John Burton, George Brown, Norman Mineta, and Leon Panetta) and his estimates reveal that Burton’s win probability has increased from 96 to 99 percent; Brown’s from 92 to 95 percent, Mineta’s from 78 to 87 percent and Panetta’s from 71 to 78 percent. Grofman’s analysis employs a different definition of “marginal Democrat” leading to the designation of John Burton, Brown, and Lantos [Table 15.4(A)] and the disqualification of Mineta and Panetta, but we note immediately their agreement on Burton and Brown.<sup>28</sup> Referring to “almost trivial increases” for Mineta and Panetta, Cain says “one can say that in two instances primarily, marginal Democrats were strengthened by the redistricting plan...”

Were any marginal Republican seats weakened? This “appears to be where the Burton plan had its major effect” says Cain. “In several instances, the strategy followed was more subtle than a straight collapse of the Republican incumbent’s seat... By inducing the Republican incumbent to run for the new seat, Burton was able to create an open seat with favorable registration for the Democrats. This was essentially the procedure used in the Hunter and Fiedler seats.”<sup>28</sup> Cain estimates that in the open district created by the displacement of Hunter (CD 44) a Democrat candidate would have a 91 percent chance of winning. In the open district created by the displacement of Fiedler (CD 26 of 1982) a Democrat candidate would have an 82 percent chance of winning.

“The old Dornan seat (CD 27) is a good example of a district created by both partisan reconstruction and incumbent removal” says Cain. “Since the seat was strengthened by 9 points in registration and no longer had an incumbent, it changed from one in which the Democrat had a 1 percent chance of winning to one in which he or she had a 95 percent chance. The old Rousselot seat (CD 26 of 1980) was also dismantled, and he was given no alternative open seat to run in. ...the largest overlap between his old district and the Burton-created districts was the highly

Hispanic 30th... Rousselot chose to contest the Democrat Martinez, as a non-incumbent rather than face his Republican colleagues in an expensive primary, and was defeated in the November, 1982 election.”<sup>29</sup> Grofman cites two post-1980 Republican incumbents as marginal [see Table 15.4(A)] who suffered “reduction”: Dornan and Clausen. He and Cain disagreed about Clausen but they were in full accord regarding Dornan.

Were any “strong” Democrats “weakened” to assist marginal Democrats? In his Table 3, Cain lists five Democrat “martyrs” who suffered reduction: Martinez, Fazio, Phil Burton, Beilenson, and Anderson. The greatest reduction suffered by any of them was Martinez’s 7.0 percent. Yet even with these reductions, their win probabilities as incumbents, ranged from 95 to 100 percent. Were any “strong” Republicans made “even stronger” in order to waste more Republican votes? Cain doesn’t name them, but in a scatter plot where he plots 1980 versus 1982 win probability for Republican incumbents<sup>30</sup> the “strong” Republican incumbents are all in the lower left-hand corner below the 45-degree line where they should be if Cain’s fourth proposition concerning “partisan restructuring” is valid in this case.

In the final section of his article Cain shows five pairs of histograms strongly resembling some of those we presented in Chapter 8, save that the horizontal axis is labeled “Probability of Democrat Winning” rather than “Democratic Index.” These histograms are strongly bi-modal and vividly portray an electoral situation in which the outcome in most districts is a foregone conclusion and in which Democrats are virtually certain to win about 60 percent of the time. Cain’s study provides clear and convincing evidence to back up Grofman’s data and his own conclusions that (1) “five of the six [Democrat seat] gains appear to be reapportionment related, and four of those five involved the forced or induced removal of Republican incumbents.”<sup>31</sup> (2) “the partisan effects of redistricting” are “important” and (3) “that a proper assessment of the partisan effects of redistricting cannot overlook its effect on incumbency.”<sup>32</sup> Having furnished the *Badham* plaintiffs with such an impressive piece of evidence how is it that Cain ends up as an expert witness for the defendants rather than for the plaintiffs? We go to his declaration.

*Cain's Declaration.* The declaration is organized into eight sections, seven of which are excerpted in the *PS* Mini-symposium. To begin with (Section 2), “the attempt to define unbiased and objective standards of political fairness is futile” for four reasons: (a) there are many possible standards of political fairness and political scientists disagree on which is best, (b) the standards proposed by Grofman (“a seats-votes measure”) and Baker (“a compactness criterion”) will prove contradictory, (c) the proposed standards are inconsistent with other criteria such as minority quotas, and (d) attempts to use fairness formulae “underestimate the many complex factors that determine” election outcomes. In Section 3 Cain says the attempt to apply such standards as advocated by Grofman and Baker encounters “practical difficulties” and “ignores the radical implications” their standards have for racial and ethnic minorities.

Section 4 reiterates the charge that “objective standards of political fairness are inconsistent with one another.” Cain characterizes Baker’s compactness standard as ruling out “tortuous district lines” that “cannot be explained either by” the criteria developed by the 1973 Masters or by the new Article XXI of the California constitution and asks if such a “reformulation of the compactness rule” would “make allowances for tortuous lines that maximize political fairness as defined by Grofman or others.” Cain then characterizes Grofman’s definition of “fairness” as a scheme in which there is an equal weighting of votes; that “irregular shapes that diminish the discrepancy between votes and seats are justifiable whereas those that do not are unjustifiable.” But Grofman “gives us no reason to believe that plans that have the most compact lines are the ones that minimize the discrepancy between seats and votes. ...aside from the fact that compact districts may not be politically fair, Grofman does not indicate how his notion of political fairness should be weighed against the other criteria...defended by Baker...”<sup>33</sup>

Section 5 plunges into the minority issue saying “the proposed standards of political fairness conflict with efforts to prevent the dilution of racial and ethnic voting strength.” Cain

cites an example from Grofman's writings: "...to provide certain geographically dispersed minorities with districts in which 'their' voice will not be submerged may require crossing of county/city boundaries and/or require violations of minimal district compactness." He says both "compactness and seats-votes standards will inevitably conflict with other redistricting values" and offers his exhibit B, two maps which show the distribution of African-Americans and Latinos in Los Angeles County. He states that "Hispanic leaders" felt the 1973 Masters' plan "was discriminatory against Hispanics."<sup>34</sup> He demonstrates, with a simple numerical example, how parity in the seats-votes relationship might be unjust to minorities because of turnout differentials. He points out that since minorities, with their characteristically low turnout, tend to vote Democratic, it is inevitable that Democrats will expend a smaller number of votes to win a seat than do Republicans. The 11.4 percent seats-votes discrepancy of 1982 under Burton I "was really quite unremarkable" when one realizes that similar discrepancies occurred in 1974 and 1976 under the 1973 Masters' plan.<sup>35</sup>

In Section 6 Cain again takes aim at "the proposed formula of political fairness," the major-party seats-votes ratio. Here he says the emphasis on this formula overestimates "the capacity of social scientists to predict the outcome of elections and underestimates the role of non-redistricting factors. ...given this complexity, it is hard to imagine how the court would be able to predict what the seats-votes ratio would be after a particular redistricting." This is an even more problematical task "at a time when party loyalty is declining for both parties. ...it raises the question of whether the court should allocate allegedly 'fair' shares of seats to the largest parties at the expense of minor parties and independents. ...why do the rights of Democratic voters and Republican voters have precedence over other voters?"<sup>36</sup> The two fundamental questions are: (1) why should any party "have a claim to seats-votes fairness when our system (single-member districts with plurality voting rules) is ill-suited for producing proportional results? (2) if a claim to seats-votes fairness is legitimate, then who has such a claim and who does not?"<sup>37</sup>

In Section 7, Cain claims the effects of the Burton plans "have been greatly exaggerated"

He concedes “it is reasonable to suspect that changes in the district boundaries had something to do with the increase in the size of the Democratic delegation” but maintains that Baker and Grofman “have presented evidence and drawn conclusions injudiciously.”<sup>38</sup> Referring to his own study, Cain concludes “the Bosco gain was virtually unrelated to redistricting” and that Democrats would have had only “about a 30 percent chance of winning” CDs 26 and 44 if Republican incumbents Fiedler and Hunter would not have vacated those districts and run in CDs 21 and 45, respectively. In overall conclusion, Cain voices his belief that redistricting is a “political issue” which involves “conflicting values which reasonable people”<sup>39</sup> can disagree about...if people are “tired of the partisan rancor that surrounds redistricting,” we should require a two-thirds vote to pass a redistricting bill; it is “unwise to try to define what is fair in the abstract...the court should avoid the temptation to arbitrate between conflicting ideas of fairness ...and leave the matter to the legislature...”<sup>40</sup>

*Polsby's Declaration.* Nelson Polsby, Professor of political science at the University of California, Berkeley, edited the anthology *Reapportionment in the 1970s*. He submitted an eight-point declaration which made these arguments: (1) Redistricting is “inescapably political and value-laden.”<sup>41</sup> Tests which might be applied by the courts to resolve disputes like *Badham* “are not neutral but political in their outcomes. ...[they] require the exercise of political judgment.”<sup>42</sup> (2) In the one-person-one-vote cases the courts were only required to determine the populations of districts. To adjudicate gerrymander claims they will be required to “protect the interests of one of many political...groups”—“an entirely different matter.”<sup>43</sup> (3) “Many groups could be said to have identifiable common political interests.” How are the courts to “decide how to rank the competing claims of” such groups? “What standards shall they use?”<sup>44</sup> (4) “Many ‘objective’ or ‘fair’ standards have been proposed to guide redistricting”:<sup>45</sup> compactness, non-fragmentation, competitiveness, minority representation, proportional representation, symmetry... How are courts to resolve conflicts among these standards? (5) The claim that the percentage of the aggregate statewide vote cast for Republican congressional candidates should approximate the percentage of seats won by those candidates is misplaced. Seats-votes discrepancies are a normal

consequence of our plurality-take-all SMD electoral system. Perhaps we should adopt proportional representation, but it is not the role of the courts to impose it. (6) A compactness standard has political consequences. It conflicts with “the notion of community of interest.”<sup>46</sup> Trade-offs between supposedly “neutral” criteria are inevitable. (7) A preference for “marginal” congressional districts is a policy choice that conflicts with other values such as the desire of a state to gain more power and influence in Washington by having added seniority in its congressional delegation due to the creation of “safe” districts for incumbents. (8) There is no guarantee that Republicans cannot win a majority of seats in the Burton plans. Gerrymandering is self-limiting and the “in” party may spread itself too thin—as the Republicans did in New York in 1963. “Opportunities exist for the losing party in one battle to regroup to fight another day.”<sup>47</sup>

#### *Grofman’s Rebuttal*

On January 27, 1984, Grofman submitted a second declaration in response to the testimony of Cain and Polsby. He begins by stating that neither the 1982 seats/votes discrepancy, the lack of competitive districts, nor the “tortuously” shaped districts of the Burton plans, by itself, shows those plans to be gerrymanders. But taken together they suggest that conclusion. He quotes from Cain’s *APSR* article saying the combination of “partisan reconstruction and the artful removal of inconveniently placed incumbents” in the Burton plans “was enough to help swing 5 seats to the Democrats.”<sup>48</sup> That compares with his own analysis which also showed that line drawing “affected partisan control in 5 seats.”<sup>49</sup> He asserts that “nothing in the reply briefs or declarations challenged” his basic finding that the legislature used eleven of the twelve gerrymander methods identified in his *prima facie* indicators in crafting the Burton plans.

He points out that even if non-compactness of “several districts in the L.A. area” could be attributed to enhancing minority representation, it would not explain the grotesque shapes of districts in the Bay Area or San Diego. When the intent of incumbents Dornan and Goldwater to run for higher office became publicly known does not alter the fact that their districts were eliminated. He quotes Cain’s article to reinforce his contention that incumbent displacement is a



“key tool” in contemporary partisan gerrymandering. He quotes *Congressional Quarterly* and *California Journal* to remind the court, the press and public that the *Badham* “plaintiffs were certainly not alone in labeling [the Burton plans] as partisan gerrymanders.”<sup>50</sup>

Grofman aligns himself with Justice Stevens in affirming that “political gerrymandering cases should be heard on their merits only if a clear prima facie showing of political gerrymandering has been made. Once [it]...has been shown...the burden of proof shifts to the state to justify its districting in neutral terms. ...this does not require the Court to make judgments more complex than in other redistricting or vote dilution challenges”<sup>51</sup> Courts can now treat partisan gerrymandering as justiciable because (1) “political scientists...have a much more quantitatively precise approach to measuring political gerrymandering than was true earlier” and (2) ...“reliance on an equal population standard provides no guarantee of fair and effective representation.”<sup>52</sup> Cain’s suggestion that “social science is limited in its capacity to predict” election outcomes does not change the fact that districting plans “can alter the odds of a party winning a particular district.”<sup>53</sup> Congressional incumbents rarely lose.

He says Burton I and Burton II are identical in partisan impact save for “minor improvements to further lock-in the present incumbents... Nowhere is there any rebuttal of” the data offered to prove this assertion. In CD 38, a marginal seat was made safer for the Democrat incumbent while in adjoining CD 42 the Republican incumbent “was given more Republicans (which he didn't need).”<sup>54</sup> The courts have accepted predictions of future election outcomes based upon the distribution of black/Hispanic registration and previous election outcomes. “The issues are directly analogous for partisan gerrymandering.”

Grofman says his errors in reporting Bosco’s 1982 vote in CD 1, or the number of cities split in Burton II, do not affect his conclusions. Cain’s assertion that Grofman erred in saying “that there were fewer seats in the competitive ranges under the Burton plans than there had been in 1980” is belied in Figure 7 of his own APSR article.<sup>55</sup> That same article contains a statement saying “the distribution has been changed some, by movement to the extremes on both sides of

the distribution.”<sup>56</sup> Even if one accepts “Cain's own 45-55 percent Democratic registration figure as the correct competitive range, there are nearly twice as many ‘competitive’ seats in 1980 as in 1982.”<sup>57</sup>

Grofman again goes to Figure 15.7 of Cain’s APSR article to refute Cain’s statement that “the notion that there are only 6 competitive districts in the [Burton] plans is so ludicrous as to almost not require refutation.” He quotes a lengthy passage from the *APSR* article to prove as “quite disingenuous” a Cain statement claiming only two Republican incumbents were “really disadvantaged by redistricting.”<sup>58</sup> To a Cain assertion that his (Cain’s) research “revealed five Democratic incumbents whose districts were weakened significantly”<sup>59</sup> Grofman quotes the *APSR* article to remind us that these were the “martyr” who even after being “weakened” still maintained win probabilities from 95 to 100 percent.

Addressing a few “Minor Points,” Grofman counters an allegation “by defense reply briefs” that he and Professor Baker “hold opposing views on what constitutes a gerrymander” by pointing out that they “are planning to co-author a research article on gerrymandering because we share common views.”<sup>60</sup> He dismisses Cain’s references to districts in Idaho and Utah as “irrelevant” because what applies to states with 2- and 3-member congressional delegations does not hold for states with 40+ delegations. Similarly, what holds for Great Britain, a state with three major parties and a plurality electoral system, is irrelevant to the U.S. A change in a footnote is needed to correct a small error concerning the residence of Rep. Dreier. A clarification is needed regarding the “difference between marginal outcomes and competitive seats.” It is not improper to label voters as Republican voters if they vote for the Republican congressional candidates.<sup>61</sup> Cain’s suggestion that “the restriction of the issue of political gerrymandering to political parties is not manageable because of the problem of defining fairness to minor parties...[is] a chimera.” Cain has apparently misread the data in Baker’s declaration in attributing 17 city splits to the 1973 Masters’ plan.<sup>62</sup> Grofman concludes his second declaration:

“There is clear and un-rebutted prima facie evidence that AB2X and AB 301 are partisan political gerrymanders. If fair and effective representation through the electoral process is to be assured, then the issue of egregious political gerrymandering in AB2X and AB301 must be addressed by this court.”<sup>63</sup>

### *Kousser's Findings*

We have attempted to give an accurate condensation of the Cain/Grofman debate and to refrain from offering our own views on who is right. Since the case never went to trial, we don't have the benefit of knowing what facts would have been established and what assertions discredited when these experts were subjected to direct and cross-examination by the attorneys for the two sides. Before we embark on our own analysis we need to look at one more study of the Burton plans that appeared after the foregoing declarations were submitted. This study was performed by Professor Morgan Kousser of the Department of Political Science, California Polytechnic Institute, Pasadena, and appeared in another Grofman-edited anthology, *Race and Redistricting*, published in 1992. Kousser asks “How true were Republican claims that the reapportionment cost them six or more seats in Congress and that it ‘preordain[ed] election results for a decade’?”<sup>64</sup> He looks at three lines of analysis that might answer these questions.

**First** are the re-aggregations performed by *Congressional Quarterly*<sup>65</sup> of earlier congressional elections within the boundaries of the districts established by the Burton plans. Table 15.5 summarizes those for the elections of 1976, 1978 and 1980. If the 1976 vote is aggregated among the 1981 (Burton 1) districts we see the Democrats would have won 31 seats, or 68.9 percent, and would have done 1.5 percent better than they actually did under the 1973 lines. When the 1978 vote is aggregated by the Burton lines we see the Democrats winning 26 seats under either configuration but achieving a lower percentage of seats (by 2.7 percent) under the Burton lines, because the total number of seats increased from 43 to 45. When the 1980 vote is aggregated by the Burton lines we see the Democrats winning only 21 seats (46.7 percent) under the Burton lines which is 4.5 percent less than they did in winning 22 seats under the 1973 lines.

Neither side in this controversy has attacked the 1973 Masters' plan as a partisan gerrymander. Yet, by this line of reasoning, either the 1973 Masters' plan was a pro-Democrat gerrymander or Burton 1 was not.

An inherent difficulty with this line of analysis is the lumping together of votes for what may be strong candidates of a party in a previous election with those for what may be weak candidates of the same party in the same previous election to arrive at a projected vote in a new district. For instance, CD 23 of Burton 1 is comprised mostly of territory from CD 23 of the 1973 Masters' plan in which incumbent Democrat Tony Beilenson in 1980 received 63.2 percent. But a significant fraction of the new CD 23 comes from former CD 20 in which a weak Democrat, Matt Miller received only 17.0 percent in challenging incumbent Barry Goldwater, Jr. Lumping these votes will under-estimate the Democratic candidate's vote in CD 23 in 1982. The difficulty is compounded if one of the major parties doesn't field a candidate in such an election because we then must impute votes for that party in that district—or perform some other form of guesswork.

Fortunately, the major parties both put up candidates in all districts in 1980. But in 1978 each of them failed to nominate a candidate in one district; and in 1976 Republicans failed to nominate a candidate in CD 31. Finally, in aggregating the votes for incumbent congresspersons to determine the propensity of voters in a district to support candidates of a given party we may be getting a measure of the popularity of those congresspersons rather than the propensity of voters in that district to favor candidates of the incumbent's party. That is the reason we opted for using the vote for statewide candidates (See Rule No. 2) in crafting a political index in Chapter 9.

Kousser's **second line** of analysis is more sophisticated. In a previously written paper he presents a pair of Ordinary Least Squares equations that regress voting percentages on major party registration percentages.<sup>65</sup> Given the Democratic and Republican percentages of total registration for a congressional district, these equations can predict the winner of a future election in that district 91.6 percent of the time. He develops separate equations to predict California

Democratic and Republican congressional vote percentages for thirteen elections covering the period 1970-1994. For example, the equation predicting the Democratic vote in any CD in 1982 is:

$$\text{Demo. \%} = 0.92 + 0.001(\% \text{Dreg}) - 0.014(\% \text{Rreg}) \quad [15.1]$$

Because the independent variables are party registration percentages for the year in which the prediction is sought, and presumably reflect the fluctuations in party preference over time, Kousser makes no correction for partisan swing—as we do in applying our Democratic Index. He also tested his equations to see if they performed better when other explanatory variables—such as incumbency and socioeconomic factors—were incorporated. The testing revealed that inclusion of incumbency improved performance of his equations, but only by a little bit. Inclusion of eleven socioeconomic variables had no measurable effect.

With these equations Kousser is able to make seats-votes comparisons for all the elections held under the Burton plans and, therefore, to make judgments on the “fairness” of those plans and/or any other plans in need of evaluation. For instance, if the 1982 relationship between party registration and general election voting behavior is that stated in Equation 15.1, then plugging in the 1980 Democratic and Republican registration percentages for the 43 districts in the 1973 Masters’ plan would enable us to predict the winner in each of those districts. When Kousser did these calculations he discovered that Democrats would have won 27 of the 43 seats (62.2 percent) that year, instead of the 22 (51.1 percent) they actually won. If the 1980 electoral “behavioral pattern” had obtained in the 1982 Burton 1 districts Democrats would have won 26 of 45 seats, or 57.8 percent. “Applying this percentage to the 43 districts the State had in the 1970s gives 24.8 seats, or 25 rounded off.” Since Democrats actually won 22 seats that year “the 1982 Burton 1 boundaries seem to have gained the Democrats at most three seats.”<sup>66</sup> By similar reasoning Kousser concludes that if the 1980 electoral “behavioral pattern” had obtained in the 1984 Burton 2 districts Democrats would have won 22 of 45 seats.

Kousser's **third line** of analysis is to compute registration differentials for Burton 1 and the 1973 Masters' plan by subtracting the Republican from the Democratic registration in each district, ordering each series from the most Republican to the most Democratic district, and then graphing one plan against the other. The registration differentials vary from -16 (Republican) to about +62 (Democrat). Experience shows that for a Democrat to have an even chance of winning the district should have a 15-20 percent pro-Democrat registration edge. Crafting a pro-Democrat districting plan by packing Republicans in a few overwhelmingly Republican districts should "pull down" the left-hand side of the curve. We see that such is indeed the case with Burton 1: its twelve most Republican districts all plot well below their corresponding districts in the Masters' plan and indicate a wastage of Republican votes. A pro-Democrat plan ought to "pull down" the right-hand side of the curve and we see that this also the case: its eight most Democratic districts all fall well below their corresponding districts in the Masters' plan, indicating a smaller wastage of Democratic votes than occurs under the Masters' plan. This analytical technique, while graphically effective, does not provide us with data that enable a "bright line" to be drawn that separates unavoidable bias from unacceptable bias. All we can say is that the 1973 Masters' plan has less partisan bias than Burton 1. Before we proceed further with a political analysis of the plans at issue in this controversy we should review their physical characteristics.

## Notes

<sup>1</sup> Quinn. 1993. pg. 32.

<sup>2</sup> Kousser, J. Morgan. "Estimating the Partisan Consequences of Redistricting Plans-Simply." *Legislative Studies Quarterly*, Vol 21 (1996).

<sup>3</sup> Quinn, *Op cit* note 1 pg. 33.

<sup>4</sup> Sept. 1983, pg. 66.

<sup>5</sup> *Badham v. Eu*. 694 F.Supp. 664 (N.D.Cal. 1988), 667.

<sup>6</sup> *Ibid*.

<sup>7</sup> 488 U.S. 1024 (1989).

<sup>8</sup> *Maryland v. Virginia & New Jersey v. Delaware* 462 U.S. 725 , 743 (1983).

<sup>9</sup> Grofman, Bernard. Declaration in *Badham v. Eu*, *PS*, Vol. 18, No. 3 (Summer, 1985), pg. 27.

<sup>10</sup> This is the *Badham* plaintiffs' figure. Our calculation gives 1982 Democratic congressional candidates in California 50.82 percent of the aggregate statewide vote; 52.22 percent of the mean district vote. The difference is because in CDs 3 and 25, where Republicans failed to run candidates, we imputed 25 percent of the vote to them, rather than zero.

<sup>11</sup> Our data for the Burton-2 plan come from "California Maps and Statistics: 1986" published by the Rose Institute, Claremont McKenna College, Claremont, CA 91711.

<sup>12</sup> Grofman, Bernard. Declaration, *PS*, Vol. 18, No. 3 (Summer, 1985): 29.

<sup>13</sup> CD 27 has a Compactness Index (C.I.) of 15. The next least compact district of that plan, CD 2, has a C.I. of 23.

<sup>14</sup> Dornan's retirement wasn't all that "voluntary." The dismemberment of his long, ocean side district left him with the prospect of facing Democrat assemblyman Mel Levine in a district that had become strongly Democratic.

<sup>15</sup> Grofman, Bernard. Declaration, *PS*, Vol. 18, No. 3 (Summer, 1985): 12, 15-16.

<sup>16</sup> *Ibid*, pg. 12. His definition of "safe" seats on this page ("victory margins greater than 56 percent") implies that anything less than 56 percent would be marginal. Yet on page 8 "marginal" is defined as "a district that was won with less than 55 percent of the vote." What is a district won by more than 55, but less than 56 percent of the vote?

<sup>17</sup> They were (1980 "victory margins" in parentheses): Chappie (53.7), Fiedler (48.7), Dreier (51.8), Lowery (52.7) and Hunter (53.3).

<sup>18</sup> *Ibid*, pg. 8.

<sup>19</sup> *Ibid*, pg. 9.

<sup>20</sup> The other was law professor Paul McKaskle, a former poverty lawyer.

<sup>21</sup> Baker, Gordon. Declaration *PS*, Vol. 18, No. 3 (Summer, 1985): 555.

<sup>22</sup> Baker, Gordon. Declaration *PS*, Vol. 18, No. 3 (Summer, 1985): 556.

<sup>23</sup> Cain, Bruce. declaration *PS*, Vol. 18, No. 3 (Summer, 1985): 320-333.

<sup>24</sup> *Ibid*, pg. 321; Grofman declaration, pg. 9.

<sup>25</sup> This is the technique employed by Morgan Kousser which we will consider shortly.

<sup>26</sup> Cain, Bruce. Declaration. *PS*, Vol. 18, No. 3 (Summer, 1985): 324.

<sup>27</sup> Cain and Grofman also differ on their use of registration figures. Cain simply gives the 1980 vs, 1982 registration figures for each man (for Burton 52.5 to 57.5, a gain of 5.0 percent). Grofman employs *Change in Registration Edge* which, in this case, is +9.3 percent.

<sup>28</sup> *Ibid*. pp. 324-325.

<sup>29</sup> *Ibid*. pg. 325.

<sup>30</sup> *Ibid*. pg.328 (Figure 2).

<sup>31</sup> *Ibid*. pg.325.

<sup>32</sup> *Ibid*. pg. 331.

<sup>33</sup> Cain, Bruce. Declaration, *PS*, Vol. 18, No. 3 (Summer, 1985): 562.

<sup>34</sup> Cain, Bruce. Declaration, *PS*, Vol. 18, No. 3 (Summer, 1985): 563.

<sup>35</sup> See Table 19.4. In 1976 the differential between Democrat aggregate statewide vote share (56.14 percent) and seats (67.44 percent) was 11.30 percent.

<sup>36</sup> Cain, Bruce. Declaration, *PS*, Vol. 18, No. 3 (Summer, 1985): 565.

<sup>37</sup> *Ibid*.

<sup>38</sup> *Ibid*. pg. 566.

<sup>39</sup> *Ibid*.

<sup>40</sup> *Ibid*. pg. 567.

<sup>41</sup> Polsby, Nelson. Declaration, *PS*, Vol. 18, No. 3 (Summer, 1985): 568.

<sup>42</sup> *Ibid*.

<sup>43</sup> *Ibid*.

<sup>44</sup> *Ibid*.

<sup>45</sup> *Ibid*. pg. 569.

<sup>46</sup> *Ibid*. pg. 570.

<sup>47</sup> *Ibid*. pg. 572.

<sup>48</sup> Cain, Bruce. Declaration *PS*, Vol. 18, No. 3 (Summer, 1985): 330-331.

<sup>49</sup> Grofman, Bernard. Declaration, *PS*, Vol. 18, No. 3 (Summer, 1985): 3.

<sup>50</sup> *Ibid*. pg. 5.

<sup>51</sup> *Ibid*. pg. 6.

<sup>52</sup> *Ibid*. pg.7.

<sup>53</sup> *Ibid*. pg. 8; Cain, Bruce. Declaration *PS*, Vol. 18, No. 3 (Summer, 1985): 331.

<sup>54</sup> *Ibid*. pg. 10.

<sup>55</sup> *Ibid*. pg. 11; Cain's Figure 7 is a pair of histograms that show that post-1980, in 4 (out of 43) districts a Democrat had more than a 20 percent chance, and less than a 80 percent chance of winning Post-1982 there was only one (out of 45) such districts.

<sup>56</sup> *Ibid*. pg. 12; Cain, Bruce. Declaration, *PS*, Vol. 18, No. 3 (Summer, 1985): 330.

<sup>57</sup> *Ibid*.

<sup>58</sup> *Ibid*. pg.13-14.

<sup>59</sup> *Ibid*. pg. 15.

<sup>60</sup> *Ibid*. pg. 16.

<sup>61</sup> *Ibid*. pg. 17.

<sup>62</sup> *Ibid*. pg. 18.

<sup>63</sup> *Ibid*. pg. 19.

<sup>64</sup> Kousser, J. Morgan. "Estimating the Partisan Consequences of Redistricting Plans Simply," *Legislative Studies Quarterly* 21 (1996): 159.

<sup>65</sup> "California Redistricting." CQ Weekly (1983): 33-85.

<sup>66</sup> Kousser, J. Morgan. "Estimating the Partisan Consequences of Redistricting Plans-Simply." Legislative Studies Quarterly, Vol 21 (1996).

<sup>67</sup> Ibid.



## Chapter 16

### Physical Characteristics of the Masters', Burton, Halliwell and Morrill Plans

#### *The Halliwell Plans*

A *Los Angeles Times* writer described Michael J. Halliwell as “the unbuttoned academic type.” A sociology professor at Long Beach State University and a Republican, he had run for state senator in 1970. This experience sensitized him to the importance of districting. “It makes it harder for the challenger if a district is not compact. . . There is no sense of community in the district,”<sup>1</sup> he said. When the unveiling of Burton I shifted the California 1980s redistricting struggle into high gear, Halliwell was ready to jump in with both feet. Acting as his own lawyer (a “Plaintiff in Propria Persona”), he prepared a brief for presentation to the California Supreme Court.

Attached to that brief was a list of “minimal modifications to A.B. 301...to provide constitutional congressional districts in time for the June, 1982 primary.” He asserted that serious computational errors had caused some districts in the plan to have much greater population deviations than its sponsors claimed; and that it violated Article XXI of the California constitution in having “several” noncontiguous districts and in its excessive fragmentation of cities. As a stopgap measure, he crafted modifications (which we will call the Halliwell Revision) addressing these deficiencies, and submitted them to the Court. Then, while the Court deliberated over what plans should be used for the 1982 elections, Halliwell went to work on a whole new plan which he believed ought to be the 1980s plan for California’s congressional districts. With assistance from the Rose Institute at Claremont-McKenna College, Halliwell put together this second plan, which became known as the Halliwell Model. Presumably an impartially drawn plan, it was unveiled at the Rose Institute in the winter of 1981-82. We include it in our analysis.

### *The Morrill Plans*

In their struggle to overturn the Burton plans, Republican leaders were not content to have the Halliwell Model as their only impartially drawn alternative. Their attempts to defeat Burton at the ballot box having all failed so far, they were following the *Bandemer* litigation closely and still had hopes of winning in the courtroom with *Badham*. In the fall/winter of 1985-86, as they awaited the High Court's decision in *Bandemer*, they engaged Richard Morrill, a geographer at the University of Washington who had served as a court-appointed master in several redistricting cases in the 1970s. With the resources of the Rose Institute at his disposal and using counties and census tracts as his building blocks, Morrill drew from one to eleven versions of each of California's 45 CDs producing a total of 205 individual districts. These individual districts could be aggregated into 54 separate plans.<sup>2</sup> When he sent the detailed descriptions of his districts to the Republican National Committee, Morrill requested "the total Democratic and Republican vote for Congress by these districts for the 1980 and 1984 elections, as well as the 1982 elections..."<sup>3</sup> He also warned that "the above hypothetical districts were created from census tracts, without much regard to whether city lines were cut." But this was no major problem because "...the purpose here...is to find out what the political balance would be under a variety of plans that were drawn disregarding political return of information." If "some of the combinations...look like pretty nice schemes..." then Morrill could fine-tune them to reduce population deviations and city fragmentation.

Morrill never received the election data he sought, and so his district descriptions remained buried in a filing cabinet until he received our inquiry. California had no Norman Primus to conduct a public competition to generate a bunch of citizen plans but thanks to Morrill, Halliwell and the Rose Institute we are able to compare the Burton plans with plans crafted by people who ostensibly had no ax to grind. We turn first to the criterion of population Equality.

b  
Table 10.1

CALIFORNIA CONGRESSIONAL: 1980 POPULATIONS AND COMPACTNESS INDICES (C.I.)  
OF 1981 (BURTON I) DISTRICTS

(1) District	(2) Population	(3) Deviation	(4) Percent	(5) C.I.	(1) District	(2) Population	(3) Deviation	(4) Percent	(5) C.I.	
1	526,358	+ 405		17*	24	525,909	- 44		26	
2	526,015	+ 62		17	25	525,411	- 542		16	
3	525,784	- 169		36	26	526,118	+ 165		5	
4	525,754	- 199		21	27	525,758	- 195		6	
5	525,914	- 39		40	28	525,682	- 271		17	
6	525,724	- 229		17	29	525,795	- 158		22	
7	525,334	- 619		24	30	524,883	- 1,070		9	
8	525,927	- 26		11	31	526,129	+ 176		18	
9	524,649	- 1,304		19	32	527,814	+ 1,861		8	
10	527,278	+ 1,325		21	33	526,296	+ 343		13	
11	525,102	- 851		17	34	526,321	+ 368		9	
12	525,271	- 682		10	35	526,398	+ 445		33	
13	526,579	+ 626		13	36	528,091	+ 2,138	0.40655	9	
14	525,893	- 60		21	37	524,963	- 990		37	
15	525,888	- 65		21	38	525,560	- 393		17	
16	525,893	- 60		24	39	526,004	+ 51		36	
17	524,790	- 1,163		20	40	525,521	- 432		21	
18	527,348	+ 1,395		11	41	526,012	+ 59		15	
19	526,068	+ 115		27	42	524,346	- 1,607	0.30555	10	
20	525,894	- 59		14	43	528,086	+ 2,133		29	
21	524,977	- 976		10	44	525,886	- 67		12	
22	526,566	+ 613		11	45	525,906	- 47		31	
23	526,007	+ 54		10	Mean = 18.5					
						Total: 23,667,902				

\*Source: Hofeller and Grofman, 1990

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Table 1.2  
CALIFORNIA CONGRESSIONAL: 1980 POPULATIONS AND COMPACTNESS INDICES (C.I.)  
OF 1983 (BURTON II) DISTRICTS

(1) District	(2) Population	(3) Deviation	(4) Percent	(5) C.I.	(1) District	(2) Population	(3) Deviation	(4) Percent	(5) C.I.
1	525,986	+ 33		17*	24	525,918	- 35		29
2	526,009	+ 56		29	25	526,013	+ 60		19
3	525,774	- 179		39	26	525,995	+ 42		9
4	525,764	- 189		22	27	525,929	- 24		6
5	525,971	+ 18		39	28	525,993	+ 40		24
6	526,020	+ 67		26	29	525,938	- 15		19
7	525,990	+ 37		30	30	526,018	+ 65		11
8	525,646	- 307		16	31	525,939	- 14		16
9	526,234	+ 281		24	32	525,922	- 31		8
10	525,882	- 71		30	33	525,348	- 605	0.115	17
11	525,981	+ 28		24	34	526,665	+ 712	0.135	10
12	525,731	- 222		14	35	525,956	+ 3		38
13	526,281	+ 328		17	36	525,987	+ 34		11
14	526,030	+ 77		21	37	525,938	- 15		38
15	525,949	- 4		23	38	525,919	- 34		9
16	526,120	+ 167		19	39	525,858	- 95		27
17	526,033	+ 80		29	40	525,935	- 18		24
18	525,990	+ 37		13	41	526,043	+ 90		18
19	526,032	+ 79		27	42	525,909	- 44		8
20	525,750	- 203		17	43	525,956	+ 3		29
21	525,880	- 73		10	44	525,868	- 85		12
22	525,939	- 14		14	45	525,927	- 26		33
23	525,936	- 17		7	Mean = 20.5				
					Total: 23,667,902				

\*Source: Hofeller and Grofman. 1990.

### *Population Equality*

Since all the plans under consideration here were drawn with whole counties and census tracts, we did not have the problem we had in Indiana where some urban districts were described in terms of wards and precincts whose populations were not known to us. We did not attempt to verify the reported populations in the Burton plans. If populations of some districts are not as reported, the mapmakers certainly could have made the necessary corrections without altering the political character of these plans. We report these populations mainly because we need them as a bench mark against which to compare the deviations in the Halliwell and Morrill plans.

Individual district populations and deviations for Burton I are given in Table 16.1 and summarized in Column (2) of Table 16.3. We note the maximum deviations of +2,138 (CD 36) and -1,607 (CD 42) are each less than one-half of one percent. Given that the census undercount is typically on the order of one to two percent, one cannot fault these deviations. Individual district populations and deviations for Burton II are given in Table 16.2 and are also summarized in Table 16.3. Here we see even smaller deviations with maximums of -605 (CD 33) and +712 (CD 34). The Halliwell Model had maximum deviations of +5,921 (CD 42) and -5,746 (CD 34). As shown in Table 16.3, these deviations translate into percentages of +1.13 and -1.09.

We did not attempt to compute population totals for the 54 possible Morrill plans but, instead, chose five plans (one each from series A, B, C, D and E) that appeared to provide a good sample of the entire array. Table 16.3 shows these plans all had deviations close to one percent. In summary, the population deviations of these California plans are unremarkable.

### *Fragmentation of Local Governmental Units*

Table 16.3 summarizes the fragmentation of counties and cities for the California plans under scrutiny. Unlike the plans we looked at in the Indiana study, the population deviations of these plans are all on the order of about one percent. This enables us to get better comparability when we judge them. In the *PS* mini-symposium Grofman and Cain had a minor clash over the

Table 17.3

FRAGMENTATION OF GOVERNMENTAL UNITS: CALIFORNIA CONGRESSIONAL DISTRICTING PLANS

(1)	(2) Population Deviation	COUNTIES		CITIES	
		(3) Number Split	(4) Number of Fragments	(5) Number Split	(6) Number of Fragments
<u>Impartially-Drawn Plans</u>					
1973 Master's (43 districts)	+ 64.78% - 16.48%	17	60	38	86
1982 Halliwell Revision of Burton I (45 districts)	+ 0.095 % - 0.060 %	19	62	12	37
1981 Halliwell Model (45 districts)	+ 1.13% - 1.04%	19	63	9	32
1985 Morrill Aa (45 districts)	+ 0.90% - 0.74%	18	61	54	125
1985 Morrill Ba	+ 1.12% - 1.08%	18	60		
1985 Morrill Ca	+ 1.12% - 1.08%	18	61		
1985 Morrill Da	+ 1.12% - 0.77%	18	60		
1985 Morrill Ea	+ 0.90% - 0.76%	16	57		
<u>Democrats' Plans</u>					
1981 State of California (Burton I)(45 districts)	+ 0.4065% - 0.3055%	19	63	38	89
1983 State of California (Burton II)(45 districts)	+ 0.135 % - 0.115 %	22	68	33	77

number of city splits Gordon Baker attributed to the 1973 Masters' plan—Grofman claiming 11 and Cain claiming 17. Baker had said there were 11 splits of cities *under 250,000* population. In a footnote he adds there were seven cities over 250,000<sup>4</sup> (all of them split in the Masters' plan). That would make the total 18. However, when we examined the maps we counted 38 incorporated cities split to one degree or another in this plan.<sup>5</sup> These 38 splits generated 86 city fragments.

There is no controversy over the number of county splits. The 1973 Masters' has about the fewest but it also contains two fewer districts. Halliwell and Burton I each have 19 splits. The Morrill plans, excepting the "E" series, all have 18 splits. Burton II has the most with 22.

We may have a rigorous definition of what constitutes a city split but we try to apply it consistently. Halliwell also has a rigorous definition and when he applied it to Burton I, he came up with 32 splits, excluding the four largest cities. We add Ontario and Burlingame to make the total 38 splits generating 89 city fragments for this plan. We had to do Burton II by ourselves, so

a thorough checking might come up with more than our 33 city splits producing 77 city fragments. As Morrill said in his letter to Hofeller, he wasn't trying to submit a finished product. The object was to generate a good number of impartially drawn plans to ascertain the political implications of adopting a "politics-blind" configuration. Once one-or-more of "rough" plans had been selected it could be fine-tuned to eliminate unnecessary city splits without significantly altering its political character.

We performed the drudgery of counting the city fragments in one of Morrill's plans in order to get an idea of how badly his "rough" plans may have been fragmented. Table 16.4 shows that his Plan Aa split 54 cities generating 125 city fragments. Therefore, we might expect to find something on that order were we to examine his other 53 plans. Halliwell, on the other hand, was striving for a finished product. He eliminated every city split he could and ended up splitting only 9 cities generating 32 city fragments. Four of those cities were larger than a CD and had to be split.

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Table 16.4

COMPACTNESS MEASURES: CALIFORNIA CONGRESSIONAL DISTRICTING PLANS

Impartially-drawn Plans	Average for Plan*	Minimum (Least Compact) District*	Average Plus Minimum*
1973 Special Masters'†	38	15 (CD 27)	53
1981 Halliwell Model	41.0	14.9 (CD 36)	55.9
1985 Morrill Aa	38.1	20.7 (CD 5)	58.8
" " Ab	38.4	20.7 (CD 5)	59.1
" " Ac	39.9	21.5 (CD 11)	61.4
1985 Morrill Ba	38.6	25.2 (CD 27)	63.8
" " Bb	37.0	25.6 (CD 27)	62.6
1985 Morrill Ca	37.1	23.8 (CD 8)	60.9
" " Cb	37.7	23.8 (CD 8)	61.5
" " Cc	36.9	23.8 (CD 8)	60.7
1985 Morrill Da	38.4	21.5 (CD 5)	59.9
" " Db	40.0	24.9 (CD 22)	64.9
1985 Morrill Ea	38.8	20.6 (CD 5)	59.4
" " Eb	38.3	20.6 (CD 5)	58.9
" " Ec	38.5	20.6 (CD 5)	59.1
<u>Democrats' Plans</u>			
1981 State of California† (Burton I)	16 <sup>8.5</sup>	5 (CD 26)	21 <sup>3.5</sup>
1983 State of California† (Burton II)	20	6 (CD 27)	26

\*Computed according to the Goedicke Compactness Index (C.I.) whereby  $C.I. = 1257 A / P^2$   
[A = area of district in units of square measure and P = perimeter of district in the same units of linear measure.]  
†Source: Hofeller and Grofman, (1990)

## *Compactness*

In Chapter 7 we stated our reasons for choosing the Goedicke Compactness Index as our tool for measuring district compactness in this study. We also asserted that the sum of the average and minimum indices “gives the best overall indicator of the compactness of the plan.” Niemi et al. employed two additional measures in their study of the Masters’ and Burton plans, but we shall not report the values given by these measures because they are not available for the Halliwell and Morrill plans. Comparing all the plans on the basis of their average compactness values using the Goedicke measure, we find Halliwell leading the pack with a score of 41.0. The 1973 Masters’ score of 38 falls in the middle of the 13 Morrill plans with Goedicke scores ranging from 36.9 to 40.0. But all of these plans run far ahead of Burton I’s score of 16 and Burton II’s score of 20.

Comparing all the plans on the basis of their minimum compactness values using the Goedicke measure, we find the Morrill plans, with minimum compactness scores ranging from 20.6 to 25.6, in the lead. Then come the 1973 Masters’ and Halliwell plans with their minimum indices of 15 and 14.9. Trailing far behind are the Burton plans with their scores of 5 and 6. When we compare the plans on the basis of their average + minimum scores we find, once again, that the Morrill plans, with scores ranging from 58.8 to 64.9, dominate. Next comes Halliwell with 55.9; then 1973 Masters’ with 53; and again the Burton plans with their scores of 21 and 26, are far in the rear.

Halliwell’s plan would have beaten most of the Morrill plans on the basis of highest minimum compactness were it not for the low score of its CD 36 (14.9), because the next least compact district in that plan (CD 6) has a C.I. of 24.7—which is higher than the minimums of all the Morrill plans listed save the “B” series and Plan Dd. To find out why Halliwell’s CD 36 was an outlier, we look at the map and discover that Halliwell’s desire to avoid fragmenting the cities of San Bernardino, Redlands and Colton led him to draw a very jagged boundary on the east side



of CD 36. Since neither the Halliwell nor the Morrill plans were drawn to best satisfy an agreed-upon set of objective criteria, we assume in this case that Halliwell chose to sacrifice compactness in order to avoid more fragmentation.

### *Distribution of Minority Populations*

*Black Representation.* In California there are two minority groups whose numbers and geographical concentration make them capable of achieving majority status in a congressional district of 525,000: African-Americans and Hispanics. In Table 16.5 we report the African-American populations and percentages of congressional districts situated in counties where that population is sufficient to constitute 10 percent of a CD. The Masters', Burton and Halliwell plans were all drawn in full awareness of what impact they might have upon minorities. California had a 1980 black population of 7.7 percent, so to achieve proportional representation by race would require 3.46 black congresspersons.

The 1973 Masters' plan created two districts in Los Angeles County with just about 50 percent black populations: CDs 28 and 29. Their black incumbents Burke and Hawkins had no difficulty being re-elected in 1974 with 80+ percent of the vote. The Masters created a third Los Angeles County CD of 36 percent black population and in 1980 it elected black Rep. Mervyn Dymally for the first time with 64 percent of the vote. In CD 8 in Alameda County, black Rep. Ron Dellums continued to be re-elected from a district whose black population was 24 percent.

When it came time for the 1981 redistricting, all Burton's people had to do was give each of these incumbents a high carryover and California would continue to have more-than-proportional representation by race in the national Congress. The lowest carryover of the four black incumbents was Julian Dixon's (CD 28) 75.6 percent.

Table 16.5

CALIFORNIA CONGRESSIONAL: AFRICAN-AMERICAN# POPULATIONS AND PERCENTAGES OF DISTRICTS  
IN COUNTIES HAVING SUFFICIENT POPULATIONS TO CONSTITUTE 10% OF A DISTRICT UNDER DIFFERENT PLANS

	Los Angeles Co.		Alameda Co.		San Diego Co.		San Francisco Co.		Contra Costa Co.	
	District, Population	%	District, Population	%	District, Population	%	District, Population	%	District, Population	%
<b>Ceiling:</b> *	943,968	179.5	202,973	38.6	104,104	19.8	82,630	15.7	60,075	11.4
<b>Impartially-drawn Plans</b>										
1973 Masters' 1	28 236,907	50.5	8 105,356	24.0	42 70,141	12.8	6 54,237	12.3	7 57,314	10.3
(1)†	29 239,578	49.1	9 88,561	18.7			5 37,776	8.1		
	31 168,685	36.4								
	32 66,606	14.0								
1983 Halliwell Model	28 280,777	53.3	8 177,150	33.7	44 65,886	12.5	5 73,515	14.0		
(2)	31 279,127	53.1								
	27 91,140	17.3								
1985 Morrill Aa	29 313,624	59.9	8 172,442	32.7	42 45,072	8.6	6 53,518	10.1	7 26,755	5.1
(2)	31 322,018	66.1	9 69,256	13.2						
1985 Morrill Ba	29 314,388	60.0	8 147,995	28.0	42 45,072	8.6	6 83,089	15.6	7 26,193	5.0
(2)	31 322,018	66.1	9 92,307	17.6						
1985 Morrill Ca	29 313,624	59.9	8 142,691	27.2	42 45,072	8.6	6 83,089	15.6	7 28,534	5.4
(2)	31 322,018	66.1	9 96,294	18.3						
<b>Political Plans</b>										
1981 State of California (Burton I)	29† 245,223	46.6	8† 139,571	26.5	44 74,692	14.2	6 72,107	13.7	7 56,924	10.8
(0)	28† 226,159	43.0	9 60,917	11.6			5 41,907	8.0		
	31† 177,319	33.7								
	27 55,532	10.6								
1983 State of California (Burton II)	29† 263,190	50.0	8† 139,730	26.6	44 73,400	14.0	5 56,892	10.8	7 56,929	10.8
(1)	28† 202,809	38.6	9 60,908	11.6			6 51,007	9.7		
	31† 177,923	33.8								
	27 57,636	11.0								
1983 Sebastiani	26 245,173	46.6	8 166,541	31.7	44 65,829	12.5	5 79,100	15.1	7 16,384	3.1
	28 242,486	46.1	9 73,259	13.9						
	32 207,981	39.6								

\*If all African-Americans in the county could be put in a single district of population of 525,953 #Statewide percent of total persons = 7.7  
 †Number of majority-minority districts in plan.  
 ‡African-American member elected from this district throughout the 1980s.

1 Source: U.S. Census Bureau. 1981. Table 2, page 5

As shown In Table 16.5, Halliwell created two L.A. County districts with 53 percent black populations and a third with 17 percent. In Alameda County, he drew a CD 8 having a black population of 33.7 percent. The Morrill plans were truly color-blind. In general, they created two districts with Black populations exceeding 50 percent in L.A. County and a single district having black populations ranging between 27.2 and 32.7 percent in Alameda County.

*Hispanic Representation.* In 1980 California had a Hispanic population of 19.2 percent, so achieving proportional representation for this ethnic group would require 8.64 Hispanic congresspersons. In Table 16.6 we report the Hispanic populations and percentages for CDs situated in counties where that population is sufficient to constitute 25 percent of a CD. The 1973 Masters' plan created two districts in Los Angeles County with over 60 percent Hispanic populations: CDs 25 and 30. In 1974 Hispanic congressman Edward Roybal ran unopposed for re-election in CD 25. CD 30 continued to elect an Anglo until a special election in the summer of 1982 sent Matthew Martinez to Congress. The Burton plans solidified Roybal and Martinez with population carryovers of 82.8 and 64.7 percent, respectively. Burton's lieutenant Leroy Hardy carved out a third district that was "open" and had a 47 percent Hispanic population: CD 34. In November 1982 Roybal, Martinez and a newcomer, Esteban Torres (in CD 34), were elected with 85.5, 53.9 and 57.2 percent of the vote, respectively.

It is apparent that even when the map makers have discretion to manipulate district boundaries, it does not result in Hispanics winning 8- to-9 districts, as proportional representation by ethnicity would require. California's Hispanic population is just too spread out over the state. Halliwell, aware of what he was doing, drew districts of 40, 58, and 62 percent Hispanic population in L.A. County; and districts of from 21- to-27 percent Hispanic population in Orange, San Diego, Santa Clara, San Bernardino, and Fresno counties. To see what color-blind districting might lead to, we must again examine the Morrill plans. When we do so we find

Table 16.6

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**CALIFORNIA CONGRESSIONAL: HISPANIC POPULATIONS# AND PERCENTAGES OF DISTRICTS  
IN COUNTIES HAVING SUFFICIENT POPULATIONS TO CONSTITUTE 25% OF A DISTRICT UNDER DIFFERENT PLANS**

	Los Angeles Co.		Orange Co.		San Diego Co.		Santa Clara Co.		Imperial/Riverside/ San Bernardino Cos.		San Joaquin Valley	
	District, Population	%	District, Population	%	District, Population	%	District, Population	%	District, Population	%	District, Population	%
<b>Ceiling:</b> *	2,066,103	392.8	277,051	52.7	269,974	51.3	221,531	42.1	164,404	31.3	150,790	28.7
<b>Impartially-drawn Plans</b>												
<b>1973 Masters' (2)†</b>	25 373,241 30 314,709 29 191,229 21 146,766	71.1 62.4 39.2 30.0	38 130,280	24.5	42 147,989	26.9	10 146,120	24.9	36 123,149 35 129,140	22.0 21.2	17 163,877 15 145,018	27.0 25.1
<b>1983 Halliwell Model</b>	25 326,320 29 308,416 30 214,592 28 187,147 31 146,357	62.3 58.8 40.9 35.5 27.8	34 126,346	24.3	44 144,036	27.4	10 128,578	24.5	36 113,165	21.4	15 147,560 17 139,243	27.9 26.4
<b>1985 Morrill Aa</b>	21 137,341 22 224,986 25 369,851 30 349,002 33 149,405	26.2 42.8 70.3 66.5 28.2			42 139,323	26.5			37 134,470	25.6	17 140,871 18 132,076	26.8 25.2
<b>1985 Morrill Ba</b>	22 224,986 25 382,487 28 130,765 30 334,930 33 136,101	42.8 79.0 25.0 63.1 25.8			42 139,323	26.5			37 134,727	25.5	18 166,283	31.6
<b>1985 Morrill Ca</b>	21 136,620 22 223,292 25 376,551 30 346,598 33 136,799	25.8 42.6 71.4 65.8 25.9			42 139,323	26.5			37 136,104	25.8	18 175,120	33.5
<b>Political Plans</b>												
<b>1981 State of California (Burton I) (2)</b>	25† 334,168 30† 284,532 34† 250,298 29 169,739	63.6 54.2 47.6 32.3	38 137,499	26.2	44 137,023	26.1	10 147,394	28.0				
<b>1983 State of California (Burton II) (2)</b>	25† 332,862 30† 286,251 34† 249,778 29 192,059	63.3 54.4 47.4 36.5	38 149,578	28.4	44 141,823	27.0	10 147,361	28.0				
<b>1983 Sebastiani (3)</b>	24 140,060 25 312,119 28 141,174 29 345,722 30 300,097 32 133,742	26.6 59.4 26.9 65.8 57.1 25.5	38 134,917	25.7	41 44,341 42 45,335 44 141,369	8.4 8.6 26.9	10 151,413	28.8				

\*If all Hispanics in the county could be put in a single district of population of 525,953 #Statewide percent of total persons = 19.2  
†Number of majority-minority districts in plan. ‡Hispanic member elected from this district throughout the 1980s.

each plan with two CDs having Hispanic majority populations, a third CD with a 40+ percent Hispanic population, and 6- to-7 districts of 20- to-40 percent Hispanic population. Overall, they would appear to elect about the same number of Hispanic candidates, statewide, as do the Burton plans.

These observations conclude our physical analysis of the 1980s California congressional districting plans. We turn to a political analysis of them.

### Notes

<sup>1</sup> *Los Angeles Times*. November 23, 1981 pg. B1, Col. 1.

<sup>2</sup> In a letter to Tom Hofeller dated 26 December, 1985 Morrill states that these districts can be aggregated to create “as many as 68 different” plans. We are unable to come up with more than 54.

<sup>3</sup> *Ibid.*

<sup>4</sup> Baker, Gordon. Declaration *PS*, Vol. 18, No. 3 (Summer, 1985): 555.

<sup>5</sup> They are: *Oakland*, Hayward, Union City, Martinez, Fresno, *Los Angeles*, Pasadena, Inglewood, Redondo Beach, Torrance, Whittier, Pico Rivera, Baldwin Park, West Covina, Compton, *Long Beach*, Pomona, Santa Ana, Anaheim, Buena Park, Garden Grove, Huntington Beach, Perris, Folsom, *Sacramento*, Ontario, San Bernardino, Colton, *San Diego*, Oceanside, *San Francisco*, Redwood City, Menlo Park, Palo Alto, Cupertino, *San Jose*, Modesto, and Oxnard. (Cities over 250,000 *italicized*.) See U.S. Dept. of Commerce Bureau of the Census *Congressional District Atlas: Districts of the 94th Congress*. Districts Established Nov. 28, 1973.

## Chapter 17

### Analytical Tools: California

#### *Carryover Analysis*

In Chapter 9 we stated our need for a means of determining the carryover for each incumbent in the plan being analyzed and why we preferred to employ population carryover rather than voter carryover. We also emphasized that we would apply our measure to individual candidates rather than to districts—specifically to incumbents the mapmakers knew to be seeking re-election. With a quantified measure of carryover we were able to apply two of the indicators listed in Grofman's test for partisan gerrymandering to the Indiana house and senate plans in Chapter 13.

We also noted there were two ways of measuring population carryover: (1) as a percentage of the incumbent's old district that is carried over into his/her new district; (2) as a percentage of the incumbent's new district that is composed of population from his/her old district. We elected to employ measure (1) in those cases where the incumbent's old district had a smaller population than his/her new district and measure (2) in those cases where the incumbent's old district had a larger population than his/her new district. In California, the mean congressional district population increased from 464,443 in 1970 to 525,953 in 1980—an increase of 61,510 persons. Table 17.1 lists the 43 districts in the 1973 Master' plan with their 1980 populations.

As in the Indiana study, the major observation to be made in Table 17.1 is the significant difference in population gains/losses between the districts of Democrat incumbents and those of Republican incumbents. The average 1980 population of a Democrat incumbent congressperson's district (520,795) is about 60,000 less than that of a Republican incumbent congressperson. Note that the seven districts (overall rankings 1 through 7) which gained the most population during

7  
Table 1#1

California Congressional: 1980 Populations and Compactness Indices (C.I.) of 1973 (Masters') Districts

(1) District	(2) Party of Incumbent	(3) Population	(4) Rank	(5) C.I., Percent	(1) District	(2) Party of Incumbent	(3) Population	(4) Rank	(5) C.I., Percent
1	R	652,219	3	57*	23	D	464,582	39	50
2	R	622,027	7	23	24	D	539,132	22	52
3	D	585,264	14	53	25	D	524,997	24	49
4	D	581,198	15	30	26	R	469,700	35	29
5	D	467,013	38	34	27	R	463,584	40	15
6	D	441,257	42	49	28	D	469,346	36	38
7	D	555,306	20	30	29	D	488,347	30	58
8	D	439,310	43	30	30	D	504,331	27	30
9	D	474,611	32	29	31	D	463,513	41	32
10	D	586,818	13	25	32	D	474,215	33	39
11	D	498,238	28	42	33	R	521,986	25	25
12	R	472,813	34	44	34	R	475,676	31	35
13	D	618,770	8	33	35	R	610,041	10	45
14	R	634,726	6	33	36	D	559,239	19	48
15	D	578,062	16	41	37	R	650,999	4	72
16	D	612,618	9	35	38	D	531,321	23	29
17	R	605,220	11	37	39	R	592,845	12	52
18	R	572,865	17	32	40	R	774,539	2	39
19	R	565,413	18	35	41	R	509,713	26	31
20	R	640,635	5	37	42	R	549,981	21	34
21	R	489,475	29	42	43	R	866,687	1	37
22	R	467,466	37	38	Total = 23,666,098			Mean = 38.3	

Mean population of districts with Democratic incumbents = 520,795

Mean population of districts with Republican incumbents = 581,479

\*Source: Hofeller and Grofman. 1990.

-1,804

the decade are those of Republicans and that five of the six (overall rankings 38 through 43) districts which lost the most population during the decade are those of Democrats. To reach the new congressional district population of 525,953 over 86,000 must be added to CD 8 of Congressman Ron Dellums—even if 100 percent of his old district is carried over. On the other hand, a minimum of 340,000 must be removed from Congressman Claire Burgener's CD 43 to reach the new population. It is simply impossible for him to receive a 100 percent carryover of his old district.

Table 17.1 provides us with the first tool for a California gerrymander analysis by enabling us to compute each incumbent's population carryover.

### *Political Index*

As recounted in Chapter 9, our second analytical tool is a means of measuring the partisan character of the districts in the plans under scrutiny. To meet that need, we created a Democratic Index by observing eleven procedural rules that appeared to have merit. Observing Rule No. 1, we used previous election results, but did not rule out party registration because conditions peculiar to California might cause party registration to have more significance. Following Rule No. 2, we used a statewide contest rather than aggregations of district-wide contests. Following Rule No.3, we employed the most recent election possible: 1980. Following Rule No. 4, we used only the vote for major party candidates.

With respect to Rule No. 5 (use elections that reflect only partisan preferences and are free of idiosyncratic factors) we face the same problem we did in Indiana: there is no such election. So once again we are forced to correlate various statewide races, precinct-by-precinct, with open-district congressional races in the same election year and choose the race that has the smallest standard error and/or yields the highest coefficient of determination. As shown in Table 17.2, there were eight statewide elections in California immediately preceding the 1981-83 redistricting: six in 1978 and two in 1980. The vote in each of these elections had been



aggregated among California's 5,052 census tracts. With this database Kernell and Grofman were able to correlate the vote in each of these races with that in the other races, with party registration, and with the vote for congressional and state assembly candidates.<sup>1</sup> Table 17.3 is derived from their Table 15.1 by squaring the correlation coefficients in their matrix to give the coefficients of determination in our matrix.

A study of this matrix shows *r*-squared values ranging from 0.28 to 0.94. The nine entries less than 0.50 all involve either the Assembly or Congress. The three highest values of 0.94 all involve the comptroller's race. Except when matched up with the Assembly, party registration correlates strongly with most races. In our appraisal of Kousser's work we voiced our suspicion that the reason Assembly and Congress are the poorest correlations is the fact that the vote in these races is an aggregation of the votes of incumbents and challengers—strong candidates and weak candidates—and tends to reflect the popularity of individuals rather than propensity to vote for a party. We would expect races like comptroller and treasurer to be the strongest candidates for an index election.

But now we ran into a serious problem: the availability of data. Whatever race we use as the index race must be aggregated among the districts in the plans we are examining and these plans are all described in terms of census tracts (CTs). If we don't know the vote in these statewide races by CT, we can't use them to determine the political character of the plans. Because this investigation is being done more than two decades since the 1980s re-districting, a great part of the data that once was available is now destroyed or lost. The only 1980 election data now extant that is aggregated by CT is the vote for U.S. Senator and the figures for party registration. Kernell's Table 15.2 shows that vote for U.S. Senator has correlation coefficients of 0.89 with party registration and 0.79 with vote for congressional candidate. These correlations aren't the best, but they are good enough to make possible a credible investigation

1  
Table 10.2  
California: Statewide Percentages for Democratic Candidates  
in Elections Immediately Preceding 1981 Districting

		Major Party Vote	Total Vote
Governor (Brown)	1978	60.56	56.04
Lieutenant Governor (Dymally)	1978	45.60	43.28
Attorney General (Burke)	1978	45.10	43.45
Secretary of State (Eu)	1978	67.44	62.49
State Controller (Cory)	1978	64.85	60.49
State Treasurer (Unruh)	1978	62.43	58.69
President (Carter)	1980	40.53	35.91
U.S. Senator (Cranston)	1980	60.33	56.51

1  
Table 10.3  
California: Republican Statewide and District-wide Candidates: 1978  
Coefficients of Determination for Pairs of Races,  $r^2$

	Assembly	Congress	Governor	(Dem.) Governor	Lt. Sec'y. State	Comptroller	Treasurer	Attorney General
Republican Registration	.46	.64	.85	.55 <sup>3</sup>	.88	.94	.92	.77
Assembly		.42	.46	.28 <sup>3</sup>	.46	.45	.48	.46
Congress			.59	.36 <sup>3</sup>	.62	.62	.64	.56
Governor				.58 <sup>3</sup>	.86	.85	.85	.88
Lt. Governor (Demo.)					.53 <sup>3</sup>	.55 <sup>3</sup>	.55 <sup>3</sup>	.56 <sup>3</sup>
Secretary of State						.94	.88	.83
Comptroller							.94	.79
Treasurer								.79

17#

Table 17#  
Open-District Races for Congress in California, 1978 & 1980

A. 1978 Races

District	County(ies)	Candidates	Democratic Congressional Candidate %age <sup>1</sup>	Democratic Statewide Candidate %age Controllor <sup>2</sup> Treasurer <sup>3</sup>	Number of Pcts.
CD 3	Sacramento	Matsui (D) vs. Smoley (R)	55.56	67.96 66.66	528
CD 4	Colusa, Sacramento, Solano, Sutter, Yolo	Fazio (D) vs. Hime (R)	51.36	72.08 67.75	528
CD 15	Fresno, Madera, Marisposa, Merced, Stanislaus	Coehlo (D) vs. Patterakis (R)	60.78	71.91 66.26	512
CD 18	Inyo, Kern, Los Angeles, Tulare	Sogge (D) vs. Thomas (R)	41.10	63.43 60.05	471
CD 33	Los Angeles	Kazarian (D) vs. Grisham (R)	44.26	61.05 59.16	472
CD 37	Riverside, San Bernardino	Corcoran (D) vs. Lewis (R)	36.56	56.97 57.63	593
CD 39	Orange	Farris (D) vs. Dannemeyer (R)	36.48	52.04 48.76	661
B. 1980 Races					3,765
CD 31	Los Angeles	Dymally (D) vs. Girmshaw (R)	65.17	73.25	334
CD 41	San Diego	Wilson (D) vs. Lowery (R)	45.08	60.54	711
Total . . . . .					1,045

<sup>1</sup>Candidates' percentage of aggregate 1,078,497 votes in all 3,765 precincts was 46.60  
<sup>2</sup>Candidates' percentage of aggregate 1,011,743 votes in all 3,765 precincts was 62.90.  
<sup>3</sup>Candidates' percentage of aggregate 1,002,307 votes in all 3,765 precincts was 60.73.

Table 17.4 shows there were seven open-district congressional races in 1978 and two in 1980. We might have obtained some attractive correlations by matching the precinct vote for Comptroller and Treasurer against that for Congress in the 3,765 open-district precincts of 1978 but, as stated above, we can only wonder. What we do have is the precinct vote for Congress and for U.S. Senator in CD 31's 334 precincts and CD 41's 711 precincts. We have party registration-by-precinct only for the CD 41 precincts. As shown in Table 17.5, we performed four regressions on this data: (1) a bivariate regression of vote for congressional candidate on party registration in 695 of CD 41's 711 precincts, (2) a bivariate regression of vote for congressional candidate on vote for U.S. Senator in the 1,029 precincts of both CDs taken together, (3) a bivariate regression of vote for congressional candidate on the mean of the vote for U.S. Senator and party registration in the usable 695 precincts of CD 41, and (4) a multiple regression of vote for congressional candidate on vote for U.S. Senator and party registration.

Table 17.5 shows that the highest coefficient of determination was obtained by the bivariate regression on the U.S. Senate vote, but that regression also had the highest standard error. The lowest standard error occurred with the multiple regression. Our rule here is to go with the lowest standard error, which means using the multiple regression equation.

$$D.I. = 0.1503S_d' + 0.6793 R_d - 0.84 \quad [17.1]$$

*Evaluation.* The fact that the last election under the Burton plans took place long before this study was completed enables us to answer the question: how accurately did equation 17.1 predict the outcome of open-district congressional races in California during the tenure of the Burton plans? Table 17.6 tells the story. In the five elections comprising 225 individual district contests (2) that took place, only 19 times was it an open district situation. These 19 contests are listed in Column 2 of Table 17.6. The actual vote received by the Democratic candidate appears

17.5  
 Table 17.5  
 California: Precinct-by-Precinct Correlations of 1980 Open District Congressional  
 with Statewide Races and with Party Registration

		Coefficient of Determination	Standard Error
<u>Single Regression</u>			
Party Registration	695 pcts.	0.74	4.45
U.S. Senator	1,029 pcts.	0.84	7.24
Party Registration/U.S. Senator mean	695 pcts.	0.71	4.70
<u>Multiple Regression</u>			
Party Registration & U.S. Senator	695 pcts.	0.75	4.37

in Column (3). The vote predicted by the index appears in Column (9).<sup>2</sup> Comparing Columns (2) and (9) reveals that the Index correctly predicted the winner in all 19 contests—although it missed the winning candidate’s share of the vote by as much as 17.46 percent in and by more than 10 percent in three others. It seems risky to hang the credibility of the analysis on the voting behavior of just one CD in one election but these numbers look reasonable—and they are all we have.

It may be worth noting that two of the three bivariate regressions tested in this study also correctly predicted the electoral outcome in all 19 instances. Only the bivariate regression using the vote for U.S. Senator in both CD 31 and CD 41 failed to hit the bull’s-eye: it wrongly predicted the winner in four out 19 cases. Critics of the Burton plans might see the relative ease of correctly predicting electoral outcomes under these plans as further evidence of deliberate manipulation to predetermine those outcomes—of gerrymandering.

*Win Probabilities.* When we derived the Indiana index equation in Chapter 9 we constructed a win probability curve (Figure 9.2) whose shape was entirely governed by the magnitude of the standard error of the regression that gave rise to the index equation. We can do the same thing for Equation 17.1 and from this win probability curve, we can make a histogram similar to the ones depicted in Figures 3-7 of Cain's study.<sup>3</sup> Figure 17.1 is the histogram for Burton I. It corresponds to Cain’s Figure 3b and is remarkably similar: it shows 14 districts where Democrat win probability is less than 20 percent—compared to 13 in Cain’s

histogram; it shows 22 districts where the Democrat win probability is greater than 70 percent—compared to 24 in Cain; it shows 6 districts where the Democrat win probability is between 30 and 65— compared to 8 in Cain. Bear in mind that, in this case, Cain—like ourselves—is positing a situation in which all districts are open and no incumbents are running. We are also positing a situation where there is an even division of the statewide mean district vote. Cain does not appear to be.

### Notes

<sup>1</sup> Kernell, Samuel and Bernard Grofman. *Political Gerrymandering and the Courts*, (New York: Agathon Press, 1990): 61.

<sup>2</sup> As was done in evaluating the Indiana Index equation, we make a correction for partisan swing. We get our correction factors from Table 17.7, which tabulates aggregate statewide vote share, and mean district vote for California congressional elections from 1966 onward. From Column (3) of this table we note that in 1980 (the year from whose elections data the Index was derived) the Democratic Mean District Vote was 50.12. In 1982 it rose to 52.22, a gain of 2.10 percent. This 2.10 percent we add to the 1980 vote for U.S. Senator as a correction factor to the first independent variable in the Index equation. We do not add this correction to party registration—the second independent variable in the Index equation—because we reason that party registration tends to remain constant for a given jurisdiction in the short run and not vary as partisan vote percentages do.

<sup>3</sup> Cain, Bruce, “Accessing the partisan effects of redistricting”, *The American Political Science Review* (1985): 329-333.

Table ~~17.6~~ <sup>17.6</sup>

Evaluation of Horn-Hampton Index for California in the 1980s:  
Correlation of Actual Vote for Democratic Congressional Candidates in Open-District Races  
with Vote Predicted by Index

(1) Open District	(2) Actual Vote	(3) Democrat Vote for U.S. Senator, 1980	(4) U.S. Senate Vote, Corrected	(5) X 0.1503	(6) Democratic Registration, %	(7) X 0.6793	(8) (5) + (7)	(9) ⊖ 0.84 = D.I.	
<u>1982:</u> Correction = + 2.10									
CD 6	53.99	75.09	77.19	11.60	69.17	46.99	58.59	57.75	3.76
CD 12	34.73	60.69	62.79	9.44	51.07	34.69	44.13	43.29	2.56
CD 18	60.86	65.33	67.43	10.13	67.57	45.90	56.04	55.20	5.64
CD 26	59.58	61.67	63.77	9.58	65.53	44.51	54.10	53.26	6.32
CD 27	61.62	64.15	66.25	9.96	64.79	44.01	53.97	53.13	6.46
CD 34	57.24	59.96	62.06	9.33	70.60	47.96	57.29	56.45	6.79
CD 37	39.47	52.83	54.93	8.26	52.95	35.97	44.22	43.38	7.91
CD 43	32.09	47.45	49.55	7.45	40.59	27.57	35.02	34.18	2.49
CD 44	67.12	68.27	70.37	10.58	67.91	46.13	56.71	55.87	8.25
<u>1986:</u> Correction = + 4.48									
CD 2	40.47	56.23	60.71	9.12	57.42	39.01	48.13	47.29	6.82
CD 12	38.47	64.06	68.54	10.30	51.05	34.68	44.98	44.14	5.67
CD 21	29.21	48.25	52.73	7.93	49.55	33.66	41.58	40.74	11.53
<u>1988:</u> Correction = + 5.71									
CD 5	79.85	80.96	86.67	13.03	73.90	50.20	63.23	62.39	17.06
CD 12	47.12	64.06	69.77	10.49	51.05	34.68	45.16	44.32	2.60
CD 40	30.83	47.37	53.08	7.98	41.98	28.52	36.49	35.65	11.82
CD 42	33.95	48.00	53.71	8.07	49.16	33.39	41.47	40.63	6.46
<u>1990:</u> Correction = 4.33									
CD 14	48.48	52.39	56.72	8.53	57.26	38.90	47.42	46.58	1.90
CD 15	66.18	62.84	67.17	10.10	63.81	43.35	53.44	52.60	13.88
CD 29	80.99	82.69	87.02	13.08	86.91	59.04	72.12	71.28	5.71
Mean:	50.64						Mean:	49.38	

$$D.I. = 0.1503S_d' + 0.6793 R_d - 0.84$$

$S_d'$  = Democrat Vote for U.S. Senator, Corrected  
 $R_d$  = Democratic Registration, %

$s_x = 16.275$        $s_y = 9.407$   
 $r = 0.9323$        $r^2 = 0.869$   
 $n = 19$

Predicted winner: 19/19 = 100%

## Chapter 18

### Backstrom/Robins/Eller Analysis: California

As we learned from the Indiana investigation, the first problem presented by the test of Backstrom, Robins, and Eller is selection of the base race: "...an estimate of the percentage of the electorate...that, all else being equal, could be expected to vote for candidates of a particular party, simply because of that affiliation."<sup>1</sup> As in Indiana, we have the statewide races from the elections of 1978 and 1980 to choose from—eight races, to be exact. In addition, the way California defines who is a Democrat and who is a Republican yields party registration figures which are much more meaningful than in other states. Therefore, party registration must be considered a viable candidate for designation as the base race. However, because of the loss of valuable data we do not have census tract aggregations of seven of these races. The only thing we have aggregated by census tract is 1980 party registration and the 1980 race for U.S. Senator. In addition to that, we have four statewide races aggregated by congressional district for each of the Burton plans: President, Governor, Lieutenant Governor and Attorney General.

With these data limitations we performed the statistical tests described in our effort to choose the best way to employ party registration and vote for U.S. Senator in the construction of a Democratic Index. We decided to employ both of these indicators together in crafting an index that was applicable only to open-district situations and which needed to be corrected for partisan swing. Here we shall go with the U.S. senate race, adjusted to 50.00 percent statewide by subtracting 10.33 percent, to "normalize" the Democratic candidate's 60.33 percent of the major party vote shown in Table 18.2. Table 18.1 shows what happens in the individual districts of six of the plans when the U.S. senate base race is aggregated among the districts, and then adjusted by subtracting 10.33 percent in each of them.



Table 18.1

BACKSTROM/ROBINS/ELLER ANALYSIS:  
 ALTERNATIVE CALIFORNIA CONGRESSIONAL DISTRICTING PLANS  
 (Using 1980 U.S. Senator as Base Race Adjustment = - 10.33%)

CD	1973 Master's		Burton 1		Burton 2		Halliwell Plan		Morrill Plan Aa		Sebastiani Plan	
	Demo. %	- 10.33	Demo. %	- 10.33	Demo. %	- 10.33	Demo. %	- 10.33	Demo. %	- 10.33	Demo. %	- 10.33
1	55.14	44.81	64.73	54.40	64.52	54.19	63.33	53.00	56.23	45.90	64.40	54.07
2	63.76	53.43	57.36	47.03	56.23	45.90	56.12	45.79	64.42	54.09	56.03	45.70
3	60.54	50.21	64.00	53.67	63.08	52.75	62.72	52.39	62.88	52.55	59.75	49.42
4	64.22	53.89	62.61	52.28	62.62	52.29	62.44	52.11	56.91	46.58	66.04	55.71
5	74.72	64.39	80.24	69.91	80.96	70.63	83.16	72.83	65.88	55.55	84.84	74.51
6	81.80	71.47	75.09	64.76	73.54	63.21	69.38	59.05	82.17	71.84	69.30	58.97
7	65.86	55.53	66.92	56.59	66.98	56.65	64.35	54.02	61.72	51.39	61.77	51.44
8	81.20	70.87	75.41	65.08	75.27	64.94	81.25	70.92	81.93	71.60	81.42	71.09
9	67.07	56.74	66.09	55.76	65.99	55.66	64.08	53.75	66.03	55.70	66.08	55.75
10	67.94	57.61	68.59	58.26	68.64	58.31	68.37	58.04	68.26	57.93	69.40	59.07
11	70.39	60.06	73.30	62.97	72.78	62.45	71.01	60.68	73.20	62.87	71.40	61.07
12	68.16	57.83	60.69	50.36	64.06	53.73	65.23	54.90	68.53	58.20	68.40	58.07
13	61.33	51.00	63.62	53.29	63.67	53.34	63.26	52.93	61.65	51.32	60.77	50.44
14	56.47	46.14	52.48	42.15	52.39	42.06	54.58	44.25	58.99	48.47	52.83	42.50
15	64.72	54.39	62.94	52.61	62.84	52.51	64.52	54.19	60.83	50.31	63.54	53.21
16	66.90	56.57	68.74	58.41	69.40	59.07	67.14	56.81	68.28	57.95	69.09	58.76
17	58.72	48.39	61.39	51.06	60.13	49.80	57.51	47.18	61.96	51.63	65.00	54.67
18	54.92	44.59	65.33	55.00	65.64	55.31	58.71	48.38	60.40	50.07	59.36	49.03
19	59.99	49.66	61.91	51.58	61.97	51.67	58.23	47.90	58.26	47.93	62.31	51.98
20	51.40	41.07	56.78	46.45	55.70	45.37	58.27	47.94	51.92	41.59	53.51	43.18
21	60.44	50.11	48.56	38.23	48.25	37.92	53.26	42.93	56.33	46.00	52.59	42.26
22	45.10	34.77	43.07	32.74	42.89	32.56	46.16	35.83	54.26	43.93	52.49	42.16
23	68.85	58.52	65.48	55.15	64.88	54.15	63.80	53.47	61.45	51.13	67.81	57.48
24	68.38	58.05	67.67	57.34	67.74	57.41	74.56	64.23	44.47	34.14	57.73	47.40
25	71.81	61.48	72.56	62.23	72.43	62.10	68.26	57.93	72.77	62.44	65.82	55.49
26	47.05	36.72	61.67	51.34	61.96	51.63	53.51	43.18	49.52	39.19	81.92	71.59
27	54.80	44.47	64.15	53.82	62.87	52.54	64.93	54.60	61.13	50.80	47.13	36.80
28	80.32	69.99	79.10	68.77	77.35	67.02	86.81	76.48	70.66	60.33	85.42	75.09
29	83.75	73.42	77.39	67.06	82.69	72.36	64.26	53.93	85.50	75.17	63.36	53.03
30	66.56	56.23	61.92	51.59	61.93	51.60	51.87	41.54	69.02	58.69	65.37	55.04
31	73.56	63.23	73.28	62.95	73.16	62.83	83.65	73.32	83.96	73.63	51.21	40.88
32	62.44	52.11	59.36	49.03	58.97	48.64	57.36	47.03	54.43	44.10	76.14	65.81
33	51.58	41.25	47.54	37.21	47.73	37.40	47.40	37.07	52.96	42.63	52.70	42.37
34	53.15	42.82	59.96	49.63	59.94	49.61	51.29	40.96	55.52	45.19	56.74	46.41
35	50.63	40.30	48.63	38.30	48.78	38.45	51.10	40.77	57.28	46.95	49.60	39.27
36	62.01	51.68	63.49	53.16	63.82	53.49	56.99	46.66	54.69	44.36	57.14	46.81
37	50.51	40.18	52.83	42.50	52.60	42.27	54.65	44.32	53.15	42.82	54.70	44.37
38	50.40	40.07	50.60	40.27	51.28	40.95	49.33	39.00	47.19	36.86	49.39	39.06
39	45.47	35.14	45.77	35.44	45.11	34.78	44.71	34.38	47.16	36.83	45.54	35.21
40	47.94	37.61	46.57	36.24	47.37	37.04	48.76	38.43	46.37	36.04	47.55	37.22
41	58.58	48.25	59.78	49.45	61.19	50.86	58.73	48.40	57.14	46.81	56.92	46.59
42	60.91	50.58	48.32	37.99	48.00	37.67	53.42	43.09	60.40	50.07	60.37	50.04
43	51.73	41.40	47.45	37.12	47.97	37.64	54.64	44.31	57.68	47.35	48.23	37.90
44	-	-	68.27	57.94	67.38	57.05	60.28	49.95	48.94	38.61	63.80	53.47
45	-	-	57.48	47.15	55.60	45.27	50.44	40.11	50.29	39.96	54.09	43.76
	2661.22 61.89	25 D 18 R	-	28 D 17 R	2778.30 61.74	29 D 16 R	-	21 D 24 R	-	23 D 22 R	-	24 D 21 R

Table 18.3 summarizes the outcomes in the six plans detailed in Table 18.1, plus the two additional Morrill plans Da and Ea. We note the two plans with the greatest partisan bias are Burton II with a 6-seat Democratic partisan advantage, and Burton I with a 5-seat Democratic advantage. The 1973 Master's plan reveals a 3-seat Democratic advantage that is also significant. Without having a similar measure of the partisan character of this plan at the time it was created in 1973, we cannot be sure whether it carried that sort of a Democratic bias at the time it was crafted<sup>2</sup> or acquired this bias from demographic changes that took place between 1973 and 1980. The Halliwell plan shows a slight Republican bias—on the order of one seat. However, the five Morrill plans reported here all show no partisan bias having either a 23-22 or a 22-23 partisan split. This is remarkable because—in contrast to Halliwell who had opportunity to, and did, test his plan for political character—Morrill had no idea who his plans favored, or disfavored.

As in Indiana, we asked whether it would make a significant difference in the partisan breakdown if some other statewide race had been chosen as the base race. We aggregated 1980 party registration, the 1980 presidential vote, and the 1978 vote for Governor, Lieutenant Governor, and Attorney General among the 45 districts of Burton I to see. Table 18.2 is the result. It shows that using 1980 U.S. Senator as the base race indicates the strongest bias—a 28-17 (5-seat) pro-Democrat partisan advantage, as noted previously. Using the 1980 presidential race as the base race indicates a 27-18 (4-seat) Democrat advantage. Using the 1978 race for either Governor or Lieutenant Governor indicates a 26-19 (3-seat) Democrat advantage. Using 1980 party registration indicates a 24-21 (1-seat) Democrat advantage and using the 1978 vote for Attorney General indicates a 24-21 (1-seat) Republican advantage. Table 18.3 summarizes these findings.

8  
Table 10.2

CALIFORNIA CONGRESSIONAL: 1981 (BURTON I) PLAN  
BACKSTROM/ROBINS/ELLER ANALYSIS USING DIFFERENT STATEWIDE RACES TO DERIVE  
BASE PERCENTAGE

CD	1980 Party Registration (Democrat % of Major-party)		1980 U.S. Senator		1980 U.S. President (Republican)		1978 Governor		1978 Lieutenant Governor (Republican)		1978 Attorney General (Republican)	
	Demo. %	- 10.52	Demo. %	- 10.33	Repub. %	- 9.47	Demo. %	- 10.56	Repub. %	- 4.40	Repub. %	- 4.90
1	60.32	49.80	64.73	54.40	57.55	48.08	58.80	48.24	52.93	48.53	48.23	43.33
2	58.08	47.56	57.36	47.03	63.91	54.44	55.82	45.26	57.46	53.06	56.73	51.83
3	64.17	53.65	64.00	53.67	53.04	43.57	61.38	50.82	56.90	52.50	57.82	52.92
4	65.64	55.12	62.61	52.28	54.94	45.47	63.08	52.52	54.12	49.72	52.24	47.34
5	72.33	61.81	80.24	69.91	39.98	30.51	73.98	63.42	41.11	36.71	38.85	33.95
6	69.17	58.65	75.09	64.76	44.76	35.29	71.15	60.59	43.04	36.74	38.82	33.92
7	64.57	54.05	66.92	56.59	53.38	43.91	63.88	53.32	51.92	47.52	49.19	44.29
8	68.80	58.28	75.41	65.08	38.93	29.46	71.50	60.94	40.72	36.32	37.84	32.94
9	67.98	57.46	66.09	55.76	52.03	42.56	66.25	55.69	51.41	47.01	48.82	43.92
10	70.27	59.75	68.59	58.26	51.87	42.40	72.97	62.41	43.18	38.78	41.03	36.13
11	61.83	51.31	73.30	62.97	53.89	44.42	65.51	54.95	52.86	48.46	48.21	43.31
12	51.07	40.55	60.69	50.36	64.10	54.63	58.14	47.58	58.52	54.12	55.56	50.66
13	60.49	49.97	63.62	53.29	59.26	49.79	68.41	57.85	49.76	45.36	48.24	43.34
14	57.10	46.58	52.48	42.15	65.27	55.80	53.00	42.44	58.08	53.68	60.99	56.09
15	63.00	52.48	62.94	52.61	55.58	46.11	57.20	46.64	54.38	49.98	55.39	50.49
16	59.49	48.97	68.74	58.41	57.52	48.05	59.78	49.22	48.94	44.54	49.07	44.17
17	59.93	49.41	61.39	51.06	60.17	50.70	53.76	43.20	56.93	52.53	58.38	53.48
18	67.57	57.05	65.33	55.00	52.34	42.87	62.48	51.92	49.56	45.16	53.03	48.13
19	57.95	47.43	61.91	51.58	61.09	51.62	62.07	51.51	53.24	48.84	52.91	48.01
20	53.90	43.38	56.78	46.45	68.35	58.88	52.82	42.26	60.72	56.32	61.74	56.84
21	49.79	39.27	48.56	38.23	72.00	62.53	50.41	39.85	66.36	61.96	65.69	60.79
22	41.58	31.06	43.07	32.74	74.34	64.87	43.39	32.83	71.89	67.49	71.45	66.55
23	63.89	53.37	65.48	55.15	56.34	46.87	62.13	51.57	55.03	50.63	53.45	48.55
24	67.39	56.87	67.67	57.34	48.02	38.55	68.46	57.90	47.37	42.97	47.53	42.63
25	76.72	66.20	72.56	62.23	37.35	27.88	75.04	64.48	39.01	34.61	41.82	36.92
26	65.53	55.01	61.67	51.34	57.22	47.75	60.69	50.13	56.70	52.30	56.38	51.48
27	64.79	54.27	64.15	53.82	52.33	42.86	65.09	54.53	51.4	47.00	50.25	45.35
28	80.17	69.65	79.10	68.77	27.90	18.43	78.25	67.69	31.28	26.88	31.72	26.82
29	83.21	72.69	77.39	67.06	28.70	19.23	77.78	67.22	30.42	26.02	32.42	27.52
30	69.30	58.78	61.92	51.59	53.29	43.82	64.41	53.85	51.74	47.34	56.76	51.86
31	80.14	69.62	73.28	62.95	37.33	27.86	73.95	63.39	36.94	32.54	41.16	36.26
32	67.43	56.91	59.36	49.03	57.68	48.21	61.92	51.36	54.82	50.42	63.72	58.82
33	51.06	40.54	47.54	37.21	70.42	60.95	50.37	39.81	64.71	60.31	66.02	61.12
34	70.60	60.08	59.96	49.63	56.70	47.23	64.25	53.69	50.88	46.48	56.18	51.28
35	50.25	39.73	48.63	38.30	70.81	61.34	51.41	40.85	64.41	60.01	66.70	61.80
36	65.79	55.27	63.49	53.16	56.36	46.89	66.06	55.50	51.52	47.12	55.65	50.75
37	52.95	42.43	52.83	42.50	66.79	57.32	55.54	44.98	59.85	55.45	63.53	58.63
38	60.00	49.48	50.60	40.27	68.74	59.27	59.85	49.29	57.45	53.05	61.29	56.39
39	46.02	35.50	45.77	35.44	76.12	66.65	52.23	41.67	64.51	60.11	65.35	60.45
40	40.81	30.29	46.57	36.24	76.96	67.49	49.07	38.51	66.30	61.90	65.25	60.35
41	50.85	40.33	59.78	49.45	69.71	60.24	63.27	52.71	53.61	49.21	57.02	52.12
42	49.00	38.48	48.32	37.99	72.33	62.86	50.58	40.02	66.71	62.31	68.80	63.90
43	40.59	30.07	47.45	37.12	78.60	69.13	49.33	38.77	66.20	61.80	68.46	63.56
44	67.91	57.39	68.27	57.94	54.40	44.93	73.41	62.85	40.50	36.10	46.32	41.42
45	52.48	41.96	57.48	47.15	69.56	60.09	59.42	48.86	54.31	49.91	59.78	54.88
	-	24 D 21 R	-	28 D 17 R	-	27 D 18 R	-	26 D 19 R	-	26 D 19 R	-	21 D 24 R

8  
Table 18.3

Backstrom/Robins/Eller Analysis: Alternative California Congressional Plans: Summary

(1) Plan	(2) Republican Seats	(3) Democratic Seats	(4) Democratic Seats per McDonald/Engstrom
1973 State of California (Masters') (43 Districts)	18	25	2.2
1981 State of California (Burton I) (45 Districts)	17	28	2.4
1983 State of California (Burton II) (45 Districts)	16	29	2.5
1981 Halliwell Model (45 Districts)	24	21	2.0
1985 Morrill Aa (45 Districts)	22	23	1.7
1985 Morrill Ba (45 Districts)	22	23	1.7
1985 Morrill Ca (45 Districts)	23	22	1.7
1985 Morrill Da (45 Districts)	22	23	1.9
1985 Morrill Ea (45 Districts)	23	22	1.7
Sebastian	20 1	20 4	2.0

Had *Badham* gone to trial and the Republican plaintiffs applied the Backstrom/Robins/Eller test to the Burton plans, one might expect Democrat defendants to argue that the 1980 contest for Attorney General should be employed as the base race. Republican plaintiffs, on the other hand, might be expected to argue that our 1980 U.S. senate contest was the proper one to use. We are not in a strong position to argue for either side because, as noted at the beginning, we were forced to choose a race that was aggregated by census tract in order to determine the partisan character of impartially drawn plans crafted from census tracts. We are also in the dark as to what would be revealed were we able to aggregate the other three statewide races of 1978—Secretary of State, Comptroller, and Treasurer—among the districts of the Burton plans.

Further examination of Table 18.2 enables us to note the extent of agreement among the various statewide races as to which districts are “Republican” and which districts are “Democratic.” Table 18.4 summarizes the extent of agreement. From it we observe that all six races are in agreement as to 29<sup>3</sup> of the plan’s 45 districts. There are varying degrees of disagreement as to the remaining 16 districts.

*Adjusting District Lines to Achieve “Political Fairness”*

As we observed in applying this test to the *Bandemer* plans, the remedy to be applied when aggregation of the base race among the districts of the plan reveals partisan bias is to transfer census tracts containing over-concentrations of voters of the disadvantaged party into marginal districts of the advantaged party. That applies when the districting authority has before it no plans that feature the same number of seats for both parties given a 50/50 split in the statewide vote. In this California study, however, we have Morrill plans Aa, Ba, Ca, Da and Ea— all of which have the necessary political balance. Therefore we need only adopt one of these plans in lieu of Burton.

Table 19.4

Alternative Statewide Races Employed as the Base Race,  
1981 State of California (Democratic)(Burton I) House Plan: Summary  
*Congressional*

Statewide Race	Democratic Percentage	Adjustment to 50.00%	Democratic Seats	Republican Seats
1980 U.S. Senator (Cranston [D] vs. Gann [R])	60.33	- 10.33	28	17
1980 President (Carter [D] vs. Reagan [R])	(Republican) 59.47	- 9.47	27	18
1978 Governor (Brown [D] vs. Younger [R])	60.56	- 10.56	26	19
1978 Lieutenant Governor (Dymally [D] vs. Curb [R])	(Republican) 54.40	- 4.40	26	19
1978 Attorney General (Burke [D] vs. Deukmejian [R])	(Republican) 54.90	- 4.90	21	24
1980 Major Party Registration	60.52	- 10.52	24	21

We should remember the caveat made in conjunction with our Indiana study: Backstrom/Robins/Eller do not say the districting authority should be free to engage in whatever boundary manipulation it takes to achieve the proper number of seats for each party. They implied that if adjustments to achieve “fairness” necessitate going outside accepted limits of compactness and non-fragmentation, then the plan must retain some degree of “*unfairness.*” However, in this California study that dilemma is not present if we agree that the Morrill plans comply with these “accepted limits.” We shall consider this issue further in Chapter 27.

### *Further Commentary*

Our California study reinforces the conclusion reached in our Indiana study that it is possible to apply the Backstrom/Robins/Eller test, and when that test indicates the presence of a partisan gerrymander, their proposed remedy. While the Indiana study revealed the test gives somewhat different answers depending on what statewide election is chosen as the base race, it did not matter a whole lot because whatever election is chosen the verdict is the same: a Republican gerrymander. In California, however, we discovered that using the 1978 Attorney General vote for the base race led us to conclude that Burton I was a Republican gerrymander (!)—albeit by one district. In Indiana, selection of the base race was facilitated by the fact that all ten statewide races in 1978 and 1980 were won by Republicans and that—save for the presidential race—the Democratic vote fell within the relatively narrow range of 42.1 to 47.3 percent. In California, however, Republicans won three and Democrats won five of the statewide races in 1978 and 1980 and—save for the presidential race—the Democratic share of the major-party vote ranged from 45.10 to 67.44 percent.

The final point we want to make in this chapter has to do with “the first of the troubling questions stated in the final paragraph of Chapter 6”: how much of the *Bandemer* (Burton) plans’ partisan bias was due to Republican (Democrat) manipulation and how much was due to geography? In Chapter 11 we argued that one of the reasons why the Democrats may have lost *Bandemer* was because they had no credible evidence the partisan bias of the *Bandemer* plans was not due to geography—and, therefore, had to be attributed to gerrymandering. They had only the Crawford, Carson, and Townsend plans which because of their partisan authorship could not be viewed as being impartially drawn. It wasn’t until 1985 and 1990 that Norman Primus’ districting competitions generated plans that were demonstrably impartial. Had they been available in 1983 and offered as exhibits at trial, Boehm would have been able to make a strong case that geography was responsible for 6 or 7 of the 14-seat Republican partisan advantage in the house plan and 3 or 4 of the 6-seat Republican partisan advantage in the senate plan. That

would have made it reasonable to infer that Republican manipulation was responsible for 7 or 8 Republican seats in the house and 2 or 3 Republican seats in the senate.

California Republicans had no Norman Primus to generate impartially drawn plans to compare with the Burton plans, but if *Badham* had gone to trial they would have had the Halliwell and Morrill plans. Halliwell's plan could be discounted because he made his own measurements of its political character and could have made adjustments in that plan to alter its political character prior to going public with it.<sup>4</sup> But Morrill's plans were absolutely "politics-blind" because prior to this investigation no one had any idea of their political character. When a random sample of five of these plans yields either a 22-23 or a 23-22 split we may reasonably assume this is what would emerge if we were to require adoption of whatever plan best satisfied objective criteria. When such plans all yield as close to a 50/50 partisan split as is possible when the partisan vote has been "normalized" there can be no partisan advantage due to geography. Therefore, it is reasonable to conclude that a partisan advantage manifest in some other plan crafted from the same data is very likely the product of partisan manipulation. In this case the logical inference is that when application of the Backstrom/Robins/Eller technique to a California congressional districting plan of the 1980s yields either party more than 23 seats the difference can be ascribed to partisan gerrymandering.

Before condemning the Burton plans, however, we should find out what the other tests tell us. We therefore turn to a consideration of McDonald/Engstrom.

## Notes

<sup>1</sup> 13 Backstrom, Charles Herbert, Leonard S. Robins, and Scott Eller. *Issues in gerrymandering: an exploratory measure of partisan gerrymandering applied to Minnesota*. (Minn.: Minnesota Law Review Foundation, 1990) Chapter 3 Note 7, at 1131.

<sup>2</sup> At least one politically knowledgeable person thought so. Kousser (1995, pg. 144) attributes this appraisal of the 1973 Master's plan to former Democratic Assembly Speaker Jesse Unruh: "There was a hell of a lot more flagrant Democratic gerrymandering than I ever would have had the guts to do in my most arrogant moment." On the other hand, the plan is stoutly defended by those involved in its creation, such as Gordon Baker who pointed out that "overwhelming Democratic majorities were elected in...the congressional delegation in 1974 and 1976, reflecting unusually strong Democratic voting majorities. ...but significant Republican gains at the ballot box in 1978 and 1980 resulted in substantial loss of Democratic seats, indicating that the plans were readily adaptable to shifts in electoral preference." (Baker. 1990, pg. 302).

<sup>3</sup>These 29 break down into 16 unanimously judged to be "Democratic" and 13 unanimously judged to be "Republican."

<sup>4</sup> Among the documents Halliwell furnished us is "Model Plan Districts Political Summary" which tabulates for each of the districts in his plan its Black and Hispanic percentages, its Democratic and Republican registrations, its 1980 vote for Reagan, its 1978 vote for Republican Lt. Governor candidate Curb, its 1976 vote for President Ford, its 1978 vote for Proposition 13 and its 1980 vote for Proposition 9.



## Chapter 19

### McDonald-Engstrom Analysis: California

As in the Indiana investigation, we cannot satisfy the test's major requirement of constructing all possible districting plans for an actual state composed of thousands of demographic building blocks. But having 54 Morrill plans in addition to the Burton, Sebastiani, Master's and Halliwell plans gets us a lot closer to meeting that requirement than we were able to with only six house and eight senate plans in Indiana. We also face the other major problem we encountered in Indiana: how to quantify the partisan character of the districts in our plans. As in Indiana, we employed our Democratic Index (D.I.) as the measure of this partisan character.

#### *Application to Congressional Districting Plans*

Following our Indiana methodology, we first constructed histograms for these plans using the D.I. of each district adjusted for an even division of the statewide vote. We arbitrarily chose to define "the statewide vote" as the mean district major party vote rather than the major-party aggregate vote share. Figures 19.1 - 19.12 are the histograms for the plans we are dealing with. Histograms for only seven of the 54 Morrill plans are given because they constitute a representative sample of those plans. We use a 2.5 percent class interval and vertical dashed lines to mark off the marginal districts.

We then computed the standard deviation ( $s_2$ ) and skewness ( $s_3$ ) statistics for each plan, annotated them to the proper histograms, and tabulated them in Columns (4) and (7) of Table 19.1. Since these histograms were constructed with an index corrected for an even split in the statewide vote, we skip the computations employed in applying the cube law to determine the division of seats. A politically neutral plan will produce an even split in

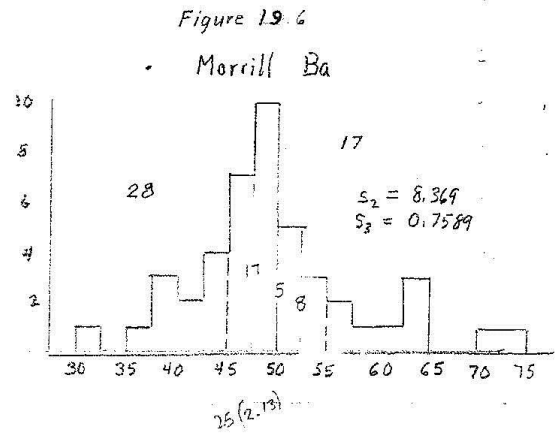
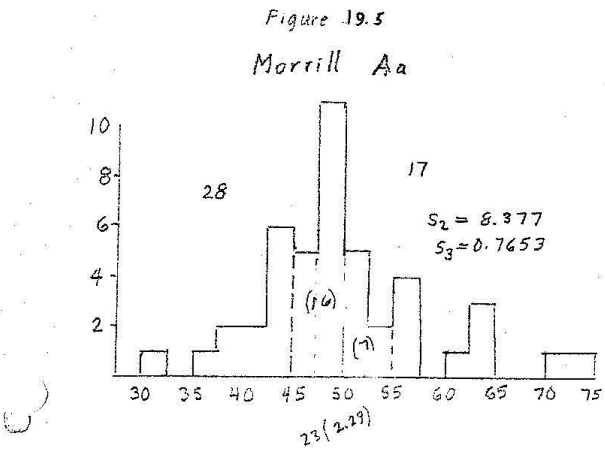
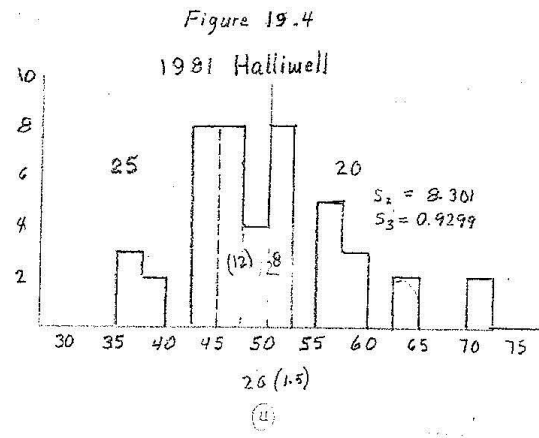
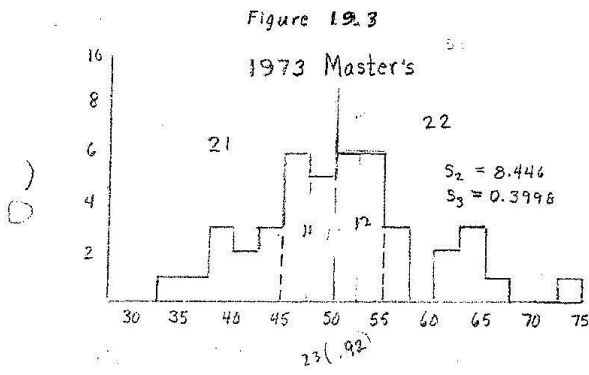
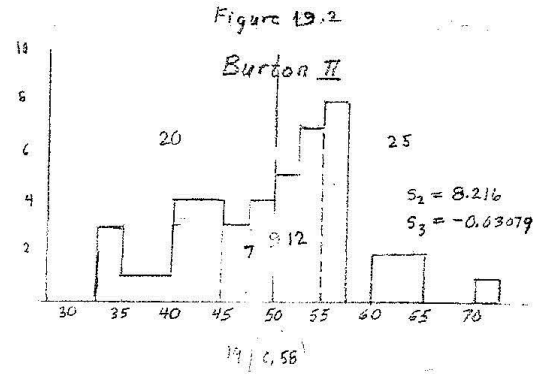
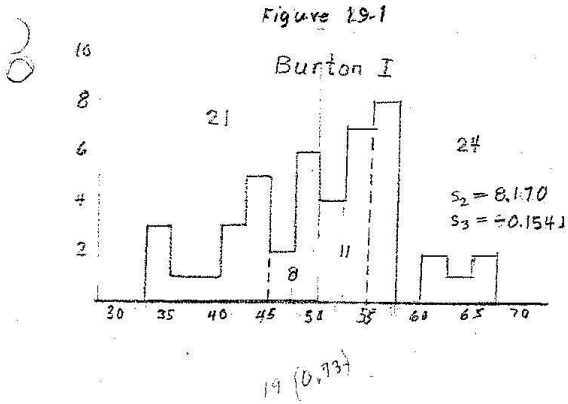


Figure 19.8  
Morrill Ca

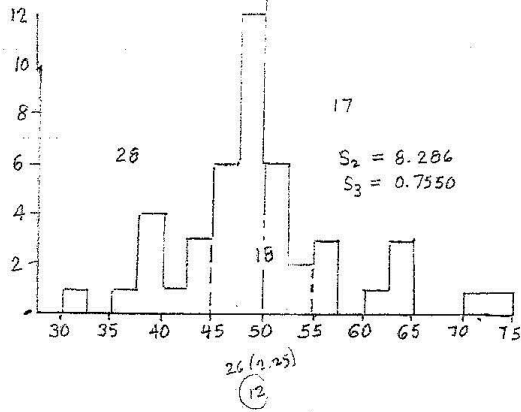


Figure 19.9  
Morrill Da

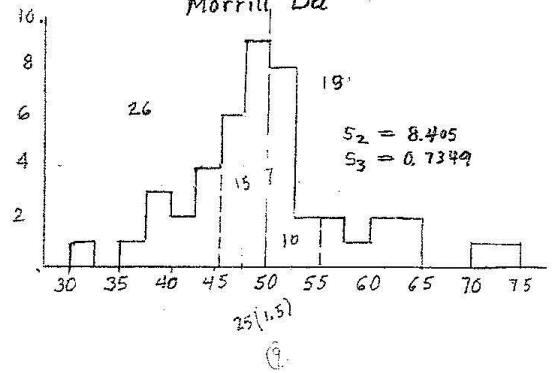


Figure 19.11  
Morrill Ea

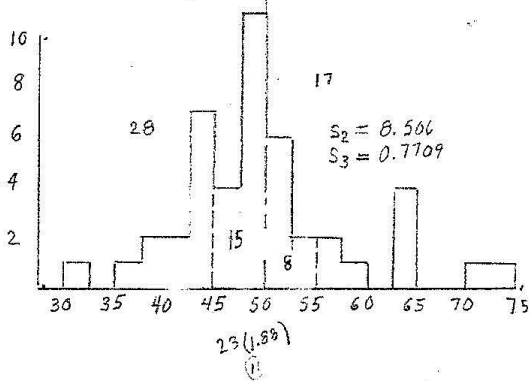


Figure 19.10  
Morrill Db

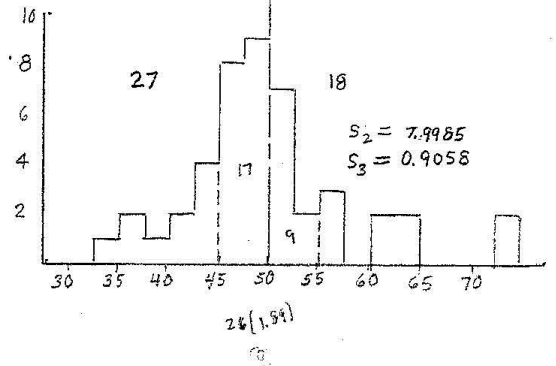


Figure 19.7  
Morrill Bg

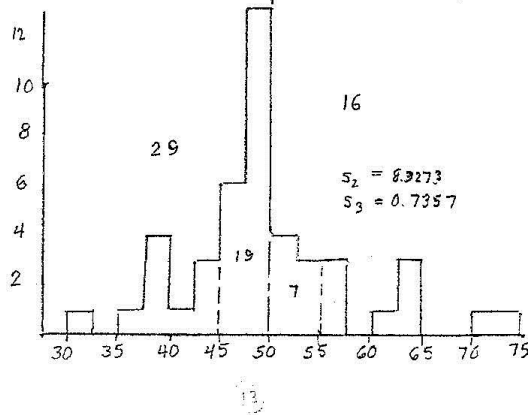
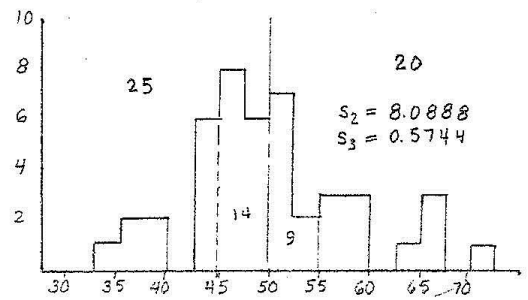


Figure 19.12  
Sebastiani



the number of districts won by each party. Since these are 45-district<sup>1</sup> plans a 22/23 or a 23/22 split would have to be the acceptable outcome according to the authors' rules. The ideal  $s_2$  value, again, is the value obtained by averaging that of all possible plans, an impossible determination. We, therefore, average the 54 values we do have and obtain the value of 8.3298 shown on the bottom line of the table. When this mean value is subtracted from the  $s_2$  values in Column (4) we obtain the deviations listed in Column (5). In Column (6) these deviations are ranked on the basis of their absolute values. In Column (8) the skewness values of Column (7) are likewise ranked according to their absolute values.

Returning to the authors' instructions, we first apply Rule No. 1, which says we must have an even partisan split—either a 22/23 or a 23/22 division—for the plan to be acceptable. When we examine Table 19.1's Column (3) we see that none of the 1980s plans that are presumably impartially drawn yields more than the 20 “Democratic” districts of the Halliwell plan. The Morrill plans all yield between 15 and 19 “Democratic” districts while the Burton plans yield 24 and 25 “Democratic” districts, respectively. The only plan giving an even split is the 43-district 1973 Master's plan: 22 Democratic to 21 Republican. We could, therefore, reject the Halliwell and Morrill plans as unacceptably biased and terminate the study; but they give us interesting information that impels us to carry the analysis further. The ranking by  $s_2$  and  $s_3$  values shows a very narrow spread in their standard deviations: from 7.9985 in Morrill Db (Fig.19.10) to 8.5061 in Morrill Ea (Fig. 19.11). We had to compute them to four decimal places in order to obtain a complete separation—a degree of hair-splitting that choice of a districting plan should not depend on. Taken together, the California plans show considerably less dispersion than the 10.49-to-12.23 range of the Indiana house and senate plans examined in Chapter 11.

In Column (7) we observe a wider spread of the California plans in their skewness values. This is due almost entirely to the presence of the two Burton plans which have negative values of -0.0308 and -0.1541, respectively—the minus sign indicating pro-Democrat bias, which conforms to the view of their critics. The other 57 plans all have positive skewness that, according to our notation, connotes pro-Republican bias. We note that the Masters' and Halliwell plans stand apart from all of the Morrill plans: positive skewness values label all these plans as pro-Republican, but the 1973 Masters' plan has a noticeably smaller bias figure (0.400) buttressing the view of its advocates (like Gordon Baker<sup>2</sup>) that it was drawn impartially. At the other end of the positive spread we find the Halliwell plan with a skewness value of 0.930, indicating the highest pro-Republican bias of any of the plans we are considering. But note that despite its greater pro-Republican skewness Halliwell has more “Democratic” districts (20) than any of the Morrill plans (15 to 19). The 54 Morrill plans feature a relatively narrow spread of skewness values (0.7349 to 0.9058), which supports a conclusion that most of these plans are quite similar.

Next compare the magnitude of the pro-Democrat skewness in the Burton plans (0.03 and -0.15) with the pro-Republican skewness in the Halliwell and Morrill plans (0.73 to 0.93). We see that the skewness in the latter is on the order of five-to-six times that of the former. Finally, return to Chapter 11, observe the range of skewness values in the Indiana house and senate plans (1.25 to 2.12), compare it with the range we are dealing with here and note that the least biased Indiana plan (Crawford house) has about one-and-one-half times as much bias as the most biased California plan.

If we proceed to Rule No. 2 of the McDonald/Engstrom analysis, we examine the array of plans to see if any one dominates all of the others, that is outranks them both as to standard deviation and as to skewness. We find no single plan does so. That leads to Rule No. 3, which instructs us to “exclude any plan that is dominated by another and select any one from among the undominated set.”<sup>3</sup> For each of the 59 plans under consideration here, Column (10) of

Table 19.1 tells how many other plans dominate it. We see that all but three of these plans are dominated by at least one other plan with Morrill Db being the most dominated. The three undominated plans are Morrill Bg, Morrill Da, and Burton 2. This, according to the authors, is “the undominated set” from which any choice “is acceptable, while the choice of any other arrangement is considered gerrymandering.”<sup>4</sup>

Morrill Bg owes its exalted status to having an  $s_2$  value closer to the group mean (of 8.3257) than that of any other plan. Burton 2 is a surprise winner because the *magnitude* of its skewness is less than that of any other plan. We note that any plan that ranks first by either criterion will gain admission to “the undominated set” regardless of how low it may rank by the other criterion. Thus Burton 2’s low rank of 51 in the dispersion contest does not matter because its No. 1 rank on symmetry guarantees its admission to the winners’ circle. The third plan to “make the cut” is Morrill Da. Its No. 5 rank in skewness is coupled with an unimpressive No. 44 rank in dispersion. But since the three plans ranking higher in symmetry rank 51-53 in dispersion, none of them dominates Morrill Da and the latter emerges a winner.

#### *Dependency on Choice of Political Index Race*

We now ask the same question we did when appraising the Indiana house and senate plans: how much do the results one obtains from this test depend upon how the political index is calculated? In the Indiana case we concluded it probably made little difference because we were able to observe from Table 10.2 that using three different races to compute Backstrom’s base percentage for the house gave an identical 64-36 partisan split. In Table 10.5 using six different races to compute Backstrom’s base percentage for the senate produced three different outcomes: 30-20, 31-19 and 32-18—a fairly narrow spread. But California does not replicate the findings in Indiana. In Table 18.4 we observe a wider variation in the number of “Democratic” seats in Burton 1’s 45-seat congressional delegation (7) than we do in *Bandemer’s* 50-seat Indiana senate (2) or 100-seat house (4) depending on which of six statewide races we employ. In five of those races, making the appropriate adjustment still

gives Democrats a majority of the delegation. But in the sixth case (Attorney General) making the 4.90 percent adjustment leaves Democrats only 21 seats to 24 for the Republicans. We conclude this test is fraught with more uncertainty in a California context than it is in an Indiana context.

### *Visual Appraisal of the California Histograms*

Study of the California histograms in Figures 19.1-19.12 does provide support for the claim that, as in Indiana, there is a certain amount of “natural” packing of Democratic voters. None of the Morrill plans has any district with a D.I. less than 30, but all have two districts with Democratic Indices exceeding 70. Halliwell has no district with a D.I. less than 35, but like the Morrill plans, has two districts of D.I. exceeding 70. The 1973 Master’s plan has no district with a D.I. less than 32.5 but does have a district with a D.I. exceeding 72.5. This “natural” packing is less severe than what we found in Indiana. Looking again at the “citizen plan” histograms for the 50-member Indiana senate, we find in the Compactness Threshold plan no districts of D.I. less than 30 but three districts of D.I. greater than 70. The Minimum Fragments, BNP and Fully Nested plans likewise have no districts of D.I. less than 30 but have four districts of D.I. exceeding 70—two of which districts have Democratic indices exceeding 80. These facts are consistent with the skewness statistics reported for these plans: the Indiana plans discussed here all have  $s_3$  values exceeding unity; the  $s_3$  values of the California plans—as already noted—are all less than unity.

We should note, however, that the narrow dispersion of the districts in the Morrill and Halliwell plans, reflected in their relatively small standard deviations, suggests these plans may contain a relatively high proportion of marginal and critically marginal districts. This is indeed the case. The histograms depicted in Figures 19.5- 19.11 all have their modes between 47.5 and 50.0. These modes represent the number of critically marginal Republican districts and indicate that with only a 2.5 percent pro-Democrat partisan swing between 9 and 13 districts could fall into the Democratic column. Table 17.7 reveals that since 1970

California Democratic congressional candidates have invariably managed to win a majority of the major party “statewide vote,” whether expressed as aggregate vote share or mean district vote. Therefore, under an impartially drawn plan Democrats would probably continue to dominate the California congressional delegation regardless of the slight theoretical advantage this study suggests is enjoyed by Republicans.

### *Comparison with Backstrom*

Table 19.1 shows we obtained the same number of Democratic seats in each of the six Indiana house plans using the Democratic Index in a McDonald-Engstrom analysis as we did using Backstrom’s base percentage. Table 10.4 shows we likewise obtained the same number of Democratic seats in each of eight Indiana senate plans using the D.I. as we did using base percentage. We naturally wonder how closely these two tests replicate each other in California. Answer: not nearly so well. Column (4) of Table 18.3 shows a difference of from one to six seats between what the two methodologies say are the number of “Democratic” seats in the nine plans tabulated. The contrast is most striking in Morrill plans Aa and Ba where Backstrom shows a 23- 22 Democrat advantage and the D.I. shows a 28-17 Republican advantage. Table 19.2 shows a fairly good agreement between Base Percentage and Democratic Index when the 1980 Democratic vote for U.S. Senator (S) is used as the “index election” in each of the two formulas. When S is 55.58 percent they give the identical value of 45.25. When S is 40 percent the D.I. is 2.55 percent higher than B.P. When S = 70 percent B.P. is higher than D.I. by the same amount.

Unlike the univariate Indiana index equation, the California index equation is derived from a multiple regression, with party registration being the second independent variable. Party registration, with a coefficient of 0.68, has about four-and-one-half times as much influence of the index value as does vote for U.S. Senator with its coefficient of 0.15. In many districts party registration and vote for U.S. Senator are quite close, so base percentage and Democratic Index will have similar values. But in districts where they



diverge appreciably the story is different. In Morrill Aa, for example, Democratic registration in CD 12 is 56.6 percent of major party. But 1980 Democratic vote for U.S. Senator was 68.5 percent of major party. If we employ a “base percentage”

Table 19.1  
McDONALD-ENGSTROM ANALYSIS: CALIFORNIA CONGRESSIONAL PLANS

(1) Plan	(2) Figure Number	(3) Number of Demo. Seats (out of 45)	Dispersion: Standard Deviatn.			Skewness		(9) Nbr. of Marginal Districts: (Rep/Dem)	(10) Dominated by How Many Other Plans
			(4) s <sub>2</sub> Value	(5) Deviation from Mean	(6) Rank	(7) s <sub>3</sub> Value	(8) Rank		
Morrill Aa	19.5	17	8.3766	0.0509	31	0.7653	27	23 (2.29)	15
Morrill Ab		18	8.3587	0.0330	10	0.7993	52	24 (2.0)	6
Morrill Ac		16	8.4009	0.0752	42	0.7612	38	24 (3.0)	27
Morrill Ad		17	8.3678	0.0421	22	0.7910	49	24 (2.43)	12
Morrill Ae		17	8.3951	0.0694	40	0.7660	28	23 (2.83)	20
Morrill Af		17	8.3691	0.0434	24	0.7773	23	23 (2.43)	9
Morrill Ag		17	8.3632	0.0375	16	0.8014	55	24 (2.43)	11
Morrill Ah		17	8.3875	0.0618	35	0.7790	39	24 (2.43)	24
Morrill Ai		18	8.3721	0.0464	27	0.7632	25	23 (1.88)	11
Morrill Aj		18	8.3633	0.0376	17	0.7853	44	24 (2.0)	9
Morrill Ak		18	8.3906	0.0649	36	0.7639	26	24 (2.0)	17
Morrill Al		18	8.3646	0.0389	19	0.7716	30	23 (1.88)	7
Morrill Am		18	8.3830	0.0573	34	0.7758	37	24 (2.0)	22
Morrill An		16	8.3824	0.0567	33	0.7605	22	23 (2.83)	14
Morrill Ao		16	8.3736	0.0479	28	0.7861	45	24 (3.0)	21
Morrill Ap		16	8.3749	0.0492	30	0.7725	31	23 (2.83)	15
Morrill Aq		16	8.3661	0.0404	21	0.7981	51	24 (3.0)	11
Morrill Ar		16	8.3933	0.0676	39	0.7731	32	24 (3.0)	22
Morrill Ba	19.6	17	8.3692	0.0435	25	0.7589	21	25 (2.13)	9
Morrill Bb		15	8.3086	-0.0171	4	0.7525	16	26 (3.33)	3
Morrill Bc		17	8.3344	0.0087	2	0.7373	7	26 (2.25)	1
Morrill Bd		16	8.3688	0.0431	23	0.7512	15	25 (2.57)	7
Morrill Be		16	8.3167	-0.0090	3	0.7497	12	26 (2.71)	2
Morrill Bf		16	8.3790	0.0533	32	0.7376	8	25 (2.57)	2
Morrill Bg	19.7	16	8.3273	0.0016	1	0.7357	6	26 (2.71)	Undominated
Morrill Bh		15	8.3615	0.0358	12	0.7502	14	25 (3.17)	5
Morrill Ca	19.8	17	8.2861	-0.0396	20	0.7550	19	26 (2.25)	10
Morrill Cb		17	8.2894	-0.0363	14	0.7798	41	26(2.25)	14
Morrill Cc		17	8.2870	-0.0387	18	0.7547	18	26 (2.25)	9
Morrill Cd		17	8.2888	-0.0369	15	0.7834	43	26 (2.25)	10
Morrill Ce		18	8.2994	-0.0263	9	0.7472	11	26 (1.89)	4
Morrill Cf		18	8.3020	-0.0237	6	0.7754	36	26 (1.89)	4
Morrill Cg		16	8.2805	-0.0452	26	0.7863	46	26 (2.71)	25
Morrill Ch		16	8.2778	-0.0479	29	0.7578	20	26 (2.71)	12
Morrill Ci		17	8.2911	-0.0346	11	0.7500	13	26 (2.25)	5
Morrill Cj		17	8.2896	-0.0361	13	0.7831	42	26 (2.25)	14
Morrill Ck		18	8.3002	-0.0255	8	0.7469	10	26 (1.89)	2
Morrill Cl		18	8.3028	-0.0229	5	0.7751	35	26 (1.89)	4
Morrill Da	19.9	19	8.4047	0.0790	44	0.7349	5	25 (1.5)	Undominated
Morrill Db	19.10	18	7.9985	-0.3272	59	0.9058	58	26 (1.89)	56
Morrill Dc		19	8.2521	-0.0736	41	0.7909	48	27 (1.7)	36
Morrill Dd		18	8.3929	0.0672	37	0.7542	17	25 (1.78)	10
Morrill Ea	19.11	17	8.5061	0.1804	57	0.7709	29	23 (1.88)	27
Morrill Eb		18	8.2446	-0.0811	45	0.7621	24	25 (1.5)	18
Morrill Ec		18	8.2584	-0.0673	38	0.7741	33	25 (1.5)	26
Morrill Ed		17	8.4975	0.1718	55	0.7956	50	24 (2.0)	46
Morrill Ee		17	8.4988	0.1731	56	0.7791	40	23 (1.88)	37
Morrill Ef		17	8.4901	0.1644	54	0.8075	56	24 (2.0)	51
Morrill Eg		18	8.2356	-0.0901	48	0.7887	47	26 (1.6)	39
Morrill Eh		18	8.2369	-0.0888	47	0.7743	34	25 (1.5)	27
Morrill Ei		17	8.2279	-0.0978	49	0.8010	54	26 (2.25)	46
Morrill Ej		18	8.2495	-0.0762	43	0.8006	53	26 (2.6)	41
Morrill Ek		19	8.2165	-0.1092	50	0.7376	9	26 (1.36)	4
Morrill El		18	8.2418	-0.0839	46	0.8129	57	26 (1.6)	44
Sebastiani	19.12	20	8.0888	-0.2369	58	0.5744	4	23 (1.56)	3
Halliwell Model	19.4	20	8.3007	-0.0250	7	0.9299	59	24 (1.0)	7
1973 Masters	19.3	22 (out of 43)	8.4460	0.1203	52	0.3998	3	23 (0.92)	1
Burton 1	19.1	24	8.1696	-0.1561	53	-0.1541	2	19 (0.73)	1
Burton 2	19.2	25	8.2162	-0.1095	51	-0.03079	1	19 (0.58)	Undominated
			Mean = 8.3257						

equation where vote for senator is the sole independent variable we will get a higher value (*i.e.*, 58.2 percent) than if we use an index equation which is weighted in favor of party registration (*i.e.*, 47.9 percent). Which alternative is based on the sounder assumptions?

We are now ready to find out what contribution Niemi's swing-ratio analysis can make toward sorting out the tangled controversy over Burton's "contribution to modern art."

#### Notes

<sup>1</sup> Except for the 1973 Master's plan which has 43 districts and for which an even split would have to be 21/22 or 22/21.

<sup>2</sup> See Baker, Gordon E. 1990: 296-317.

<sup>3</sup> McDonald, Michael D. and Richard L. Engstrom, "Minority Representation and City Council Electoral Systems: A Black and Hispanic Comparison" (Westport, Conn.: Greenwood) 1990: 195.

<sup>4</sup> *Ibid.*

## Chapter 20

### Niemi's Swing-Ratio Analysis: California

In Chapter 12's application of Niemi's Swing-Ratio Analysis to the Indiana districting plans the methodology we decided upon was to employ prorata swing in preference to uniform percentage swing or random swing. We did so in order to "stick with" Niemi's "methodology, modifying it only in ways that do not change its essential character." We further decided to compute swing ratios over the historic range, as opposed to the "traditional" 45-55 range, or Niemi's  $\pm 5.0$  percent of the actual vote share in an historic election.

In our discussion of Niemi's New Jersey curve in Chapter 12 and Appendix H we noted there were two ways of stating the actual vote in an historic election: major-party aggregate vote share (*i.e.*, 56.86 percent) and mean district vote (*i.e.*, 58.68 percent). We have the same choice in marking the end-points of the historic range. In Indiana we employed aggregate vote share, rather than mean district vote, without comment as to why we did so. We did so because, in Indiana, we had available Niemi's data for aggregate vote shares covering the period 1970-1988.<sup>1</sup> In California we have figures for both aggregate vote share and mean district vote for all years since 1966. Table 17.7 lists them.

We observe that the mean district vote figures are invariably higher than the aggregate vote share figures, usually one to two percent. This reflects the fact that "Democratic" districts tend to be lower in turnout than "Republican" districts. Part of the reason for this was evident when we examined Tables 9.1, 9.2, and 17.1: the inner-city districts that have been losing the most population over recent decades tend to be Democratic. The suburban districts that have been gaining the most population over recent decades tend to be Republican. Therefore, by the time even the first election occurs under a new redistricting plan (2 1/2 years after the census) inner-city and suburban districts are likely to differ significantly in number of potential voters.

The other part of the reason is the well-recognized fact that turnout has a positive correlation with wealth and educational level. And wealthier and more educated citizens tend to vote Republican.

As we noted in Chapter 8's discussion of "troublesome complications," Lowenstein recognizes the partisan implications of this difference in measuring a party's statewide vote and says that *if* the relationship of votes to seats is employed as a criterion for judging the "fairness" of a districting plan, then the measure should be mean district vote. Aggregate vote-shares, he says:

"...is not only inconsistent with the [United States' equal population] basis for districting, but is inconsistent in a manner that is systematically skewed in favor of the Republicans and against the Democrats."<sup>2</sup>

However, we are not here employing the relationship of votes to seats as a criterion for judging the "fairness" of a districting plan. We are only marking the end points of a party's historic range of statewide vote to establish the denominator in the swing ratio fraction—and, in the next chapter, to mark the end points of the "votes" span defining a "marginal" district for the purpose of applying Grofman's Indicators 5/7. If those end points are commonly stated in terms of aggregate vote shares, it will make little difference in a plan's swing ratio if the votes span begins one or two percentage points lower and terminates one or two percentage points lower. On the other hand, if the information is available, it is better to employ mean district vote because the political indices of all districts shown in our histograms and seats-votes curves are calculated on the basis of an even division of the mean district vote—not on the basis of an even division of aggregate statewide vote-share.

Table 17.7 shows that since 1966 the historic extremes of vote division, according to mean district vote, are 47.58 percent (1968) and 59.16 percent (1974).<sup>3</sup> This defines an 11.58 percent range over which we shall compute the SRs for the eleven California congressional

districting plans for the 1980s and that of the 1973 Master's plan. They will be annotated "SR47.6-59.2."

As in Indiana, we give little attention to the bias parameter since it plays no major role in the prospective tests for partisan gerrymandering extant as of 1990 and applicable to the plans we are analyzing in this section. As previously, we simply compute a single bias factor for each plan we are examining, based on a Democrat "v" of 50 percent, and include it along with other information pertaining to that plan.

### *Seats-Votes Curves Based upon Actual Elections*

Using prorata swing and a swing-ratio vote range defined by the end-points 47.58 and 59.16, we constructed seats-votes curves for the elections of 1982—the first and only election conducted under Burton I—and 1984—the first election conducted under Burton II. These are depicted by the "staircases" labeled "A" in figures 20.1 and 20.2. We note the lowest swing-ratios of any plans we have looked at so far: Burton I has a swing ratio of 1.15; Burton II has a swing ratio of only 0.38. This is the first time we have encountered a swing-ratio less than unity. The histograms for the 1982 and 1984 elections that apply to these "staircases" are shown in Figures 20.3 and 20.4. A comparison with the histograms for these two plans, illustrated earlier in Figures 19.1 and 19.2, shows rather dramatically the difference between defining the political character of a districting plan by actual election results and defining it by the presumed innate partisan character of its districts: the 17.14 and 19.50 standard deviations of the former are more than twice the 8.2  $s_2$  values of the latter; the skewness of the former is several times that of the latter.

A histogram for the final election conducted under the 1973 Master's plan—the election of 1980—is shown in Figure 20.5. The corresponding histogram based upon a Democratic Index of its districts using 1980 registration/election data was shown earlier in Figure 19.3. Again, we observe the far greater standard deviation of the histogram derived from election results than that

100  
90  
80  
70  
60  
50  
40  
30  
20  
10

Figure 2.1

Seats-Votes Curve for 1981 California Congressional Districting Plan  
(Burton I): Actual 1982 Election Results

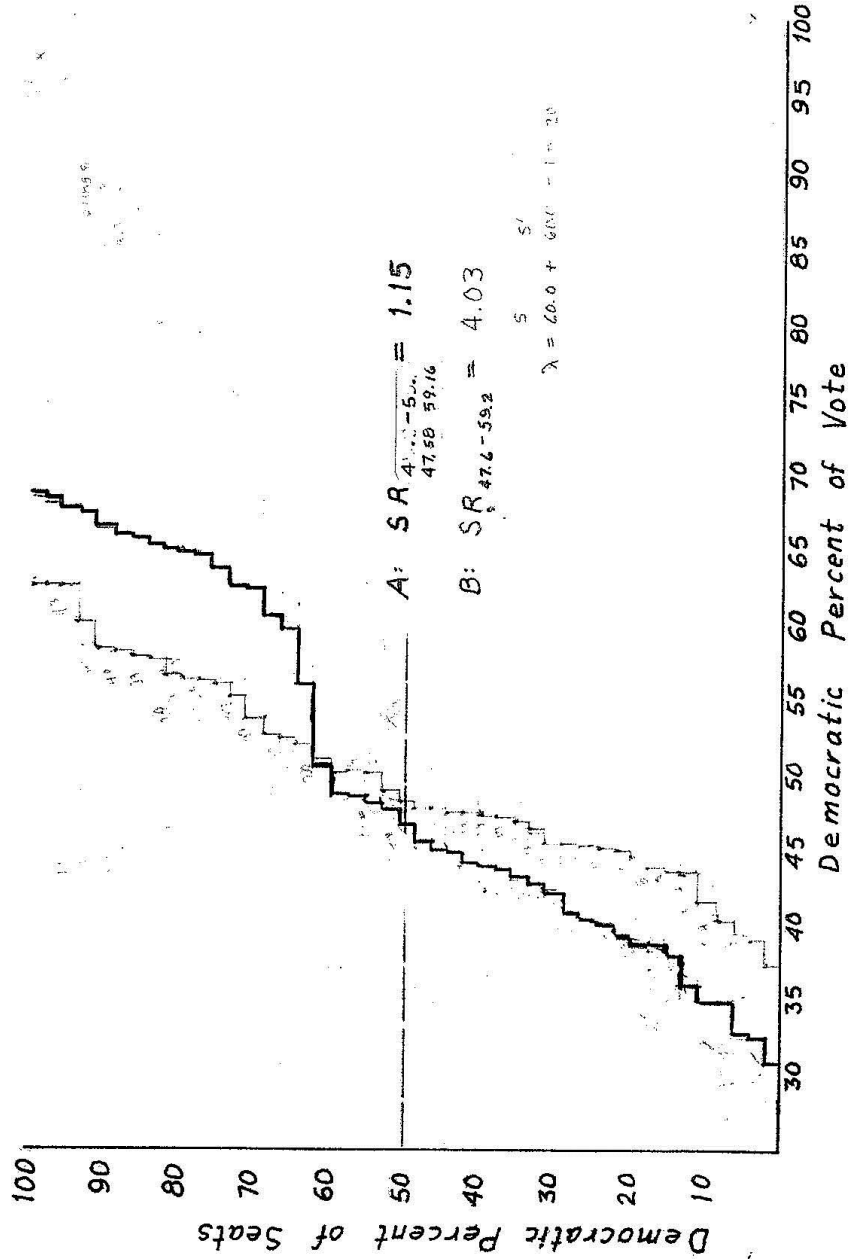
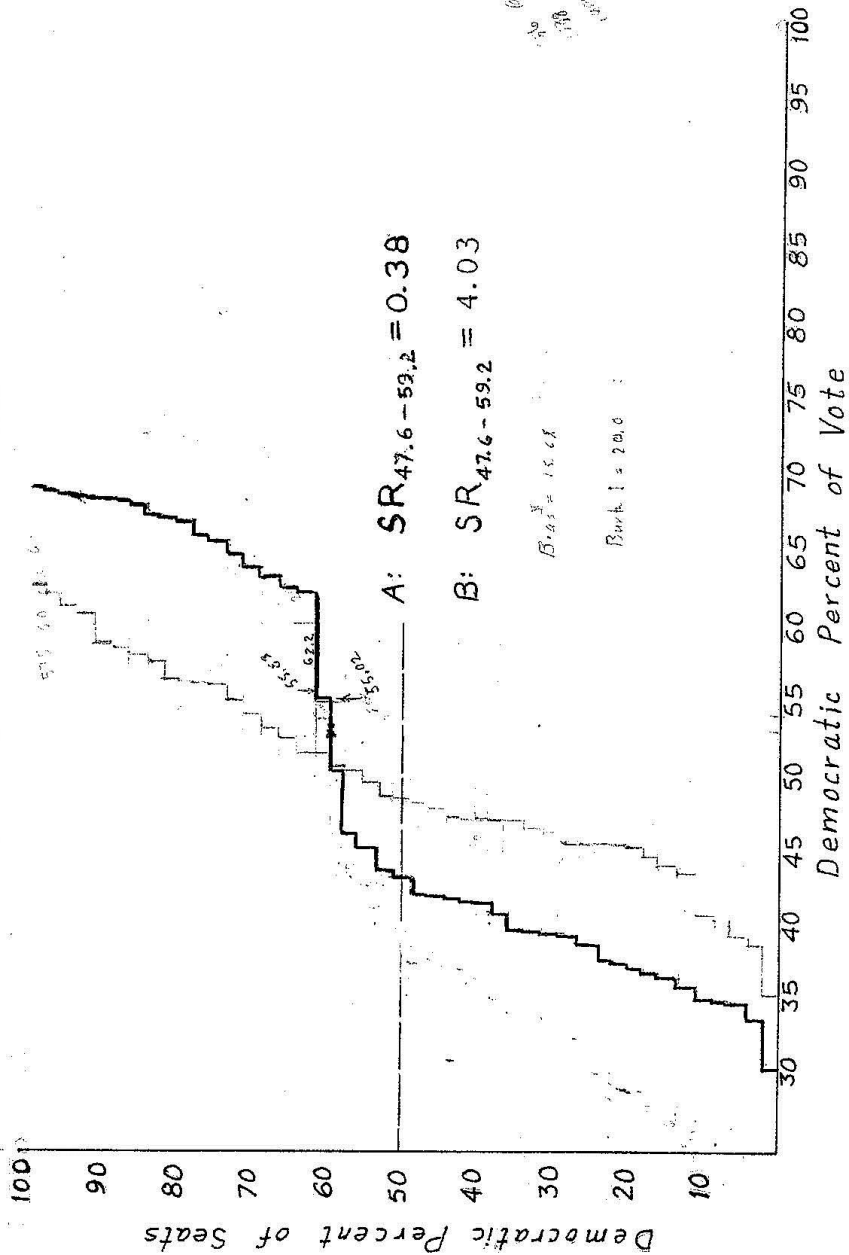
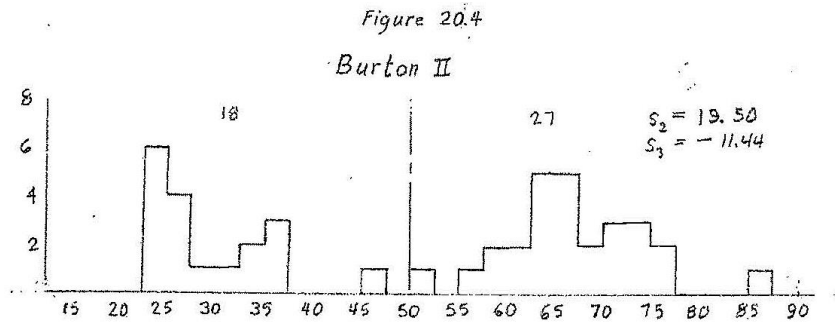
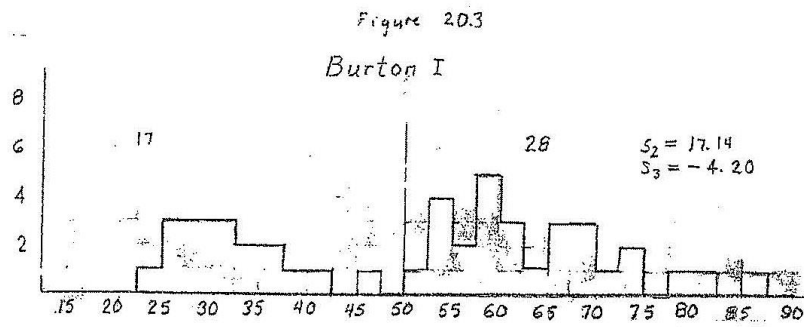


Figure 2.12  
 Seats-Votes Curve for 1983 California Congressional Districting Plan  
 (Burton II): Actual 1984 Election Results





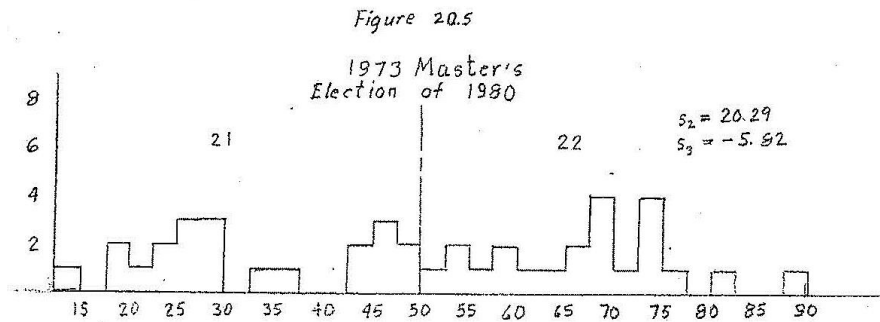
of the histogram derived from the political indices of its districts. In this case we note also that the direction of the histogram's skewness has changed, as well as its magnitude. We do not depict a seats-votes curve for the 1973 Master's plan. We can compute swing-ratios from the tabulations giving the coordinates of the "steps" on the staircase and do not need to plot it out on paper. These tabulations give a swing-ratio of 0.803 for this final election under the Master's plan.

#### *Seats-Votes Curves Based upon Democratic Indices of Districts*

Table 20.1 summarizes the swing-ratios and partisan biases of the plans under examination in this chapter. Looking first at the 1973 Master's plan, we note that in contrast to a swing ratio of less than unity derived from 1980 election results, our calculation yields a SR of 4.62 when input data is the Democratic Indices of its districts.



Looking next at Burton I, we see the swing-ratio rise to 4.03 when Democratic Indices are substituted for the 1982 election results that had produced a SR of only 1.15. Figure 20.1 shows the contrast in the seats-votes curves produced in these alternative ways. Curve "A," based on the 1982 election results, shows long "steps" when the Democratic vote percentage is between 50



and 60. It is, therefore, no surprise to learn that the swing-ratio associated with this curve barely exceeds unity. When the Burton I curve derived from the Democratic Indices of the plan's districts is superimposed as Curve "B" we can easily understand why the swing-ratio nearly quadruples. The reader will recall the similar relationship in the case of the 1972 plan for the Indiana House that we illustrated in Figure 20.5.

Table 20.1

Swing-Ratios and Partisan Biases of California Congressional Districting Plans

(1) Year of Plan	(2) Plan	(3) Figure	Swing-Ratio		(6) Bias at 50 Based Upon Political Indices of Districts	(7) Percent Based Upon Actual Election Result (Year)
			(4) Based Upon Political Indices of Districts	(5) Based Upon Actual Election Result (Year)		
1973	Special Master's (Court-drawn)	20.3 21-5	4.62	0.803 (1980)	2.33 (D)	0.02 (D) (1980)
1981	Burton I (Democrat drawn)	20.1 21.1	4.03	1.15 (1982)	6.67 (D)	20.0 (D) (1982)
1983	Burton II (Democrat drawn)	20.2 21.2	4.03	0.38 (1984)	11.11 (D)	15.6 (D) (1984)
1981	Halliwell (Impartially drawn?)	20.4	5.37		- 11.11 (R)	
1985	Morrill Aa (Impartially drawn)	20.5	5.75		- 24.45 (R)	
1985	Morrill Ba (Impartially drawn)	20.6	5.95		- 24.45 (R)	
1985	Morrill Bg (Impartially drawn)	20.7	5.95		- 28.89 (R)	
1985	Morrill Ca (Impartially drawn)	20.8	6.15		- 24.45 (R)	
1985	Morrill Da (Impartially drawn)	20.9	6.15		- 15.56 (R)	
1985	Morrill Db (Impartially drawn)	20.10	5.95		- 20.0 (R)	
1985	Morrill Ea (Impartially drawn)	20.11	5.95		- 24.45 (R)	
1984	Sebastiani (Republican drawn)	20.12	5.37		- 11.11 (R)	

Finally, we look at Burton II and see the same 4.03 swing-ratio when we substitute Democratic Index for the 1984 election results that had produced the remarkably low swing ratio of 0.38. Figure 20.2 contrasts the seats-votes curves produced with these alternative data. Curve “A,” based on the 1984 election results, shows even longer “steps” when the Democratic vote percentage is between 45 and 63. We expect to find a low swing-ratio associated with this curve and we do. When the Burton II curve derived from the Democratic Indices of the plan’s districts is superimposed as Curve “B” we get a picture similar to that in Figures 20.1 and 12.3.

When we proceed to the plans under which no election ever took place we no longer have the benefit of comparisons with swing ratios derived from results of elections conducted under the plans. The Halliwell plan and the Sebastiani plan, with swing ratios of 5.37, are intermediate between the Burton plans and the Morrill plans. This would be consistent with the view that the Burton plans, being gerrymandered, would have more “safe” districts which—according to the theory presented in Chapter 8—would give the plan a lower swing ratio. The Morrill plans seem to all have swing ratios either of 5.75, 5.95, or 6.15. Whichever of these it is, the Morrill plans have consistently higher swing ratios than Halliwell and Sebastiani, though not by a wide margin.

How do these swing ratios compare with those found in the Indiana investigation? A quick perusal of Tables 12.1 and 12.2 reveals a basic similarity. The Indiana citizen plans had consistently higher SRs (4.32 - 5.05) than the Indiana Republicans’ plans (3.68 - 4.00), just as the Halliwell/Morrill plans have higher SRs (5.37 - 6.15) than the Burton plans (4.03). But in neither case is the difference very great. The SRs of the California Burton plans (4.03) are higher than those of the Indiana Republican plans (3.68 - 4.00); the SRs of the Halliwell/Morrill plans (5.37 - 6.15) are higher than those of the Indiana citizen plans. (4.32 - 5.05). But again the differences aren't earthshaking. The really dramatic contrast appears when we compare swing-ratios derived from actual election results to swing-ratios computed from data, which, arguably, reveal the underlying partisan character of the districts. But this contrast is of little or no value in a partisan

gerrymander analysis. We will defer further discussion of the swing-ratio as a measure of partisan gerrymandering until we have the benefit of swing-ratio calculations for plans under litigation in two additional states.

Before concluding this chapter we need to take a quick look at the partisan bias figures obtained from the calculations we made in constructing our seats-votes curves. They are tabulated in Columns (6) and (7) of Table 20.1. According to the convention we established in Equation 8.1 (Chapter 8) a positive value indicates pro-Democrat bias and a negative value indicates pro-Republican bias. Further, the numbers represent percentages of the seats that a party has won by getting a given percentage of the statewide vote. In Column (6) of Table 20.1 we see that Democrat bias has been ascribed to the 1973 Master's plan, as well as to the two Burton plans. The magnitude of bias in the Master's plan, however, is quite small: it says the plan gives Democrats 2.33 percent more seats at 50 percent of the statewide vote than they are entitled to. In practical terms that comes out to one "extra" seat. By comparison, Burton II gives Democrats 11.11 percent more seats at 50 percent of the statewide vote than they are entitled to. In practical terms that comes out to five "extra" seats. Our calculations ascribe the same magnitude of pro-Republican bias to the Halliwell and Sebastiani plans; but they ascribe more than double that amount of bias to most of the Morrill plans. In Column (7) of Table 20.1 we have three bias figures derived from actual election results. They show no consistent pattern.

## Notes

<sup>1</sup> Niemi, Richard, "The Swing Ratio as a Measure of Partisan Gerrymandering," in Bernard Grofman, ed., *Toward Fair and Effective Representation*. New York: Agathon, (1990): 268.

<sup>2</sup> Lowenstein, Daniel and Daniel Steinberg, *The Quest for Legislative Disstricting in the Public Interest: Elusive or Illusory?*(California: UCLA Law Review, 1985): 51.

<sup>3</sup> The corresponding end points, using major-party aggregate statewide vote share are 45.23 (1968) and 57.17 (1974), for a spread of 11.94 percent on the "votes" scale.

## Chapter 21

### Grofman's Prima Facie Indicators: California

In Chapter 13 we were afforded opportunity to see how one would apply Grofman's prima facie indicators to an actual districting plan in a real controversy. There we noted he used party registration as his measure of "voting strength," in contrast to employing a political index—as we had done in Indiana. We had no quarrel with him over that choice, but voiced disagreement with the selective use of his measure.

#### *The Burton Plans*

*Packing.* If, as Grofman claimed, CDs 21 and 22 were "packed" because of their relatively high Republican registration then consistent application of this registration criterion would lead to classifying four additional districts as "packed" with Republicans and seven other districts as "packed" with Democrats. We listed these districts in Table 15.1 using both Republican (Democrat) percent of major-party registration and Republican (Democrat) percent of total registration.

So it only remains for us to apply the Democratic Index and thresholds we did in Indiana to the California situation as embodied in Burton II. When we do so we obtain the results reported in Table 21.1. Recall that we defined any district with a D.I. exceeding 60 as "packed" with Democrats and any district with a D.I. less than 40 as "packed" with Republicans. When we look at Column (3) of Table 21.1 we see that by these criteria Burton II "packs" Republicans in five districts and "packs" Democrats in five districts. The only difference is a slightly higher degree of packing of Democrats on account of one of the "Democratic" districts having a D.I. exceeding 70. Viewed from this perspective, it would be very difficult to condemn Burton II as a partisan gerrymander on the strength of this indicator. When we look at adjacent Column (2) we see an almost identical picture with respect to Burton I: the same five districts "packed" with Democrats and the same five districts "packed" with Republicans—and to almost exactly the same degree.

Table 21.1

Grofman's *Prima Facie* Indicator No. 1:  
California Congressional: "Packing" of Districts Under Different Plans, as Measured by Democratic Index

1973 Master's	1981 Burton I	1983 Burton II	1983 Halliwell Model	1985 Morill Aa	1983 Sebastiani
<u>Democrats (7)</u>	<u>Democrats (5)</u>	<u>Democrats (5)</u>	<u>Democrats (4)</u>	<u>Democrats (6)</u>	<u>Democrats (5)</u>
CD 29 72.96	CD 29 67.30	CD 29 70.61	CD 28 74.56	CD 31 72.52	CD 28 70.36
	CD 28 65.49		CD 31 72.63	CD 29 72.10	
CD 28 67.34	CD 31 64.60	CD 31 64.53			CD 26 67.11
CD 31 64.91	CD 25 62.16	CD 28 63.81	CD 8 63.88	CD 8 64.62	CD 32 66.57
CD 6 63.01	CD 5 60.34	CD 25 61.97	CD 5 63.74	CD 25 63.64	CD 5 65.52
CD 25 62.66		CD 5 61.51		CD 30 63.34	CD 8 63.45
CD 8 62.35				CD 6 61.60	
CD 30 60.88					
<u>Republicans (5)</u>	<u>Republicans (5)</u>	<u>Republicans (5)</u>	<u>Republicans (5)</u>	<u>Republicans (4)</u>	<u>Republicans (5)</u>
CD 26 38.91	CD 42 39.69	CD 42 39.75	CD 22 38.26	CD 39 38.85	CD 41 39.84
CD 22 38.68	CD 39 37.28	CD 39 36.23	CD 45 37.75	CD 41 38.60	CD 43 38.16
CD 43 38.14	CD 40 33.86	CD 40 34.78	CD 43 37.41	CD 24 36.46	CD 27 37.30
CD 39 36.29	CD 22 33.86	CD 43 34.73	CD 40 36.14	CD 40 31.72	CD 39 36.94
CD 40 34.20	CD 43 33.71	CD 22 33.75	CD 39 36.13		CD 40 34.12

*Fragmenting.* We met the problems associated with Indicator No. 2 in Chapter 13's analysis of the Indiana plans and in Chapter 15's discussion of Grofman's use of it in analyzing the Burton plans. There we expressed our view that "fragmenting" takes place only when there is a concentration of the "out" party's voters sufficient to constitute a majority in a single-member district. If the "out" party voters have to be strung together in a "non-compact" arrangement to achieve that majority, then failure to string them together does not constitute fragmenting. In our view CD 27 of the 1973 Master's plan was not "fairly compact" and the mere cutting up of it by Burton's technicians did not render them guilty of fragmenting. Since CD 27 was the only case of fragmenting in the Burton plans cited by Grofman, and we cannot find any other cases on our own, we conclude that the Burton plans are free from fragmenting.

*Pairing.* In discussing Grofman’s application of Indicator No. 3 in Chapter 15 we noted that both sides agreed on who was paired at the time of redistricting. There were no Democrat-Democrat pairs and no bipartisan pairs. On the other hand, there were three Republican-Republican pairs (Goldwater/Fiedler; Moorhead/Rousselot; Grisham/Dreier) indicating strong partisan bias on the part of the mapmakers. Table 21.2 shows the pairings in the Burton plans, as well as those in the other plans we shall be considering. Note that Burton II shows no pairings. This is because the Burton I pairings eliminated the three Republican incumbents that are listed as paired in Burton I.

*Open-District Advantage.* (Indicator No. 8) The number of open districts in a plan is always the sum of three components: (1) the number of new districts resulting from expansion of a state’s congressional delegation; (2) the number of instances where incumbents seeking re-election were placed in the same district (“pairings”); (3) the number of incumbents who have voluntarily retired. Sometimes it is difficult to say with certainty whether a particular incumbent belongs in category (2) or (3). It can be argued, for instance, that Goldwater had voluntarily retired from the U.S. House to run for the U.S. Senate and, therefore, should not be considered a victim of pairing. Likewise, it can be argued that Dornan’s decision to retire was dictated by his receiving a very bad district in which to seek re-election rather than ambition for higher office.

On the other hand, it is certain that Dornan would not have to face another incumbent were he to seek re-election—and that Goldwater would have. Therefore, we place Goldwater in category (2) and Dornan in category (3). In making valid comparisons with other plans we must treat McCloskey, Dornan, Burgener and John Burton as voluntary retirees, thus causing their districts to be “open.”

Table 21.2  
 Grofman's *Prima Facie* Indicator No. 3:  
 California Congressional: "Pairing" of Incumbents Under Different Plans

1973 Master's	1981 Burton I	1983 Burton II	1983 Halliwell	1985 Morrill Aa	1985 Morrill Ba	1985 Morrill Ca	1985 Morrill Da	1983 Sebastiani
Not  Applicable	<u>Democrats</u>	<u>Democrats</u>	<u>Democrats (2)</u>	<u>Democrats (2+1)</u>	<u>Democrats (3+1)</u>	<u>Democrats (2+1)</u>	<u>Democrats (2+1)</u>	<u>Democrats (3)</u>
	None	None	Beilenson D Waxman D Dixon D Hawkins D	Beilenson D Dixon D Hawkins D Martinez D Dymally D	Mineta D Edwards D Beilenson D Dixon D Hawkins D Martinez D Dymally D	Beilenson D Dixon D Hawkins D Martinez D Dymally D	Beilenson D Dixon D Hawkins D Martinez D Dymally D	Matsui D Fazio D Beilenson D Dixon D Hawkins D Roybal D
	<u>Republicans (3)</u>	<u>Republicans</u>	<u>Republicans</u>	<u>Republicans (1)</u>	<u>Republicans (1)</u>	<u>Republicans (1)</u>	<u>Republicans (1)</u>	<u>Republicans (2)</u>
	Grisham R Dreier R Goldwater R Fiedler R Moorhead R Roussetot R	None	None	Lowery R Hunter R	Lowery R Hunter R	Lowery R Hunter R	Lowery R Hunter R	Goldwater R Fiedler R Moorhead R Roussetot R
	<u>Bipartisan</u>	<u>Bipartisan</u>	<u>Bipartisan (1+1)</u>	<u>Bipartisan (1)</u>	<u>Bipartisan (2)</u>	<u>Bipartisan (2)</u>	<u>Bipartisan (1)</u>	
	None	None	Grisham R* Patterson D Dannemeyer R* (44.9)	Patterson D Dannemeyer R* (38.9)	Coehlo (51.9) D Pashayan R Patterson D Dannemeyer R* (38.8)	Coehlo (52.3) D Pashayan R Patterson D Dannemeyer R* (38.8)	Patterson D Dannemeyer R* (38.8)	

\*Party having advantage in a bipartisan pairing of incumbents. Number in parentheses is the Democratic Index (D.I.) of the district.

47.58 - 54.16  
 mid-point = 53.87 ± 2.5    47.58 + 5.74 = 53.32  
 50.87 - 55.87  
 50.87 - 55.87

In discussing Grofman's application of Indicator No. 8 in Chapter 15 we concluded there were nine open districts in Burton I: three created by the three pairings; two by the two-seat expansion of the delegation; and four created by retirements. In our Chapter 15 review of Grofman's work we employed his "registration edge" as the measure of partisan character. We see from Table 15.2 that in 1982 Democrats won all districts where their registration edge exceeded 25 percent and lost all districts where their registration edge was less than six percent. In Table 21.3 we use our Democratic Index as the measure of partisan character and assign a significant advantage to one of the parties only if the district is not "critically marginal"—*i.e.*, with a D.I. *not* between 47.5 and 52.5. This measure leads to the same conclusion as did Grofman's methodology: a significant Democrat advantage in six of the nine districts making for a strong pro-Democrat bias. In Burton II we find only one open district: CD 5, which became "open" due to the death of Phil Burton. This heavily Democratic district was easily won by Burton's widow, Sala.

*Altering/Preserving Incumbents' Districts.* (Indicators No. 4 and 6) In our Chapter 15 commentary on how Grofman employed these indicators we stated our preference for the more highly quantified approach employed in our Indiana investigation. Choosing population carryover as our analytical tool, we computed that percentage for each incumbent in two different ways and employed whichever gave the higher value. These values we entered in Table 15.3. For Burton I we discovered a greater-than-25 percent spread in the mean carryover between Democrats and Republicans—a spread favoring Democrats. Table 15.3 further revealed that nine of the 21 Republicans had less than 50 percent carryover while no Democrat had less than 59 percent. Finally, while one Republican incumbent received a carryover as low as 6.8 percent, no Democrat incumbent had a carryover less than the 59.3 percent received by Glenn Anderson in CD 32. These indicators reveal a pro-Democrat bias too strong to have resulted from chance.



Table 21.3  
Grofman's *Prima Facie* Indicator No. 8:  
California Congressional: Open-District Advantage Under Different Plans

1973 Masters	1981 Burton I	1983 Burton II	1983 Halliwell	1985 Morrill Aa	1985 Morrill Ba	1985 Morrill Ca	1985 Morrill Da	1983 Sebastiani	
Not	(9 Districts) CD 6: 57.4 D* CD 12: 43.0 R* CD 18: 54.9 R* CD 26: 52.9 R* CD 27: 52.8 R* CD 34: 56.1 D* CD 37: 43.0 R* CD 43: 33.7 R* CD 44: 55.5 R*	(1 District) CD 5: 61.5 D*	(10 Districts) CD 6: 51.4 CD 12: 45.4 R* CD 23: 51.9 CD 27: 53.6 R* CD 29: 58.5 D* CD 35: 43.0 R* CD 38: 43.2 R* CD 39: 36.3 R* CD 43: 37.4 R* CD 45: 37.7 R*	(11 Districts) CD 5: 50.6 CD 12: 47.9 R* CD 16: 51.6 CD 27: 47.9 R* CD 31: 72.5 D* CD 37: 43.0 R* CD 38: 41.2 R* CD 40: 36.6 R* CD 41: 38.6 R* CD 43: 44.7 R* CD 44: 43.1 R*	(13 Districts) CD 6: 63.8 D* CD 10: 56.7 D* CD 13: 47.8 R* CD 15: 46.6 R* CD 18: 51.3 R* CD 23: 52.6 R* CD 27: 49.3 R* CD 31: 72.5 D* CD 37: 43.2 R* CD 38: 40.4 R* CD 40: 32.0 R* CD 41: 39.9 R* CD 43: 43.9 R*	(12 Districts) CD 6: 63.8 D* CD 13: 47.3 R* CD 15: 48.4 R* CD 18: 51.3 R* CD 20: 39.5 R* CD 27: 47.9 R* CD 31: 72.5 D* CD 37: 43.6 R* CD 38: 40.4 R* CD 40: 32.0 R* CD 41: 39.9 R* CD 43: 43.9 R*	(11 Districts) CD 5: 50.9 CD 12: 52.3 CD 18: 49.7 R* CD 20: 42.3 R* CD 27: 49.3 R* CD 31: 72.5 D* CD 37: 43.2 R* CD 38: 40.4 R* CD 40: 32.0 R* CD 41: 39.9 R* CD 43: 43.9 R*	(11 Districts) CD 3: 50.5 CD 6: 49.3 CD 12: 48.0 R* CD 20: 45.0 R* CD 21: 42.9 R* CD 23: 47.7 R* CD 24: 50.5 R* CD 25: 55.8 D* CD 40: 34.1 R* CD 41: 39.8 R* CD 45: 43.3 R*	
Applicable	4.3		4.6	3.6	5.8	3.9	3.8	3.8	

\*Party having advantage in an open district. Preceding number is the Democratic Index (D.I.) of the district, rounded to one decimal

significant

$$47.56 - 59.6 = 47.58 + 5.19 = 53.37$$

$$\text{Mid-point} = 53.37 \pm 2.50$$

$$\text{Range} = 50.87 - 55.87$$

The “old district” populations to be carried over in all plans save Burton II are those of the 1973 Master’s plan. In the case of Burton II they are those of the districts of Burton I. Table 21.4 lists the population carryover for each of the victorious candidates in the general election of 1982—including nine who became incumbents as a result of that election. We note, unsurprisingly, that all these incumbents—Republican as well as Democrat—were given high carryovers. This simply says that having accomplished their political objective with Burton I, the Democrats simply wanted to reinforce the status quo. They did not want to rock the boat by attempting to take more seats from the Republicans. The significant carryover comparisons between Democrats and Republicans are to be found in Table 15.3.

*Reducing/Enhancing Marginal Incumbents’ Districts.* (Indicators No. 5 and & 7) In Chapter 13 we addressed the question of what was a “marginal” incumbent. We defined such an incumbent as one who occupied a district whose Democratic Index fell within the bracket corresponding to the historic minimum and maximum statewide Democratic vote. In California the end-points of that bracket are 47.58 and 59.16 percent of the major-party mean district vote. That means those districts having Democratic Indices between 40.84 and 52.42 are the marginals—22 of the 43 districts in the 1973 Master’s plan. Further reflection leads one to realize that a marginal incumbent is not only one who occupies a marginal district but, in addition, could include a representative who is elected from what a political index would say is a “safe” district for the other party. Such a representative would, presumably, be at least as vulnerable as one elected from a marginal district. Therefore, we must expand our definition of a marginal incumbent to include one who may have been elected from a district supposedly “safe” for the other party. In this study one representative qualifies as “marginal” by this expanded definition: Bobbi Fiedler elected in 1980 from CD 21 of the Master’s plan—a district with a Democratic Index of 53.15.

Table 21.4  
Grofman's *Prima Facie* Indicators 5 & 7: Reducing/Enhancing Marginal Incumbents' Districts  
California Congressional: Change in Democratic Index of Marginal Incumbents' Districts Under Different Plans

Incumbent	0% 1973 Nasters' (7)	Burton 1	Sebastiani	Halliwel	Morrill Aa	Morrill Ba	Morrill Ca	Morrill Da
DEMOCRATS								
Matsui	51.34	52.35 + 1.01	56.66 + 5.32	54.33 + 2.99	54.46 + 3.12	53.23 + 1.89	52.84 + 1.50	54.46 + 3.12
Miller	51.42	53.06 + 1.64	46.43 - 4.99	47.47 - 3.95	46.33 - 5.04	47.15 - 4.27	48.97 - 3.35	46.33 - 5.09
Larios	51.56	52.16 + 0.60	51.80 + 0.24	51.97 + 0.41	55.89 + 4.33	48.69 - 2.87	48.69 - 2.87	53.55 + 1.99
Mineta	47.24	49.79 + 2.55	46.92 - 0.32	49.82 + 2.58	46.86 - 0.38	49.66 + 2.42	50.34 + 3.10	46.63 - 0.61
Panetta	49.61	49.89 + 0.28	50.33 + 0.72	49.94 + 0.33	44.29 - 5.32	46.78 - 2.83	48.31 - 1.30	50.17 - 0.56
Brown	51.59	53.78 + 1.79	48.54 - 3.05	44.85 - 6.74	45.00 - 6.59	45.00 - 6.59	45.00 - 6.59	45.00 - 6.59
Patterson	46.42	47.51 + 1.09	44.95 - 1.47	43.17 - 3.25	38.85 - 7.57	38.81 - 7.61	38.81 - 7.61	38.81 - 7.61
Nbr. Receiving > 1% Reduction	-	0	3	3	4	5	5	3
Nbr. Receiving > 1% Enhancmt Maximum	-	5	1	2	2	2	2	2
Unfavorable Change in Index	-	None	- 4.99	- 6.74	- 7.57	- 7.61	- 7.61	- 7.61
REPUBLICANS (16)								
Chapple	46.44	47.22 - 0.78	45.75 + 0.69	47.37 - 0.93	50.25 - 3.81	50.25 - 3.81	47.09 - 0.65	45.50 + 0.94
Clausen	49.50	49.85 - 0.35	50.51 - 1.01	49.69 - 0.19	47.38 + 2.12	47.16 + 2.34	50.25 - 0.75	50.25 - 0.75
McCloskey	47.50	42.96 + 4.54	48.04 - 0.54	45.39 + 2.11	47.89 - 0.39	48.69 - 1.19	48.69 - 1.19	52.31 - 4.81
Shumway	48.36	45.82 + 2.54	45.75 + 2.61	46.70 + 1.66	49.30 - 0.94	52.07 - 3.71	49.82 - 1.46	48.98 - 0.62
Pashayan	49.50	49.08 + 0.42	52.56 - 3.06	50.07 - 0.57	53.08 - 3.58	51.85 - 2.35	52.35 - 2.85	52.49 - 2.99
Thomas	50.42	44.29 + 6.63	48.64 + 2.28	46.17 + 4.75	51.97 - 1.05	47.85 + 3.07	47.40 + 3.52	44.89 + 6.03
Lagomarsino	46.07	47.81 - 1.74	45.85 + 0.22	45.45 + 0.62	44.29 + 1.78	47.33 - 1.26	46.78 - 0.71	45.70 + 0.37
Goldwater	40.91	40.26 + 0.65	45.85 - 4.94	43.20 - 2.29	50.70 - 9.79	41.98 - 0.87	50.74 - 9.83	50.76 - 9.85
Fiedler	53.15	40.26 + 12.89	45.85 + 7.30	46.30 + 6.85	48.94 + 4.21	44.30 + 8.85	48.95 + 4.20	47.93 + 5.22
Dornan	42.83	52.80 - 9.97	52.37 - 9.54	53.62 - 10.78	47.94 - 5.11	49.30 - 6.47	47.94 - 5.11	49.30 - 6.47
Grisham	46.25	40.97 + 5.28	48.11 - 1.86	44.86 + 1.39	49.06 - 2.81	49.53 - 3.28	49.98 - 3.73	49.33 - 3.08
Lungren	45.05	39.69 + 5.36	49.00 - 3.95	50.02 - 4.97	46.57 - 1.52	46.36 - 1.31	46.36 - 1.31	46.36 - 1.31
Dreier	43.53	40.17 + 3.36	44.44 - 0.91	43.64 - 0.11	43.92 - 0.39	43.92 - 0.39	44.11 - 0.58	43.92 - 0.39
Lewis	41.60	40.59 + 1.01	48.54 - 6.94	48.20 - 6.60	48.84 - 7.24	48.79 - 7.19	48.04 - 6.44	48.79 - 7.19
Lowery	42.92	42.67 + 0.25	44.98 - 2.06	43.00 - 0.08	49.97 - 7.05	49.97 - 7.05	49.97 - 7.05	49.97 - 7.05
Hunter	51.86	43.43 + 8.43	52.42 - 0.56	48.85 + 3.01	49.97 + 1.89	49.97 + 1.89	49.97 + 1.89	49.97 + 1.89
Nbr. Receiving > 1% Reduction	-	2	8	4	10	10	9	8
Nbr. Receiving > 1% Enhancmt Maximum	-	9	2	5	3	3	2	2
Unfavorable Change in Index	-	- 9.97	- 9.54	- 10.97	- 9.79	- 7.19	- 9.83	- 9.85

Table 28<sup>1.5</sup>

Grofman's *Prima Facie* Indicators 4 & 6: Altering/Preserving Incumbents' Districts  
 California Congressional: Incumbents' Population Carryover Under 1983 Burton II (Democrat) Plan

From Old District to New District Having Larger Population: Percent of Old District Carried Over into New District

\*From Old District to New District Having Smaller Population: Percent of New District Composed of Carryover from Old District

Incumbent	Population Carryover	Incumbent	Population Carryover
<b>DEMOCRATS</b> (28)		<b>REPUBLICANS</b> (17)	
Bosco	80.5* ✓	Chappie	80.5* ✓
Matsui	100.0* ✓	Zschau *	79.8 ✓
Fazio	100.0 ✓	Shumway	83.7 ✓
Burton	81.6 ✓	Pashayan	83.8
Boxer	68.2 ✓	Thomas	85.9* ✓
Miller	100.0 ✓	Lagomarsino	100.0* ✓
Dellums	99.9* ✓	Fiedler	96.5
Stark	99.9 ✓	Moorhead	94.0*
Edwards	99.9* ✓	Dreier	97.5*
Lantos	86.9 ✓	Lewis	96.5*
Mineta	99.9* ✓	McCandless *	96.1
Coehlo	79.9	Dannemeyer	92.7*
Panetta	92.9 ✓	Badham	93.6
Lehman	81.0*	Lowery	67.2
Bejlenson	92.2*	Lungren	61.7*
Waxman	99.2	Packard	94.8*
Roybal	99.6	Hunter	70.9
Berman	96.5*		
Levine	70.7		
Dixon	77.5		
Hawkins	89.5		
Martinez	99.7		
Dymally	96.7*		
Anderson	83.0*		
Torres	98.7		
Brown	98.2*		
Patterson	82.7		
Bates	89.9*		
<b>Mean:</b>	90.9 <del>81.1</del>		82.7 <del>53.9</del>
$\Sigma = 2544.7$			$\Sigma = 1503.2$
<b>Lowest:</b>	68.2 <del>62.8</del>		67.2 <del>14.0</del>
Number Having < 50% Carryover:	0		0

Having refined our definition of a marginal incumbent, we refer to Table 21.5 for a list of individuals who meet that definition: sixteen Republicans and seven Democrats. Following our Indiana analysis, we arbitrarily establish a one percent change in the Democratic Index of an Incumbent's district as significant. Table 21.5 reveals that in Burton I none of the seven Democrats receives any reduction in his index, but four of them receive significant enhancement. For Republicans, only two receive significant reduction, whereas nine receive significant enhancement. But one of the two suffering reduction takes a real hit: Dornan's Democratic Index goes from 42.83 to 52.80—a 9.97 percent jump. For Burton I this pair of indicators shows an overall pro-Democrat bias, but except for Dornan the bias is not dramatic.

*Burton Summary.* Taking all eight of the indicators together, we are led to conclude that no case can be made against Burton I on the basis of the first two—packing and fragmenting—but the remaining six demonstrate a pro-Democrat bias ranging from moderate to severe. We would characterize as moderate the reduction/enhancement bias and the altering preserving bias. We would characterize as severe the bias demonstrated by the pairing of six Republican incumbents in three districts and the concomitant appearance of nine open districts in which Democrats hold a 6-to-3 advantage. In Chapter 13 we quoted Grofman as saying that “eleven of these twelve methods were used” in crafting the Burton plans. We would say eight of those methods were used; but the issue isn't *whether* a method was used but *how severely* it was used. That is a far more difficult judgment to make. Our judgments will be better informed if we apply these indicators to the other plans in this study. We turn first to the Halliwell Plan.

### *1983 Halliwell Plan*

*Packing.* Table 21.1 shows Democrats “packed” in five districts; Republicans “packed” in five. But Democrats are packed to a greater degree. Two of their four districts have Democratic indices above 70, whereas none of the Republican districts has a D.I. below 30. We would say the asymmetry makes it come out a wash.

*Fragmenting.* This indicator really applies to a situation where a reasonably compact concentration of Democrats in a predominantly Republican area, or a reasonably compact concentration of Republicans in a predominantly Democratic area, is divided in a way that prevents the formation of a district in which the “compact concentration” is a majority. We saw a classic example of this in Indiana where the city of Fort Wayne—an urban center immersed in a conservative rural area—was split between two legislative districts in which the rural conservatives dominated. But the geography of California is different. One might say a corresponding situation occurs in Fresno County, but it really doesn’t because the rural area surrounding the city of Fresno isn’t all that conservative. A better example might be the Riverside/San Bernardino community which, if Republicans controlled the State’s congressional districting, might be divided among two or three districts, each dominated by its rural, desert hinterland. But Republicans don’t control California’s congressional districting; so the Riverside/San Bernardino community is concentrated in a single CD which, unsurprisingly, elects a Democrat. We fail to find any instance of fragmenting in this plan, or in any other of the California plans we are examining, and therefore shall delete this indicator from our check list as we examine the rest of the plans before us.

*Pairing.* Table 21.2 shows two Democrat/Democrat pairings, no Republican/Republican pairings, and a three-way bipartisan pairing where Republicans have the advantage. We would characterize the pro-Republican bias of this indicator as moderate.

*Open-District Advantage.* Table 21.3 lists ten open districts created by this plan, with Republicans enjoying a 6-to-4 advantage. The Republican advantage appears greater when we note that two of the four “Democratic” districts are critically marginal.

*Altering/Preserving Incumbents’ Districts.* Table 15.3 shows the Halliwell plan to be essentially neutral by this indicator. The mean carryover percentages for the major parties—62.4 and 65.0—are virtually the same. The lowest carryover percentages—9.0 and 10.8—do not differ significantly. Democrats are at a slight disadvantage with respect to the number of their

incumbents suffering less-than-50 percent carryover—six, as opposed to four—but overall, the pro-Republican bias by this indicator is at most moderate.

*Reducing/Enhancing Marginal Incumbents' Districts.* Table 21.5 shows that of seven marginal Democrat incumbents two received significant enhancement and three others received significant reduction. Of sixteen marginal Republican incumbents six received significant enhancement and four received significant reduction. The maximum unfavorable change in district index suffered by a Democrat incumbent was 6.74; that for a Republican incumbent was 10.97. We see no significant difference in how the parties fared by these indicators.

*Summary.* The packing and fragmenting indicators reveal no significant partisan advantage. Moderate partisan bias is revealed by the pairing indicator and by the open district indicator. So, too, for the altering/preserving indicator. The reducing/enhancing indicator shows no significant difference between the parties. Taken together, these indicators add up to a pro-Republican bias that might be termed slight to moderate.

### *1985 Morrill Plans*

*Packing.* The Morrill plans are sufficiently similar among themselves and, as a group, different from the other plans under analysis that we can consider them collectively. Plan Aa, for instance (see Table 21.1), shows packing of Democrats in six districts and packing of Republicans in four. In two of the six “Democratic” districts the D.I. exceeds 70. In none of the “Republican” districts does the D.I. fall below 30. Plans Ba, Ca, Da and Ea also have six districts with D.I. above 60 of which two are above 70. They may differ in having five or six districts with D.I. under 40 but, like Aa, have no districts of D.I. under 30. We are safe, therefore, in saying that all the Morrill plans show a slight pro-Republican bias according to this indicator.

*Pairing.* The four Morrill plans in Table 21.2 all show either two or three Democrat/Democrat pairings, one of which is a three-way pairing. They also show a lone Republican/Republican pairing in CD 42, doubtless because CD 42 is one of three CDs that is identical in all 54 Morrill plans. Finally, they all show either one or two bipartisan pairings one of

which includes Patterson and Dannemeyer with the partisan advantage going to Dannemeyer. These similarities make it safe for us to generalize that the Morrill plans, by this indicator, have a moderate pro-Republican bias.

*Open-District Advantage.* The four Morrill plans in Table 21.3 all show 11 to 13 open districts in which the Republican advantage is either 8-to-3, 8-to-5 or 9-to-3. In all cases there are at least six districts with a D.I. less than 47.5 and in all cases there are either 3 or 4 districts with a D.I. between 47.5 and 52.5. These similarities make it safe for us to generalize that the Morrill plans, by this indicator, have a moderate pro-Republican bias.

*Altering/Preserving Incumbents' Districts.* The four Morrill plans in Table 15.3 all show a mean population carryover between 58.3 and 62.6 percent for Democratic incumbents and between 59.0 and 62.9 percent for Republican incumbents. The carryover differential between Democratic and Republican incumbents ranges from 2.1 percent Democratic to 3.3 percent Republican. The lowest population carryover for any one district is 10.8 percent for Democratic incumbents and ranges from 4.1 to 5.7 percent for Republican incumbents. The number of incumbents having less than 50 percent carryover ranges from 6 to 8 for Democrats and from 4 to 6 for Republicans. The narrow differences evident in these comparisons make it safe for us to generalize that the Morrill plans, by this indicator, are politically neutral.

*Reducing/Enhancing Marginal Incumbents' Districts.* The four Morrill plans in Table 21.4 contain seven marginal Democratic incumbents and sixteen marginal Republican incumbents. Each of these plans gives significant enhancement to two of the Democratic incumbents and significant reduction to either 3, 4, or 5 other Democratic incumbents. The maximum unfavorable change in Democratic Index for any of these Democrats is either 7.57 percent or 7.61 percent. Each of these plans also gives significant enhancement to either two or three of the Republican incumbents and significant reduction to either 8, 9, or 10 other Republican incumbents. The maximum unfavorable change in Democratic Index for any of these Republicans ranges from 7.19 percent to 9.85 percent. The ratio of incumbents receiving



reduction to those receiving enhancement is consistently higher for the Republican incumbents and the maximum unfavorable change in index also tends to be higher. We would infer that the Morrill plans, by these indicators, show a slight pro-Democrat bias.

*Summary.* The packing indicator reveals a slight pro-Republican advantage. Moderate pro-Republican bias is revealed by the pairing indicator and by the open district indicator. The altering/preserving indicator shows political neutrality. The reducing/enhancing indicator shows a slight pro-Democrat bias. Taken together, these indicators arguably add up to a slight pro-Republican bias.

### *1983 Sebastiani Plan*

*Packing.* Table 21.1 shows Democrats packed in five districts and Republicans packed in five districts. But Democrats are packed to a greater degree: one of Sebastiani's five districts has a Democratic Index above 70, whereas none of his Republican districts has a D.I. below 30. A slight pro-Republican bias might be inferred from this indicator.

*Pairing.* Table 21.2 shows three Democrat/Democrat pairings, two Republican/Republican pairings, and no bipartisan pairings. This suggests a moderate pro-Republican bias.

*Open-District Advantage.* Table 21.3 lists eleven open districts created by this plan, with Republicans enjoying an 8-to 3 advantage. The Republican advantage appears slightly greater when we note that two of the three "Democratic" districts are critically marginal—compared to three of eight for the Republicans. We conclude a moderate pro-Republican bias.

*Altering/Preserving Incumbents' Districts.* Table 15.3 shows a mean population carryover of 65.2 percent for Democratic incumbents and 59.4 percent for Republican incumbents. The lowest population carryover for any one district is 12.6 percent for Democratic incumbents and 7.0 percent for Republican incumbents. The number of incumbents having less than 50 percent carryover is five for Democrats and eight for Republicans. Viewed in isolation none of these

factors suggests a significant partisan bias; but viewed together they constitute a moderate pro-Democrat bias.

*Reducing/Enhancing Marginal Incumbents' Districts.* Among Democratic incumbents the ratio of those receiving significant reduction to those receiving significant enhancement is 3-to-1. The corresponding ratio for Republican incumbents is about the same: 8-to-2. The maximum unfavorable change in index for Democratic incumbents is 4.91. The corresponding number for Republicans is 9.54—nearly double. We infer a slight pro-Democrat bias from these indicators.

*Summary.* Indicator No. 1 argues for a slight pro-Republican bias; Indicators 3 and 8 argue for a moderate pro-Republican bias. Indicators 5 and 7 argue for a slight pro-Democrat bias; Indicators 4 and 6 argue for a moderate pro-Democrat bias. Taking all the indicators together, it is difficult to infer a significant bias for either major party.

#### *Summary for All Congressional Plans*

We concluded that the Halliwell plan had “a pro-Republican bias that might be termed slight to moderate.” Judging the Morrill plans, we said the indicators “arguably add up to a slight pro-Republican bias.” Assessing the Sebastiani plan, we just concluded “it is difficult to infer a significant bias for either major party.” Finally, in our appraisal of the Burton plans we found that, overall, the indicators “demonstrate a pro-Democrat bias ranging from moderate to severe.” What we have gained, then, by painstaking examination of these other plans is a bench mark, or perspective on the Burton Plans we could have acquired no other way. We see these indicators, while useful, erect no electric fence that separates the sheep from the goats. We repeat our conclusion after examining the *Bandemer* plans in Chapter 13: that these indicators are not either present or not present, but are present to a varying degree. Despite our attempt to flesh them out, when we get to the bottom line we are still forced to employ non-quantitative adjectives like “slight,” “moderate,” and “severe.”

## Chapter 22

### California Wrap-up

#### *Battle of the Experts: Who Won?*

In Chapter 15 we recounted the conflicting testimony of Grofman/Baker and Cain/Polsby, and then detoured for the next six chapters into a consideration of the scholars' tests for partisan gerrymandering, without attempting a judgment as to which side came out on top. It is now time to do that.

Upon re-reading and summarizing the arguments made by each side we are left with the conclusion that for the most part they talked past each other. They challenged each other's factual assertions only over minor points. Grofman's assertion that Republicans were "a politically salient class whose geographical distribution is...ascertainable" was not disputed. So, too, his assertion that Republican "voting influence...[was] adversely affected by the challenged scheme." When he proceeded to roll out his twelve prima facie indicators and to assert that eleven of them were present in the Burton plans, Cain did not contradict him. Our analysis did challenge Grofman on the applicability of at least two of them (1 and 2). But Cain's did not. As noted earlier, Baker simply looked at the low compactness and extensive fragmentation of the Burton plans and concluded that the burden of justification was on the State. Cain made no attempt to deny that the Burton plans' districts were highly fragmented and had low compactness.

Cain completely sidesteps the issue of whether the Burton plans were biased in favor of Democrats, thus negating the impact of the strong evidence of that bias provided by his *APSR* article and implying that the partisan bias of these plans was irrelevant. Instead, he argues that definition of "unbiased and objective standards of political fairness"<sup>1</sup> is a futile pursuit. He says such standards "are inconsistent with one another" and pulls out his trump card by alleging that

satisfying criteria of compactness and non-fragmentation may have an adverse impact on representation of racial and ethnic minorities. He doesn't deny the double-digit seats/votes discrepancies that occurred under the Burton plans but simply points out that similar discrepancies occurred in 1974 and 1976 under the supposedly impartial 1973 Masters' plan. He says seats/votes discrepancies in future elections cannot be predicted with sufficient precision to justify a court's voiding a plan on that basis. Polsby echoes Cain in not trying to argue that the Burton plans were not biased but, instead, by saying that any test applied by a court in adjudicating a gerrymander claim would be "inescapably political and value-laden;" and would involve subjective judgment on how to "rank the competing claims of" many political groups.

In rebuttal, Grofman makes no attempt to deal with the specific points made by Cain and Polsby. He proposes no measurable standards concerning how much packing or fragmenting is too much; how many pairings of the "out" party's incumbents are too many; how much open-district advantage is too much; how much altering of the "out" party's incumbents' districts or preserving of the "in" party's districts is too much; how much enhancement of the "in" party's incumbents' districts or reduction of the "out" party's incumbents' districts is too much.

He proposes no solution to the possibly conflicting demands of achieving compact districts while at the same time providing racial and ethnic minorities with districts where their candidates have a high probability of success. (He does, however, point to the existence of non-compact districts in the San Francisco and San Diego Bay areas that cannot be justified in terms of minority representation.) He does not address the dilemma (cited by Polsby) when desirable criteria, such as having competitive districts, conflict with other desirable (?) criteria such as gaining seniority for the State's congressional delegation in Washington. In fact, many of the objections cited by Cain and Polsby have to do with the *Badham* plaintiffs' lack of a workable remedy—the lack of an alternative to discretionary districting—which puts those plaintiffs in the position of asking the courts to make the same policy choices which are presently in the hands of

the legislature. If districting has to involve discretion, isn't it better that the judgment calls be in the hands of elected representatives than in those of unelected judges?

Grofman insists that adjudicating gerrymander claims “does not require the courts to make judgments more complex than those in other redistricting or vote dilution challenges,” and that “political scientists...have a much more quantitatively precise approach to measuring political gerrymandering than was true earlier.” Few would agree that defining a political group is no more difficult than defining a racial group. If political scientists have a “quantitatively precise” way to measure gerrymandering, why did Grofman not use it in *Bandemer* or *Badham*? Certainly his prima facie indicators are a long way from being “quantitatively precise” despite our efforts to make them more so.

We would have to conclude that neither of these experts emerges as “the winner” because each was arguing a different proposition. Grofman was arguing the proposition “The Burton Plans are biased in favor of Democrats.” He won that argument by default. Cain was arguing the proposition “There are no non-arbitrary standards which define an unacceptable level of partisan gerrymandering.” He won that argument by default, as well.

### *If Badham Had Gone to Trial*

*What the Scholars' Tests Tell Us.* Having applied the four prospective tests for partisan gerrymandering, extant as of 1990, to the California congressional districting plans relevant to the 1980s redistricting struggle, we are in a better position to make informed judgments. First, we find additional support for the observation we made in Indiana that the threshold of what is an unacceptable degree of gerrymandering is much easier to pinpoint for the Backstrom/Robins/Eller and McDonald/Engstrom tests than it is for the tests of Niemi and Grofman.

Second, whereas all of the plans analyzed in Indiana (including the Democrat-drawn Carson, Crawford and Townsend plans) carried some degree of pro-Republican bias when subjected to the B/R/E and McDonald/Engstrom tests, the California plans we have examined include ones having pro-Democrat bias as well as ones having pro-Republican bias.

Third, the only plans judged as pro-Democrat by both B/R/E and McDonald/Engstrom are the 1973 Masters' plan and the two Burton plans. The only plan judged as pro-Republican by both B/R/E and McDonald/Engstrom is the Halliwell plan. All other plans receive conflicting verdicts from these first two tests. The Morrill plans are judged as neutral by B/R/E (using U.S. Senator as the base race) and as pro-Republican by McDonald/Engstrom. The Sebastiani Plan is judged as pro-Democrat by B/R/E and as pro-Republican by McDonald/Engstrom.

Fourth, as in Indiana all plans pass muster by Niemi's swing-ratio if a value of 1.00 based upon the political indices of the districts is the agreed-upon threshold. The lowest swing-ratios belong to the Burton plans but the overall range (4.03 to 6.15) is relatively narrow.

Fifth, Grofman's prima facie indicators reveal no striking contrasts among the plans. Our judgment call regarding the Burton plans was that "overall" the indicators "demonstrate a pro-Democrat bias ranging from moderate to severe."

*A Courtroom Scenario.* The plaintiffs would doubtless have offered the Halliwell, Morrill and Sebastiani plans as exhibits to demonstrate that reasonable alternatives to the Burton plans were available. But defendants would have been able to point out the biases in these alternative plans that we have discovered in the preceding four chapters. They could have demonstrated that this array of plans presented a continuum of partisan bias that ranged from the Burton plans at the pro-Democrat end to the Halliwell plan at the pro-Republican end, and that the Burton plans could not be condemned without establishing a cut-off point somewhere along that continuum that would necessarily be arbitrary. At best, plaintiffs would have been able to convince the three-judge panel that the Burton plans, overall, showed more pro-Democrat bias than any of the other plans.

Defendants could have argued that Niemi's swing-ratio threshold was satisfied if a plan had a sufficient number of marginal districts to make its swing-ratio more than unity—and such was certainly the case with the Burton plans. Defendants could certainly have argued that the McDonald/Engstrom test was inapplicable in this controversy because of its requirement that *all*

possible plans must be considered—so that their standard deviations and skewness values can be employed as specified by the test’s authors.

Regarding the test of Backstrom/Robins/Eller, the *Badham* defendants would have been in a much stronger position than were the defendants in *Bandemer*. In *Bandemer* it did not matter a great deal which statewide race in the two elections immediately preceding redistricting was chosen as the base race. All ten of those races, when adjusted to 50.00 percent (“normalized”), gave the “in-party” defendants a solid majority (better than 60 percent) of the seats, and thus signaled a gerrymander. There was nothing to be gained from arguing which election was the proper one to use. But in California one of the eight statewide races in the two elections immediately preceding redistricting, when normalized, gave Republicans a majority of the seats. This was the 1978 race for attorney general in which the Republican candidate received 54.90 percent of the vote. When normalized, and aggregated among the 45 Burton districts, Republicans are found to be in a majority in 24 of those districts (see Table 18.2). We could expect the defendants’ attorneys to argue vigorously that the attorney general’s race—being more “anonymous” than the “high profile” race for U.S. senator—is more suitable to serve as the base race.

*The Defendants’ Test: Second Version.* To administer the knock-out punch to the Republicans’ faltering case in the courtroom the Democrats might have brought forth the Defendants’ Test: Second Version. An abbreviated and much simpler variant of the First Version we encountered in *Bandemer*, it might have gone like this:

Assuming an election has occurred under the disputed plan in which the out-party failed to win a majority of the seats; that in one or more of the statewide races in that election its candidate carried a majority of the districts in the plan; choose the out-party candidate that carried the most districts and count the districts he carried. Announce that the out-party failed to win a majority of seats in the election, not because the districting plan was gerrymandered, but because of the poor

Table 22.1

DEFENDANT'S TEST FOR PARTISAN GERRYMANDERING: CALIFORNIA  
 REPUBLICAN CANDIDATES' VOTE AGGREGATED BY CONGRESSIONAL DISTRICT\*\*  
 UNDER (DEMOCRATIC) PLANS BURTON I AND BURTON II

District, Congressperson	1982 (Burton I)			1984 (Burton II)		
	Congress	U.S. Senator (Wilson)	Governor (Deukmajian)	Congress	President (Reagan)	
1 Bosco, (D)	47.2%	52.5%	46.2%	37.7%	52.2%	
2 Chappie, (R)	57.9	62.0	58.6	69.5	63.4	53.2
3 Matsui, (D)	0.0	48.9*	51.7	0.0	54.6	
4 Fazio, (D)	36.1	49.4*	50.1	36.7	56.0	
5 Burton, (D)	40.5	28.7	29.8	23.8	33.3	
6 Boxer, (D)	44.6	41.3	37.1	29.7	42.4	
7 Miller, (D)	30.2	47.8	46.3	33.3	52.0	
8 Dellums, (D)	44.1	34.5	32.5	39.7	33.5	
9 Stark, (D)	39.3	44.6	46.6	26.3	49.7*	
10 Edwards, (D)	33.7	41.7	39.0	34.3	50.8	
11 Lantos, (D)	39.7	45.9	43.9	28.2	50.3	
12 Zschau, (R)	63.0	54.7	47.6	61.7	57.0	
13 Mineta, (D)	31.4	50.6	44.7	33.0	57.7	
14 Shumway (R)	63.4	58.8	60.1	73.3	64.2	54
15 Coehlo, (D)	34.0	54.5	54.4	32.7	58.6	50.4
16 Panetta, (D)	14.6	49.6*	42.8	27.7	52.5	
17 Pashayan, (R)	54.0	59.6	55.9	72.5	63.4	55.2
18 Lehman, (D)	38.3	47.6	49.4*	32.7	50.5	
19 Lagomarsino, (R)	61.1	52.7	47.4	67.3	62.3	54.1
20 Thomas, (R)	68.1	63.1	58.2	70.9	69.4	61.2
21 Fiedler, (R)	71.8	63.9	59.6	72.3	72.2	64
22 Moorhead, (R)	73.6	67.4	64.5	85.2	72.4	64.2
23 Beilenson, (D)	40.4	45.5	43.0	36.9	52.7	
24 Waxman, (D)	31.0	35.3	36.3	33.2	43.6	
25 Roybal, (D)	0.0	29.5	30.2	24.1	38.6	
26 Berman, (D)	40.4	46.7	45.7	37.2	53.9	
27 Levine (D)	37.0	44.3	42.2	41.8	52.3	
28 Dixon (D)	18.7	24.4	23.5	22.4	31.8	
29 Hawkins, (D)	20.2	16.4	15.9	13.4	21.8	
30 Martinez, (D)	46.1	42.6	44.3	43.4	55.3	
31 Dymally, (D)	27.6	29.9	30.3	29.3	40.6*	
32 Anderson, (D)	39.6	48.8*	52.6	36.6	58.4	50.2
33 Dreier, (R)	65.2	61.5	58.7	70.6	70.0	61.5
34 Torres, (D)	42.8	45.1	45.7	40.2	59.0	50.8
35 Lewis, (R)	68.3	62.3	58.2	85.5	71.2	63
36 Brown, (D)	45.7	46.1	44.3	43.4	55.7	
37 McCandless, (R)	59.1	58.6	54.5	63.6	65.1	56.9
38 Dornan, (R)	43.4	56.5	54.0	53.2	69.4	61.2
39 Dannemeyer, (R)	72.2	67.9	63.5	76.2	77.2	69.0
40 Badham, (R)	71.5	67.3	61.7	64.4	75.0	66.8
41 Lowery, (R)	68.9	55.2	51.0	63.5	64.0	55.6
42 Lungren, (R)	69.0	64.7	63.1	73.0	72.2	64.0
43 Packard, (R)	36.8*	67.1	61.1	74.1	74.1	65.9
44 Bates, (D)	31.8	39.9	38.7	28.0	52.0	
45 Hunter (R)	68.6	60.6	57.5	75.1	71.1	62.9
Republican wins:	17/45	25/45	21/45	18/45	37/45	

\*\* Numbers in boldface indicate Republican win in district  
 \*Win by plurality in race having more than two candidates

Source: California Maps and Statistics: 1986. The Rose Institute, Claremont McKenna College, Claremont, CA 91711

Reagan % of Major-Party Vote = 58.22  
 Mondak 41.78



quality of its candidates. In 1982 Republican gubernatorial candidate Pete Wilson won with 53.51 percent of the statewide major-party vote and carried 25 of Burton I's 45 districts. In 1984 Republican President Ronald Reagan, in winning 58.22 percent of the statewide major-party vote, carried 36 of Burton II's 45 districts (see Table 22.1). In 1991 Democratic Assembly Speaker Willie Brown asserted that Republicans failed to win control of the Assembly in the 1980s not because of gerrymandering, but "because they have fielded inferior candidates and run poor campaigns."<sup>2</sup> Indeed, Republicans did not need a fair map. All they needed were Wilson and Reagan clones running in each congressional district.

#### *What Happened in the Remaining Elections Under the Burton Plans?*

The best way to assess the outcomes of the five elections which took place under the Burton plans is the way we did at the conclusion of our Indiana study: to construct a table similar to Table 14.1. Table 22.2 is such a table. As in Table 14.1, Columns (1) - (3) give an ordered ranking of the Burton districts from "most Democratic" to "most Republican" according to their Democratic Indices. The single, heavy line crossing the table below Rank 25 and D.I. 50.55 marks the theoretical Democrat/Republican seat split where no incumbents running and were there an even division of the statewide vote. As in Table 14.1, the double lines crossing Columns (2) - (8) mark the theoretical seat split if no incumbents had been running and if every seat vulnerable to the partisan swing that year had fallen to the party benefiting from that swing. In 1982 the statewide Democratic  $v$  of 52.22 means every district with a D.I. higher than 47.78 was theoretically vulnerable to capture by a Democratic candidate. Column (4) shows a striking agreement of this projection with what actually happened: Democrats did win all 29 districts above the double line—except CD 17 where Republican incumbent Pashayan successfully resisted the swing.

Table 22.2  
Electoral Outcomes: California Congressional (Burton/Badham) Districting Plans

(1) Democratic Rank	(2) CD	(3) D.I.	(4) 1982	(5) 1984	(6) 1986	(7) 1988	(8) 1990
1 - 10	10 Most Democratic Districts (D.I. > 55.3)		DDDD DDDD	DDDD DDDD	DDDD DDDD	DDDD DDDD	DDDD DDDD
11	44	53.22	D	D	D	D	Cunningham ‡(C)
12 - 24	13 Next Most Democratic Districts (D.I. > 51)		DDDDDD DDDDDD	DDDDDD DDDDDD	DDDDDD DDDDDD	DDDDDD DDDDDD	DDDDDD DDDDDD
25	1	50.55	D	D	D	D	Riggs (C)
26, 27	13, 16	49.58 - 49.88	DD	DD	DD	DD	DD
28	38	48.18	D	Dornan (C)	Dornan (I)*	Dornan (I)	Dornan (I)
29	17	48.15	Pashayan (I)	Pashayan (I)	Pashayan (I)	Pashayan (I)	D
30	19	47.45	R	R	Lagomarsino (I)	Lagomarsino (I)	Lagomarsino (I)
31	2	46.60	R	R	Herger (O)†	Herger (I)	Herger (I)
32	14	45.91	R	R	Shumway (I)	Shumway (I)	Doolittle (O)
33	20	44.68	R	R	R	Thomas (I)	R
34 - 45	12 Most Republican Districts (D.I. < 43.45)		RRRRR RRRRR	RRRRR RRRRR	RRRRR RRRRR	RRRRR RRRRR	RRRRR RRRRR

\* (I) = Incumbent

† (O) = Winner of election in open district

‡ (C) = Challenger

50.12 52.22 52.18 54.60 55.83 54.55  
46.82 48.82 50.00 52.68 53.57 52.36

In 1984 the California congressional swing from 1982 was negligible, so we would expect the same electoral result: 28 or 29 Democratic wins. This time our projection misses by two: Pashayan continues to defy the swing; and a second Republican, Dornan, defeats Democrat incumbent Patterson in CD 38, a district with a D.I. of 48.18. In 1986,  $\nu$  rises to 54.60, so we would expect any district with a D.I. above 45.40 to be a prospect for a Democrat win. This would put Republican incumbents Lagomarsino, Herger and Shumway in jeopardy. But they are incumbents and today's incumbents nearly always win—swing or no swing. In 1988,  $\nu$  moves further in the Democratic direction to 55.63, making vulnerable any Republican in a district with a D.I. greater than 44.37. This should put Thomas at risk, but incumbency holds sway and the partisan line-up remains the same. In 1990, the final election under the Burton plans, we discern a minor swing to the Republicans as the Democratic mean district vote drops slightly to 54.45. This time two Democratic incumbents are defeated while Pashayan, the most vulnerable

Republican on the basis of his district's index, is finally turned out of office. One of the Democratic losses is Bosco, who on the basis of index is the most threatened Democratic incumbent. However, it is unlikely he would have lost were it not for the presence of a Peace and Freedom Party candidate who drew off 14.8 percent of the vote. The other Democratic loss is Bates whose defeat in CD 44, the eleventh most Democratic district on the basis of index, would have been a surprise were it not known he was the subject of a sexual harassment controversy.

Summing up, of the 225 electoral contests that took place under the Burton plans, the outcomes in 205 cases (91.1 percent) could have been correctly predicted simply on the basis of index and swing. If we modify our rule to predict that incumbents always win, regardless of the index or the swing, then we could have foretold the outcome in 219 cases (97.3 percent). Of the remaining six cases, in two (Bosco and Bates in 1990) there were special circumstances. That leaves unexplainable only the open-district wins of Herger in 1986 and Doolittle in 1990; plus the defeats of Patterson in 1984 and Pashayan in 1990. We are forced to conclude that in California the 1980s congressional elections were very predictable. How does this compare to Indiana? Looking again at the Indiana House (Table 14.1) we find that in 417 out of 500 contests that occurred over the life span of the Bandemer plan the winner could have been correctly predicted on the basis of the index and the swing—or 83.7 percent of the time. If we modified the rule to say incumbents win, regardless, then our batting average rises to 480 out of 500, or 96.0 percent. Looking at the Indiana Senate (Table 14.3) we find in 105 of 125 contests that occurred over the life of the *Bandemer* plan the winner could be correctly predicted on the basis of index and swing—or 84.0 percent of the time. With the same “incumbent” modification our batting average rises to 93.6 percent. Why are our predictions consistently better in California than in Indiana? Finding the reason is a task for some other investigator. We offer this guess: the Indiana house districts are about one-tenth (and the Senate districts about one-fifth) the size of a U.S. congressional district. The smaller the constituency the larger is the percentage of constituents

who will be personally acquainted with the legislator and will have some other basis for judging him besides party label. That will make less predictable the behavior of voters in that district.

*Which Was the Worse Gerrymander: Badham or Bandemer?*

Now that we have applied the same tests to both of the 1980s partisan gerrymander cases that were ruled upon by a U.S. district court, the question naturally occurs: which was the worse gerrymander? Let's compare the two plans beginning with their seats-votes discrepancies.

1. Seats-Votes Discrepancies. In *Bandemer* the parties to the controversy assumed 51.9 percent was the aggregate statewide vote for 1982 Democratic house candidates. This was compared to 43 percent of the seats they won, producing a discrepancy of 8.9 percent. In 1984 this aggregate vote dropped to 43.3 percent while the seats they won dropped to 39 percent. That reduced the discrepancy to 4.3 percent. In 1982 California Republican congressional candidates received 49.18 percent of the major-party aggregate statewide vote and captured 37.78 percent of the seats for a discrepancy of 12.40 percent. In 1984, with 50.00 percent of the major-party aggregate vote, Republicans captured 40.00 percent of the seats producing a discrepancy of exactly 10 percent. By the seats/votes discrepancy measure *Badham* is clearly a more biased plan.

2. Backstrom/Robins/Eller. In *Bandemer* Table 10.2 shows, for the House, a 28 percent discrepancy between seats and votes when the vote for the most "anonymous" statewide race is aggregated among the districts in the plan and then "normalized" to 50.00 percent. It does not matter which statewide race is chosen as the "base race;" a discrepancy of at least 24 percent results. In California Table 18.4 shows an 11-seat discrepancy, favoring Democrats, when U.S. Senator is employed as the base race. Using President, Governor, Lt. Governor and party registration as the base race produces smaller discrepancies but a pro-Democrat gerrymander is still indicated. However, if Attorney General is used as the base race a pro-Republican advantage of three seats is given. The 11-seat pro-Democrat bias in Burton I, using U.S. Senator for the base race, works out to a 24.4 percent advantage. This compares to the 28 percent advantage cited for

the *Bandemer* house plan. It is clear that by Backstrom/Robins/Eller a more severe gerrymander is evident in *Bandemer* than in *Badham*.

3. McDonald/Engstrom. It is debatable, given our inability to generate all possible 1981 districting plans for these states, whether this test is applicable to the controversies under study. But, for whatever it is worth, we compare the histogram of the *Bandemer* house plan (Figure 11.2) with that for Burton I (Figure 19.1). We find the standard deviation of *Bandemer* is 12.23, compared to 8.17 for Burton. The greater dispersion in *Bandemer* is more indicative of a gerrymander. Looking at skewness, we compare a plus 1.94 (pro-Republican) value for *Bandemer* with a minus 0.15 (pro-Democrat) value for Burton. The magnitude of the skewness in the *Bandemer* histogram is about 12.6 times that of the Burton histogram. Finally, we simply count the districts on each side of the 50 percent votes centerline in each histogram. The 100 districts in *Bandemer* split 64 - 36 toward the Republicans; the 45 districts in Burton split 24 – 21 toward the Democrats. Multiplying the 3-seat advantage in Burton by 100/45 to obtain comparability gives 6.67 seats, which is still small compared to the 28-seat partisan advantage in *Bandemer*. If this test is applicable to these two controversies, it attributes more partisan bias to the Indiana plan than to the California plan.

4. Niemi's Swing-Ratio. Examination of Table 12.1 reveals the *Bandemer* house plan with a swing-ratio of 3.68 when calculated from the political indices of its districts. When calculated from 1982 election returns it drops to 1.60 based upon uniform percentage swing, or to 1.68 if based upon pro-rata swing. Its partisan bias, measured at 50 percent of the mean district vote for each party, is 28.0 Republican, based upon the political indices of its districts and pro-rata swing. Examination of Table 20.1 reminds us that Burton I has a swing-ratio of 4.03 when calculated from the political indices of its districts. When calculated from 1982 election returns it drops to 1.15, if based on pro-rata swing. Its partisan bias, measured at 50 percent of the mean district vote, is 6.67 Democrat, based upon the political indices of its districts and pro-rata swing. We have argued that a swing-ratio of unity, based on the political indices of a plan's districts,

ought to enable it to pass muster. That being the case, we would have to call *Bandemer v. Badham* a draw when swing-ratio is the deciding factor. However, when we compare a bias of 6.7 with a bias of 28.0, the difference does not appear trivial and we would have to rate *Bandemer* the bigger gerrymander.

#### 5. Grofman's Prima Facie Indicators.

*Packing.* In the *Bandemer* house plan we note in Table 13.1 that Democrats are packed in 9 districts covering 14 seats and Republicans are packed in 10 districts covering 12 seats. Those numbers might convey the impression that the packing was about equal for both parties. But when we note that three of the nine "Democrat packed" districts have D.I.'s exceeding 70, but none of the "Republican packed" districts has a D.I. below 30, we conclude pro-Republican bias is present. In Table 21.1 we concluded that in the Burton plans both the extent and the intensity of packing were about the same for both parties. Therefore, when we weigh the packing in *Bandemer* against that in *Badham* we conclude it is greater in the former.

*Fragmenting.* We argued in Chapter 21 that no significant fragmenting of either party's supporters takes place in the Burton plans. On the other hand, we asserted in Chapter 13 and in Table 13.2 that Democrats had been fragmented in Alien County by the splitting of Fort Wayne in the *Bandemer* plan. This leads us to conclude that by Grofman's Indicator No. 2 the pro-Republican bias in *Bandemer* is greater than the pro-Democrat bias in *Badham*.

*Pairing.* The salient, and most egregious, feature of Burton I was its placement of six Republican incumbents in three districts in a manner to assure the defeat of three of them. But what about *Bandemer*? If we revisit Table 14.3 we find three Democrat/Democrat contests were set up in the *Bandemer* house plan, while there were no Republican/Republican pairings or bipartisan pairings. So, do the plans come out equally biased by this criterion? We would judge the Burton plan as more biased because three pairings in a 45-district plan is a higher fraction than three pairings in a 77-district (100-seat) plan.

*Open-district Advantage.* In Table 21.3 we refresh our memory that there were 9 open districts created by Burton I. In our commentary we concluded the Democrats enjoyed a significant partisan advantage in six of those districts—a 2-to-1 advantage making for a strong pro-Democrat bias. How does *Bandemer* compare with that? In Table 13.4 we are reminded that the *Bandemer* house plan created 9 open districts containing 11 seats. Our commentary concluded that there was a Democratic advantage in two districts, a Republican advantage in 5 districts containing 7 seats, and no advantage in 2 districts. That added up to a 3.5-to-1 open district advantage for the Republicans. If we want to assume that a 3.5-to-1 advantage evidences more bias than a 2-to-1 advantage then, by this indicator, *Bandemer* is more biased than Burton I.

*Altering/Preserving Incumbents' Districts.* Looking again at Table 15.3 we note the mean carryover for Democrats is 26 percent higher than for Republicans; the lowest carryover for any Democrat is 52 percent higher than that for any Republican; and whereas 9 Republicans have less than 50 percent carryover, not one Democrat falls within that category. It all adds up to a strong pro-Democrat bias, but what about *Bandemer*? In Table 13.5 we see that mean carryover for Republicans is 7.9 percent higher than that for Democrats; the lowest carryover for any Republican is 42.7 percent higher than that for any Democrat; and whereas five Democrats have less than 50 percent carryover not one Republican falls within that category. It all adds up to a strong pro-Republican bias—but not as strong as the pro-Democrat bias of Burton.

*Reducing/Enhancing Marginal Incumbents.* In Table 21.4 we note again that none of the seven marginal Democrats suffers from a reduction of index, but that five receive enhancement. Two of the 16 marginal Republicans sustain a reduction of index while nine receive significant enhancement. The bias evidenced in these numbers appears minimal except, as we pointed out earlier, one of the Republican reductions is for nearly 10 percent. When we turn to *Bandemer* we again find two (of nine) Democrats suffering significant reduction but none of the 25 Republicans doing so. The highest Democrat reduction is 2.67 while the maximum Republican reduction is only 0.75. We find four Democrats and 12 Republicans receiving enhancement. Is the pro

Democrat bias in Burton more severe, by this indicator, than the pro-Republican bias in *Bandemer*? That is a difficult question. We shall answer “yes” because the changes in both plans are all minimal except for the big reduction suffered by Dornan, which induced him to run for another office. A change that significant for one incumbent should outweigh the changes suffered by ten others, none of which was so decisive. This, of course, is a very subjective “judgment call.”

Overall, can one say by these indicators that either plan is more biased than the other? Indicators 1, 2 and 8 point in one direction. Indicators 4 and 6 point in the other. Let’s leave that question for the moment and compare the two plans by the “formal” criteria of compactness and fragmentation. From Table 7.5 we again find the mean district Compactness Index for the *Bandemer* house plan to be 39.5 and the C.I. of its two least compact districts to be 18. Returning to Table 16.4 we find the mean district compactness index for Burton I to be 18.5 and the C.I. for its least compact district to be only 5. Therefore, the mean compactness of *Bandemer* is more than twice that of Burton and the minimum of *Bandemer* is more than three times that of Burton. Is there a non-political explanation for this? One explanation could be the fact that the fewer districts a state is divided into the easier it is to obtain high compactness for those districts. But that would make justification of the Burton districts even more difficult because California is being divided into 45 districts while Indiana is being divided into 77 districts. A second explanation could be that irregular geography in one state could make it more difficult to achieve compact districts. California does have the more irregular geography with its meandering shorelines in the San Francisco and San Diego bay areas, and the very non-compact boundaries of cities like Industry and San Bernardino. But that justification disappears when we discover that the least compact districts in the Burton plans are CDs 23, 26 and 27—none of which involve the San Francisco or San Diego bays, or the city of Industry, but which can be constructed from urban census tracts most of which have regular outlines.



What about fragmentation of counties and cities? Table 7.3 shows that *Bandemer* House splits 67 of Indiana's 92 counties creating 183 fragments. Table 16.3 shows that Burton I splits 19 of California's 58 counties creating 63 fragments. It takes only a look at the maps and a moment's reflection to compel the conclusion that we are attempting an apples/oranges comparison: meaningful comparisons of fragmentation in the *Bandemer* plans can only be made with other Indiana plans drawn to the same population equality standards; and meaningful comparisons of fragmentation in the Burton plans can only be made with other California congressional districting plans drawn to the same population equality standards.

6. Durability of Discriminatory Effect. In his analysis of Justice White's plurality opinion in *Bandemer*, Grofman says that to qualify as an actionable partisan gerrymander a plan's discriminatory effects must "be...persistent in duration." Here is where one might be able to demonstrate that a clear line can be drawn between *Bandemer* and Burton that would affirm the constitutionality of the former but lead to the voiding of the latter. Look at the five election outcomes under each of the two plans. Table 14.1 shows that in Indiana, under the *Bandemer* house plan, Democrats were able to win only 43 percent of the seats in the first election (1982) and 39 percent of the seats in the second election (1984). But in the third election (1986) they won 48 seats. In the fourth election (1988) an even split of 50 seats and in the final election (1990) a majority of 52 seats. Thus, in *Bandemer*, the out-party was able to make a 9 percent seats gain in 8 years. Table 22.2 shows that in California, under the Burton plans, Republicans were able, in 1982, to win only 17 seats (37.8 percent) in the first election held under the plan. In the second, third, and fourth elections (1984, 86 and 88) they were able to win 18 seats (40 percent). In the final election (1990) they were able to win 19 seats (42.2 percent). One can argue from these numbers that the *Bandemer* plan's effects persisted for only two elections: that the Democrats' 9-seat upsurge in 1986 put an end to their disability. On the other hand, the Burton plans' discriminatory effects lasted the entire decade because eight years after the initial election the Republicans still had managed a gain of only two seats, or 4.4 percent. Republican lawyers

might argue that somewhere between a 4.4 percent out-party gain and a 9 percent out-party gain is the bright line that divides a “transitory” effect from a “persistent” effect.

Democratic lawyers would not let such an argument go unanswered. In rebuttal they might point out that in the second election held under both plans Democratic candidates suffered a further loss of four seats under the *Bandemer* house plan while Republicans managed a gain of one seat under the Burton plan; that no plan can be expected to have discriminatory effects for a whole decade and what matters is what happens in the first two elections under the plan at issue. Finally, they might argue there is no way to predict how long a plan’s discriminatory effect will persist. A lot of that persistence, or lack of persistence, will depend upon national or statewide partisan swing during the ensuing decade. Years like 1946, 1958, 1966, 1974 and 1994 have happened in the past and will happen in the future; and there is no way anyone can predict when they will come. A meaningful test for gerrymandering must be one that can give a definitive answer before the first election takes place under the plan in question.

#### *Arguments to the Federal District Court*

*Plaintiffs’ Third Amended Complaint.* The *Badham* plaintiffs filed their third amended complaint on October 1, 1986. In drafting this complaint their attorneys had the benefit of the High Court’s opinion in *Bandemer*, at that point only 90 days old. The task facing them was to re-word their complaint to state allegations that would meet what were thought to be the High Court plurality’s requirements. They could not argue that *Bandemer* was wrongly decided. Rather, they had to talk as though they thought *Bandemer* was correctly decided and distinguish their case from *Bandemer*. They attempted to do it in three ways.

The most conspicuous way in which the *Badham* attorneys tried to distinguish their case from *Bandemer* was to claim the “persistent degradation of Republican voting strength...will continue through this entire decade.”<sup>3</sup> In contrast to the disproportionate results from one election that implicitly characterized *Bandemer*, this complaint alleged a “...continued frustration of the

will of California voters [which] can be reliably predicted to persist in the 1986, 1988, and 1990 congressional elections.” The *Badham* attorneys reinforced their argument in their memorandum in opposition to defendants’ motion to dismiss. They say:

... it is crucial to understand the virtual lack of proof of discriminatory effect in the *Bandemer* record. The *Bandemer* plurality reversed the trial court’s judgment for the reason that “the only concrete effect on the Democrats in Indiana was the result of one election... Because there was *only* a ‘showing of possibly transitory results’ of one election ‘the findings of the District Court of an adverse effect on the appellants do not surmount the threshold requirement.’ The detailed allegations of discriminatory effect... go well beyond the ‘possibly transitory’ results of one election and easily meet the *Bandemer* criteria.”<sup>4</sup>

Further on they draw attention to such phrases in the plurality opinion as “continued frustration” and “consistently degrade,” and a sentence that begins “Relying on a single election to prove unconstitutional discrimination is unsatisfactory,” and remind the Court that their complaint “alleges not one but three elections involving 135 individual Congressional races in which only one seat changed hands...” to drive home their point. We noted, when comparing *Badham* to *Bandemer* in the previous section, that “durability of discriminatory effect” was the criterion that argued strongest for *Badham* being the worse gerrymander.

The next most conspicuous way in which the *Badham* attorneys tried to distinguish their case from *Bandemer* was to deny they were “complaining about disproportionate results per se but rather” were suffering “a lack of fair representation”<sup>5</sup> by seats-votes discrepancies significantly greater than those in *Bandemer*. They argued:

The 1982 election results for the Indiana Assembly disproportionately favored Republicans but the same was not true for the Senate elections where the results were perfectly proportional; nevertheless the District Court in *Bandemer* struck down both the Senate and Assembly plans. ...in the state House, Democrats won

51.9 percent of the votes and 43 percent of the seats; but in the state Senate,

Democrats won 53.1 percent of the vote and 52 percent of the seats.”<sup>6</sup>

The attorneys went on, in their footnote, to cite as their source of these numbers Note 16 of Justice White’s plurality opinion. We know from our review of Grofman's testimony in *Bandemer* in Chapter 4 that this claim of “perfectly proportional” results in the senate elections was a false statement.<sup>7</sup> However, even with seats-votes discrepancies on the order of 8.5 percent in *both* houses we noted, when comparing *Badham* to *Bandemer* in the previous section, that magnitude of these discrepancies was a factor that argued for *Badham* being the worse gerrymander.

The third noticeable way in which the *Badham* attorneys tried to distance their case from *Bandemer* was to assert that, unlike *Bandemer*, the “continued disproportionality” suffered by their clients was “in conjunction with other indicia.” These “other indicia” are: (1) disproportionate election results in three separate election cycles, (2) “the combination of district configurations and vote projections to predict future, unfair election results,” (3) lack of electoral competition, (4) “disparate treatment of incumbents,” (5) insulating “in-party” incumbents from shifting public opinion, (6) increased difficulty for the “out-party” to recruit effective challengers, (7) districts with “numerous, disparate and conflicting local and regional interests,” (8) “voter confusion and apathy,” and (9) creation of Republican super-majorities in some districts to spread their votes more inefficiently.<sup>8</sup>

The *Badham* attorneys’ effort to distinguish their case from *Bandemer* on these “other indicia” grounds is a bit labored. Some of these “indicia” are vague and imprecise. Some overlap with others. Some are not indicative of a loss of political power. But let us forego a detailed critique and see how the district court dealt with the pleadings in its deliberations leading to its granting of defendants’ motion to dismiss on April 21, 1988.

*The District Court’s Ruling.* The Court first considered the defendants’ arguments that the case was not justiciable under the equal protection clause. They cited *Wesberry v. Sanders*<sup>9</sup> to

refute the contention that Article 1 Sec. 4 of the Constitution requires this issue to be committed to state legislatures. They followed the *Bandemer* plurality in rejecting the argument that one person-one vote cases “involved a numerical rule of law” that did not apply in gerrymander cases. They found “nothing in *Bandemer*’s justiciability analysis that turns on the distinction between congressional redistricting and state legislative redistricting” and concluded that *Badham* was justiciable.<sup>10</sup>

The court majority next reasoned that the “tripartite division of views” in the *Bandemer* court required them to follow Justice White’s plurality in their analysis of *Badham*. To begin with, the plurality held that “...plaintiffs were required to prove both intentional discrimination against an identifiable political group and an actual discriminatory effect on that group.”<sup>11</sup> Further, “a threshold showing of discriminatory vote dilution is required for a prima facie case of an equal protection violation.”<sup>12</sup> This was a more rigorous requirement than Justice Powell’s view that it sufficed for the perpetrators to adopt “a redistricting plan designed solely to preserve the power of the dominant political party.”<sup>13</sup> The *Badham* judges had no difficulty in finding “that the complaint sufficiently alleges a discriminatory intent”<sup>14</sup> and thus satisfies the first prong of the *Bandemer* test.

But when the court majority considered the second prong (the “effects” prong)—whether the plaintiffs had alleged “a threshold showing of discriminatory vote dilution”—it was a different story. By the majority’s reasoning the second prong was itself two-pronged: the first “sub”-prong was disproportionate election results that will persist throughout the decade and beyond; the second sub-prong was the “other indicia.” The *Badham* attorneys argued that the disproportionate results of the 1982 and 1984 elections were proof the Burton plans “would consign the [Republicans] to a minority status throughout the 1980s,”<sup>15</sup> and in so doing satisfy the first “effects” prong. The Defendants argued that plaintiffs must, in addition, allege they “would have no hope of doing any better in the reapportionment that would occur after the 1990 census.”<sup>16</sup>

The court majority concluded that it “need not resolve this dispute...because in any case it is clear that plaintiffs cannot satisfy the second prong of the ‘effects’ test” whereby they must show “strong indicia of lack of political power and the denial of fair representation.”<sup>17</sup> The majority noted that the *Bandemer* plurality based this additional requirement upon the High Court’s rulings in “cases relating to challenges by racial groups to individual multi-member districts”<sup>18</sup> noting further that “[i]n those cases the racial minorities...had essentially been shut out of the political process.”<sup>19</sup> The majority wrote:

There are no allegations that California Republicans have been “shut out” of the political process, nor are there allegations that anyone has ever interfered with Republican registration, organizing, voting, fund-raising, or campaigning. Republicans remain free to speak out on issues of public concern; plaintiffs do not allege that there are, or have ever been, any impediments to their full participation in the “uninhibited, robust, and wide-open” public debate on which our political system relies.

Particularly conspicuous by its absence is any allegation that plaintiffs’ interests are being entirely ignore [d]<sup>20</sup> by their congressional representatives. Instead, plaintiffs complain that Democratic incumbents will be re-elected “without need to attend to the views of fragmented and submerged Republican minorities in their districts.” Such an allegation is insufficient under *Bandemer*; the plurality in that case specifically cautioned that such a presumption of disregard would not be countenanced without proof, even in so-called “safe”<sup>21</sup> districts. Nowhere do plaintiffs suggest that they can prove disregard by any means other than by inference from the election results, a method which *Bandemer* removes from our purview.<sup>22</sup>

The majority came down hard on what it regarded as an attempt by the plaintiffs to characterize as “other invidious effects” different ways of repeating their central allegation that the Burton plans caused disproportionate election results. These “other invidious effects” included “destruction of Republican incumbencies, the wasting of Republican votes,” and “the

systematic elimination of political competition.”<sup>23</sup> We have to agree that these are not separate effects but means by which the defendants accomplished their primary objective of “disproportionate election results” which maximized the number of Democratic congresspersons elected from California in the 1980s.

The court majority concluded its analysis of plaintiffs’ First Cause of Action by stating its reasons for refusing to give plaintiffs leave to amend their complaint yet another time and then digressed to take judicial notice of other facts which demonstrate that California Republicans are far from being effectively “shut out” of the political process. Instead, California Republicans represent so potent a political force that it is unnecessary for the judiciary to intervene, as we would be constrained to do to protect the trampled rights of a disadvantaged political or racial minority.

Chief among our observations is our undisputed knowledge that California Republicans still hold 40 percent of the congressional seats, a sizable bloc that is far more than mere token representation. It simply would be ludicrous for plaintiffs to allege that their interests are being “entirely ignore[d] in Congress when they have such a large contingent of representatives who share those interests. We should also note that California has a Republican governor, and one of its two senators is a Republican. Given also that a recent former Republican governor of California has for seven years been President of the United States, we see the fulcrum of political power to be such as to belie any attempt of plaintiffs to claim that they are bereft of the ability to exercise potent power in “the political process as a whole” because of the paralysis of an unfair gerrymander.<sup>24</sup>

The *Badham* plaintiffs’ First Cause of Action—violation of the Fourteenth Amendment’s guarantee of equal protection—was their best shot. They also alleged a Second Cause of Action based on Article 1, Section 2 of the Constitution, a Third Cause of Action based upon the First Amendment right of political association, and a Fourth Cause of Action based upon Article IV

Section 4's guarantee to every state in the Union of a Republican Form of Government. The court majority made short shrift of each of them and we shall not consume more space in commentary. The court majority consisted of Ninth Circuit Judge Poole who wrote the opinion and District Judge Zirpoli who concurred in the judgment. Both were appointed by Democratic presidents. The third judge on the panel, District Judge Schnacke, dissented. Schnacke was appointed by a Republican president.

As reported in Chapter 15, the Republican plaintiffs appealed the decision to the Supreme Court and nine months later the judgment was affirmed. It was to be fourteen more years until another partisan gerrymandering case would receive serious attention from the High Court: another congressional districting case, from Pennsylvania, in which the roles of the major parties were reversed. We are not ready to examine that case at this point. We need first to contemplate the elephant standing in the living room: the issue of remedy. Also, during that fourteen years there appeared two additional analyses of partisan bias of electoral systems which we need to look at.

## Notes

<sup>1</sup> Cain, Bruce, Declaration in *Badham v. Eu*, American Political Science Association, Vol 18, No. 3 (1985): 562.

<sup>2</sup> Kousser, J. Morgan, "The Voting Rights Act and the Two Reconstructions," in Chandler Davidson and Bernard Grofman eds., *Controversies in Minority Voting: A Twenty-Five Year Perspective on the Voting Rights Act of 1965* (Washington: Brookings Institution, 1992) 164.

<sup>3</sup> U.S. District Court N.D. California Cause No. C-83-1126RHS: Plaintiffs' Third Amended Complaint of October 1, 1986: § 27, pg. 24.

<sup>4</sup> U.S. District Court N.D. California Cause No. C-83-1126RHS: Plaintiffs' Memorandum of Points and Authorities in Opposition to Motions to Dismiss Third Amended Complaint, November 21, 1986: pp. 4-5.

<sup>5</sup> *Ibid.*, pg. 14.

<sup>6</sup> *Ibid.*, pg. 15 and note 6.

<sup>7</sup> We stated in Table 5.1 that there was "none possible" so far as a proper object of comparison was concerned regarding the number of senate seats won by the parties in 1982. However, one can make a reasonable comparison for the *entire* senate covering the elections of 1982 and 1984 by averaging the votes cast for each party's senate candidates in the two elections and putting that number alongside the number of seats each party won in the two elections taken together. By imputing 25 percent of the vote to Democrats in three districts they did not contest in 1984 we get 43.9 percent of the aggregate statewide vote for Democratic senate candidates in that election. Averaging that with the 53.1 percent they received in 1982 yields 48.5 percent of the vote for the two elections together. That compares to 40 percent of the seats in the two elections taken together for a deficiency of 8.5 percent, which is very close to the 8.64 percent discrepancy we have attributed to their House candidates. Not bad.

<sup>8</sup> Plaintiffs' Memorandum. *Op cit.* Note 3: pp. 11-12.

<sup>9</sup> *Wesbury v. Sanders* 376 U.S. 1 (1964).

<sup>10</sup> *Badham v. Eu* 694 F.Supp. 664, 668 (N.D.Cal. 1988).

<sup>11</sup> *Davis v. Bandemer* 478 U.S. 109, 127(1986).

<sup>12</sup> *Ibid.*, pg. 143.

<sup>13</sup> *Ibid.*, pg. 161.

<sup>14</sup> *Badham v. Eu* 694 F.Supp. 664, 669 (N.D.Cal. 1988).

<sup>15</sup> *Davis v Bandemer* 478 U.S. 109, 135 (1986).



<sup>16</sup> *Ibid*, pg. 136.

<sup>17</sup> *Ibid*, pg. 139.

<sup>18</sup> *Ibid*, pg. 132 n. 13.

<sup>19</sup> *Ibid*, pg. 139.

<sup>20</sup> *Ibid*, pg. 132.

<sup>21</sup> *Ibid*.

<sup>22</sup> *Badham v. Eu* 694 F.Supp. 664, 670-671 (N.D.Cal. 1988).

<sup>23</sup> *Ibid*, pg. 671.

<sup>24</sup> *Ibid*, pg. 672.

Part V.

The Remedy:

Additional Analyses

## Chapter 23

### Impartial Districting Procedures; Result-Oriented Criteria

The *Bandemer* plaintiffs asked the Court to enjoin the defendants from conducting any elections in the districts of the *Bandemer* plans. Beyond that, they had no recommendation as to what the Court should do to provide the people of Indiana with a legislature. The *Badham* plaintiffs were more specific; in addition to declaring the Burton plan “null and void,” they asked the Court to promulgate its own congressional districting plan, if the California legislature failed to adopt “in a timely manner a congressional redistricting statute pursuant to constitutional standards and guidelines enunciated by the Court.”<sup>1</sup> The plaintiffs in each of these cases believed that remedy was a bridge to be crossed when they got to it—if they got to it. They saw the big task was to get the plan they were challenging declared unconstitutional. Once they had surmounted that hurdle they could worry about getting over the next one. They pointed out that plaintiffs won *Baker v. Carr*<sup>2</sup> without addressing the question of remedy. Later cases would deal with that issue, they said, and they were right. Subsequent cases led to evolution of the “one person-one vote” rule that districts must be as nearly equal in population “as practicable,” and today that rule is so well refined that no districting plan fails to pass muster on this basis.

But crafting a remedy to be applied if a districting plan is ever to be voided on grounds of “gerrymandering” may prove to be a different story. A partisan gerrymandering case is probably unwinnable and opponents of discriminatory districting will have to start with a new premise: the Constitution’s command that “the state must govern impartially.”<sup>3</sup> If this imperative applies to the electoral process—and we certainly think it does—then it ought to apply to every aspect of that process, including districting. How does one apply an impartiality requirement to political districting? We see only two ways in which it can be done: (1) by granting discretionary power to

draw the districts to an impartial individual or agency; (2) by removing discretion from the line drawing by means of an impartial procedure specifying how districts are to be drawn.

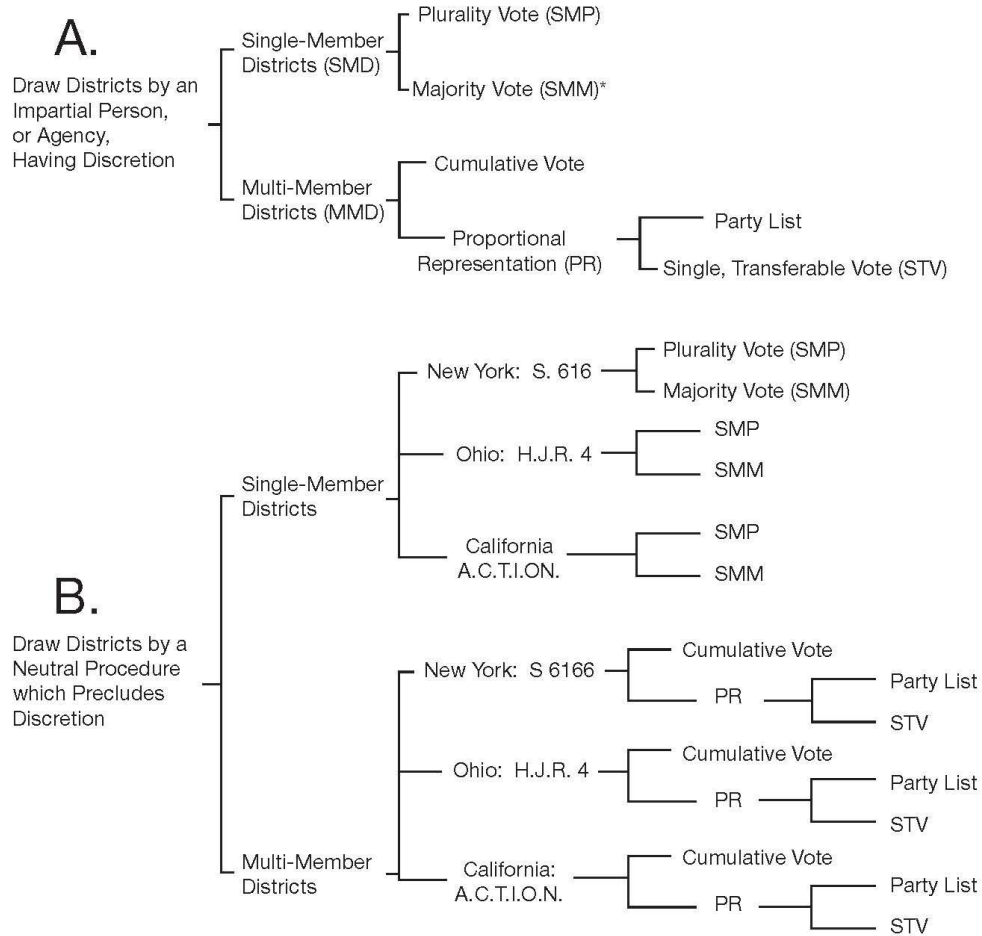
The first alternative, while logically possible, is likely to prove unworkable in practice. (Can protagonists in a high-stakes political struggle agree on who is an “impartial individual” or what is an “impartial agency?”) The second alternative is widely believed not to exist because, at this moment, not one of the fifty states has in place an impartial, non-discretionary procedure for drawing either legislative or congressional districts. The conventional wisdom everywhere holds sway: “You can’t take politics out of politics” is the *ad nauseam* refrain. It is usually uttered by people who hold power to draw districts under the current system, and leads one to suspect that what they are really saying is “We don’t *want* to take politics out of districting because we would lose power.” Discretion can be removed from districting by a well-crafted procedure just as discretion is removed from vote counting by well-crafted laws covering the counting of votes.

In a paper given at the 1989 meeting of the APSA<sup>4</sup> we stated that for the first time in American history, serious, practical proposals were being put forward that, if adopted, would remove discretion from political districting. In two states such proposals have been drafted into bills or resolutions and introduced in the legislature.<sup>5,6</sup> In a third state such a proposal, although undrafted as legislation, has credible authorship.<sup>7</sup> Figure 23.1 sets these proposals within the larger context of how a constitutionally mandated neutrality principle in political districting might be implemented. Note that, in theory, such a principle could be implemented by giving discretionary line-drawing power to an impartial person or agency. In practice, as we have just suggested, there may be no such thing.

The Ohio reform proposal has the longest history; is the only one with sponsors from both major parties; and at one point got as far as a favorable recommendation from a committee of the legislature.<sup>8</sup> It is predicated on the assumption that any discretion granted to persons charged

Figure 23.1

**Alternative Ways of Implementing a Constitutionally-Mandated Neutrality Principle in Political Districting**



\*A majority vote within a single-member district can be obtained by employing a Majority Preferential voting system. This is also called the Alternative Vote.

with drawing a districting plan will be used for their personal or partisan benefit and, therefore, to the detriment of the rights of others. It follows from this that the only remedy is to remove the discretion. Discretion is removed either by specifying which units (*i.e.*, counties, cities, census tracts) must be added to which other units, in what order, to make a district<sup>9</sup> or by specifying the desired end result (*i.e.*, fewest county splits, etc.) and leaving it to the plan drawers to combine units in whatever way they can to best achieve it. We opted for the second alternative and now explain how we selected the criteria we did and how we arranged them.

Districting criteria may be broadly divided between “formal” criteria and “result-oriented” criteria. Lowenstein lists eleven criteria of which the first five “formal” and the last six “result-oriented.”<sup>10</sup> Grofman lists six formal criteria, which include Lowenstein’s five plus “nesting.” The result-oriented criteria all pertain to how a plan is to be *judged*; they are mostly unspecific as to how a plan is to be *drawn*. We find the result-oriented criteria of little value in designing a discretion-less districting procedure for the simple reason that no system of geographically based districts can be guaranteed to produce a particular result. A brief examination of the scholars’ result-oriented criteria reveals why this is so.

### *Result-oriented Criteria*

1. *Competitiveness*. Attempts to incorporate a “competitiveness” criterion into an impartial districting procedure have been unsuccessful. In 2005, leaders of a group Reform Ohio Now (RON) placed on the statewide ballot by initiative petition a proposed constitutional amendment that would have greatly reduced discretionary districting. Like the Ohio Anti-Gerrymander Amendment, it would employ a “competitive submissions” procedure\* to select from among submitted plans the plan best satisfying objective, measurable criteria. Unlike the Anti-Gerrymander Amendment, the RON procedure would employ a districting commission to make the selection; would not employ a compactness

criterion in selecting among plans; but would employ “competitiveness” as the dominant criterion, overall.

To get a measure of a district’s competitiveness RON used major-party votes from “the three closest general elections for non-judicial statewide federal or state office” in the “four previous even-numbered years immediately preceding” redistricting. The difference in the percentages of the major party candidates is designated the “average partisan index” for a district and that difference is called “the measure of competition.” If that measure is less than 5 percent, the district is “competitive;” if more than 15 percent the district is “uncompetitive.” A “competitiveness number” is determined by the number of competitive and uncompetitive districts in a plan, and the plan with the highest such number is the winning plan.

This procedure is fairly complex. It requires a large database in which geographical and political data were integrated. Competitors would need to own and know how to operate computers with the capacity to handle ArcGIS 9.3 software in order to compete with a realistic chance of success. The RON proposal lost heavily at the polls (30.30 percent) in November 2005. The use of a political index and the mathematical parameters derived from it remove much of the opportunity for abuse associated with limit-less discretion on the part of a districting commission. But a district’s competitiveness is a function of other variables besides major-party affinity. Incumbency status is obviously the major one, but other variables associated with the personal qualities of the candidates will intrude and mess up the neat, “scientific” calculations on which district indices are based.

Lowenstein differentiates between a “strong” and a “weak” version of this criterion and then proceeds to demolish each of them. He concludes it is possible to create a strongly competitive plan “in the abstract” but:

“In a real state, with real incumbents, real campaign contributors, real media, real campaign managers, and real voters, the drawing of a plan in which all or

nearly all districts turned out to be competitive in practice probably would be impossible.”<sup>11</sup>

In the same vein he discusses the “weak” competitiveness criterion; asks the obvious question of “how many” competitive districts and comments:

“It is not nearly so easy to count the competitive districts in an actual districting plan as it is to bandy the concept about in academic journals.”<sup>12</sup>

He delivers the *coup de grace* to making such a criterion a constitutional provision by commenting that:

“It is easier to declare that ‘some’ districts should be competitive than it is to declare *which* districts should be competitive.”<sup>13</sup>

We agree. There is no way of ensuring that a plan has a given percentage of competitive districts without giving somebody discretion to decide which candidates get such districts and which do not. To do so would open the door to favoritism and vindictiveness, features antithetical to our objectives.

2. *Incumbent Protection*. Lowenstein’s list of criteria states, “Districts should not be drawn to protect incumbents.” This corresponds roughly to Grofman’s: no intentional candidate bias and no use of political data. Here we agree with the desirability of the criterion but differ with the conventional wisdom as to how to achieve it. Lowenstein challenges an attack upon incumbent protection by creating a straw man, which is to pose the alternative as “advantaging the challenger at the expense of the incumbent.”<sup>14</sup> He goes on to quote Robert G. Dixon about the virtues of incumbency and then attributes to critics of incumbent protection the “remedy” of a discretionary districting procedure whereby certain, but not all, incumbents are “sacrificed.” He then says (rightly) “The major stumbling block...(of this)...criterion is how to determine which incumbents should be sacrificed.”<sup>15</sup>

There are two extremes to this debate. At one end are people who are so upset over the way incumbents in Congress and state legislatures are able to perpetuate themselves that they



advocate an arbitrary limit on the number of terms incumbents can serve. This attitude led to the passage of term limitation amendments by initiative/referendum in several states during the 1990s. Such limits deny to constituents the option of keeping in office someone they may want. At the other extreme are persons like Lowenstein who believe we should give incumbents “an incentive for good service” by providing them with districts in which they “realistically can expect good service to be rewarded.”<sup>16</sup> He does not say who shall design such districts.

Our position is squarely in the middle: Don’t limit the terms an incumbent can serve. Don’t give anyone discretion to create districts giving advantage to incumbents. Draw districts impartially and let the political chips fall where they may. This approach favors neither challengers nor incumbents. We don’t see how the law can look at this issue any other way. A state has no business creating districts to favor, or disfavor, incumbents. It has no business creating districts to favor, or disfavor, challengers.

3. *Minority Representation.* Lowenstein’s criteria list states “Some districts should be drawn to guarantee racial, linguistic, or ethnic groups a majority, but without including more members of the group than is necessary to ensure that group a reasonable possibility of electing a candidate of its choosing.” It is one that could be placed under the rubric of “community of interest” in the formal criteria division. We shall do that, and defer consideration of this issue here.

4. *Proportionality.* Lowenstein’s criteria list states “Districts should be drawn so that there will probably be a close or exact proportionality in the next election between a party’s share of the total vote and its share of the total available seats.” On a seats/votes curve the 45-degree line of Figure 1.1 of (this book) represents this case.<sup>17</sup> Lowenstein makes the vital distinction between representing “votes” as the aggregate of all votes cast, and the mean percentage of votes cast in each district, by pointing out that in the real world the number of votes cast in each district is not the same and that the aggregate total definition penalizes the

party whose turnout is lower. He, therefore, opts for the mean percentage, (or “adjusted”) vote definition and proceeds with his analysis. The major flaw of proportionality in the U.S. system of single-member plurality-take-all districts is that, “under conditions of anything like the normal dispersion of party support, the majority party can expect to win a disproportionately large percentage of the seats.”<sup>18</sup> This is Backstrom’s “balloon” effect.<sup>19</sup> Lowenstein cites Backstrom’s demonstration that efforts to draft a plan that will yield proportional results will greatly prejudice the majority party. We agree.

5. *Symmetry*. Lowenstein's criterion No. 9 states “Districts should be drawn to produce ‘symmetry’ among parties so that if the Democrats get  $x$  percent of the seats with  $y$  percent of the vote, the Republicans should also get  $x$  percent of the seats if they get  $y$  percent of the vote.” This has no exact correspondence in Grofman’s taxonomy, but it can be viewed as another special case of his IV F. In Niemi’s parameters this would be another case of Constant Swing Ratio, one that he labels “Neutrality.”<sup>20</sup> To satisfy neutrality, or symmetry, the swing ratio need not be unity, but it must be constant over the range of vote percentages the parties are likely to get. Put another way, there can be no “break” in the seats/votes curve over this range. If Party A gets 60 percent of the seats with 55 percent of the votes, then Party B must, likewise, get 60 percent of the seats with 55 percent of the votes.

The symmetry criterion has received new attention in the wake of the Supreme Court’s decision in *LULAC v. Perry*.<sup>21</sup> Grofman and King write that a majority of the justices appear to endorse their view that “the measurement of partisan symmetry can be used as part of a broader test in resolving partisan gerrymander claims.”<sup>22</sup> They respond to the concern of Justice Kennedy and others “that a partisan symmetry test can only be effectively used if there is a specified threshold to distinguish unconstitutional gerrymandering from mere politics as usual” not by expressing their own opinion, but by quoting Justice Stevens’ view that “it is this Court, not the proponents of the symmetry standard, that has the judicial obligation to answer the question of how much unfairness is too much.”<sup>23</sup>

The High Court will have a difficult time deciding how much partisan bias/asymmetry is “too much” because bias is closely tied to the responsiveness/swing ratio criterion. The 1965 districting plan for the Ohio House of Representatives provides an arresting example of this relationship. This plan was crafted behind closed doors by statewide officials who were Republicans, but who would not permit Republican legislators to see their work-in-progress. It was unveiled and submitted as an interim plan to a federal court that had struck down the existing House districting plan on one person-one vote grounds. The Court had invited interested parties to submit recommendations for a new districting *procedure* that would satisfy population equality requirements demanded by *Reynolds v. Simms*. Rather than submit a proposed procedure, the officials offered the Court this districting *plan*; the Court accepted it and the 1966-1970 elections were conducted under it.

Gelman and King studied the 1965 and 1971 Ohio legislative districting plans and concluded they represented “a systematic change from extreme Republican bias to slight Democratic bias—far beyond what one would expect due to mere random variability;”<sup>24</sup> and in 1994 called it “the largest effect of redistricting ever noted in the academic literature.”<sup>25</sup> Their tabulation shows bias shifting from a pro-Republican bias of 7.0 percent to a pro-Democrat bias of 0.9 percent.<sup>26</sup> This would seem ample grounds for condemning the 1965 House plan as a partisan gerrymander. Yet this 1965 House plan featured a very minimal fragmentation of local governmental units and achieved the third highest standard of compactness of any of the Ohio plans we examined. Our study of this plan revealed that it had 19 marginally Republican and 16 critically marginal Republican districts giving it a 6.30 swing ratio—the highest we have observed in our studies. Figure 23.1 is its histogram derived from building blocks based upon their Democratic indices. Figure 23.2 is its histogram derived from building blocks based upon their actual performance in the general election of 1966. It suggests that a 2.5 percent swing would move 16 districts into the Democratic column and give Democrats control of the chamber. Most people would conclude

this shows that bias measurements alone do not prove a plan is a partisan gerrymander: a high bias value must be accompanied by a low swing-ratio in order for the plan to fail muster. If, as Grofman and King state, it is for the courts to say what value of lambda must be exceeded in order to void a districting plan, their job is made even more difficult if they must say what combinations of bias and swing-ratio are unacceptable. How can they do this without resorting to arbitrary judgments?

6. *Range of Responsiveness.* Since we have made repeated reference to Niemi's "A Theory of Political Districting" it might be appropriate at this point to insert the fourth of his parameters, Range of Responsiveness, (R of R) before taking up the last of Lowenstein's criteria. The R of R is the percentage range of the total (statewide) vote over which seats change from one party to the other. Its low end is the minimum percentage of the total vote required for a party to win at least one seat, while the upper end is the minimum percentage of the total vote required for a party to win all of the seats.

A wide R of R implies that there will be some districts so heavily laden with minority party supporters that they can be won even if that party's statewide vote is very low—say, 20-25 percent. It ensures that the minority party will never be totally shut out. This would be the case if every seat were "competitive" by falling, say, within the 45-55 percent range. A large R of R is, therefore, in conflict with a high fraction of competitive seats and the "ideal" districting plan is one in which these parameters are in proper balance.

As with the criteria of competitiveness and symmetry, this is an easier criterion to implement in the abstract than to factor into an actual districting plan. First, there is the question of what R of R is to be specified; secondly, the problem of measuring the partisan character of the districts we are creating; and finally, the problem of determining which candidates shall be assigned the purposefully "safe" districts that this criterion requires. Assuming the assignment would be at the discretion of persons empowered to do the districting, the opportunity for bribery—of one kind of another—would be significant.

Figure 23.2

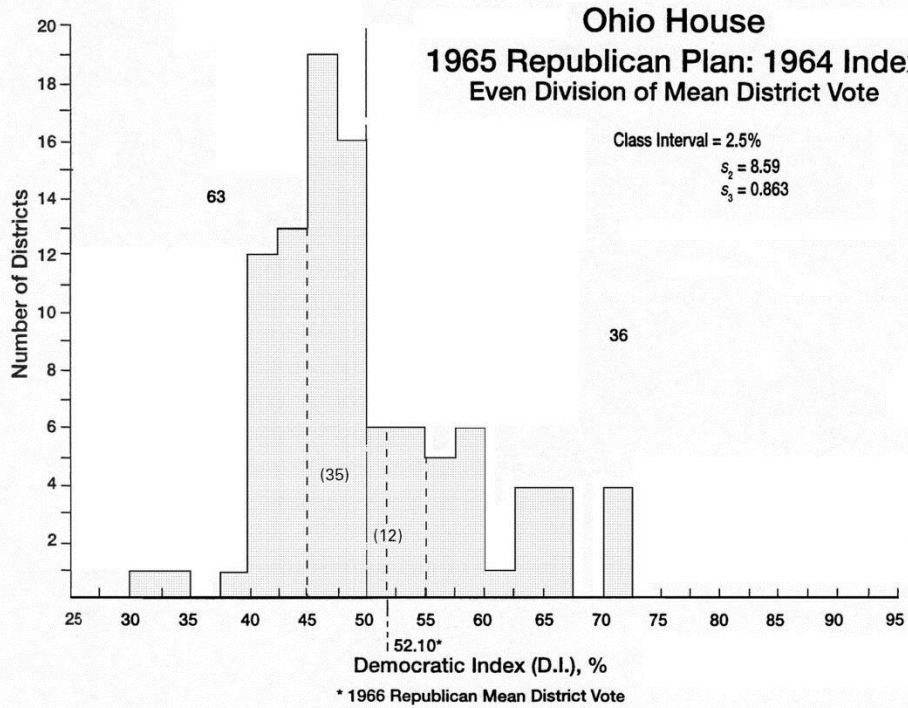
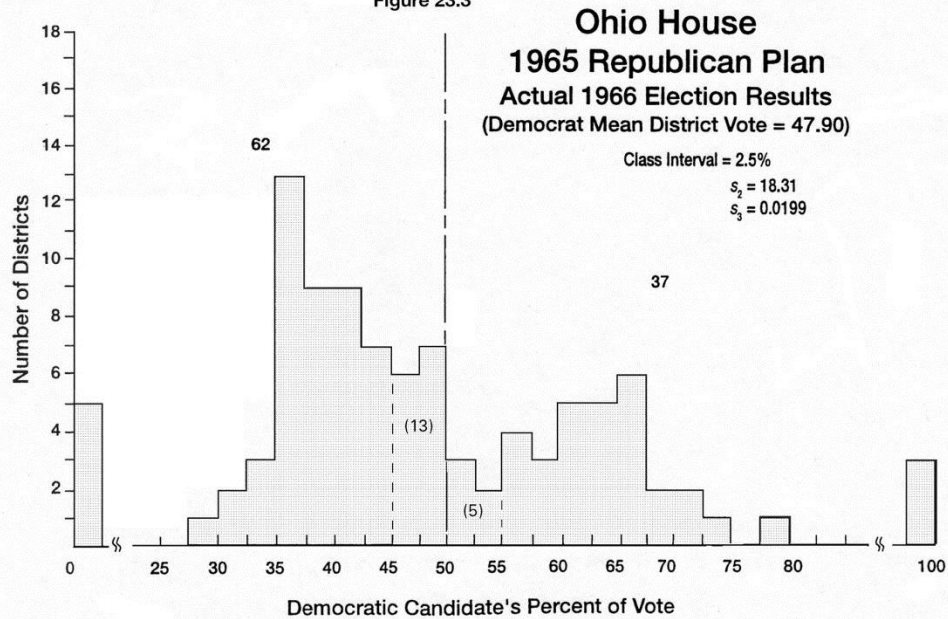


Figure 23.3



7. *Chalk Test*. Lowenstein's criterion No. 10 states "Districts should be drawn so that a given party will win a number of seats that is sufficiently close to the mean number of seats that districts we are creating that this criterion requires, would be won by that party under a large number of computer-generated plans, either drawn randomly or in accord with one or more of the formal criteria, such as compactness." Grofman does not include it in his taxonomy, but Niemi refers to Monte Carlo techniques, which amount to the same thing. It is also described by Richard Engstrom. Lowenstein argues, persuasively, that this test shows a bias in favor of the majority party because the great majority of possible ways to draw lines usually benefit the majority party. He further argues, persuasively, that this test shows a bias in favor of the majority party because the great majority of possible ways to draw lines usually benefit the majority party (43). He further argues that the test is biased against the party whose supporters are geographically concentrated. Since he assumes Democrats are so concentrated, (an assumption we question), it follows that this test is biased against Democrats.

Whether biased or not, the test has serious practical problems. First, of course, is the lack of reliable measure of the partisan character of the districts. Second, generation of a representative sample of alternative plans with which to compare the plan under scrutiny and assess the probability that its partisan distribution could have occurred by chance would be an enormous undertaking. Finally, the problem of applying such a test to a plan under which no election has taken place raises further uncertainties. It is simply not a practical criterion to employ in drawing plans.

*Concluding Comments on Result-Oriented Criteria.* As stated at the beginning of this section, no system of geographically-based districts can be guaranteed to produce a particular result. That is because people may not actually vote the way they are supposed to by the designers of the plan. There is no better way to demonstrate the futility of factoring result-

oriented criteria into the construction of a districting plan than to relate a few historical examples where such was attempted.

In 1913, Ohio had a Democratic governor. Democrats controlled the Ohio senate 26-7 and the house 87-33. They passed H.B. 567, (44) a congressional districting law that remained in effect for 38 years. H.B. 567 was referred to as “the gerrymander bill,” even in the official record (45). The populations of the districts varied from 114,359 (-47.2 percent) to 349,018 (+61.1 percent) (46). Of its 22 districts, 17 were composed of entire counties. The remaining five split the urban areas of Cincinnati and Cleveland. The lowest compactness indices (19.5 and 24.1) belonged to two heavily Democratic Cleveland districts—the two districts also having the highest populations. If the 1910 vote for governor (the best election to use as an index of “party strength”) is aggregated among these districts, Democrats are a majority in 18 of 22—exceeding 65 percent in the two Cleveland districts (47).

In the first election conducted under this plan (1914) Democrats won only nine districts (40.9 percent) with 50.2 percent of the aggregate vote. The mean population of those nine districts was 237,086. The mean population of the 13 districts electing Republicans was 206,737. Three elections later (1920) Republicans won *all* 22 districts, for a clean sweep, with 58.5 percent of the statewide vote. It would be hard to find a districting plan of partisan authorship that failed more badly to achieve the intended result. But the story does not end in 1920. Sixteen years later (1936) the same plan gave Democrats 20 of 22 seats (90.9 percent) with 56.5 percent of the vote (48).

A second example is the 1981 Republican-drawn congressional districting plan for Indiana. Two of the six Democratic incumbents were paired in one of the new districts. Another two were paired in another new district. A fifth was placed in a Republican-dominated district with a strong Republican incumbent. Three districts had low compactness indices (19.5, 25.8, 26.1) (49) for no apparent non-political reason. Thirteen counties were split when a  $\pm 1$  percent population spread can be attained while splitting only one county.

Democrats cried “foul” and considered a lawsuit. Nine years later they found themselves an 8-2 majority in the state’s delegation, having elected members in 1986 and 1989 in open districts that by any political index would be considered Republican (50).

These examples—and others from Connecticut, Iowa and Arizona we will consider later—demonstrate that even the most expert districting technology cannot guarantee an election result, given the nature of the U.S. electorate. Therefore, any attempt, however well-intentioned, to combine political and demographic data to create districting plans having such characteristics as competitiveness, proportionality, symmetry/neutrality, constant swing ratio, and wide range of responsiveness is an illusion (51). It is significant that no one has ever drawn a real districting plan—using real demographic and political data in a real state—which incorporates the recommended result-oriented criteria.

Giving people discretion to draw plans in an attempt to achieve the goals of result-oriented criteria will only grant them an opportunity to reward friends and punish enemies which, even if not intentionally exercised, casts a pall over the electoral process and further erodes the will of the citizens to be involved in it.

Lowenstein states that “the formal criteria” have been “downgraded or rejected entirely by most of the more sophisticated students of redistricting, “many of whom “have embraced, instead...the result-oriented criteria” (52). He has it backwards. The “sophisticated” students, among who we include ourselves, see the unworkability of result-oriented criteria and would employ formal criteria to strip discretion from the districting process. We now turn to a consideration of those criteria and the question of how to employ them in a discretion-less districting procedure.

## Notes

<sup>1</sup>

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<sup>3</sup> *New York City Transit Auth. v. Beazer*, 440 U.S. 568, 587 (1979).

<sup>4</sup> Horn, et al. 1989.

<sup>5</sup> Joan W. Lawrence, et al., *House Joint Resolution (H.J.R.) 2*. 120th Ohio General Assembly (1993-94).

<sup>6</sup> S. 6166 (Regular Session, New York Senate, 1981-82).



<sup>7</sup> Hardy, Leroy and Alan Heslop, *Redistricting Reform*, (Rose Institute of State and Local Government, 1990).

<sup>8</sup> *Ohio Senate Journal*, (23 May, 1986), pg. 1593.

<sup>9</sup> This is the procedure followed by Hardy and Heslop. See Note 8, above.

<sup>10</sup> Lowenstein, Daniel and Daniel Steinberg, *The Quest for Legislative Districting in the Public Interest: Elusive or Illusory?*(California: UCLA Law Review, 1985): 11.

<sup>11</sup> Lowenstein, Daniel and Daniel Steinberg, *The Quest for Legislative Districting in the Public Interest: Elusive or Illusory?*(California: UCLA Law Review, 1985): Note 11 pg. 39.

<sup>12</sup> *Ibid* pg. 41.

<sup>13</sup> *Ibid* pg. 43.

<sup>14</sup> *Ibid* pg. 45.

<sup>15</sup> *Ibid* pg. 46.

<sup>16</sup> *Ibid* pg. 47.

<sup>17</sup> *Ibid* a pg. 1307.

<sup>18</sup> *Ibid* at Note 11 pg. 53.

<sup>19</sup> Backstrom, Charles Herbert, Leonard S. Robins, and Scott Eller. *Issues in gerrymandering: an exploratory measure of partisan gerrymandering applied to Minnesota*. (Minn.: Minnesota Law Review Foundation, 1978): 1134.

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## Chapter 24

### Formal Districting Criteria

Given that result-oriented criteria are unworkable, we are faced with a choice of permitting mapmaker's discretion, or of employing objective—or “formal”—criteria in such a way as to remove that discretion. Formal criteria differ from result-oriented criteria, generically, in that they do not involve, or require, any use of political data. They can also be characterized as objective and quantifiable—as opposed to subjective and nebulous. The key to using such criteria to remove discretion is to consider a criterion as being a *constraint* or an *optimizer*.

Employing a criterion as a constraint means that it is a rule that either is or is not met: it is not a matter of its being met to some degree. A district is either contiguous or it is not contiguous; it is either within the population deviation or it is not within the population deviation; its compactness index is either above 30 or it is not above 30. To employ a criterion in such a manner is to make it a constraint.

Employing a criterion as an optimizer means that it is a rule that is not an “either-or” case, but rather one in which it is met to a greater or a lesser degree. A district that is in only two different pieces could be said to meet a contiguity criterion better than a district that is in four different pieces. A plan that has a  $\pm 1$  percent population deviation can be said to meet a population equality requirement better than a plan with a  $\pm 4$  percent deviation. A district with a compactness index of 30 can be said to meet a compactness criterion better than one with an index of 25.

We may define a discretionary procedure as one in which all criteria are employed as constraints and none is employed as an optimizer. After a series of constraints is employed, subjective human judgment is exercised to make the final choice. A mechanical districting

procedure, after reducing the possible options by a series of constraints, employs the final criterion as an optimizer in order to define what is the best plan and to make the final choice accordingly.

Lowenstein lists five formal criteria, combining two of them (population equality and contiguity) under one heading. Grofman adds a sixth, “coterminality.” We shall consider these six, plus a seventh, which we shall call “special rules.”

1. Equality of population
2. Contiguity
3. Compactness
4. Non-fragmentation of governmental units such as cities and counties
5. Non-division of “communities of interest”
6. Nesting, or coterminality
7. Special rules

The best way to evaluate these criteria is to refer, by footnote, to the actual text of what we have been calling the “Ohio Anti-Gerrymander Amendment.” That document can be obtained from the Ohio Legislative Service Commission (Vern Riffe Center, 77 South High St., Columbus, OH 43215-6136) and look up the relevant passages of this text. (Be sure to specify that it is H.J.R. 4 of the 124<sup>th</sup> General Assembly.)

1. Equality of Population. This criterion must be included. Lowenstein accepts it as “axiomatic”<sup>1</sup> and defends the very strict standards for congressional districts that were applied in *Karcher v. Daggett*. Grofman considers the standard applied in *Karcher* as “extreme” and the courts’ different standards for congressional and state districting as having “no clear rationale.”<sup>2</sup> We share Grofman’s view that a population deviation smaller than the accuracy of the census count is unwarranted. In our Ohio reform proposals we have employed a  $\pm 1$  percent deviation

for congressional districts (CDs), a  $\pm 4$  percent deviation for senate districts and a  $\pm 5$  percent deviation for house districts [Sec. 3(A)]. For the 2000 census the ratio of representation for Ohio CDs [Sec. 2(A)] is 630,730; a 1 percent deviation from that ratio would be 6,307 persons. A 99-member Ohio house means a ratio of representation [Sec. 2(B)] for that body of 114,678 persons. If the population standard for such districts were  $\pm 1$  percent, the deviation would be 1147 persons. The current provision in the Ohio constitution permits a  $\pm 5$  percent deviation, or 5734 persons, and that has been the one employed in our proposals. A 108-member house implied by the fully nested alternative, using the same 5 percent deviation, would mean  $\pm 5256$  persons.

We agree with Grofman and others that there is no philosophical reason for permitting a higher deviation in legislative than in congressional districting. There is a practical justification, however. Plans are made from “units,” or “building blocks” (*i.e.*, counties, cities, townships, census tracts, block numbering areas, blocks). The smaller and more numerous these units are the more cumbersome and unwieldy is the necessary database and the process of constructing districts. A  $\pm 1$  percent population deviation for congressional districting can be achieved with a maximum building block size of 6,307. This will result in a database of about 4,300 units for a state like Ohio. If the population deviation for legislative districts is narrowed to, say,  $\pm 1$  percent one is forced to choose between what may be the technical impossibility of achieving a  $\pm 1,147$  deviation with building blocks of over 5000 persons, and reducing maximum building block size to 1,000 resulting in an expansion of the database to 10,000+ units.

So the justification for a wider population deviation involves, primarily, the pragmatic considerations of database and district construction. A secondary justification is that the wider the deviation the easier it is to optimize such other criteria as compactness and non-fragmentation of local governmental units. Whether such criteria should be optimized is another question. We only state here that to do so requires relaxing the population standard.

2. Contiguity. This criterion is so universally accepted that one might adopt it without argument. Lowenstein accepts it as "axiomatic."<sup>3</sup> Grofman describes it as "relatively trivial" and "usually noncontroversial."<sup>4</sup> We adopt it, making a few specifications when we employ it in a districting procedure: In cases where water intervenes between bodies of land (*i.e.*, the Lake Erie islands) we shall assume that the legally-established nautical boundaries govern). We need also to specify that touching corners does not qualify as contiguous. Finally, we need to rule out "doughnuts." These latter objectives are normally achieved by using the language "bounded by a single, nonintersecting line" [Sec. 8(c)].

3. Compactness. We dealt with this criterion, extensively, in a published article.<sup>5</sup> In it we concluded "either the Cox or Goedicke area/perimeter-squared" measure is the best way to specify compactness in a districting procedure. By the Goedicke measure the compactness index = C.I. =  $400pA/P^2$  where A is the area of a district in units of square measure and P is the perimeter of the district in the same units of linear measure. By this formula a circle (having an index of 100) is the standard of reference. In our reform proposal, as currently drafted [Sec. 6(A)(5)(c)], the constant 400p is omitted, meaning that the value of a circle becomes 0.0796. We deleted the constant, thinking that the resultant formulation,  $A/P^2$ , is less intimidating to legislators afflicted with math anxiety. The Cox formulation is employed by Niemi and Wilkerson in their analysis of the *Bandemer* house plan<sup>6</sup> and by Hofeller and Grofman in their study of the compactness of California CDs.<sup>7</sup> The difference between Cox and Goedicke is trivial: Cox uses the constant 4 p whereas Goedicke employs 400 p. Whichever of the foregoing three measures is used, the compactness ranking of districts is unaffected.

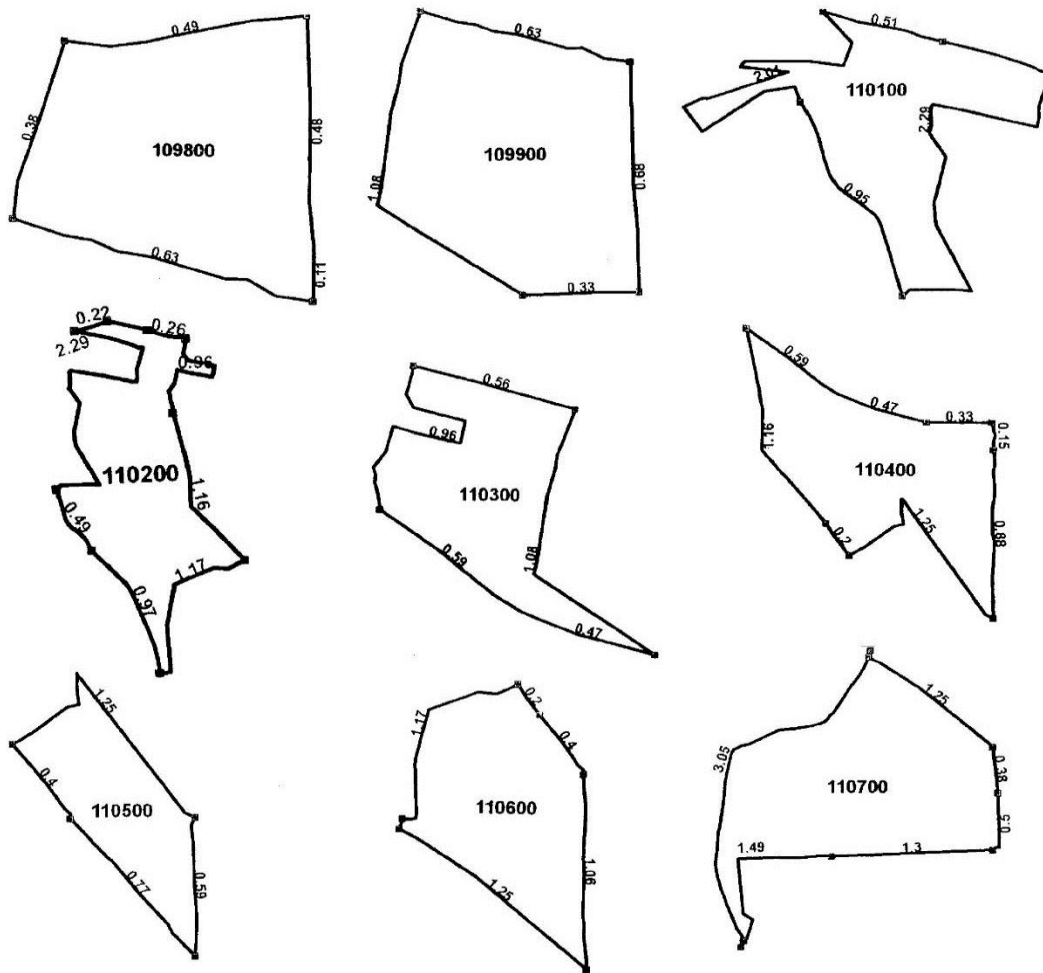
Recent work by Niemi et al<sup>8</sup> demonstrates a theoretical shortcoming of the area/perimeter-squared formulas: they do not adequately penalize dispersion of a geometric figure, while perhaps unduly penalizing a figure that is geographically concentrated, but having

“sawtooth edges.” This theoretical defect has no adverse consequences so far as prescribing a compactness measure to be used in a districting procedure is concerned. As we shall explain later on, because of the “sawtooth edges” problem we have decided to use two compactness thresholds in the most recent version of our legislation [**Sec. 8(D)**].

The most important feature of a compactness measure to be used in a districting procedure is that it be one that permits *analytical* determination, as opposed to dependence upon graphical measurement. If the choice of a plan ultimately depends upon a compactness measurement, one can envision heated controversy over whose measurement of a particular district’s area or perimeter was the correct one. When such measurements are made with a planimeter or curvimeter—or even with a computer/map digitizer—they will not be precise and even several replications will not give exactly the same numbers.

Such problems are obviated if areas and perimeters of all district building blocks are officially established prior to the commencement of districting activity. Then all participants in this activity would be using the same numbers and there would be no arguments afterwards. The best means for “officially establishing” such data would be for the secretary of state to engage an engineering firm to make the necessary measurements and publish them, along with population figures, in a catalogue available for public distribution. The firm making the measurements could use judgment and discretion as to the degree of precision employed, because whatever figures it came up with, regardless of how close or not close to the “true” values, would have to be used by everybody. Figure 24.1 gives an idea of how one page in such a catalogue might look. (Printed inside the outline of each individual building block, in order, from top to bottom are (1) its census tract number, (2) its total population, (3) its black population, (4) its area in km<sup>2</sup>.) Since 2008 several private firms have developed accurate graphical tools which can make the sort of measurements shown in Figure 24.1 in a few seconds. The reader is referred to:

Figure 24.1  
 2000 Census Tract District Building Blocks: Cuyahoga County



Lowenstein is vehement in his condemnation of a compactness criterion, calling it a “Republican Trojan Horse.”<sup>9</sup> Grofman sees no pro-Republican bias in the criterion but says its “usefulness...has been vastly overrated.”<sup>10</sup> We have elsewhere addressed Lowenstein’s contention that compactness and other formal criteria have partisan bias. Here we address his assertion that it has “precious little virtue under modern conditions”<sup>11</sup> and “serves no cognizable purpose that can be plausibly identified with the public interest.”<sup>12</sup>

What constitutes “virtue,” or the “public interest,” is a highly subjective judgment. Lowenstein’s judgment is just as subjective as that of James W. Rankin who represented the 69th and 25th Ohio house districts from 1971-1978. HD 69 was a relatively compact Cincinnati inner-

city district. In 1971, it was renumbered 25 and redrawn to afford a safe district next door for Rep. James T. Luken.<sup>13</sup> The new HD 25 was the dumbbell-shaped configuration shown in Figure 24.2(A). When Rankin was presented with this fait accompli he was furious.<sup>14</sup> In times past he had been able to “walk” his district. Now it was an elongated affair virtually cut in two by the city of Norwood.

Sam Speck was elected to the Ohio House from a rural district that was redrawn in 1971 to yield the configuration shown in Figure 24.2(B). He stated “In going from one end of my district to the other, I had to drive for 30 miles through another district.”<sup>15</sup> He was not pleased. The Ohio 10th CD was redrawn in 1982 (Figure 32.2) to bypass Hocking County and extend the district’s already long span another 30 miles. In 1982 Charles Overby, a candidate without much money but with a corps of dedicated volunteer workers, challenged the incumbent. Overby and his volunteers had to travel another 60 miles to campaign in the northern end of the district, passing through Hocking County, which was in the 6th district. They were not amused. Lowenstein says, “given modern methods of transportation and communication, the size or shape of a district has little effect on the ability of a legislator to represent his or her constituents.”<sup>16</sup> We disagree.

We may have a different definition of “virtue” and “the public interest” than Lowenstein, but the point here is not whose definition is correct. Compactness is one of *several* criteria that can be used in combination to take discretion out of districting. Grofman misses the point when he grudgingly concedes the “potential usefulness” of compactness “as an indicia of possible gerrymandering.”<sup>17</sup> Non-compactness cannot “prove” gerrymandering. Compactness might be employed, in conjunction with other criteria, to preclude the opportunity for gerrymandering.



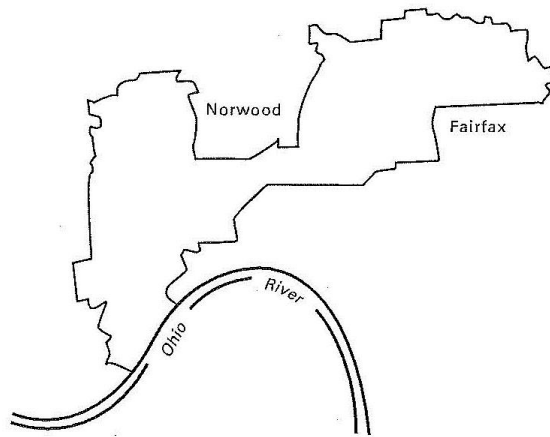


Figure 24.2a HD 25.  
C.I. = 23.2

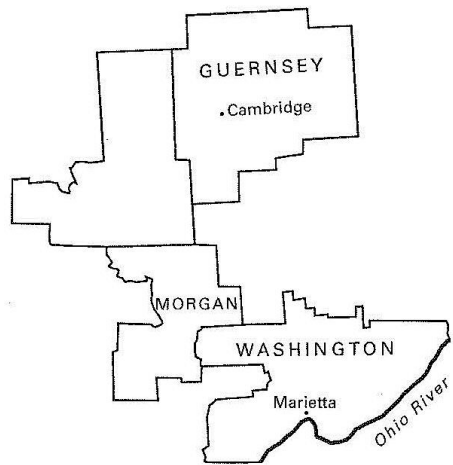
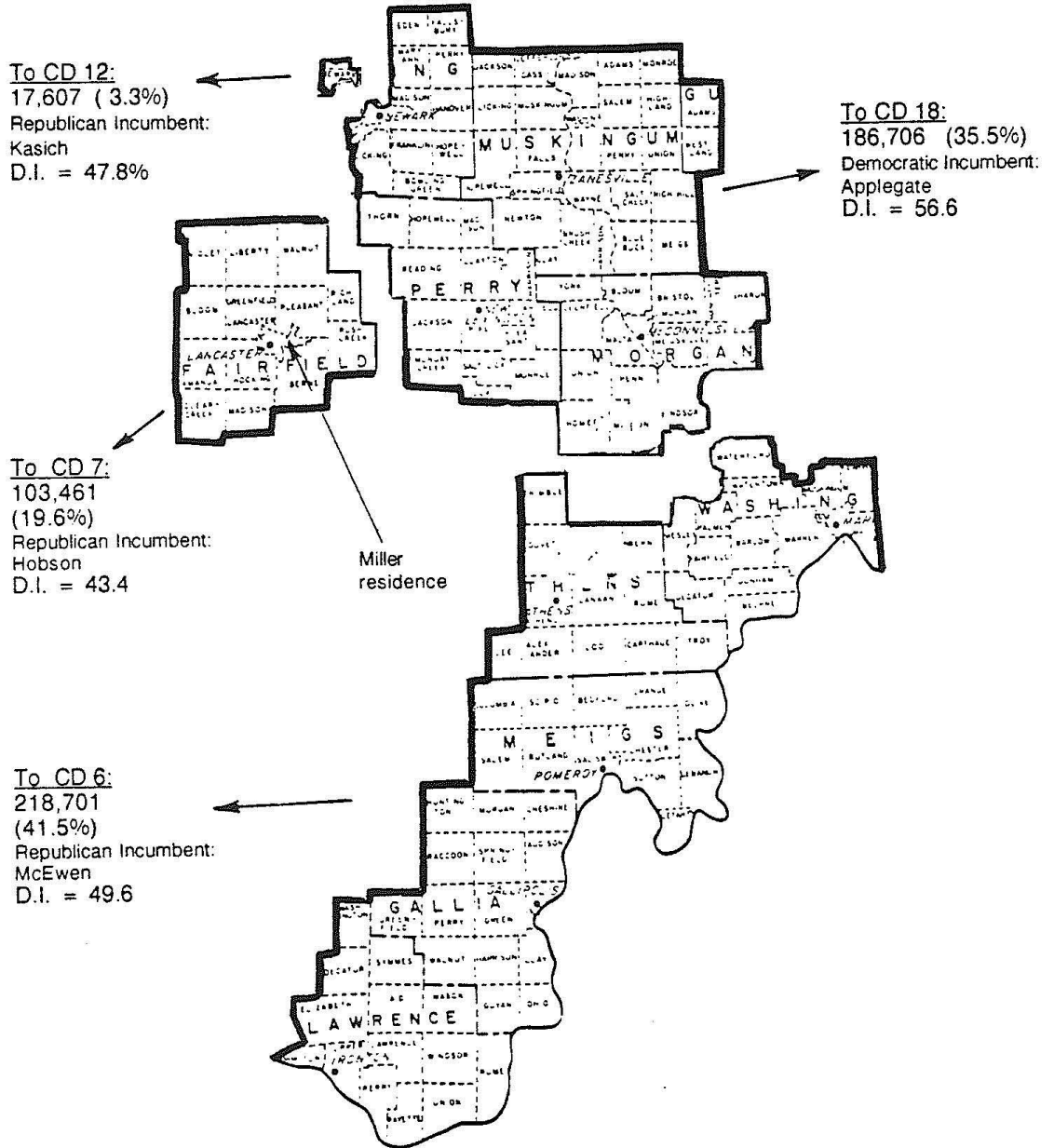


Figure 24.2b HD 95.  
C.I. = 18.5

Figure 32.2

# CHECKMATE GERRYMANDER: BREAKUP OF OLD CD 10

1990 Population: 526,475  
(D.I. = "Democratic Index")



4. Non-fragmentation of local governmental units. From the beginning, the Ohio reform proposals recognized the need for a database that described and specified the “units,” or “building blocks,” that would be used in constructing districts. The mapmakers, of course, could not divide these building blocks; they had to be entirely included, or entirely excluded, from a district [Sec. 8(B)]. If a township or municipal corporation was below the maximum building block size (in the current Ohio proposal 1 percent of the ratio of representation for congressional districting, or 6307 persons), it follows that it would not be split. The original version of the Ohio anti-gerrymander amendment had no restriction on splitting governmental units other than these.<sup>18</sup> It was not much of a restriction because all Ohio counties, and many of its municipal corporations, exceed 6307 population. In this initial version population equality, contiguity, and building block integrity were the constraints. If the plans under scrutiny met those constraints, then compactness alone decided which of them would be adopted.

The principal reason for the criterion is that it is easier to tell someone whom their state representative, state senator, or congressperson is if a county or city is not divided between districts. If someone is from Licking County, and you know Licking County is all within John Ashbrook’s 17th CD, you can tell them, unequivocally, that Ashbrook is their congressperson. They are better informed without having to call the board of elections. On the other hand, if Licking County is divided between CD 10 and CD 12, and someone asks who their congressperson is, you may not be able to tell them whether it is Miller or Kasich unless you have a detailed knowledge of where they live and how that residence relates to the dividing line. They may have to call the board of elections, and their failure to do so may leave them uninformed. Most people would say the easier it is for the citizenry to be so informed of such matters the better the public interest is served.

Some would also argue that the fact that a city or county is undivided makes it more convenient for mayors and county commissioners, who this way would have only one state representative, one state senator, or one congressperson to deal with—rather than two to several.

Conversely, it may be more convenient for a state representative, state senator, or congressperson to have a smaller, rather than a larger number of mayors and county commissioners to deal with, as would be the case if his/her constituency contained fewer county and city fragments.

Also, as we can testify, it is easier campaigning, or managing a campaign, in a rural district when fewer counties are involved. If you have one or two townships from a county in your district, you have to recruit a volunteer from that county, or send someone to that county to get voter registration lists, the same as you would if the entire county were in the district. You have to deal with county party leaders the same way you would if the entire county were in the district. The same may be true for radio station managers and newspaper editors where such media coverage tends to coincide with county lines. You have to attend meetings of civic and political organizations whose membership coincides with that county, even though many of the persons in those organizations may not live in the part of that county that is in your district. It is less wasteful of time, money, and effort to conduct a grass-roots campaign in a district composed of a small number of whole counties than in a district containing fragments of a large number of counties. We assume that more efficient grassroots campaigning coincides with the public interest.

Beyond these considerations we see no compelling arguments against dividing cities and counties in districting plans. We agree with Lowenstein in his rebuttal of the argument that dividing such entities “dilutes” their voice in a state legislature, or in Congress. Legislators and congresspersons represent people—not counties and cities. And even if one argued that the officials who govern cities and counties would have their influence diluted in a state legislature, or in Congress, if their jurisdictions are divided between districts, it is by no means certain that such is true. As Lowenstein states:

“Is a city more influential when a single legislator pursues its interests very intensely, or when two or more legislators pursue those interests somewhat less intensely?”<sup>19</sup>

People in Mansfield, Ohio were initially upset when their city was divided between the 4th and 13th districts by Ohio's 1982 CD plan. But their attitude changed when they came to realize that they now had *two* congresspersons to go to bat for them in Washington rather than just one.<sup>20</sup>

Lowenstein is also correct in his argument that, even if non-fragmentation of counties and cities increases their influence in legislatures or Congress, it is by no means certain that enhancing such influence is congruent with the public interest. As he says:

“On what a priori basis can it be said that it is in the public interest to create a permanent structural advantage for one side (municipalities) in controversies involving other interests?”<sup>21</sup>

We agree.

Non-fragmentation of counties and cities has its pros and cons as a criterion for districting and we are not dogmatic either way. We think that, on balance, it should be included and we employ it as a criterion in the Ohio proposal [**Sections 9(B) and (D)**]. Non-fragmentation can be achieved to a greater degree if one is willing to trade-off population equality, compactness, nesting, and other criteria. Conversely, these other criteria are better optimized if non-fragmentation is downgraded. What is the proper balance? It is a value judgment that should be made by a legislature when it is crafting a districting procedure. As with compactness, it is one of several criteria which can be used in combination to take discretion out of districting. It is the removal of that discretion that is in the public interest—not necessarily the non-fragmentation of local governmental units. As with the compactness criterion, Lowenstein asserts that implementation of this criterion favors Republicans. As indicated earlier, we have addressed that assertion elsewhere.

5. Non-division of “communities of interest.” Unlike the other formal criteria, this one is vague and subjective. It has been used as a synonym both for racial/ethnic groups and for “municipal corporation.” We prefer to say “African-Americans” when we mean African-Americans and to say “cities” when we mean cities. Lowenstein agrees with us in that it “fares

very badly under” the test of simplicity and straightforwardness. David I. Wells agrees. Grofman notes that most states fail to define it; that it is “hard to enforce because it is hard to define,” and that it “may conflict with the criterion of following political and other subunit boundaries.” Here is a good place to deal with the issue of race/ethnicity in districting.

If a state decides that a particular classification of its citizens should be guaranteed representation in it’s legislature, or in its congressional delegation, it—for all practical purposes—has two options: (1) a constitutional or statutory requirement prescribing a quota of districts for the designated group, to be created by “affirmative” gerrymandering. The courts have been prescribing this remedy in the cases they have had before them until now and it has generated much resistance and controversy. At least two justices (Scalia and Thomas) have indicated they think mentioning race in the Constitution is itself unconstitutional.

Option (2), by a system of what amounts to “parallel” districts, is used in Ohio to elect the major-party state central committees, with one male and one female committeeperson from each state senatorial district. Only Option (2) can guarantee representation to a racial/ethnic group. It would mean a structural change so radical that no political leader has even proposed it. In drafting the version of the Amendment introduced in the Ohio House in 2000, a “permissive” clause was written into Section 8(E) authorizing the General Assembly to establish quotas in its districting procedure. There was no support for it and it was dropped in the next version introduced. Since then the United States has elected an African-American president and the issue may be moot.

6. Nesting; coterminality. Grofman notes that “Ten states (actually eleven: he left out Ohio) have constitutional provisions requiring coterminality of state assembly and state senate districts; three other states customarily draw plans to achieve coterminality, even though it is not constitutionally mandated.”<sup>22</sup> No state currently mandates nesting of congressional with legislative districts although there have been two instances where this occurred. Prior to 1964, California required that CDs be created from state assembly districts (ADs) within its large counties. The CDs were created by combining either two, or three, ADs.<sup>23</sup> This made large

population differences between CDs unavoidable, so that when the courts mandated population equality for CDs the requirement had to be abandoned (assuming that the state maintained its fixed number of 80 ADs—which was not a multiple of its 38 CDs).

The other instance where nesting of legislative and congressional districts occurred was the state of Washington during the 1970s. Because of a political impasse at the time the districts had to be drawn the judiciary intervened and appointed Richard L. Morrill to draw both legislative and congressional districts.<sup>24</sup> The state's constitution provides for a flexible number of seats in both houses of the legislature, ranging from 63 to 99 in the house and from 21 to 49 in the senate.<sup>25</sup> Since Washington was allocated 7 congresspersons for the 1970s, Morrill chose to have 49 senators and 98 assemblypersons. He drew 49 senate districts, and then combined 7 senate districts to form each CD. Figure 24.3 shows his plan.

During the 1980s, six states had numbers of congressional, senate, and house districts that were integral multiples of each other and could have implemented a policy of fully nesting legislative and congressional districts.<sup>26</sup> What are the implications of such a criterion?

a. Public understanding. First, and most obvious, nesting appeals as a simpler, more rational arrangement than one in which house, senate, and CD lines crisscross each other. In Ohio during the 1970s one house district contained parts of four different CDs; one senate district contained parts of five different CDs. As with the argument for non-fragmentation of counties and cities, it is easier to tell someone who their congressperson or their state senator is if the system is nested. If you knew the state representative of a citizen of Washington State during the 1970s, you could without hesitation tell that person who his state senator and congressperson were. But if a resident of Ohio house district 86 in the 1970s told you his state representative was Walter McClaskey, you could not tell him who his congressperson was unless you had a very detailed map in your brain that would enable you to tell him whether that person was Ashbrook, Brown, Devine, or Guyer.

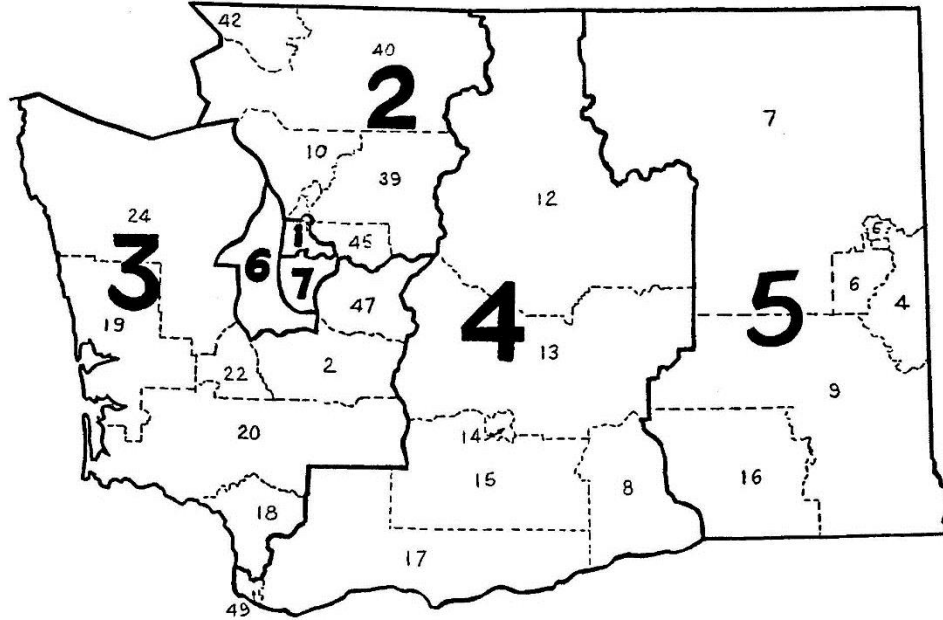


Figure 24.3  
 1970's Washington Congressional and State  
 Senatorial Districts

b. Political organization. Another consequence of a fully nested system would be a strengthening of political parties and fewer uncontested, or weakly contested, seats. An example will drive this point home. For over two decades there has been an association of party activists in southeast Ohio called the 10th Congressional District Democratic Action Club. This kind of association does not exist at the state house or state senatorial district level. No senate district was entirely contained in the 10th CD. The 17th senate district, for example, lay partly in the 10th CD and partly in the 6th CD. A particularly obnoxious (to Democrats) Republican held senate district 17 and was up for re-election in 1974. Yet nobody in the 10th District Democratic Action Club felt it was that group's responsibility to come up with a strong challenger. After all, maybe the 6th District Democratic Action Club was recruiting somebody. If the 10th CD and associated legislative districts had all been within a large urban county, one would expect that the county central committee would take care of things. But in rural areas multi-county political



organizations have to be set up to recruit and support legislative and congressional candidates. In a fully nested system the congressional district organization would have no doubt as to its responsibility for the recruitment and support of legislative as well as congressional candidates.

c. Gerrymandering inhibitor. Whenever it is mandated that one set of districts is to be subdivided to form another set, a severe restriction is placed on whoever is drawing those districts. Such a restriction could be a strong inhibition on gerrymandering if districts were being drawn in a discretionary manner: whatever congressional districting scheme might yield maximum partisan advantage might not divide into a senate districting scheme that would yield maximum advantage. The senate-districting scheme, in turn, might not be divisible into a house-districting scheme that would yield maximum advantage. The requirement in Ohio's constitution, since 1967, that each senate district be composed of 3 house districts probably gave the Ohio Democratic Party difficulty in using its control over districting in 1971 and 1981 to devise an Ohio senate plan that would ensure its control of that body. Republicans gained control of the Ohio senate during both decades. Similarly, this nesting requirement probably gave the Ohio Republican Party difficulty in using the control over districting it gained in 1991 to devise a plan that would enable it to take over the Ohio house: they came up four seats short in the 1992 elections.

Under a mechanical districting system, in which discretion is precluded by application of other criteria, nesting assumes less importance as an anti-gerrymandering safeguard. However, it can still function in such a role when employed in conjunction with those other criteria.

d. Career ladders and congressional incumbency. The phenomenal re-election rates of incumbent congresspersons have been widely recognized and documented. In Ohio, from 1968 through 1988, of 225 incumbents<sup>27</sup> seeking re-election 216 were successful, making the percentage 96.0. Of the 9 who were defeated, 3 were "freshmen." If these three cases are excluded, the success rate of the others rises to 216 of 222, or 97.3 percent.<sup>28</sup> The reasons for the high incumbent re-election rates of recent years are debated. Pro-incumbent gerrymandering is,

arguably, one of them. Whatever may be the reasons for incumbent success the public policy question remains the same: do we want to structure the electoral system to provide more competition for incumbent congresspersons?

One good way to do it is with nesting. The original Ohio proposals would have carried the nesting of 3 house districts in one senate district one step further to nest two senate districts in each CD.<sup>29</sup> [Sec. 3(B)] Ohio senators have staggered 4-year terms; those from even-numbered districts being elected in presidential years; those from odd-numbered districts being elected in gubernatorial years.<sup>30</sup> [Sec. 3(C)] These proposals would have situated one even-numbered senate district, and one odd-numbered senate district, in each CD meaning that in each election one of those senators could have challenged the incumbent without giving up his/her own seat. In large states, where only 2 or 3 senators would be nested in a CD, the threat might be considerable. In small states, where 5 to 25 senators would be nested, the threat would be minimal. Whether such a change is desirable or undesirable depends upon one's attitude toward the question of congressional incumbency.

If one believes that congressional incumbents should have more credible competition structured into the system in the manner proposed, there is a small negative consideration offset against it. Lowenstein pointed out in his discussion of non-fragmentation of counties and cities that such a criterion favors the aspirations of mayors and county commissioners who seek higher office: their current electoral base is situated entirely within the jurisdiction in which they want to run. This gives them an advantage relative to other candidates who may not be mayors or commissioners.<sup>31</sup> The same would be true for nesting: a state representative or state senator running for Congress would have an increased advantage relative to a candidate who is not a state legislator.

e. Interest group organization. In one sense no political system is neutral. The way it is structured is bound to favor some interests as opposed to others. Nesting of congressional and legislative districts would make it easier for any organization attempting to influence legislative

decisions on both national and state levels to group its people together and effectively mobilize them (especially, by means of phone networks) to bring constituent pressure to bear upon elected representatives.

However, organizations or interest groups which rely more heavily upon the use of money—as opposed to grassroots organizing—to achieve their objectives would benefit very little from nesting. Nesting gives all groups a better opportunity to organize but it confers a greater relative advantage upon the money-less groups. Since such groups do not have the option of gaining influence through the well-targeted campaign contribution, the only road open to them is effective organization of their supporters. A districting system which frustrates their organizing efforts by overlapping CD and legislative district lines tilts in favor of the moneyed groups against which they are usually arrayed.

Someone once wrote, “*Not to choose is to choose.*” To leave intact a system of overlapping district boundaries is to confer a relative advantage on certain interests in the political arena, just as instituting nesting would confer a relative advantage upon others. One is truly choosing either way. Nesting implies a choice in favor of a political structure that rewards ability to mobilize people as opposed to a political structure that rewards ability to raise money.

There have been only two generic objections to nesting. The first, discussed above, is the erection of career ladders, which give legislators an advantage relative to non-legislators in seeking state senatorial or congressional office. The other objection is that nesting will necessitate more division of counties and cities than would be the case where each districting system is independent of the others. If non-fragmentation of counties and cities is very high in one’s priorities one is likely to oppose nesting. A non-generic objection to nesting with CDs is that in many states it would mean going from a fixed number of state representatives and senators to one that would change whenever the decennial apportionment altered a state’s number of CDs. As we have noted, states like Washington allow for a flexible number of legislators and seem no worse for it. Ohio had a flexible number of legislators from statehood until 1967. It had 30 state

representatives in 1803 and had reached 137 by the time the one-person-one-vote litigation forced a radical overhaul of its districting, resulting in the current fixed number of 33 senators and 99 representatives.<sup>32</sup>

For Ohio to return to a larger number of legislators serving smaller-sized districts would involve a choice between two schools of thought on representation. One school sees a legislator as a citizen working part-time at the capitol, for a modest salary, serving a district small enough that he/she can be in close personal contact with and do his/her own casework. The other school sees a legislator as a full-time professional receiving a substantial salary, serving a district too large for extensive personal contact. Communication and casework are facilitated by larger staffs, newsletters mailed at state expense, and local offices maintained in the district at state expense. Such state-financed services are viewed by some as contributing to incumbent advantage. New Hampshire is the paradigm of the citizen-legislator school; California is the paradigm of the professional legislator school.

7. *Special rules.* The Ohio constitution specifies three constraints on drawing legislative districts that we here consider under the heading “special rules.” Article XI Sec. 8 states:

“A county having at least one house...ratio...shall have as many house...districts wholly within its boundary as it has whole ratios. Any fraction of the population in excess of a whole ratio (*i.e.*, the “spillover”) shall be part of *only one* adjoining house...district.”

Article XI Sec. 11 applies the same rules to the formation of senate districts. Though they are combined in one paragraph, we here consider them separately.

*Maximum Districts Rule.* As indicated, this rule states that where a county has a population sufficient to create more than one political district the maximum number of such districts be contained within that county. The advantage of such a rule is that it makes things easier for election boards, makes for easier public understanding, and may work to assure election

of more congresspersons and legislators who reflect inner-city concerns. On the other hand, imposition of this rule might work to prevent formation of more compact districts.

*Spillover rule.* The spillover rule is the maximum districts rule carried one step further. Under the maximum districts rule, by itself, that portion of a county not used to make up the whole districts may be used to form any number of other districts. But when the spillover rule is added that portion can be used in *only one* other district. The 1971 legislative districting plan in Ohio violated the spillover rule in that the spillover from Lake County was used to form *two* adjoining districts (HD 74 and HD 97). The person who drew that plan, Ira Gaffin, stated that it was impossible to satisfy both the spillover rule and meet the equality of population requirement—which he took, at that time, to be a  $\pm 1$  percent deviation.

An investigation was conducted to determine whether it was possible to satisfy both the spillover rule and the Article XI Section 3 requirement specifying a maximum population variance of  $\pm 5$  percent between house districts. It was found that it was possible to barely satisfy both requirements with a population variance of  $\pm 5$  percent. However, if the variance were lowered just to  $\pm 4$  percent, it would be impossible to adhere to the spillover rule and Gaffin's position would be vindicated.

*Secondary Counties Rule.* Another clause in Article XI Section 11 presented another impossible situation to the Ohio apportionment board in 1991. The clause reads: "Counties having less than one senate ratio..., but at least one house ratio..., shall be part of only one senate district."

In contrast to the situation facing Gaffin in 1971, the architects of the 1991 plan *were* able to satisfy both the population requirement and the spillover rule. However, they could not if they were to satisfy this rule, as well. They opted to violate the population rule by making the population of house district 68 in Geauga and northern Trumbull counties less than the minimum 5 percent deviation. They survived a challenge in the Ohio Supreme

Court which ruled that, when districting provisions in the Ohio constitution conflicted, the apportionment board had discretion as to which provision to violate.<sup>34</sup>

The lesson to be learned from these episodes is that extreme care should be taken about writing such rules into constitutions. Only a stroke of population distribution luck enabled satisfaction of the spillover rule in 1971 and 1981. In 1991 a change in population distribution made it impossible to comply with all of these rules, even with a  $\pm 5$  percent deviation. Similar situations are likely to occur in the future. In the current version of our proposal, there are no special rules.

\* \* \*

In the final section we set forth two versions of the Ohio Anti-Gerrymander Amendment: the partially-nested version and the fully-nested version. In the partially-nested version **Section 1** affirms the current fixed number of 33 senate and 99 house districts. In the fully-nested version **Section 1** specifies no fixed number of house and senate districts. In **Sections 2(b)** and **2(c)** the ratios of representation for house and senate districts in the partially-nested version are derived by dividing the state population by the fixed numbers “33” and “99,” respectively. In the fully-nested version they are derived by dividing by two times the number of U.S. representatives, and six times the number of U.S. representatives, respectively. In **Section 3(b)** the partially-nested version specifies the division of each *senate* district into 3 contiguous house districts. The senate districts are numbered in order of their statewide ranking by area. In the fully-nested version **3(b)** specifies the division of each *CD* into 6 house districts which are, in turn, combined to form 2 contiguous senate districts composed of 3 house districts each. The senate districts are numbered by giving the larger (in area) within each *CD* an odd number, and the smaller within each *CD* an even number consecutive to the number of the other senate district in that *CD*.

A non-discretionary means of numbering senate districts is necessary because it *does* make a political difference whether a senator's district carries an even or an odd number: whether the senator runs in a gubernatorial year, or a presidential year, could mean the difference between

victory and defeat. There are other differences between the partially- and fully-nested versions in the later sections dealing with procedure. Here we only point out the differences in Sections 1-3, which deal with structure.

## Notes

- <sup>1</sup> Lowenstein, Daniel and Daniel Steinberg, *The Quest for Legislative Disdistricting in the Public Interest: Elusive or Illusory?*(California: UCLA Law Review, 1985): 12.
- <sup>2</sup> Grofman, Bernard. "Criteria for districting: A social science perspective" *UCLA Law Review*, Vol. 33 No. 1 (1985): 88-89.
- <sup>3</sup> Lowenstein, *op. cit.* Note 1: pg. 12.
- <sup>4</sup> Grofman, *op. cit.* Note 2: pg. 84.
- <sup>5</sup> Horn, David L., et al. 1993b.
- <sup>6</sup> Niemi, Richard G. and J. Wilkerson. "Compactness in the 1980s Indiana Districting" in Bernard Grofman, ed., *Toward Fair and Effective Representation*. New York: Agathon, 1990.: 253-265.
- <sup>7</sup> 8 Niemi, Richard G., et al. "Measuring Compactness and the Role of a Compactness Standard in a Test for Partisan and Racial Gerrymandering" *Journal of Politics*, 52 (1990): 1155-1181.
- <sup>8</sup> *Ibid.*
- <sup>9</sup> Lowenstein, *op. cit.* Note 1: pg. 27. More recently, Chen and Rodden have issued a paper, ("Tobler's Law, Urbanization, and Electoral Bias: Why compact, Contiguous Districts are Bad for Democrats") which, lends support to Lowenstein's claim(s). Certainly, it calls for further investigation. A nine percent partisan advantage in the state of Florida is not a claim to be dismissed lightly. The outcomes of our investigations as reported in both tables in Chapter 40 for Ohio, Indiana, Pennsylvania and California are much more of a mixed bag.
- <sup>10</sup> Grofman, *op. cit.* Note 2: pg. 89.
- <sup>11</sup> Lowenstein, *op. cit.* Note 1: pg. 22.
- <sup>12</sup> *Ibid* pg. 25.
- <sup>13</sup> Private conversation in early 1980 between Robert Weidenfeld and Rep. Helen Rankin, widow of Rep. James Rankin, as reported by former to David L. Horn.
- <sup>14</sup> Rev. Robert S. Graetz, Jr., Ohio Council of Churches lobbyist who was close to Rankin; reported by Graetz to David L. Horn.
- <sup>15</sup> Senator Sam Speck, 1981. Testimony before Ohio Senate Committee on Elections re. S.J.R. 5: February 24.
- <sup>16</sup> Lowenstein, *op. cit.* Note 1: pg. 22.
- <sup>17</sup> Grofman, *op. cit.* Note 2: pg. 89.
- <sup>18</sup> HJR 90 (Locker, et al) 112th General Assembly; HJR 15 (Locker, et al) 113th G.A.; HJR 8 (Locker, et al) 114th G.A.; HJR 36 (Galbraith, et al) 115th G.A.
- <sup>19</sup> Lowenstein, *op. cit.* Note 1: pg. 29.
- <sup>20</sup> Conversation of David L. Horn with Nancy Youd, district representative for Congressman Donald J. Pease, July 6, 1989.
- <sup>21</sup> Lowenstein, *op. cit.* Note 1: pg. 31.
- <sup>22</sup> Grofman, *op. cit.* Note 2: pg. 88.
- <sup>23</sup> See pp. 15-16 in Leroy Hardy and Alan Heslop, *The Westside Story: A Murder in Four Acts*. The Rose Institute of State and Local Government. Claremont CA. 1990.
- <sup>24</sup> Richard L. Morrill, 1973. Ideal and Reality in Reapportionment. *Annals of the Association of American Geographers*, 63: 463-477.
- <sup>25</sup> Constitution of the State of Washington, Art. XI Sec. 2.
- <sup>26</sup> Alabama: 7-35-105; Indiana: 10-50-100; Oregon: 5-30-60; Arizona: 5-30-60; Montana: 2-50-100; Rhode Island: 2-50-100.
- <sup>27</sup> This count excludes the single case (CD 22 in 1968) where two incumbents were paired and forced to run against each other.
- <sup>28</sup> David L. Horn: unpublished research.
- <sup>29</sup> Those versions cited in Note 18.
- <sup>30</sup> Ohio Constitution, Article II Sec.2 and Article XI Sections 11 and 12.
- <sup>31</sup> Lowenstein, *op. cit.* Note 1: pg. 31.
- <sup>32</sup> In some states, where a change in the number of congressional seats apportioned to that state could cause a major change in the number of legislative seats due to a requirement for fully nesting, there might have to be a provision to change the "multiplier" relating congressional to legislative seats. For example, suppose Indiana were to adopt a fully nested districting scheme. It currently has 10 congressional seats, 50 senate seats, and 100 house seats. The current house/congressional multiplier is, therefore, 10. Suppose, in future decades, its congressional representation dropped to 7, forcing it to go to a 35-member senate and a 70-member house. Indiana political leaders might consider

these numbers too small. In that case, they could write a constitutional provision stipulating that under such circumstances the multiplier would rise to 12—yielding a 42-member senate and an 84-member house. Similarly, they could stipulate a *reduction* in the multiplier if the state’s congressional representation rose beyond a certain number. There is nothing sacred about the number of seats in a state legislature. Senate sizes range from 20 in Alaska to 67 in Minnesota; house sizes range from 40 in Alaska to 400 in New Hampshire.

<sup>33</sup> *Ferguson et al v. Voinovich et al.* 586 N.E. 2d 1020 (Ohio, 1992).



## Chapter 25

### Employment of Formal Criteria in a Districting Procedure

#### *Choice of an Optimizer*

We stated in the opening paragraph of the preceding chapter that the “key” to using such criteria to define the best plan in a districting procedure is to employ one of them as an optimizer. We now address the question of which one. Almost any criterion may be used either as a constraint or as an optimizer, but some function better as constraints and some function better as optimizers.

Population equality can, as suggested above, function as a constraint by the device of requiring that all districts fall within a stated deviation. It could be used as an optimizer by requiring that, of plans meeting all constraints, the one with the smallest deviation from the ratio of representation be chosen. Since the courts have already ruled that population variances be held below various minima, it does not seem wise to employ population equality as a criterion where, under certain conditions, its optimum value may be outside court-established limits. We concluded, therefore, that it should be employed as a constraint.

Contiguity can, as suggested above, function as an optimizer if it is stated that, of plans meeting the constraints, that plan which has the smallest number of non-contiguous districts—or where non-contiguous districts are the least divided—must be chosen. The minor difficulty with this is the possibility that two or more plans may end up with the same number of non-contiguous districts—since the number of all districts is relatively small. The major difficulty with this is that most people believe all districts should be completely contiguous, and that being the case this criterion can only serve as a constraint.

Non-fragmentation of counties and cities has a strong claim to be used as an optimizer. Used as a constraint, it can be said only that it is not permissible to divide a township, municipality, or census tract that conforms to the population limits imposed upon “building blocks” in the preceding discussion of the population equality criterion. Beyond that, it is not possible to use this criterion as a constraint without creating technical impossibilities. For example, to specify that no county be divided would make impossible the satisfaction of a population deviation constraint. As alluded to earlier, the initial version of our proposal employed non-division only as a weak constraint. We knew then that it could be employed as an optimizer by specifying that a plan with fewer county fragments must be chosen over one with more such fragments.

It was quite possible, however, that two or more plans might contain the same number of county fragments. That impasse could be resolved by specifying that the plan with the smaller number of municipal corporation (“municipal”) fragments would be chosen. If another impasse resulted, we could see no new decision rule that would not encumber the procedure with further complexity. More important, employing non-fragmentation as an optimizer would, presumably, require compactness as a constraint.

To employ compactness as a constraint would mean specifying a minimum compactness index and ruling that any plan with a district below that minimum be rejected. The problem is in choosing that minimum. Compactness indices constitute a continuum from 100 down to zero, with an infinite number of possibilities in-between. Our experience indicates that a congressional districting plan ought to achieve a minimum compactness index of 25 to 30. But this is not much to go on. Depending upon the unpredictable factor of population distribution, which changes after each census, it may be possible to attain much higher minima than 30. On the other hand, it may be impossible to attain a minimum of 30. Guesswork is required. If, to play it safe, the minimum is set fairly low, and it proves easy to comply with, then considerable latitude may be

afforded for gerrymandering. If, on the other hand, one tries to preclude opportunity for gerrymandering, he may set the minimum too high for attainment. There is no way to know in advance what will prove to be the proper number.

But when compactness is used as an optimizer these problems disappear. The fact that compactness values fall on a continuum, with a large number of gradations between 100 and zero, makes it very unlikely that any two plans will have the exact same minimum,<sup>1</sup> if the compactness index is computed to a sufficient number of places. It was hard to avoid the conclusion—in 1978—that, of the realistically possible criteria, compactness was ideally suited to be the optimizer.

Our problem in using it in this way concerned whether we really *wanted* to compute compactness values to a large number of decimal places (as suggested above). Further reflection led us to conclude that it would probably be best to consider two plans in a “dead heat” if their minimum districts had the same index when computed to two significant figures. Then make the choice based on the compactness of the next least compact districts, and so on, until one plan emerged as the winner [Sec. 9(E)]. Such a procedure would give a better overall comparison between alternative plans than one in which everything hangs on a very slight difference between the least compact districts.

The initial version of our proposal, then had no inhibition on dividing counties and cities larger than the maximum building block size, and used compactness as the single optimizer. As stated in our discussion of Formal Criterion No. 3, we altered the proposal to employ compactness both as a constraint and as the tertiary optimizer. Further studies showed that a compactness index of 30 was attainable under any population distribution, if the building blocks were below the specified maximum population. It was simply a matter of the trade-off with non-division of counties and cities. There was no problem of setting the compactness threshold so low it would permit gerrymandering, because non-division would still be available to eliminate discretion. Minimum county fragments were now the primary optimizer [Sec. 9(B)], and

minimum municipal fragments the secondary optimizer [Sec. 9(D)]. To deal with the earlier cited problem of two or more plans having the same number of county and municipal fragments, compactness was then reintroduced as the tertiary optimizer using the principle of the highest minimum [Sec. 9(D)].

Our 1989 congressional districting investigation in Ohio provided evidence in support of the Niemi<sup>2</sup> criticism of area/perimeter-squared compactness measures cited in our discussion of Formal Criterion No. 3. It is true that an urban district with little geographic dispersion can have a low compactness index simply because of the “sawtooth edges” effect.<sup>3</sup> Similarly, a rural district that is quite dispersed can have a compactness index no lower than the urban district because the former follows relatively “smooth” county lines.<sup>4</sup> We decided that for Ohio conditions it is more important to prevent dispersed rural districts than sawtooth-edged urban districts. Accordingly, in the most recent version of our proposal, we employ a dual compactness threshold as a constraint: we set it at 30 ( $A/P^2 = 0.024$ ) in urban areas and raised it to 37.7 ( $A/P^2 = 0.030$ ) in rural areas [Sec. 8(D)].

In concluding this discussion, one can see how we have taken a very pragmatic approach to the development of our proposal. From the beginning we have sought what is simple, sound, and workable and modified it as we learn from experience. One element, however, has never changed: there are no “judgment calls” as to which plan is chosen.

#### *Method of implementation*

At this point we have demonstrated how formal criteria can be employed to take discretion out of districting by defining the “best plan” in unambiguous terms and mandating that such plan be adopted. It remains for us to consider how a state might implement such a procedure. There are two general approaches, which we shall label “Legislature/Commission” and “Competitive Submissions.”

1. *Legislature/Commission.* The first, and obvious, approach is to have the legislature, or a commission, draw the districting plan in a manner which ties its hands: that is, mandate that

it draw a plan that fulfills all the constraints and best meets the optimizing criteria. It would not matter how a commission were made up since it would exercise no discretion. Having a mandate to draw the best plan, it would immediately be faced with the choice of attempting to draw the plan manually, or of attempting to program a computer with the criteria and have the computer search out the best plan.

Whether the legislature/commission employed a computer, or drew its plan manually, it is unlikely that it would come up with the best plan. Even if it were acting in good faith, it is likely that someone could draw a plan better meeting the criteria. The legislature/commission's plan, whether conceived in good faith or treachery, would doubtless displease somebody and it would then be up to that "somebody" to prove that the commission did not draw the best plan. This he would, presumably, do by drawing an alternative plan that better satisfied the criteria, and then going to court with a lawsuit to replace the legislature/commission's plan with his own.

This is not a very satisfactory process, since it guarantees what will certainly be costly—and presumably, lengthy—litigation every time districts need to be drawn. It means, further, that only persons or groups with the financial resources to wage lawsuits can seriously participate in the districting process.

In this age of high technology, there is a popular notion that computers can do anything. Of the seven individuals who claim authorship of this proposal, two hold doctorates in mathematics, a third teaches the use of computers in business and accounting, and a fourth is an engineer who uses a computer in his work. They are unanimous in their judgment that attempting use of a computer to draw a districting plan where 4,300 building blocks are involved would be an exceedingly costly and impractical endeavor. To go into a discussion of all the technical complexities involved in developing the program is beyond the scope of this work. There is simply no point in going to all the trouble and expense of trying to develop such a program.

If we reject a state-funded computer search for the best plan, we are thrown back to manually drawn plans. As we have observed, the legislature or a commission can only be

“forced” to draw the best plan by the threat of somebody with an alternative plan challenging the state’s plan in court. Is there a way to avoid this certainty of litigation? The way that seems logical to us is to open the process to the public at the *outset*, *without* the necessity of court action—rather than after the state has acted, and then only *by* court action.

2. *Competitive submissions.* To open the process in such a manner would employ what we have labeled “competitive submissions.” Once the official data on populations, areas, and perimeters was published any person could take this data, construct a plan with it, and submit it to the districting authority. That authority could be any number of state officials or bodies. It would not matter who it was, since the procedure, being cut-and-dried, would tie the hands of whoever administers it. Our choice would be the secretary of state [Sec. 6(B)], who already serves as the state’s chief elections officer. Although a partisan, he is allowed to oversee all elections in the state because his actions are governed by clear, detailed rules. His actions would be similarly governed were he to administer the districting process. In fact, he would probably contract much of the work to universities or consulting engineers.

The winning plan in a competitive submissions procedure will, obviously, displease somebody also. But now the process would be an open one in which all the alternative plans submitted would be known to, and probably published in, the media. The authors of losing plans would know what other plans were considered and why their plans lost out. Anyone who wished to employ a computer to make his plan would be free to do so—but at his/her own expense. The winning plan might be challenged in court; but in this case the argument, rather than being over what the “intent” of a commission had been, would be simply one of what is the correct sum of a column of numbers. Attorneys do not get rich litigating such questions.

Competitive submissions are, admittedly, an unconventional approach to districting. Significantly, however, we are not alone in reaching the conclusion that it is the best approach. Norman Primus, a districting consultant and reformer with over 15 years’ experience, arrived at the same conclusion, independently. His 1985 Indiana districting competition, even without the

resources of the state available to provide the best database, still demonstrated the workability of this approach.

Sherlock Holmes once said “...when you have eliminated the impossible, whatever remains, however improbable, must be the truth.”<sup>5</sup> Once we have ruled out the unsound and the unworkable approaches to districting, then whatever approach remains, however unconventional, is the one to take.

### *Commentary on Other Provisions*

Section 4 simply affirms that plans are to consist of single-member districts.

Section 5 applies to districts that may be described in terms of the municipal corporations contained in them: the boundaries of such districts are not to be altered should the boundaries of their municipal corporations change. For example, suppose a district line separated District A in western Cincinnati from District B in adjoining Green Township. During the ensuing decade the city annexed part of the township. By this provision the annexation would remain as part of District B, and not be transferred to District A.

Section 6(A) defines various terms employed in the procedure, including the formula employed in computing the compactness ratios of districts. The rationale for Division (A)(5)(d) is given elsewhere.<sup>6</sup> Division (B) commences description of how the secretary of state would actually conduct a competitive submissions districting procedure. He begins, on May 1, by issuing an invitation to parties wishing to submit plans and requiring them to file a notice of intent, accompanied by a fee, within two weeks. This enables the secretary to estimate how many copies of the districting database will have to be printed. The filing fee helps defray the cost of the necessary documents and serves to screen out frivolous entries.

Section 6(C) sets June 1 as the day on which the Secretary of State issues the documents necessary for competitors to draw their plans. We have already argued the rationale for a catalogue of district “building blocks” and given an idea of what it might look like in Figure 24.1. The maximum building block population is also stated. That of the partially nested version

differs from that of the fully nested version. The rationale for the maximum-sized building block in the fully nested version involves mathematical reasoning we have set forth elsewhere.<sup>7</sup>

It is quite likely that some of the townships, census tracts, and block numbering areas used as raw data by the secretary of state will have populations exceeding the maximum allowable. Some census tracts also include portions of more than one municipal corporation.<sup>8</sup> In such cases Section 6(D) directs the secretary of state to divide these entities into “the fewest possible units of contiguous territory containing populations not exceeding the threshold or containing parts of more than one municipal corporation.” Usually, there are many ways such divisions can be made and the secretary could exercise discretion as to how he did it, because such discretion poses no real opportunity for political manipulation. However, when a proposal somewhat similar to ours was placed on the statewide Ohio ballot by initiative petition in 1981, the alleged ability of the person preparing the database to manipulate the districting outcome by the way he divided “oversize” census tracts was a point of major controversy.<sup>9</sup> Therefore, we have included language directing the secretary to “make the divisions resulting in the most compact units...” Guidance is thus provided to the secretary so that, if he makes a reasonable effort to achieve the “most compact units,” it is very unlikely anybody will make this an issue. Since minimizing division of municipal corporations is an important criterion in our procedure, it is essential that achievement of minimal division not be hindered by building blocks containing parts of more than one such jurisdiction. Therefore, if a census tract contains parts of more than one municipal corporation, it must be divided even if its population is below the threshold.

In our discussion of the compactness criterion preceding Figure 24.1 we stated that the engineering firm making the area and perimeter measurements to go into a catalogue of district building blocks “could use judgment and discretion as to the degree of precision employed, because whatever figures it came up with, regardless of how close or not close to the ‘true’ values, would have to be used by everybody.” Section 6(E) simply recognizes this fact and forestalls controversy and nit picking by stating that such measurements “shall be presumed to be



accurate.” With respect to the precision of perimeter segment measurements, we would recommend that they be made to the nearest 0.01 kilometer. That would be about 33 feet, or about the width of a small street.

Our research, based upon Ohio conditions, indicates that the database (i.e., the “catalogue of building blocks” plus forms and an assortment of base maps) discussed in this section would contain about 4,300 building blocks. To prepare it would first require splitting about 600 oversize census tracts, or tracts containing parts of more than one municipal corporation. We estimate the time required to do this as about 200 hours. Measurement of areas and perimeters of all 4,300 building blocks might take another 1450 hours. Preparation of the “catalogue” (which we estimate would come to about 500 pages), forms, and base maps might take about 960 hours. Consequently, we estimate the total required time to be about 2,600 hours. If we apply a “safety factor” of about 1.5, the time required for the secretary of state to prepare the database would rise to 4,000 hours. Multiply this by whatever hourly rate seems reasonable to arrive at the cost.

The maximum time required—and the maximum cost—would occur the first time the database is prepared. Because the configurations of many of the township and census tract building blocks will not change from decade to decade, their areas and perimeters would not have to be re-measured, thus leading to significant cost savings in subsequent decades.

Section 7 begins by stating that each plan submitted in response to the invitation extended in Section 6(B) must cover the entire state. In the case of the partially-nested version we are talking about either congressional or senate plans; in the case of the fully-nested version we mean only congressional plans. We make this stipulation because many participants are interested only in the configuration of a particular district—or group of districts—and if allowed to do so would submit a plan covering only the part of the state that concerns them. This is unacceptable because the state requires a plan for *all* of the districts, and the way a particular district is configured imposes limitations upon what can be achieved with respect to all the others. We are picking the best *statewide* plan. We cannot achieve that plan by adding together plans for individual districts.

Section 7 continues by requiring that each plan include a summary sheet listing the populations and compactness ratios of all of its districts, the identities of all counties and municipal corporations that are split, and the number of fragments resulting from these splits. Further, the participant is to include a statement affirming that the plan conforms to all of the constraints enumerated in Section 8. The feature of a summary sheet requiring this information first appeared in H.J.R. 33 and S.J.R. 30, the versions that were introduced in the 116th general assembly in 1985. Prior versions had burdened the secretary of state with making the compactness measurements for all of the plans, himself. As will shortly become apparent, this burden is unnecessary.

Finally, Section 7 gives participants just 30 days in which to prepare their plans by requiring a July 1 submission deadline. Based upon our experience, this time is ample. After the submission deadline, all plans become available for public examination. This is an imperative feature of the process. It ensures meticulous verification and generates public confidence that everything is open and aboveboard.

Section 8 specifies the four or five constraints, which all plans submitted pursuant to Section 6, must satisfy. Division (A) affirms the population equality requirements already considered in our discussion of Section 3. Divisions (B), (C), and (D) affirm the constraints of building block integrity, contiguity, and compactness discussed previously.

Section 9 describes the process by which the secretary of state determines the winning plan from among those plans, which meet the constraints enumerated in Section 8. Under the partially nested version Division (A) calls for concurrent selection of the best congressional plan and the best senate plan. Under the fully nested version, division (A) only calls for the selection of the best congressional plan.

Division (B) instructs the secretary to examine the summary sheets of all the plans, and on the basis of this survey find out if any plan has fewer county fragments than the others. If such is the case, then the winning plan is very quickly established on the basis of the primary optimizer:

county fragments. Then the secretary must make a detailed examination of this plan to see if it does, indeed, meet all the constraints and that what is claimed on its summary sheet is true and correct. If so, the secretary, by August 15, is to declare this plan as the winner. In the partially nested version, this is done for both the congressional and senate plans. In the fully nested version, this is done only for the congressional plan. Finally, the secretary must publish for public distribution the maps and detailed descriptions of these winning plans because this information is necessary for competitors to participate in the next stage of the competition. In the partially-nested version, this distribution will apply only to the senate plan.

Division (C) prescribes what is to be done if examination of the supporting documents of the apparent winner fails to verify what is claimed on its summary sheet: that plan is disqualified and a new apparent winner is determined from among the remaining plans. The verification procedure of Division (B) is again followed. If a second disqualification results, the procedure is repeated until a bona fide winner is established. We have estimated that it should take approximately 25 hours to completely check a senate plan of 33 districts. This means that, if the summary sheet of the apparent winner is true and correct, no other plans have to be checked and a process we have allowed six weeks to complete could be finished in a few days. As we noted in the discussion of Section 7, the earlier versions of our proposal called for the secretary of state to check *all* of the plans. It took us about seven years to realize that such a large expenditure of time and money could be made completely unnecessary by employment of a summary sheet.

Division (D) prescribes what is to be done if two or more qualifying plans each contain the fewest county fragments and the winner cannot be determined on the basis of the primary optimizer—which is very likely to be the case. We then determine, among the plans that finished in a “dead heat” on the basis of their county fragments, which one contains the fewest municipal fragments. If one plan has fewer municipal fragments than the others, we then have an apparent winner on the basis of the secondary optimizer and again follow the verification procedure of Division (B). If two or more plans end up in a “dead heat” on the basis of the secondary

optimizer—which is likely to be the case if a large number of plans are submitted—we must then resort to the tertiary optimizer: compactness. Compactness was initially used as a constraint to weed out plans which might split very few counties and cities, but were not sufficiently compact. Now we return to this criterion to make the final determination. Here we compare the compactness of plans according to the principle of the highest minimum which we have discussed elsewhere.<sup>10</sup>

The rationale for Division (E) was given during our consideration of compactness in the section discussing choice of an optimizer. Availability of the decision rule given in this division means that it will always be possible to resolve a deadlock between two plans—unless they turn out to be identical, which would be entirely possible if a large number of plans are submitted.

Division (F) was included to make it clear that plans are not to be disqualified because of “minor technical errors that have no substantive effect.” A court interpretation of this provision might be necessary in some situations and we do not like to use language that might require court interpretation. But to omit this provision would be an even less satisfactory alternative. The key word is “substantive.” By that we mean something that could make the difference as to whether a plan is selected.

Section 10 lays out the procedure to be followed during the second phase of the competition under the partially nested version; and the second and third phases under the fully-nested version.

Division (A) instructs the secretary of state, at the time he announces the winning congressional/senate plans, to invite people to submit plans for House of Representatives (“House”) districts. In the case of the partially-nested version, the competitors may divide any number of districts in the senate plan, each into three house districts. In the fully nested version, the competitors may divide any number of districts in the congressional plan, each into six house districts. In this stage of the competition it is not necessary to require that submitted plans cover

the entire state because each congressional/senate district is self-contained and how it is divided does not affect how other congressional/senate districts can be divided. The secretary furnishes competitors with the documents described in Sections 6(C) and 9(B) in return for a modest filing fee, contingent upon the number of districts the competitor intends to divide. Competitors are, once again, given a month in which to prepare their plans with a new deadline of September 15.

Division (B) sets November 1 as the date for the secretary of state to announce the winning house plans based upon the division of senate districts in the partially-nested version; based upon the division of congressional districts in the case of the fully-nested version. The selection procedure is the same as that given in sections 8 and 9 except that, instead of one competition covering the entire state, there are “mini-competitions.”

In the partially-nested version, there will be competitions in each of the senate districts—33 in all. The resulting statewide plan will very likely be a composite of the winning plans of different competitors in different senate districts. It is unlikely that a single individual would come up with the winning plan for the division of all 33 districts. In the fully nested version, there will be competitions in each of the congressional districts—currently 16 in Ohio. The resulting statewide plan will, very likely, also be a composite of the winning plans of different competitors in different CDs.

For the partially nested version, all districting plans are, therefore, in place by November 1. For the fully nested version, however, a third and final phase is necessary: the recombination of house districts within each CD to form the senate districts. Division (B), therefore, includes additional language governing this phase. A public competition is not necessary to arrive at the combination of six house districts within each CD that best satisfies the requirements of Sections 8 and 9 because the number of such combinations is small. The possible number of combinations of 6 things, taken 3 at a time, is only 20—in fact 10, since 10 of the combinations are

complements of the other 10. Of these 10, it is quite likely that as many as seven may result in one or both of the senate districts being non-contiguous.<sup>11</sup> Therefore, the real options are likely to be about three. In this situation it is safe to let the secretary of state designate the winning combination. To “keep him honest” Division (B) requires him to “publish the computations he used in determining the compactness of the various combinations.” This makes it very easy for the press and public to look over his shoulder. The language of this division gives him a month to make this choice, but it is quite likely that he could do it in a day. With the data available to everybody, the winning plan for senate districts will probably be figured out in a day or two by the press and political community. The secretary of state’s official announcement on December 1 will probably be an anticlimactic formality.

Division (C) was written because what number is given to a congressional district has political consequences—although not nearly so grave as in the case of senate districts. Rules pertaining to the use of the congressional franking privilege are tied to the number given the district. We discovered this fact several years ago when one of our collaborators got a phone call from a distressed congressional incumbent after seeing the number given to “his” district in a demonstration plan drawn by the senior author for submission to a federal court.<sup>12</sup> We, therefore, need an impartial procedure for numbering congressional districts; but it is not something that should take up space in a state constitution. Consequently, we direct the legislature to specify such a procedure by statute. Numbering of Ohio house districts does not, at this point, have political consequences, but it seems reasonable to take discretion out of this matter as well.

Division (D) authorizes the legislature to adjust the various deadlines specified in Sections 6, 7, 9, and 10 if practical experience with availability of census data, time required to process plans, filing dates for primary elections, or other factors make it evident that such adjustment is warranted. It also authorizes the adjustment of filing fees to account for inflation.

Section 11 deals with the problem of holdover senators. If state senators have staggered 4-year terms it means that, anytime redistricting occurs, half of those senators will be halfway through their terms. The instructions given by this section ensure continuity for holdover senators when possible, and when not possible provide an impartial mechanism for resolving conflicts.

Section 12 provides an expeditious mechanism for litigating controversies involving legislative districting done by this procedure. It does not apply to controversies involving congressional districting done by this procedure. Such jurisdiction lies with the federal courts and no state constitution can regulate the procedures of federal courts.

Section 13 states how long the boundaries of existing districts are to remain in effect. As currently drafted, the Ohio Anti-Gerrymander Amendment would not take effect until the redistricting slated to occur in the year 2021. We have set its effective date that far into the future because the proposal has a better chance of being judged on its merits if it cannot be known which political party would benefit by its adoption.

Section 14, the severability clause, is to protect the integrity of the Amendment in the event that a court ruling voids any of its provisions.

## Notes

<sup>1</sup> For reasons we have detailed elsewhere (see Horn et al, *op.cit.* Chapter 24 Note 5), it is better to compare plans on the basis of their *least compact* districts (principle of the highest minimum) than according to the *average* of the indices of their districts.

<sup>2</sup> Niemi, Richard G., et al. "Measuring Compactness and the Role of a Compactness Standard in a Test for Partisan and Racial Gerrymandering" *Journal of Politics*, 52 (1990): Chapter 24, Note 8.

<sup>3</sup> *e.g.*, CDs 1 and 2 of Kenworthy Minimum Fragments and Compactness Threshold plans, Figures 3 and 5, Horn et al, *op.cit.* Chapter 23, Note 5.

<sup>4</sup> *e.g.*, CD 5, Figure 3, *Ibid.*

<sup>5</sup> Doyle, Sir Arthur Conan, *The Sign of Four* (UK: Spencer Blackett, 1890) Chapter VI.

<sup>6</sup> Horn et al *op.cit.* Chapter 24, Note 5, page 117.

<sup>7</sup> Horn, David L. "The Mechanics of a 'Competitive Submissions' Procedure for Political Districting" (1978): 3-4 (unpublished typescript).

<sup>8</sup> For example, Tract 69.50 in the 1980 census for Franklin County, Ohio contains fragments of Perry Township, Sharon Township, and the municipal corporations of Columbus and Worthington: four different jurisdictions. This instance is not unique.

<sup>9</sup> Horn, David L. "Ohio" in Leroy Hardy, Alan Heslop, and George Blair ed., *Redistricting in the 1980s*. (Claremont, The Rose Institute of State and Local Government, 1992): 200.

<sup>10</sup> See Horn et al, *op. cit.* Chapter 24, Note 5, pp. 111-112.

<sup>11</sup> See example given in David L. Horn, *op.cit.* Note 9, pp. 17-19.

<sup>12</sup> Private conversation between Benson A. Wolman, Executive Director, American Civil Liberties Union of Ohio and U.S. Rep. Chalmers Wylie as reported by former to David L. Horn, October 1983.



## Chapter 26

### The Black Box: Gelman and King

#### *British Scholars and Tufte*

In Chapter 8 we gave “preliminary attention to two concepts which are fundamental to three of the five tests for gerrymandering we will be considering: histograms and seats/votes curves.” It is now time to examine these concepts more closely. We begin by reviewing the work of British scholars Graham Gudgin and Peter J. Taylor. They apply the term Continuous Probability Distribution (CPD) to histograms; seats-votes curves they refer to as cumulative frequency distributions, or cumulative CPDs. They also assert:

“...as a matter of empirical observation...two-party frequency distributions from most British elections this century, in New Zealand elections, and in U.S. elections [omitting the states in the Deep South]...[prior to 1965]...are all approximately ‘normally distributed.’”<sup>1</sup>

If the histograms depicting these elections do conform to a “normal” (a.k.a. “Gaussian”) frequency distribution, they can be described mathematically. Gudgin and Taylor do so. Their histograms have many more classes than the six shown in the example in Figure 8.4 and the corresponding class intervals are much narrower than the 2.5 percent increments given there. In fact, the number of district elections is (theoretically) so great and the class intervals so narrow that the histogram and corresponding seats/votes curve lose their step-like character and become “smooth.” By mathematical integration a formula is derived in which the probability per unit,  $P(t)$ , measured on the y-axis of the histogram, is<sup>2</sup>:

$$P(t) = \frac{e^{-t^2/2}}{(2\pi)^{1/2}} \quad (\text{Equation 26.1})$$

We define a  $t$  as  $(v_i - v)/s$ , where  $v_i$  is the Democratic fraction of the vote in District  $i$ ,  $v$  is the Democratic fraction of the mean district vote, and  $s$  is the standard deviation.

An equation can also be written which describes the seats/votes curve. If we define  $[s/(1 - v)]$  as the “seat odds” and  $[v/(1 - v)]$  as the “vote odds,” we can express the so-called “cube law,” first referred to in Chapter 4 and defined in the caption of Figure 1.1 as

$$\frac{s}{1-s} = \left( \frac{v}{1-v} \right)^k \quad \text{(Equation 26.2)}$$

where  $s$  is the statewide fraction of seats won by a party and  $v$  is the corresponding fraction of the mean district vote received by that same party, and  $k = 3$ .<sup>3</sup> Gudgin and Taylor, in addition to observing that a normal frequency distribution well depicts most of the elections in their study, cite the work of Kendall/Stuart and other scholars to conclude the cube law well describes the seats/votes curves that go with their histograms—provided the standard deviation of those histograms is close to 0.137.<sup>4</sup>

However, Tufte did not find the cube law a satisfactory characterization of the elections in his study. Referring to it as “political folklore,”<sup>5</sup> he says:

“it hides important political issues...[implying]...that the translation of votes into seats is

(1) unvarying over place and time, and

(2) always ‘fair,’ in the sense that the curve traced out by the law passes

through the point (50 percent votes, 50 percent seats) and the bias is zero.”<sup>6</sup>

He proposes an alternative approach to fitting a curve to seats/votes data in a “logit model.”<sup>7</sup> The natural logarithm of equation 26.2 yields this model. Adding an additional variable, specifically a bias parameter  $\beta$  • we have the equation:

$$\ln\left(\frac{s}{1-s}\right) = \beta + k \ln\left(\frac{v}{1-v}\right) \quad \text{Equation 26.3)}$$

With this more generic formulation the “cube law” becomes a special case in which  $b = 0$  and  $k = 3$ . The use of logarithms has the added advantage of avoiding absurd values for seat-shares corresponding to vote-shares in the vicinity of zero and 100 percent, if uniform percentage swing is assumed to apply. However, if we assume a pro-rata swing,<sup>8</sup> as proposed by Kleinman, such a justification is unnecessary. Tufte finds that equation 26.3 better fits his data than does the cube-law, particularly in that the values he gets for  $\beta$  are statistically significant and indicate electoral bias in all cases save Great Britain. His values for  $k$  range from 1.33 to 2.88, all of them less than the cube-law value of 3, but with the highest of them—2.88—applicable to Great Britain. Though Tufte’s logit model best fits his data, he believes its parameters  $k$  and  $b$  are not “readily interpretable from a political point of view” and so concludes that a simple rule of thumb is preferable to either the cube-law or his model: in a two-party system a 1.0 percent change in votes for a party leads to a 2.5 percent change in the seats it wins.

### *Quandt*

Princeton economist Richard Quandt (1974) examined the cube law in light of Tufte’s work and affirmed Tufte’s conclusions regarding its deficiencies: specifically, that it (1) implied an absence of bias in the political system under analysis and (2) mandated an exponent of responsiveness of 3.0 whenever there was an even division of the statewide vote between two parties. Whereas Tufte’s work dealt with historical seats/votes curves<sup>9</sup> covering several elections derived from data points each representing a statewide or nationwide fraction of seats and votes in a single election, Quandt derived mathematical formulas expressing the expected fraction of seats to be won in a single jurisdiction (*e.g.*, a state) in an election based upon vote fractions in

individual districts in that jurisdiction. Each data point in Quandt's analysis, therefore, represents the outcome in an individual district so what he created was frequency distributions that could be translated into hypothetical seats/votes curves. In contrast to the normal frequency distribution of district vote-shares found to be valid by British scholars, Quandt assumed a beta frequency distribution.<sup>10</sup>

Quandt's mathematical models were stochastic,<sup>11</sup> for the first time introducing the element of probability into seats/votes analysis. This implied that measures of the swing-ratio and partisan bias were not static, but for even a single election in a particular state could vary within a statistically predictable range. In his equations, Quandt employs the letter  $p$  to "denote the proportion of votes received by Party A," where this "proportion" is expressed as aggregate statewide vote. This implies a significant observation: a party winning a preponderance of the low turnout districts will appear to be the beneficiary of partisan bias.<sup>12</sup>

Quandt further recognizes that the uniform percentage swing assumption "can produce counterintuitive results."<sup>13</sup> He observes that the swing away from a party tends to be reduced in those districts where the party's supporters form a small "hard core" minority. Though he doesn't say so explicitly he argues, in effect, for pro-rata rather than uniform percentage swing; so that a swing away from a party is a percentage not of the number of voters in a district but of that party's supporters within the district. This view supports our decision in Chapter 12 and Appendix H to employ Kleinman's pro-rata swing, rather than uniform percentage swing, in our own analyses.

A third significant point Quandt makes is that voter turnout and degree of "competitiveness" in a district "cannot be assumed independent:" close races tend to induce more potential voters to vote. He, therefore, wants his "probability density functions" (i.e., histograms) to be bimodal where  $p$  is near 0 or 1 and unimodal where  $p$  is close to 0.5.<sup>14</sup> In this article Quandt makes no attempt to fit his mathematical models to actual elections.

*King and Browning*

Thirteen to fourteen years later King and Browning took up where Tufte left off with his logit model and Quandt with his stochastic model. Solving equation 26.2 for  $s$  and substituting a Greek  $r$  for  $k$ , they propose a “bilogit functional” equation denoting  $r$  as the parameter of “democratic representation”:<sup>15,16</sup>

$$\frac{s}{1-s} = \left( \frac{v}{1-v} \right)^{\rho} \quad \text{or} \quad s = \frac{1}{1 + \left( \frac{v}{1-v} \right)^{\rho}} \quad \text{(Equation 26.4)}$$

This formulation enables the authors to obtain a “representation” parameter more all-inclusive than a simple “swing-ratio” exponent, a parameter that encompasses the entire range of “representation” from zero to infinity. They are particularly interested in values between one (proportional representation) and infinity (winner-take-all) and produce a graph showing how “majoritarian” representation is between these two. This is the graph we reproduced as Figure 1.1 in this book’s opening chapter. King and Browning go on to incorporate a bias parameter into their model, like Tufte, using  $\beta$  as its symbol. Their final equation comes from solving equation 26.3 for  $s$  is:

$$\frac{s}{1-s} = \beta \left( \frac{v}{1-v} \right)^{\rho} \quad \text{or} \quad s = \frac{1}{1 + \frac{1}{\beta} \left( \frac{v}{1-v} \right)^{\rho}} \quad \text{(Equation 26.5)}$$

They apply this comprehensive equation to their data, in this case the vote in U.S. congressional races over the period 1950-1984, conducting a separate analysis for each state. Since equation 26.5 has two unknowns, it is indeterminate and must be solved by a “likelihood” procedure analogous to a statistical regression, which will give the result a measure of uncertainty. The values for  $\beta$  and  $\rho$  that they obtain are, therefore, each associated with a standard error. Our objective here is not to comment upon their conclusions but to emphasize that this study, in a manner that

parallels the studies yielding Tufte's historical swing ratios, deals with 48 individual states with up to 18 elections (*i.e.*, 18 data points) per state. These elections might cover as many as three or four redistrictings. Each of those data points<sup>17</sup> expresses the fraction of the aggregate statewide vote a major party's congressional candidates received in one of those elections, versus the fraction of the seats on that state's congressional delegation won by that party. These data do not involve the fraction of the vote received by a party's candidates in individual district elections.

### *King in Connecticut: Methodology 1*

Having developed indices of bias and "representation" pertinent to historic seats/votes relationships in the election of U.S. representatives, King turned his attention to the development of similar indices for analysis of a single election conducted under a single redistricting plan—the indices applicable to a hypothetical seats/votes curve. In a study published in 1989<sup>18</sup> he examined elections conducted in six states over the period 1968-1980. To start off, he developed a series of illustrations that simply and vividly portray the significance of the representation parameter  $\lambda$  and a new bias parameter  $\lambda (= \ln \beta)$ . He draws six pairs in which  $\lambda = 0$  and another six pairs in which  $\lambda = 1$ . Each pair consists of a histogram and its corresponding seats-votes curve. The six pairs in each set have  $\rho$ -values of 0.15, 0.5, 1, 3, 8, and  $\infty$ , respectively. Whereas the diagram we reproduced as Figure 1.1 only shows  $\rho$ -values of 1, 3, and  $\infty$ , we see in this article the curves generated by  $\rho$ -values less than 1 and their corresponding bi-modal histograms which peak at zero and 100 percent votes.

King notes that "in order to derive a seats-votes curve from district-level election votes, some assumption needs to be made," the most widely used being uniform partisan swing in which "vote proportions in every district all move in lockstep, swinging back and forth in response to national or statewide electoral forces. . .without any random error or local factors to make them behave differently."<sup>19</sup> He finds this assumption to be "empirically false" offering, as evidence, a graph of elections to the Pennsylvania State Assembly in which 1972 results when

plotted against 1974 results fail to produce the straight line called for by uniform partisan swing. He concludes that “an explicit probabilistic mechanism” is required and hypothesizes “an underlying probability distribution termed the mean voter preference distribution.”<sup>20</sup>

Such a distribution implies a histogram flexible enough to incorporate unimodal, bimodal, and skewed distributions—and any combination thereof. Quandt’s distribution made “assumptions about individual voters, their spatial arrangement, or the process of redistricting” that did not sufficiently “narrow the range of possibilities.”<sup>21</sup> The normal distribution, found adequate by Gudgin and Taylor for certain British elections, will not suffice. Nor will other existing distributions such as the Beta.<sup>22</sup> He, therefore, derives a new equation achieving the desired flexibility employing the two parameters  $\rho$  and  $\lambda$ .

$$f_v(v_1) = \rho e^{\lambda} \left[ \frac{v_1}{1-v_1} \right]^{\rho} v_1^{-(1-\rho)} (1-v_1)^{-(1+\rho)} \quad \text{(Equation 26.6)}$$

The parameter  $\lambda$  is equivalent to  $\ln(\beta)$ , or the logarithm of the bias parameter employed in the study of congressional elections he did with Browning. An equation is also needed to describe the corresponding seats/votes curve. Such an equation can be arrived at by integrating equation 26.5 since the histogram (= frequency distribution = CPD [Gudgin & Taylor] = mean voter preference distribution [King]) *is the derivative of the seats/votes curve*. Note this has the same form as Equation 26.5.

$$E(S_1) = \int_0^1 f_v(1-\mu_1) d\mu_1 = \left[ \frac{1-e^{-\lambda(1-\mu_1)^\rho}}{\lambda \rho \mu_1^{\rho-1}} \right] \quad \text{(Equation 26.7)}$$

Recognizing that his partisan bias and “representation” parameters are not only interdependent between themselves, but are influenced by additional variables, King embarks on a theoretical discussion showing that partisan bias is influenced by partisan swing (denoted by the Greek letter  $\varepsilon$ ) and “representation” is influenced by incumbency (denoted by the Greek letter  $\gamma$ ). He does so in the following equation.

$$E(S_2) = \left[ 1 + \frac{-(\lambda + \varepsilon \rho / \gamma) \left( \frac{1 - \mu_2}{\mu_2} \right)^{\rho / \gamma}}{\left( \frac{1 - \mu_2}{\mu_2} \right)^{\rho / \gamma}} \right]^{-1} \quad \text{(Equation 26.8)}$$

Since partisan swing is not uniform but random, a mechanism is necessary to enable its incorporation into the equations describing histograms and seats/votes curves. King assumes that  $\varepsilon$  has mean  $\tau$  and varies uniformly on the interval from  $\tau - \theta$  to  $\tau + \theta$ .

However, these theoretical considerations involving additional variables and their interactions are set aside when King turns to a less refined empirical analysis of the data from the six states. By omitting the effects of incumbency and partisan swing “these empirical analyses are only broadly indicative of general patterns and trends;”<sup>23</sup> so they are “not meant as an empirical test of the model, only as an illustration of its potential.”<sup>24</sup>

The six states include two where the 1971 redistricting process was deemed to be partisan (Connecticut and Indiana), two where the process was deemed to be bipartisan (Pennsylvania and Wisconsin), and two where it was judged as nonpartisan (Iowa and Washington). We shall examine only the Connecticut findings because we are about to make an extensive analysis of the landmark Supreme Court redistricting case which came out of the 1971 legislative redistricting in that state, *Gaffney v. Cummings*. We need to know all we can about that districting plan and, consequently, King’s analysis of it is important to us.



King conducts a separate analysis for 1968, 1970, and each of the five elections following the 1971 redistricting. Values of  $\lambda$  and  $\rho$  are computed for each election “by applying maximum likelihood to the probability distributions developed in equation” 26.6. This maximum likelihood analysis “produces the values of  $\rho$  and  $\lambda$  that maximize the probability of getting the data we actually observe”<sup>25</sup> and each of these values is associated with a standard error. One of the problems in applying a model such as this to historical elections is *the presence of uncontested districts*. We drew attention to this problem when discussing the Appellant’s *fourth deceptive statistic* in *Davis v. Bandemer* (Chapter 5 pp. 5-6) and again in Chapter 8’s discussion of “troublesome complications.” There we noted that including these districts unduly favored the party running a candidate and excluding such districts unduly favored the party not running a candidate. King does not say how he dealt with this problem in his Connecticut analysis, but there were no more than two uncontested districts in the first four elections at issue. King’s lambda values are reported in Column 5 of Table 26.1.

The 1968 and 1970 elections were conducted under a districting plan drawn in the 1960s, so we should not expect bias values for those elections to agree with the bias values pertaining to the elections 1972-1980. We note the first election of the 1970s (1972) shows a pro-Republican bias of - 0.252. In this election Republicans gained a 93-58 majority of seats (61.59 percent) with a 53.02 percent majority of the vote.<sup>26</sup> This would support the claim of Democrats, who challenged the districting plan in court, that it was a Republican gerrymander. In the following election (1974), however, the electoral tide swung sharply toward the Democrats and their vote went up by 11.6 percent to 57.6. Their gain in seats was even more dramatic: they won 118 of the 151 seats, or 78.1 percent. King’s lambda reverses direction and now shows a pro-Democrat bias of 1.095. We do not tabulate the rho values for these elections but they were 2.53 and 2.82,

Table 26.1

Partisan Bias Values for Connecticut House Districting Plans\* under Different Methodologies

(1) Election Year	Seats Won By:		(4) Mean District Vote, ‡ Demo. %	"Stochastic Model . ." . Nov. 1989 Pg. 814		"Estimating . . . Consequences . . ." June 1990 Pg. 281*		"Enhancing Democracy . . ." Sept. 1994 Pg. 556	
	(2) Demo.	(3) Repb.		(5) Value	(6) Rank	(7) Value	(8) Rank	(10) Value	(11) Rank
1966	117	60	54.94	-	-	-	-	-	-
1968	110	67	53.65	.378	3	.010	2	.012	4
1970	99	78	51.98	.178	5	-.009	5	.001	5
1972	58	93	48.28	-.252	7	-.060	7	-.021	6
1974	118	33	59.24	1.095	1	-.020	6	-.025	7
1976	93	58	53.36	.265	4	-.007	3	.016	3
1978	103	48	56.85	.432	2	.020	1	.031	1
1980	83	68	51.80	.124	6	-.008	4	.024	2

\*Elections of 1966-1970 were conducted under the 1965 districting plan; elections of 1972-1980 under the 1971 ("Gaffney") plan.

†Does not impute votes to the party failing to put up a candidate in an uncontested district

‡In an uncontested district imputes to the party not putting up a candidate one-third of the vote received by the other party's candida

respectively—which nicely agrees with Tufte’s rule-of-thumb. Column (3) of Table 26.2 reveals another factor worth noting: whereas 1,331,000 people voted for state representative in the presidential election year of 1972, only 1,062,000 voted for that office in the “off-year” election of 1974.

Turning to 1976, we observe a return to a higher voter turnout with 1,317,000 persons casting a ballot for state representative. The Democrats’ “raw” aggregate statewide vote for state representative falls back to 51.6 percent, but with 93-58 split they maintain a 61.6 percent to 38.4 percent advantage in seats. King’s lambda diminishes sharply but retains a pro-Democrat character of 0.265. In 1978 the turnout again falls off—this time to 1,001,000 voters—the Democrats’ aggregate statewide vote for state representative rises to 55.1 percent; their seats go up to 103-48, or 68.2 percent to 31.8 percent; and King’s lambda rises to a pro-Democrat 0.432. In 1980, the final election under the *Gaffney* plan, turnout rises to 1,294,000; the Democrats’ aggregate statewide vote falls to 49.1 percent; their seat majority holds on at 83-68 (55.0 percent to 45.0 percent) and King’s lambda continues to show a pro-Democrat 0.124.

The point to bear in mind concerning King’s lambda is that it is “affected” by partisan swing: in King’s words “partisan swing affects whether the system is biased toward one party or the other.”<sup>27</sup> The more commonly understood notion of “bias” is that it describes a situation in

which one party wins more seats than the other even though there is an even division of the “statewide vote” for the candidates of those parties.

Table 26.2  
PENNSYLVANIA CONGRESSIONAL: 2002 "ACT 1" (REPUBLICAN) PLAN  
COMPARED TO DEMOCRATS' ALTERNATIVE PLANS

1992 Plan			Act 1			ALT 2			ALT 3			ALT 4		
(1) CD No.	(2) Incumbent	(3) % Demo 1991- 2000	(4) CD No.	(5) % Demo 1991- 2000	(6) Change in % Demo	(7) CD No.	(8) % Demo 1991- 2000	(9) Change in % Demo	(10) CD No.	(11) % Demo 1991- 2000	(12) Change in % Demo	(13) CD No.	(14) % Demo 1991- 2000	(15) Change in % Demo
1	<b>Brady</b>	<b>79.7</b>	1	<b>77.3</b>	-2.4	1	<b>76.8</b>	-2.9	1	<b>73.7</b>	-6.0	1	<b>75.8</b>	-3.9
2	<b>Fattah</b>	<b>83.0</b>	2	<b>81.7</b>	-1.3	2	<b>81.8</b>	-1.2	2	<b>81.5</b>	-1.5	2	<b>82.1</b>	-0.9
3	<b>Borski</b>	<b>59.5</b>	13	<b>48.9</b>	-10.6	3	<b>54.3</b>	-5.2	3	<b>56.8</b>	-2.7	3	<b>55.0</b>	-4.5
4	Hart	<b>52.0</b>	4	<b>48.6</b>	-3.4	4	<b>44.3</b>	-7.7	4	<b>45.6</b>	-6.4	4	<b>45.1</b>	-6.9
5	Peterson	41.2	5	42.1	+0.9	5	42.5	+1.3	5	41.2	0.0	5	42.5	+1.3
6	<b>Holden</b>	44.0	17	41.7	-2.3	6	44.7	+0.7	6	44.5	+0.5	6	44.6	+0.6
7	Weldon	42.9	7	43.1	+0.2	7	40.7	-2.2	7	42.1	-0.8	7	40.8	-2.1
8	Greenwood	45.6	8	46.0	+0.4	8	39.0	-6.6	8	42.2	-3.4	8	39.4	-6.2
9	Shuster	37.7	9	39.9	+2.2	9	38.0	+0.3	9	38.9	+1.2	9	38.1	+0.4
10	Sherwood	46.1	10	41.5	-4.6	10	37.6	-8.5	10	45.9	-0.2	10	37.9	-8.2
11	<b>Kanjorski</b>	<b>50.9</b>	11	<b>53.5</b>	+2.6	11	<b>53.8</b>	+2.9	11	<b>53.7</b>	+2.8	11	<b>53.7</b>	+2.8
12	<b>Murtha</b>	<b>51.9</b>	12	<b>59.5</b>	+7.6	12	<b>53.8</b>	+1.9	12	<b>53.9</b>	+2.0	12	<b>52.7</b>	+0.8
13	<b>Hoeffel</b>	46.9	13	48.9	+2.0	13	46.3	-0.6	13	45.5	-1.4	13	46.0	-0.9
14	<b>Coyne</b>	<b>60.0</b>	14	<b>66.1</b>	+6.1	18 <sup>a</sup>	<b>61.7</b>	+1.7	18	<b>64.4</b>	+4.4	18	<b>65.1</b>	+5.1
15	Toomey	47.5	15	47.0	-0.5	15	47.7	+0.2	10	45.9	-1.6	15	47.7	+0.2
16	Pitts	36.5	16	34.6	-1.9	16	34.3	-2.2	16	34.5	-2.0	16	34.4	-2.1
17	Gekas	36.9	17	41.7	+4.8	17	39.7	+2.8	17	37.9	+1.0	17	39.5	+2.6
18	<b>Doyle</b>	<b>53.9</b>	14	<b>66.1</b>	+12.2	18	<b>61.7</b>	+7.8	18	<b>64.4</b>	+10.5	18	<b>65.1</b>	+11.2
19	Platts	38.2	19	38.0	-0.2	19	38.0	-0.2	19	37.9	-0.3	19	38.1	-0.1
20	<b>Mascara</b>	<b>54.4</b>	18	46.8	-7.6	14	<b>60.3</b>	+5.9	15	<b>56.7</b>	+2.3	14	<b>56.7</b>	+2.3
21	English	47.7	3	46.4	-1.3	9	49.2	+1.5	14	48.4	+0.7	9	49.7	+2.0
			6	44.5										
Mean		<b>50.3</b> 12 R 9 D		<b>49.8</b> 14 R 5 D			<b>49.8</b> 12 R 7 D			<b>49.8</b> 12 R 7 D			<b>49.8</b> 12 R 7 D	

Boldface indicates a Democratic incumbent, a<sup>a</sup>"Democratic" district, or a Democratic statewide mean district percentage.

### Gelman and King in Connecticut: Methodology 2

Andrew Gelman, at the time a graduate student in the Department of Statistics at Harvard, teamed up with King in 1988 to refine King’s original “stochastic model” to incorporate probability mechanisms associated with additional variables. Those were the variables featured in “stochastic model’s” theoretical discussion but omitted in its application to historical elections in the six states. A major departure from King’s “Methodology 1” was redefinition of the bias parameter  $\lambda$ . In Methodology 1 we noted that  $\lambda$  could be influenced by partisan swing ( $\epsilon$ ). That is probably the major reason for the sharp reversal in direction of the “bias” of the *Gaffney House* plan from 1972 to 1974 when Democrats benefited from a 10.6 percent swing in the aggregate statewide vote. The

new definition of bias makes this parameter independent of partisan swing, or of whatever the “split” in the aggregate statewide or mean district vote is.

Bias is here formally defined just as we did in Chapter 8: as deviation from partisan symmetry,<sup>28</sup> or in notational terms:

$$\text{Bias}(V) = E(S|V) + E(S|1-V) - 1 \quad (\text{Equation 26.9})$$

where  $E(S|V)$  is the expected value of the statewide fraction of seats won by a party with a statewide fraction of the vote,  $V$  and  $E(S|1-V)$  is the expected value of the fraction of seats won if it had received a fraction of the statewide vote equal to  $(1 - V)$ .

King’s parameter  $\rho$ , which “indexed the form of democratic representation” in “stochastic model,” is superseded by a new “responsiveness” parameter defined as the mathematical derivative of the “expected value of  $s$ ” with respect to  $v$ , or

$$\text{Responsiveness}(V) = d E(S|V) / dV \quad (\text{Equation 26.10})$$

In graphical terms this means the slope of the seats/votes curve.

These definitions of bias and responsiveness by King and Gelman are for each value of  $V$ . To get bias and responsiveness for a seats-votes curve and the related conditional expectations they average these quantities over the interval from  $V = .45$  to  $V = .55$ .<sup>29</sup> The results are:

$$\text{average bias} = \frac{1}{.55 - .45} \int_{.45}^{.55} (E(S|V) + E(S|1-V) - 1) dV \quad (\text{Equation 26.11})$$

$$\text{average responsiveness} = \frac{1}{.55 - .45} (E(S|V = .55) - E(S|V = .45)) \quad (\text{Equation 26.12})$$

It is these average values that King and Gelman compute and use in their analysis.

Using both Bayesian and non-Bayesian statistical tools King and Gelman generate hypothetical seats-votes curves for Ohio, Connecticut and Wisconsin. Rather than a uniform partisan swing on the logit scale, they adjust each district in a random manner to account for the variability seen in district voting. The problem of uncontested districts is addressed by a statistical analysis of the vote received by a party in a contested district election immediately preceding the one *in which it failed to put up a candidate*. There were 132 cases of this sort (out of 2,495 possible contests) in the three states over the period 1968-1980. Their analysis yields the unsurprising finding that, on average, the party fielding a candidate in these cases received 74 percent of the vote. This allows them to adjust each of those districts randomly as well.

King and Gelman do not present their results for the three states in tables of values for bias and responsiveness, but rather give graphs of these values for each state and each election 1968 to 1980. We estimate their results for Connecticut from their graph in Table 26.1.

Even without actual numerical values it is apparent that the new definitions for bias and responsiveness along with the stochastic approach yield quite different outcomes. The most obvious is that responsiveness remains in the range 2.5 to 3.5, which means that a 1 percent increase in the statewide vote corresponds to an increase of 2.5 percent to 3.5 percent in seats. The shift from a small Democratic bias in 1968 to a small Republican bias in 1970 is not particularly meaningful, but the change to a significant Republican bias in 1972 following the Republican controlled redistricting is what was expected. The fact that bias quickly returns to favor the Democrats may be due to incumbent effects after the large Democratic win in the 1974 election. By 1980 the bias has become essentially neutral.

### *Gelman and King in Connecticut: Methodology 3*

In 1994 King and Gelman modified their statistical model so that it would be “useful (1) for understanding an election that has already taken place; (2) for predicting a future election, possibly subject to a new redistricting plan; and (3) for evaluating a past election under specific

counterfactual conditions (e.g., supposing no incumbents had run for reelection).”<sup>30</sup> This method is then applied to evaluate several proposed redistricting plans for Ohio<sup>31</sup> and to analyze every state legislative election from 1968 to 1988 that elected its lower house with single member districts.<sup>32</sup> This analysis of 29,679 district-level elections covered 267 statewide elections in 50 states and 60 redistrictings.

The problem of how to handle uncontested elections is handled simply by imputing a value of 0.75 to the winning party. This value is from earlier work<sup>33</sup> based on analysis of the district elections immediately preceding uncontested ones. With this imputation it is no longer necessary to use the logit transformation as values for seats do not fall below 0 or above 1.0 in subsequent analysis. The random partisan swing then can be applied directly to the votes.

Retaining the definition of partisan bias from Method 2, Gelman and King change slightly their definition of responsiveness. It becomes the average slope over the interval  $v - 0.1$  to  $v + 0.1$  where  $v$  is the actual mean district vote. Both definitions are presented below. Gelman and King have made available a computer program, JudgeIt, to carry out their method.

References indicating how to access this program are given in their 1994 articles cited above.

$$\text{average bias} = \frac{1}{.55 - .45} \int_{.45}^{.55} (E(S | V) + E(S | 1 - V) - 1) dV \quad (\text{Equation 26.14})$$

$$\text{average responsiveness} = \frac{1}{.02} (E(S | V = v + 0.01) - E(S | V = v - 0.01)) \quad (\text{Equation 26.15})$$

The results for Connecticut in the years 1968 through 1980 have been extracted from Gelman and King's table<sup>34</sup> for all 267 statewide elections. When we compare the table values with the graph for Method 2, we find only small differences in the responsiveness of these elections. This is not surprising as the definition of responsiveness has not changed and the slight differences are attributable to the change from using the logit transformation. Interestingly both have responsiveness near 2.5, which matches well with the rule of thumb that a 1 percent gain in the vote yields about a 2.5 percent gain in seats. However the changes in bias are in two cases significant. In 1972 the graph shows about a 6 percent bias for Republicans while the table has only a 2.1 percent bias in that direction. Also in 1980 the graph has about a 1 percent bias for Republicans and the table has a 2.4 percent bias for Democrats. We are left wondering if the new method is simply better or if there is some flaw in the analysis or in the JudgeIt program.

#### *Assumptions Undergirding the King/Gelman Analyses*

Several assumptions implicit in the King/Gelman analyses need to be identified and subjected to scrutiny:

*Assumption 1: Bias can be partially dependent on swing.* Shouldn't partisan bias be independent of partisan swing, and not partially dependent on it, as King suggests? Maybe we are struggling with a semantic problem and need a new or different word to apply to the propensity of a districting plan to confer an unfair advantage on a party, ethnic group or individual candidate. If a districting plan is under litigation as a partisan gerrymander, we need a measure of bias that is entirely attributable to skullduggery by the "in" party and not to some advantage they have legitimately earned by getting more votes. And if partisan bias is partly attributable to such legitimate cause, have we any way of measuring how big that part is?

*Assumption 2: Bias can fluctuate.* Presumably, partisan bias is something inherent in the plan—something stemming from the way the mapmakers—intentionally or unintentionally—

have drawn the lines to concentrate and disperse supporters of the “out” party so that it fails to win the seats a “fair” districting would give it. If so, shouldn’t the plan’s bias remain more or less constant throughout the life of the plan—not change from one election to the next, reversing direction as well as increasing or decreasing in magnitude? We can understand that long-term demographic and socioeconomic trends will affect the partisan orientation of people who live in a given geographical area and thereby change the partisan character of a plan; but when one observes a radical change within a two-year period, both in direction and magnitude, as occurs from 1972 to 1974 in the *Gaffney* plan according to King Method 1, occurs from 1976 to 1978 according to Gelman Method 2, and occurs from 1974 to 1976 according to Gelman Method 3, we are left wondering if other factors are at work which haven’t been screened out.

*Assumption 3: Data need not be adjusted to an even vote split.* We see no evidence the vote shares in the individual districts in King Method 1 were adjusted to account for partisan swing—either uniform or random. The Democratic share of the aggregate statewide vote rose 10.6 percent from 1972 to 1974. If the data haven’t been adjusted to reflect an even split in the statewide vote—either aggregate statewide vote or mean district vote—it is obvious that lambda will change from minus to plus from 1972 to 1974, not because of cartography but because the Democrats got a bigger fraction of the votes.

*Assumption 4: Stay-at-homes would have voted the same as active voters.* The considerable fluctuation in turnout between presidential and “off-year” elections has been noted. Roughly a quarter-million people voted in the presidential years of 1972, 1976, and 1980 that did not vote in the off-year elections of 1974 and 1978—about 20 percent of those who voted in the presidential years. Are these election years really comparable? What basis have we for assuming the stay-at-home voters of 1974 and 1978 would have voted similarly to those who bothered to go to the polls?

*Assumption 5: Mean district vote is the correct measure of fairness.* Whether each party’s share of the statewide vote for the district office in question is stated as the aggregate statewide



vote-share, as argued by Campbell,<sup>35</sup> or as the mean district vote, as preferred by King, makes a one-to-two per cent difference in the state vote total. That, in turn, affects the rest of the analysis.

*Assumption 6: Voters “swing” randomly in a uniform pattern rather than in a pro-rata pattern.* When a party gains or loses votes in a given district from one election to the next the votes transferred from the party losing votes to the party gaining votes are a fixed percentage of the total votes in the district rather than a fixed percentage of the votes for the party losing votes.

*Assumption 7: A party would have received 25 percent of the vote had it run a candidate in a district it did not contest.* Even if the “correct” percentage is some other number—say 20 percent or 30 percent—it is the same for Democrats as it is for Republicans.

### Notes

<sup>1</sup> Gudgin, G. and P. J. Taylor. “Seats, Votes, and the Spatial Organization of Elections” *Economic Geography*, Vol. 58, No. 3 (Jul., 1979): 26.

<sup>2</sup> Goedicke, Victor, *Introduction to the Theory of Statistics*, (Harper, 1953): 104.

<sup>3</sup> We call  $k$  the Exponent of Responsiveness. See Appendix C.

<sup>4</sup> Gudgin, G. and P. J. Taylor. “Seats, Votes, and the Spatial Organization of Elections” *Economic Geography*, Vol. 58, No. 3 (Jul., 1979): 26.

<sup>5</sup> Tufte, Edward R. and Robert Dahl, “Size and Democracy”, *The American Political Science Review*, Vol. 68, No. 3 (1973): 544.

<sup>6</sup> *Ibid*, pg. 546.

<sup>7</sup> Logit analysis is described in Thiel, 1971 pp. 632-636.

<sup>8</sup> See Chapter 12 and Appendix H.

<sup>9</sup> See Chapter 12, “Niemi’s Swing-Ratio Analysis: Indiana,” for distinction between historical and hypothetical seats-votes curves.

<sup>10</sup> Quandt, William B, “Berbers in the Algerian Political Elite,” in E. Gellner and C. Micaud, eds., *Berbers and Arabs: Ethnic Group Relations in North Africa*, (London: Duckworth, 1973). 317.

<sup>11</sup> Webster’s defines stochastic as “pertaining to, or arising from, chance; involving probability; random.”

<sup>12</sup> Quandt, op. cit. pg. 322.

<sup>13</sup> *Ibid*, pg. 318.

<sup>14</sup> *Ibid*, pg. 322.

<sup>15</sup> Which we have decided to call the Exponent of Responsiveness, per Appendix C.

<sup>16</sup> King, Gary, and Robert X. Browning, “Seats, Votes, and Gerrymandering: Estimating Representation and Bias in State Legislative Redistricting”, *Law and Policy Journal*, Vol. 9, No. 3, (1987): 1253.

<sup>17</sup> In the vocabulary of a statistician a “data point” is a *variate*.

<sup>18</sup> King, Gary, “Representation through Legislative Redistricting: A Stochastic Model”, *American Journal of Political Science*, Vol. 33, (1989): 787-824.

<sup>19</sup> *Ibid*, pg. 796.

<sup>20</sup> *Ibid*, pg. 799.

<sup>21</sup> *Ibid*.

<sup>22</sup> *Ibid*, pg. 799 Note 8.

<sup>23</sup> *Ibid* pg. 813.

<sup>24</sup> *Ibid* pg. 811.

<sup>25</sup> *Ibid* pg. 812.

<sup>26</sup> See Columns 4-6 of Table 26.2. The 53.02 percent Republican “vote” number we cite here is *aggregate statewide vote* without adjustment for uncontested seats. Column (8) shows that only two of the 151 districts were uncontested, both by Republicans. In the analysis to follow we imputed a 25 percent vote to the Republican Party in each of these districts.

<sup>27</sup> King, *Op. cit.* Note 14, pg. 811.

- <sup>28</sup> Gelman, Andrew, and Gary King. "Estimating Incumbency Advantage Without Bias", *American Journal of Political Science* Vol. 34 (1990a): 276.
- <sup>29</sup> Gelman & King, op. cite. (1990) 278.
- <sup>30</sup> Gelman, Andrew, and Gary King. "Enhancing Democracy Through Legislative Redistricting" *American Political Science Review* Vol. 88 (1994a): 514-515.
- <sup>31</sup> Gelman & King, op.cite (1994).
- <sup>32</sup> Gelman & King, op cite (1994).
- <sup>33</sup> Gelman & King, 1990 op cite.
- <sup>34</sup> Gelman & King, 1994. op. cite 556-557.
- <sup>35</sup> Campbell, J. *Cheap Seats: The Democratic Party's Advantage in U.S. House Elections*. (Columbus, OH: Ohio State University Press, 1996): 81-85.

## Chapter 27

### Campbell and Rush

#### *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."<sup>1</sup> 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:<sup>2</sup>

*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 1” 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.<sup>3</sup> 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).

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

Table 27.1  
 CAMPBELL'S UNWASTED VOTES ANALYSIS FOR PARTISAN BIAS: CALIFORNIA

(1) Year	(2) Democrats			(3) Republicans			(4) Mean Winning Votes per Seat	(5) Repub'n. Unwasted Votes	(6) Conte- sted Seats Won	(7) Mean Winning Votes per Seat	(8) Total Unwasted Votes	(9) Half of Total Unwasted Votes	(10) Divided by Mean Democrat Winning Votes per Seat	(11) Divided by Mean Republican Winning Votes per Seat	(12) Sum of Partisan Enfranchisements	(13) Democrat Percent of Total Contested Seats	(14) Percent Partisan Bias from Unwasted Votes	
	(2) Democrat Unwasted Votes	(3) Conte- sted Seats Won	(4) Mean Winning Votes per Seat	(5) Repub'n. Unwasted Votes	(6) Conte- sted Seats Won	(7) Mean Winning Votes per Seat												
1966	1,938,316	21	92,301	2,164,398	17	127,318	4,102,714	2,051,357	23,449	16,112	39,561	59.27	+ 9.27					
1968	2,158,817	20	107,941	2,365,018	17	139,119	4,523,835	2,261,917	20,955	16,259	37,214	56.31	+ 6.31					
1970	2,021,066	20	101,053	2,170,405	18	120,578	4,191,471	2,095,735	20,739	17,381	38,120	54.40	+ 4.40					
1972	2,597,851	22	118,084	2,630,637	20	131,532	5,228,488	2,614,244	22,139	19,875	42,014	52.69	+ 2.69					
1973 Special Masters' Plan (43 Districts)																		
1974	1,957,854	23	85,122	1,381,796	15	92,120	3,339,650	1,669,825	19,617	18,127	37,744	51.97	+ 1.97					
1976	2,999,314	28	107,118	1,768,211	14	126,301	4,767,525	2,383,762	22,254	18,874	41,128	54.11	+ 4.11					
1978	2,161,772	25	86,471	1,747,699	16	109,231	3,909,471	1,954,735	22,606	17,895	40,501	55.82	+ 5.82					
1980	2,305,736	22	104,806	3,018,435	21	143,735	5,324,171	2,662,085	25,400	18,521	43,921	57.83	+ 7.83					
1981 "Burton 1" Plan (45 Districts)																		
1982	2,543,115	26	97,812	2,093,603	17	123,153	4,636,718	2,318,359	23,702	18,825	42,527	55.73	+ 5.73					
1983 "Burton 2" Plan (45 Districts)																		
1984	3,148,583	26	121,099	2,478,350	16	154,897	5,626,933	2,813,466	23,233	18,163	41,396	56.12	+ 6.12					
1986	2,695,765	26	103,683	2,204,273	18	122,460	4,900,038	2,450,019	23,630	20,007	43,637	54.15	+ 4.15					
1988	3,180,868	24	132,536	2,858,854	18	158,825	6,039,722	3,019,861	22,785	19,014	41,799	54.51	+ 4.51					
1990	2,249,536	25	89,981	1,841,653	17	108,333	4,091,189	2,045,594	22,734	18,882	41,616	54.63	+ 4.63					
1991 Special Masters' Plan (52 Districts)																		
1992	3,348,695	27	124,026	2,649,906	22	120,450	5,998,601	2,999,301	24,183	24,901	49,084	49.27	- 0.53					
1994	2,341,562	25	93,662	2,758,763	25	110,351	5,100,325	2,550,163	27,227	23,110	50,337	54.09	+ 4.09					
1996	3,122,067	29	107,657	2,778,086	23	120,786	5,900,153	2,950,076	27,403	24,424	51,827	52.87	+ 2.87					
1998	2,444,340	24	101,847	1,906,430	19	100,338	4,350,770	2,175,385	21,359	21,681	43,040	49.63	- 0.37					
2000	3,843,500	30	128,117	2,504,180	18	139,121	6,347,680	3,173,840	24,773	22,814	47,587	52.06	+ 2.06					
2001 Democrat Plan (53 Districts)																		
2002	2,661,168	32	83,161	2,010,701	19	105,826	4,671,869	2,335,934	28,089	19,000	47,089	59.65	+ 9.65					
2004																		
2006																		

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<sup>4</sup> 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 27.4<sup>2</sup>

ALTERNATIVE DEFINITIONS OF WASTED AND UNWASTED VOTES  
California Congressional Election of 1982

(1) CD	Votes		Campbell Definition Unwasted		Plurality		Traditional Definition			
	(2) Democrat	(3) Republican	(4) Democrat	(5) Republican	(6) Democrat	(7) Republican	Wasted		Unwasted	
							(8) Democrat	(9) Republican	(10) Democrat	(11) Republican
1	107,749	102,043	107,749	0	5,706		5,705	102,043	102,044	0
2	81,314	116,172	0	116,172		34,858	81,314	34,857	0	81,315
3	194,680	(64,893)*	194,680†	0	129,787		‡129,786	64,893	64,894	0
4	118,476	67,047	118,476	0	51,429		51,428	67,047	67,048	0
5	103,268	72,139	103,268	0	31,129		31,128	72,139	72,140	0
6	96,379	82,128	96,379	0	14,251		14,250	82,128	82,129	0
7	126,952	56,960	126,952	0	69,992		‡69,991	56,960	56,961	0
8	121,537	95,694	121,537	0	25,843		25,842	95,694	95,695	0
9	104,393	67,702	104,393	0	36,691		36,690	67,702	67,703	0
10	77,263	41,506	77,263	0	35,757		35,756	41,506	41,507	0
11	109,812	76,462	109,812	0	33,350		33,349	76,462	76,463	0
12	61,372	115,365	0	115,365		53,993	61,372	53,992	0	61,373
13	110,805	52,806	110,805	0	57,999		‡57,998	52,806	52,807	0
14	77,400	134,225	0	134,225		56,825	77,400	56,824	0	77,401
15	86,022	45,948	86,022	0	40,074		40,073	45,948	45,949	0
16	142,630	24,448	142,630	0	118,182		‡118,181	24,448	24,449	0
17	68,364	80,271	0	80,271		11,907	68,364	11,906	0	68,365
18	92,762	59,664	92,762	0	33,098		33,097	59,664	59,665	0
19	66,042	112,486	0	112,486		46,444	66,042	46,443	0	66,043
20	57,769	123,312	0	123,312		65,543	57,769	‡65,542	0	57,770
21	46,412	138,474	0	138,474		92,062	46,412	‡92,061	0	46,413
22	46,521	145,831	0	145,831		99,310	46,521	‡99,309	0	46,522
23	120,788	82,031	120,788	0	38,757		38,756	82,031	82,032	0
24	88,516	42,133	88,516	0	46,383		‡46,382	42,133	42,134	0
25	71,106	(23,702)*	71,106†	0	47,404		‡47,403	23,702	23,703	0
26	97,383	66,072	97,383	0	31,311		31,310	66,072	66,073	0
27	108,347	67,479	108,347	0	40,868		40,867	67,479	67,480	0
28	103,469	24,473	103,469	0	78,996		‡78,995	24,473	24,474	0
29	97,028	24,568	97,028	0	72,460		‡72,459	24,568	24,569	0
30	60,905	52,177	60,905	0	8,728		8,727	52,177	52,178	0
31	86,718	33,043	86,718	0	53,675		‡53,674	33,043	33,044	0
32	84,663	57,863	84,663	0	26,800		26,799	57,863	57,864	0
33	55,514	112,362	0	112,362		56,848	55,514	‡56,847	0	55,515
34	68,316	51,026	68,316	0	17,290		17,289	51,026	51,027	0
35	52,349	112,786	0	112,786		60,437	52,349	‡60,436	0	52,350
36	76,546	64,361	76,546	0	12,185		12,184	64,361	64,362	0
37	68,510	105,065	0	105,065		36,555	68,510	36,554	0	68,511
38	73,914	61,279	73,914	0	12,635		12,634	61,279	61,280	0
39	46,681	129,539	0	129,539		82,858	46,681	‡82,857	0	46,682
40	52,546	144,228	0	144,228		91,682	52,546	‡91,681	0	52,547
41	58,677	140,130	0	140,130		81,453	58,677	‡81,452	0	58,678
42	58,690	142,845	0	142,845		84,155	58,690	‡84,154	0	58,691
43	57,995	122,741	0	122,741		64,746	57,995	‡64,745	0	57,996
44	78,474	38,447	78,474	0	40,027		‡40,026	38,447	38,448	0
45	50,148	117,771	0	117,771		67,623	50,148	‡67,622	0	50,149
	3,815,205	3,691,697	2,808,901	2,093,603	1,210,805	1,087,299	2,217,083	2,685,376	1,598,122	1,006,321

\*Imputed

†District Uncontested by Republicans

‡Democrat Type 2 wasted votes (Total: 714,895) exceed corresponding Republican Type 1 wasted votes.

§Republican Type 2 wasted votes (Total: 846,706) exceed corresponding Democrat Type 1 wasted votes



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) =  $2,604,443 / 2 = 1,302,221 =$  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."<sup>5</sup>

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).”<sup>6</sup>

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.

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

3  
Table 27.2

CAMPBELL'S UNWASTED VOTES ANALYSIS FOR PARTISAN BIAS: OHIO HOUSE

(1) Year	Democrats			Republicans			(8) Total Unwasted Votes	(9) Half of Total Unwasted Votes	(10) Divided by Mean Democrat Winning Votes per Seat	(11) Divided by Mean Republican Winning Votes per Seat	(12) Sum of Partisan Entitlements	(13) Democrat Percent of Total Contested Seats	(14) Percent Partisan Bias from Unwasted Votes
	(2) Democrat Unwasted Votes	(3) Contested Seats Won	(4) Mean Winning Votes per Seat	(5) Repub'cn. Unwasted Votes	(6) Contested Seats Won	(7) Mean Winning Votes per Seat							
1965 Apportionment Board (Republican) Plan													
1966	474,211	33	14,370	1,023,995	57	17,965	1,498,206	749,103	52,130	41,698	93,828	55.56	+ 5.56
1968	597,016	30	19,901	1,232,377	54	22,822	1,829,393	914,697	45,962	40,080	86,042	53.42	+ 3.42
1970	631,468	36	17,541	973,045	51	19,079	1,604,513	802,256	45,736	42,049	87,785	52.10	+ 2.10
1971 Apportionment Board (Democrat) Plan													
1972	1,191,671	55	21,667	937,087	39	24,028	2,128,758	1,064,379	49,124	44,297	93,421	52.58	+ 2.58
1974	947,470	53	17,877	714,068	38	18,791	1,661,538	830,769	46,471	44,211	90,682	51.25	+ 1.25
1976	1,214,738	52	23,360	928,192	37	25,086	2,142,930	1,071,465	45,868	42,712	88,580	51.78	+ 1.78
1978	902,569	56	16,117	684,365	35	19,553	1,586,934	793,467	49,232	40,580	89,812	54.82	+ 4.82
1980	869,375	39	22,292	1,188,512	40	29,713	2,057,887	1,028,943	46,158	34,629	80,787	57.14	+ 7.14
1981 Apportionment Board (Democrat) Plan													
1982	1,285,438	61	21,073	734,420	36	20,401	2,019,858	1,009,929	47,925	49,504	97,429	49.19	- 0.81
1984	1,378,904	53	26,015	1,162,629	39	29,811	2,541,433	1,270,716	48,846	42,626	91,472	53.40	+ 3.40
1986	804,951	43	18,720	789,844	37	21,347	1,594,795	797,397	42,596	37,354	79,950	53.28	+ 3.28
1988	919,394	37	24,848	1,096,902	35	31,340	2,016,296	1,008,148	40,573	32,168	72,741	55.78	+ 5.78
1990	1,271,856	61	20,850	874,908	36	24,303	2,146,764	1,073,382	51,481	44,167	95,648	53.82	+ 3.82
1991 Apportionment Board (Republican) Plan													
1992	1,423,416	49	29,049	1,279,075	43	29,746	2,702,491	1,351,246	46,516	45,426	91,942	50.59	+ 0.59
1994	839,800	41	20,483	1,165,641	50	23,313	2,005,441	1,002,720	48,954	43,011	91,965	53.23	+ 3.23
1996	914,203	34	26,888	1,597,098	54	29,576	2,511,301	1,255,650	46,696	42,455	89,151	52.38	+ 2.38
1998	717,530	36	19,931	1,204,066	52	23,155	1,921,596	960,798	48,206	41,494	89,700	53.74	+ 3.74
2000	728,485	30	24,282	1,693,927	56	29,534	2,382,412	1,191,206	49,057	40,333	89,390	54.88	+ 4.88
2001 Apportionment Board (Republican) Plan													
2002	621,107	33	18,821	1,102,605	51	21,620	1,723,712	861,856	45,792	39,864	85,656	53.46	+ 3.46
2004	815,978	25	32,639	1,655,551	49	33,787	2,471,529	1,235,764	37,862	36,575	74,437	50.86	+ 0.86
2006													

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.

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.

Table 27.4

TYPE II WASTED VOTES IN MOST HEAVILY DEMOCRATIC HOUSE DISTRICTS:  
OHIO 1982

District	Democrat Percentage Major-Party Vote	Democrat Vote	Republican Vote	Total Vote	Type II Wasted Vote	
					By Aggregate Statewide	By Mean District
14	95.55	20,877	972	26,179	19,904	9,110
16	95.34	27,954	1,367	29,321	26,586	9,068
12	89.37	19,360	2,303	21,663	17,056	7,874
11	86.00	18,019	2,933	23,529	15,085	7,200
47	80.53	19,554	4,728	24,282	14,825	6,106
19	80.37	28,952	7,671	36,623	21,280	6,074
9	78.02	28,472	8,020	36,492	20,451	5,664
45	77.45	22,264	6,484	28,748	15,779	5,490
41	76.46	26,939	8,294	35,233	18,644	5,280
15	76.31	25,947	8,055	34,002	17,891	4,962
294,072 Totals:					187,501	66,828
Ratio of Type II Wasted Vote in Most Heavily Republican Districts:					1.34	1.79

Table 27.5

TYPE II WASTED VOTES IN MOST HEAVILY REPUBLICAN HOUSE DISTRICTS:  
OHIO 1982

District	Democrat Percentage Major-Party Vote	Democrat Vote	Republican Vote	Total Vote	Type II Wasted Vote	
					By Aggregate Statewide	By Mean District
6	*25	9,241	27,723	36,564	18,481	5,000
35	25.99	11,377	32,394	44,997	21,016	4,802
34	27.90	9,492	24,530	36,676	15,037	4,420
26	29.39	11,035	26,510	38,426	15,474	4,122
38	32.10	13,531	28,616	42,147	15,084	3,580
27	32.58	12,139	25,123	38,154	12,983	3,484
79	34.60	11,624	21,975	33,599	10,350	3,080
93	34.93	10,532	19,621	30,153	9,088	3,014
51	35.03	14,941	27,714	42,655	12,772	2,994
86	36.04	12,529	22,239	34,768	9,709	2,792
378,139 Totals:					139,994	37,288

\*Imputed

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*.<sup>7</sup> 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.

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



Table 27.2

CAMPBELL'S UNWASTED VOTES ANALYSIS FOR PARTISAN BIAS: PENNSYLVANIA

(1) Year	Democrats			Republicans			(8) Total Unwasted Votes	(9) Half of Total Unwasted Votes	(10) Divided by Mean Democrat Winning Votes per Seat	(11) Divided by Mean Republican Winning Votes per Seat	(12) Sum of Partisan Entitlements	(13) Democrat Percent of Total Contested Seats	(14) Percent Partisan Bias from Unwasted Votes
	(2) Democrat Unwasted Votes	(3) Contested Seats Won	(4) Mean Winning Votes per Seat	(5) Republican Unwasted Votes	(6) Contested Seats Won	(7) Mean Winning Votes per Seat							
	1991 Court-drawn Special Masters' Plan (21 Districts)												
1992	1,398,861	10	139,886	1,001,574	7	143,082	2,400,435	1,200,217	9,580	8,388	17,968	53.32	+ 3.32
1994	1,116,271	11	101,479	650,423	6	108,404	1,766,694	883,347	8,705	8,149	16,854	51.65	+ 1.65
1996	1,424,642	11	129,513	1,314,998	10	131,500	2,739,640	1,369,820	10,577	10,417	20,994	50.50	+ 0.50
1998	899,662	10	89,966	665,999	7	95,143	1,565,661	782,830	8,701	8,228	16,929	51.40	+ 1.40
2000	1,145,007	8	143,126	1,347,711	9	149,746	2,492,719	1,246,359	8,708	8,323	17,031	51.13	+ 1.13
	2002 Republican-drawn Plan (19 Districts)												
2002	701,086	6	116,848	850,515	7	121,502	1,551,601	775,800	6,639	6,386	13,024	50.98	+ 0.98
2004	811,863	4	202,965	1,647,510	9	183,057	2,459,373	1,229,686	6,059	6,718	12,777	47.42	- 2.58
2006													

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.<sup>8</sup> 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.

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

Table 27.7

## CAMPBELL'S "CHEAPEST" SEATS: 1990

National Rank	State & District	Winning Candidate	Party	Winner's %age	Democrat Vote	Republican Vote	Total Vote	Type II Wasted Vote
331	California-31	Dymally	Dem.	67.1	56,394	27,593	83,987	†28,800
332	Tennessee-9	Ford	Dem.	58.1	48,629	25,730	83,640	22,898
333	California-30	Martinez	Dem.	58.2	45,456	28,914	78,083	16,541
334	New York-8	Scheuer	Dem.	72.3	56,396	21,646	78,042	†34,749
335	Tennessee-4	Cooper	Dem.	67.4	52,101	22,890	77,272	†29,210
336	West Virginia-4	Rahall	Dem.	52.0	39,948	36,946	76,894	3,002
337	New York-10	Schumer	Dem.	80.4	61,468	14,963	76,431	†46,504
338	New York-19	Engel	Dem.	61.2	45,758	17,135	74,761	†28,622
339	Mississippi-4	Parker	Dem.	80.6	57,137	13,754	70,891	†43,382
340	Mississippi-2	Espy	Dem.	84.1	59,393	11,224	70,671	†48,168
341	Maryland-7	Mfume	Dem.	85.0	59,628	10,529	70,157	†48,498
342	California-25	Roybal	Dem.	70.0	48,120	17,021	68,717	†23,098
343	Michigan-13	Collins	Dem.	80.1	54,345	11,203	67,817	†43,141
344	Mississippi-1	Whitten	Dem.	64.9	43,668	23,650	67,318	20,017
345	California-29	Waters	Dem.	79.4	51,350	12,054	64,672	†39,295
346	New York-6	Flake	Dem.	73.1	44,306	13,224	60,641	†31,081
347	New York-13	Solarz	Dem.	80.4	47,446	11,557	59,003	†35,888
348	New York-9	Manton	Dem.	64.4	35,177	13,330	54,644	†21,846
349	New Jersey-10	Payne	Dem.	81.5	42,616	9,072	52,305	†33,543
350	New York-18	Serrano	Dem.	75	38,024	*12,675	40,796	†25,349

\*Imputed vote

†Type II wasted vote for Democrat winner exceeds Type I wasted vote for Republican loser.

Table 27.8

## CAMPBELL'S HIGHEST TURNOUT DISTRICTS ELECTING REPUBLICANS: 1990

National Rank	State & District	Winning Candidate	Party	Winner's %age	Democrat Vote	Republican Vote	Total Vote	Type II Wasted Vote
1	Minnesota-3	Ramsted	Rep.	66.9	96,395	195,833	292,228	99,438
6	California-14	Doolittle	Rep.	51.5	120,742	128,309	249,001	7,566
7	Florida-9	Bilirakis	Rep.	58.1	102,503	142,163	244,666	39,659
9	Maine-2	Snowe	Rep.	51.0	116,798	121,704	238,502	4,905
11	Arizona-3	Stump	Rep.	56.6	103,018	134,279	237,297	31,261
14	Florida-6	Stearns	Rep.	59.2	95,421	138,588	234,009	43,166
17	California-37	McCandless	Rep.	52.6	103,961	115,469	232,082	11,507
18	Arizona-4	Kyl	Rep.	61.3	89,395	141,843	231,238	52,448
19	California-1	Riggs	Rep.	43.3	96,468	99,782	230,261	3,313

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 cut-off 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.<sup>9</sup> 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”<sup>10</sup> 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”<sup>11</sup> 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.<sup>12</sup>

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.

$$D\%(t) = a + bD\%(t - 1) \quad [27.1]$$

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."<sup>13</sup>

*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.<sup>14</sup> Congressional voting was different in Massachusetts' 336 towns they ranged from 0.22 to 1.07.<sup>15</sup> The Massachusetts electorate "votes in a manner radically different from that suggested by the registration data."<sup>16</sup> 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.<sup>17</sup>

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.”<sup>18</sup> 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.”<sup>19</sup> 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.<sup>20</sup>

*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.<sup>21</sup> 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.<sup>22</sup> 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.”<sup>23</sup> His overall conclusion is that “nonparty factors” make it nearly impossible to “categorize a town as partisan based on electoral results” and therefore, “if we cannot determine a town's partisan profile, we cannot make the claim that a districting system is unfair to one of the parties...”<sup>24</sup>

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.”<sup>25</sup> 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...<sup>26</sup>



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

<sup>1</sup>Campbell, J. *Cheap Seats: The Democratic Party's Advantage in U.S. House Elections*. (Columbus, OH: Ohio State University Press, 1996): 74.

<sup>2</sup>*Ibid*, pg. 92.

<sup>3</sup> 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.

<sup>4</sup>Campbell, *Op Cit*.

<sup>5</sup> Lowenstein, Daniel and Daniel Steinberg, *The Quest for Legislative Disstricting in the Public Interest: Elusive or Illusory?*(California: UCLA Law Review, 1985): 93.

<sup>6</sup> Campbell, *Op cit*. Note 1, pg. 106.

<sup>7</sup>———U.S. ——

<sup>8</sup> Campbell. *Op. cit*. Note 1. Tables 5.4 & 5.5. pp. 104-105.

<sup>9</sup> Rush, Mark E. *Does Redistricting Make a Difference?* (Lexington Books, 2000): 4.

<sup>10</sup> *Ibid*, Pg. 1.

<sup>11</sup> *Ibid*, Pg. 15.

<sup>12</sup> *Davis v. Bandemer* 478 U.S. at 128-29.

<sup>13</sup> Rush, *Op. cit*. Note 9: pg. 71.

<sup>14</sup> *Ibid*, pg. 82.

<sup>15</sup> *Ibid*, pg. 83.

<sup>16</sup> *Ibid*, pg. 84.

<sup>17</sup> *Ibid*, pg. 86.

<sup>18</sup> *Ibid*, pg. 91.

<sup>19</sup> *Ibid*, pg. 92.

<sup>20</sup> *Ibid*, pp. 83-84.

<sup>21</sup> *Ibid*, pp. 97-98.

<sup>22</sup> *Ibid*, pg. 116.

<sup>23</sup> *Ibid*, pg. 119.

<sup>24</sup> *Ibid*, pg. 96.

<sup>25</sup> Kernell, Samuel and Bernard Grofman, *Political Gerrymandering and the Courts*, (New York: Agathon Press, 1990): 293.

<sup>26</sup> *Ibid*, pg. 290

(2004).

# Part VI.

*Vieth v. Jubelirer*

Legal Principles

## Chapter 28

### The Pennsylvania Controversy

#### *From Badham to Vieth*

The High Court's summary affirmance of the dismissal of *Badham* in 1989 had a chilling effect on the willingness of subsequent victims of partisan gerrymandering to seek redress in the courts. When the 1990s redistricting got under way two years later there were only two halfway serious attempts to erect a judicial roadblock to partisan gerrymandering: in Virginia and in North Carolina. In Virginia, in the fall of 1991, Republicans sought an injunction against implementation of a districting plan for the 100-member House of Delegates that paired 14 Republican incumbents against each other and a fifteenth Republican incumbent against an Independent incumbent.<sup>1</sup> Republicans offered a statistical analysis showing that the random chance of all 15 paired incumbents involving only Republicans was about 138 in one billion—strong evidence of discriminatory intent.<sup>2</sup> The Court noted that to warrant an injunction there had to be a good likelihood the plaintiffs would succeed on the merits; that this was a *Bandemer* claim; that to prevail in a *Bandemer* claim, plaintiffs had to prove a severe discriminatory effect as well as discriminatory intent; that they were unlikely to do so; and therefore, denied the Republicans' motion for a preliminary injunction. The Republicans appealed but the High Court upheld the denial.<sup>3</sup>

In North Carolina, Democrats controlled both houses of the legislature when it was time for new congressional districts to be drawn following the 1990 census—a census which increased its congressional delegation from 11 to 12. The legislature initially crafted a plan that featured one “very contorted” black majority district in the northeastern corner of the state, but this plan failed to get preclearance from the Department of Justice. The legislature therefore passed a second plan in January, 1992 which contained two black majority districts. The second such district, CD 12, was the to-be-famous “shoestring district” which stretched for 160 miles along Interstate Route

85 linking together black communities from Durham to Gastonia. The triple requirement of making all districts precisely equal in population, creating two black majority districts and protecting six white Democrat incumbents led to extensive fragmentation of local governmental units and districts of very low compactness everywhere. North Carolina Republicans filed a *Bandemer*-type suit early in 1992.<sup>4</sup> In April, the three-judge trial court dismissed the suit, following the same course taken by the courts in *Badham* and *Republican Party of Virginia*: the issue was justiciable; plaintiffs had alleged discriminatory intent; but on the matter of discriminatory effect their complaint was found “insufficient to state a valid claim.”<sup>5</sup> The High Court affirmed the dismissal in October with (curiously) only Justice Blackmun noting probable jurisdiction.<sup>6</sup> This set the stage for the suit that followed, *Shaw v. Reno*,<sup>7</sup> which opened up a can of worms that still bedevils us;<sup>8</sup> but serious litigation over partisan gerrymandering was dead for the rest of the decade.

When the post-2000 round of redistricting got underway the national political landscape had changed significantly to the detriment of Democrats. Republicans controlled not only the White House and both houses of Congress, but many statehouses as well. In particular, they were in a position to work their will in redistricting in the large states of Ohio, Michigan, Florida and Pennsylvania. Hirsch identified these states as the locus of a national “pro-Republican distributional bias that...gives Republicans a 50-seat head start in the battle for control of the [U.S.] House.”<sup>9</sup> His law firm<sup>10</sup> represented plaintiffs in two *Bandemer*-style lawsuits that attempted, once again, to persuade the courts that theirs was a case that would satisfy the stringent/nebulous criteria enunciated in *Davis*.

They thought their best shot was Michigan. In that state “Democrats have won the last three presidential contests, 9 out of the last 10 U.S. Senate elections, and at least a plurality of votes cast statewide in 14 of the last 15 U.S. House elections.”<sup>11</sup> The 2000 census had shrunk the Michigan congressional delegation from 16 members (9 D, 7 R) to 15 members. Despite its status as a “Democratic” state, in 2001 Republicans occupied the governor’s mansion and controlled

both houses of the legislature. They were, therefore, in the catbird's seat when redistricting time arrived. In crafting the 2001 congressional plan they employed all the time honored techniques of partisan gerrymandering: Six Democratic incumbents were paired in three districts while each of the seven Republicans was given a district tailor-made for his re-election. The two open districts resulting from the pairings were designed to facilitate the election of specific Republican candidates. The seven Republican incumbents enjoyed an average carryover of 79 percent; the nine Democratic incumbents' mean carryover was only 51 percent. Although Gore won Michigan by about five percentage points in 2000, he carried only 5 of the 15 new districts thanks to the mapmakers' skill in packing and fragmenting probable Democratic voters.

Judicial treatment of the Democrats' suit, *O'Lear v. Miller*, followed the expected course. As Hirsch tells it:

The state defendants conceded that the Michigan legislature had acted with unconstitutionally discriminatory intent, but asked the district court to dismiss the complaint because it failed to allege sufficiently severe effects. Although the court initially found that the plaintiffs had demonstrated a likelihood of success on the merits of their partisan gerry-mandering claim, it then reversed course and dismissed the complaint with prejudice. The U.S. Supreme Court summarily affirmed, with Justices Stevens and Breyer noting that they would have set the case for plenary briefing and oral argument.<sup>12</sup>

The *O'Lear* attorneys were sobered over the rejection of their suit and especially over the indication that they had only two prospective votes on the High Court. The linchpin of their argument was that—unlike Democrats in Indiana and Republicans in California—Democrats in Michigan were the majority party by almost any measure and that under this plan they would definitely be “consigned to minority status.”<sup>13</sup> That argument might have helped the Democrats' case but the district court found other reasons to reject their claims. Again, as Hirsch tells it:

...the complaint had failed to allege any of three “other indicia” of political powerlessness. First, the plaintiffs had failed to allege that Democratic voters were being deprived of their rights to register, organize, cast ballots, and raise campaign funds, and thus the plaintiffs had not alleged that Democrats would be completely excluded from the political process. Second, the plaintiffs had alleged only that Republican representatives elected from strongly Republican districts would be “largely” indifferent to the interests of their Democratic constituents. To state a cognizable claim of partisan gerrymandering, the court held, plaintiffs would have to allege that these Representatives would *entirely* ignore their Democratic constituents, refusing even to listen to their views or help them with constituent casework. Third, the plaintiffs had failed to allege that Democrats have “no chance” of obtaining a more favorable districting plan ten years hence, after the next reapportionment in 2011.”<sup>14</sup>

### *Unexpected Opportunity*

Like Michigan, Pennsylvania was another “rust belt” state that had failed to keep pace with the rest of the country in population growth and because of that had to give up seats in Congress. In 1991 a political deadlock in the state capitol led to the Pennsylvania Supreme Court’s taking over the congressional district line drawing—a task complicated by the state’s loss of two seats in going from 23 U.S. Representatives to 21. The first election (1992) under the court drawn plan sent 11 Democrats and 10 Republicans to Washington. See Table 28.1. This division of the state’s congressional delegation held for the next three elections with offsetting turnovers in CDs 13, 15 and 18 maintaining the partisan status quo. In the final election of the decade, 2000, Republicans picked up CD 4, which had been vacated by Democrat Ron Klink in his run for the U.S. Senate. The final line-up, then, was 10D-11R. The 2000 census forced the

Table 28.1

## Pennsylvania Congressional: Aggregate Vote Share vs. Mean District Vote: 1992-2010

(1) Year	Votes			Seats Won			Uncontested Seats			(11) Turnout Ratio
	(2) Democratic Aggregate Vote Share (v)	(3) Democratic Mean District Vote (v)	(4) Difference	(5) Demo.	(6) Repub	(7) Demo. %	(8) by Dem.	(9) by Rep.	(10) Total	
1992	49.35*	50.17*	0.82	11	10	52.38	3	1	4	1.47
1994	47.78*	48.99*	1.21	11	10	52.38	4	0	4	1.61
1996	52.18	52.93	0.75	11	10	52.38	0	0	0	1.48
1998	49.79*	51.09*	1.30	11	10	52.38	3	1	4	1.93
2000	50.55*	51.73*	1.18	10	11	47.62	2	2	4	1.61
2002	45.20*	46.08*	0.88	7	12	36.84	5	1	6	1.58
2004	49.24*	49.73*	0.49	7	12	36.84	3	3	6	1.85
2006	54.89*	55.34*	0.45	11	8	57.89	0	2	2	1.43
2008	55.23*	55.32*	0.09	11	8	57.89	0	1	1	1.32
2010	47.45*	47.73*	0.28	7	12	36.84	0	1	1	1.44

\*Adjusted to assume that major party which did not contest a district would have received 25% of the vote in that district had it run a candidate.

Votes for independent and Libertarian Party candidates were disregarded.

state to give up two more congressional representatives, but in 2001 Republicans were in full control in Harrisburg and no partisan deadlock was in the works.

A deadlock did occur, however. It was between the Republican-controlled House and the Republican-controlled Senate and on December 13, 2001 the legislature adjourned without having passed a new congressional districting bill. The Democrats went to court on December 21 with a complaint asking the Court to promulgate a new districting plan of its own. In Washington “prominent national figures in the Republican party,”<sup>15</sup> including President Bush’s top political operative Karl Rove, began pressuring (Republican) Governor Schweiker and Republican members of the Pennsylvania House to adopt the reportedly more partisan Senate plan. These legislators responded by reaching agreement and on January 2 and 3 passed the redistricting plan that became known as “Act 1.” Democrats were excluded from the negotiations preceding passage of the plan—even Democratic members of the Conference Committee officially charged with reconciling the House and Senate versions. The January 2 Conference Committee vote was on party lines. The January 3 legislative vote was near party-line in the Senate, while in the House 42 Democrats broke ranks and supported the bill. Schweiker signed the bill into law on January 7, 2002. The districts it created are shown in Figure 28.1.



Concurrent with their suit in federal court, the Democrats had also filed an action in the state courts alleging Act 1 violates the Pennsylvania constitution. A month of legal maneuvering ensued in which the Democrats sought to get an evidentiary hearing on a political gerrymandering charge while Republicans sought dismissal of all charges without bringing the case to trial. The Democrats prevailed. Although they were denied a hearing on their political gerrymandering claims, they were granted a hearing on their “malapportionment” claims. It would be difficult for a court, in this controversy, to rule which evidence (*i.e.*, which oral testimony, which exhibits...) was relevant to a “malapportionment” claim and which was relevant only to a “gerrymandering” claim.

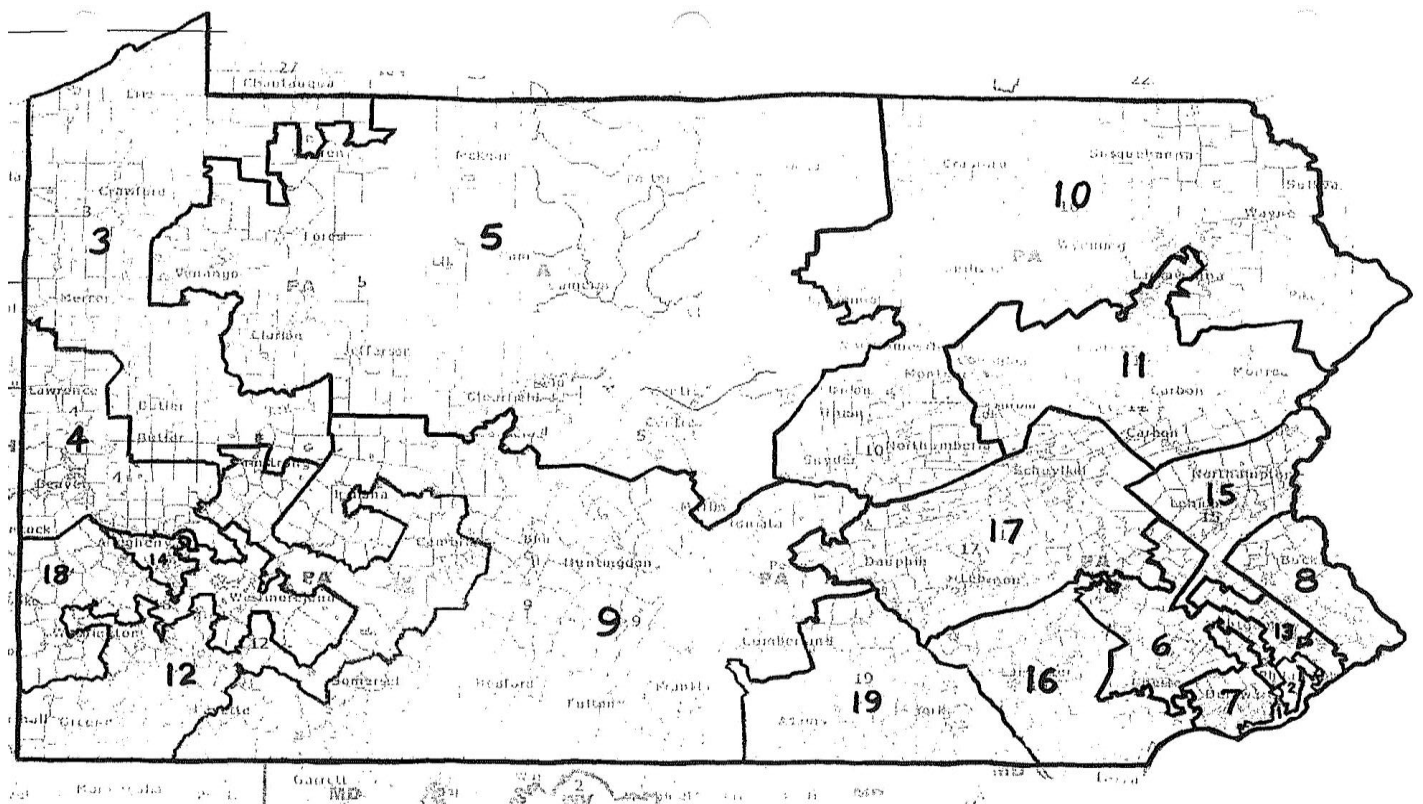


Figure 28.1

### *Lichtman's Evidence*

Allan J. Lichtman, Professor of Political Science at American University, had served as an expert witness in more than 60 voting rights and redistricting cases. He is a Democrat and worked closely with the Jenner & Block attorneys in challenges to Republican-drawn redistricting plans following the 2000 census. He prepared the seats/votes analysis that the plaintiffs would have employed in Michigan had *O'Leary v. Miller* gone to trial. With ample assistance in the “number crunching” from Bob Priest, an aide to the Democratic Caucus of the Pennsylvania House, he prepared twelve tables comparing the Act 1 plan to the 1992 plan and to three alternative plans. The latter plans—captioned “Alt 2,” “Alt 3,” and “Alt 4”—were not offered in the General Assembly but were prepared by Priest, as (presumably) impartially-drawn plans to demonstrate that districts of precisely equal population could be drawn while, at the same time, achieving higher compactness and less fragmentation of local governmental units.

The first four of Lichtman's tables compared the 1992 plan with Act 1 and with each of the three alternative plans, on the basis of their partisan character. His fifth table summarized the salient points of the first four tables. Our Table 28.2 is a condensation of his Tables 1-4, which provides more detail than his Table 5. To measure the partisan character of the districts in the plans under scrutiny Lichtman did not attempt to create a political index, as we did in our Indiana and California studies, but instead, simply averaged the major-party vote for all non-judicial statewide offices over the preceding decade. Table 28.3 lists these 19 races. Neither does Lichtman attempt to correct for partisan swing over this period in an attempt to estimate what the partisan split in the seat-shares would be under an even split in the statewide vote. It is very difficult to say what these partisan swings are—especially when one-fifth to one-third of the congressional seats were uncontested in a typical election during this period and we had to impute votes in uncontested districts. As it turns out, Table 28.1 shows the Democratic aggregate statewide vote share from 1992 to 2004 was 49.16 percent and the Democratic mean district vote for the same period was 50.10 percent. Therefore, one could conclude that Lichtman's assessment

Table 26.2

PENNSYLVANIA CONGRESSIONAL: 2002 "ACT 1" (REPUBLICAN) PLAN  
 COMPARED TO DEMOCRATS' ALTERNATIVE PLANS

1992 Plan			Act 1			ALT 2			ALT 3			ALT 4		
(1) CD No.	(2) Incumbent	(3) % Demo 1991- 2000	(4) CD No.	(5) % Demo 1991- 2000	(6) Change in % Demo	(7) CD No.	(8) % Demo 1991- 2000	(9) Change in % Demo	(10) CD No.	(11) % Demo 1991- 2000	(12) Change in % Demo	(13) CD No.	(14) % Demo 1991- 2000	(15) Change in % Demo
1	<b>Brady</b>	<b>79.7</b>	<b>1</b>	<b>77.3</b>	-2.4	<b>1</b>	<b>76.8</b>	-2.9	<b>1</b>	<b>73.7</b>	-6.0	<b>1</b>	<b>75.8</b>	-3.9
2	<b>Fattah</b>	<b>83.0</b>	<b>2</b>	<b>81.7</b>	-1.3	<b>2</b>	<b>81.8</b>	-1.2	<b>2</b>	<b>81.5</b>	-1.5	<b>2</b>	<b>82.1</b>	-0.9
3	<b>Borski</b>	<b>59.5</b>	<b>13</b>	<b>48.9</b>	-10.6	<b>3</b>	<b>54.3</b>	-5.2	<b>3</b>	<b>56.8</b>	-2.7	<b>3</b>	<b>55.0</b>	-4.5
4	Hart	52.0	4	48.6	-3.4	4	44.3	-7.7	4	45.6	-6.4	4	45.1	-6.9
5	Peterson	41.2	5	42.1	+0.9	5	42.5	+1.3	5	41.2	0.0	5	42.5	+1.3
6	<b>Holden</b>	<b>44.0</b>	<b>17</b>	<b>41.7</b>	-2.3	<b>6</b>	<b>44.7</b>	+0.7	<b>6</b>	<b>44.5</b>	+0.5	<b>6</b>	<b>44.6</b>	+0.6
7	Weldon	42.9	7	43.1	+0.2	7	40.7	-2.2	7	42.1	-0.8	7	40.8	-2.1
8	Greenwood	45.6	8	46.0	+0.4	8	39.0	-6.6	8	42.2	-3.4	8	39.4	-6.2
9	Shuster	37.7	9	39.9	+2.2	19	38.0	+0.3	9	38.9	+1.2	19	38.1	+0.4
10	Sherwood	46.1	10	41.5	-4.6	10	37.6	-8.5	10	45.9	-0.2	10	37.9	-8.2
11	<b>Kanjorski</b>	<b>50.9</b>	<b>11</b>	<b>53.5</b>	+2.6	<b>11</b>	<b>53.8</b>	+2.9	<b>11</b>	<b>53.7</b>	+2.8	<b>11</b>	<b>53.7</b>	+2.8
12	<b>Murtha</b>	<b>51.9</b>	<b>12</b>	<b>59.5</b>	+7.6	<b>12</b>	<b>53.8</b>	+1.9	<b>12</b>	<b>53.9</b>	+2.0	<b>12</b>	<b>52.7</b>	+0.8
13	<b>Hoeffel</b>	<b>46.9</b>	<b>13</b>	<b>48.9</b>	+2.0	<b>13</b>	<b>46.3</b>	-0.6	<b>13</b>	<b>45.5</b>	-1.4	<b>13</b>	<b>46.0</b>	-0.9
14	<b>Coyne</b>	<b>60.0</b>	<b>14</b>	<b>66.1</b>	+6.1	<b>18</b>	<b>61.7</b>	+1.7	<b>18</b>	<b>64.4</b>	+4.4	<b>18</b>	<b>65.1</b>	+5.1
15	Toomey	47.5	15	47.0	-0.5	15	47.7	+0.2	10	45.9	-1.6	15	47.7	+0.2
16	Pitts	36.5	16	34.6	-1.9	16	34.3	-2.2	16	34.5	-2.0	16	34.4	-2.1
17	Gekas	36.9	17	41.7	+4.8	17	39.7	+2.8	17	37.9	+1.0	17	39.5	+2.6
18	<b>Doyle</b>	<b>53.9</b>	<b>14</b>	<b>66.1</b>	+12.2	<b>18</b>	<b>61.7</b>	+7.8	<b>18</b>	<b>64.4</b>	+10.5	<b>18</b>	<b>65.1</b>	+11.2
19	Platts	38.2	19	38.0	-0.2	19	38.0	-0.2	19	37.9	-0.3	19	38.1	-0.1
20	<b>Mascara</b>	<b>54.4</b>	<b>18</b>	<b>46.8</b>	-7.6	<b>14</b>	<b>60.3</b>	+5.9	<b>15</b>	<b>56.7</b>	+2.3	<b>14</b>	<b>56.7</b>	+2.3*
21	English	47.7	3	46.4	-1.3	9	49.2	+1.5	14	48.4	+0.7	9	49.7	+2.0
Mean		<b>50.3</b> 12 R 9 D	6	<b>49.8</b> 14 R 5 D			<b>49.8</b> 12 R 7 D			<b>49.8</b> 12 R 7 D			<b>49.8</b> 12 R 7 D	

Boldface indicates a Democratic incumbent, a "Democratic" district, or a Democratic statewide mean district percentage.

Table 28.3

Vlath Plaintiffs' Historical Elections Used to Define Partisan Character of 2002 Pennsylvania  
 Congressional Districts

Year	U.S. President	U.S. Senator	Governor	Attorney General	Auditor General	State Treasurer
2000	Gore, D (10)* Bush, R (9) 52.15	Santorum, R (15) Klink, D (4) 46.47		Fisher, R (16) Eisnhower, D (3) 44.38	Casey, D (15) True, R (4) 58.73	Hafer, R (14) Knoll, D (5) 48.94
1998		Specter, R (17) Lloyd, D (2) 36.19	Ridge, R (16) Itkin, D (3) 35.09			
1996	Clinton, D (11) Dole, R (8) 55.16			Fisher, R (13) Kohn, D (6) 49.25	Casey, D (14) Nyce, R (5) 58.11	Hafer, R (14) Knoll, D (5) 48.89
1994		Santorum, R (14) Wofford, D (5) 48.71	Ridge, R (14) Singel, D (5) 46.76			
1992	Clinton, D (11) Bush, (8) 55.55	Specter, R (13) Yeakel, D (6) 48.55		Preate, R (13) Kohn, D (6) 48.60	Hafer, (14) Lewis, D (5) 46.91	Knoll, D (18) Henry, R (1) 64.89
1991 (Special)		Wofford, D (11) Thornburgh, R (8) 55.01				

\* Number in parentheses is the number of districts in the plan of Act 1 that were carried by the candidate  
 Number at bottom of cell is the Democratic candidate's percentage of the major party vote.

was very close to what one would expect to get under a theoretical even split in the “statewide” vote.

If we accept Lichtman’s methodology, we see from Table 28.2 that by creating 12 “Republican” and 9 “Democratic” districts, the 1992 bipartisan plan has a 1.5-seat pro-Republican bias. When we look at the plans of 2001-2002 we see a more pronounced pro-Republican bias: The Republican-drawn Plan of Act 1 gives Republicans a 14-5 seat advantage compared to the 12-7 seat advantage conferred by each of the three Democratic-drawn “alternative” plans. One has to ask: were the Democrats, in crafting these plans, really trying to come up with plans that would best satisfy the “traditional” objective criteria of non-fragmentation and compactness? If they were, their maps suggest that optimizing such criteria, while giving them a better map than an intentional Republican gerrymander, also falls at least two seats short of giving them a fair shake.

### *Two Citizen Plans*

Whatever the Democrats were trying to accomplish with their Alternative Plans 2, 3 and 4, we saw a need to generate some plans that consciously sought to best satisfy objective criteria and were deliberately “politics-blind.” Using the criteria of the Ohio Anti-Gerrymander Amendment described in Chapters 24 and 25 the senior author and Holderly, in late 2003 crafted the Pennsylvania congressional districting plans we call the Horn and Holderly plans. These plans each sought to minimize the number of county, city, township and borough fragments and to maximize compactness while keeping population deviations within a  $\pm 1$  percent bracket. Because these plans would be compared to Act 1 and to Alternative 4—plans which presumably achieved zero population deviation—the Horn plan was modified to include a version having zero population deviation. Horn and Holderly worked independently, so as not to influence each other, and ended up with plans that were identical in only one of their districts—CD 7.

Table 28.4  
Fragmentation of Governmental Units: Pennsylvania Congressional Districting Plans

(1)	(2) Population Deviation	COUNTIES		CITIES	
		(3) Number Split	(4) Number of Fragments	(5) Number Split	(6) Number of Fragments
<u>Impartially-Drawn Plans</u>					
1992 PA Supreme Court (21 districts)		19	45	8	
2002 Plaintiffs' Alternative Plan 2 (19 districts)	+ 9 persons - 6 persons	22	58	13	26
2002 Plaintiffs' Alternative Plan 3 (19 districts)	+ 9 persons - 8 persons	23	50	14	28
2002 Plaintiffs' Alternative Plan 4 (19 districts)	zero	25	68	35	70
2003 Horn Plan ±1.0% Deviation	+ 0.97% - 0.98%	8	21	1	2
2003 Horn Plan Zero Deviation	zero	11	29	14	28
2003 Holderly Plan ±1.0% Deviation	+ 0.95% - 0.58%	8	22	0	0
<u>Republican Plans</u>					
2002 Act 1	+ 9 persons -10 persons	25	35	59	
2002 Act 34	zero	28	68	65	

Table 28.5  
Compactness Indices of Pennsylvania Congressional Districting Plans

(1) District	(2) 1992 Plan	(3) 2002 Act 1 Plan	(4) 2002 Alt. 2 Plan	(5) 2002 Alt. 3 Plan	(6) 2002 Alt. 4 Plan	(7) 2003 Horn Plan	(8) 2003 Holderly Plan
1	9.2	6.8	6.5	8.4	9.4		50.3
2	17.8	16.5	17.0	27.4	22.5		44.0
3	30.2	14.2	28.6	25.6	24.8		51.5
4	20.7	25.2	13.6	17.6	11.5		47.8
5	23.7	22.7	17.3	20.5	17.3		59.1
6	21.3	9.0	36.0	39.0	24.4		35.2
7	20.3	17.2	11.0	28.9	12.7	34.5	36.5
8	43.1	31.9	20.6	20.8	16.7		44.0
9	25.5	12.6	22.3	15.1	22.3		51.5
10	30.5	18.2	11.6	20.0	11.4		47.8
11	28.5	24.3	24.5	26.2	19.8		51.5
12	23.7	5.3	13.7	24.3	12.9		42.7
13	23.6	10.4	29.4	21.8	28.5	35.3	46.5
14	13.9	9.8	19.5	34.2	15.3		33.9
15	34.2	22.2	35.0	16.1	26.0		47.8
16	27.9	22.1	19.8	34.3	17.0		59.1
17	22.3	30.1	22.6	22.1	33.1		44.0
18	12.7	6.3	10.9	20.1	12.3		
19	35.7	38.8	14.4	42.2	13.2		49.0
20	21.6						
21	27.5						
Minimum:	9.2	5.3	6.5	8.4	9.4	35.3	33.9
Mean:	24.5	18.1	19.7	24.5	18.5		

Table 28.4 compares all the plans under scrutiny as to non-fragmentation of governmental units. The Horn and Holderly plans show us that with a one percent population deviation the number of county fragments can be reduced to as low as 21 and the number of city fragments to

zero. When the allowable population deviation is reduced to zero the Horn plan shows us that the number of county fragments can still be held to 29. This compares to 35 fragments in the plan of Act 1 and to 50 fragments in the best of the plaintiffs' plans—Alternative Plan 3. With respect to compactness Table 28.5 reveals that, with a minimum compactness of 35.3, Horn is the winner with Holderly's 33.9 a close second. Plaintiffs' alternative plans, with minima ranging from 6.5 to 9.4, are a distant third while Act 1 finishes last with a minimum compactness of 5.3.

### *The Evidentiary Hearing*

*Lichtman Direct Examination.* As noted above, the Court had dismissed the Democrats' partisan gerrymandering claim in its opinion and order of February 22, so the purpose of the March 11-12 evidentiary hearing was to examine evidence relative to the Democrats' surviving one person-one vote claim. The only evidence offered at this trial that bore on that claim was compactness measurements and counts of local governmental unit splits in the various plans. The major part of the testimony concerned the issues of partisan bias and partisan gerrymandering. Lichtman was the first witness. Under direct examination by Jenner & Block's lead attorney Paul V. Smith, he presented his first analysis dealing with seats-votes comparisons. The centerpieces of the evidence were the five tables we discussed earlier and summarized in Table 28.2. He defined packing and cracking and explained why he chose statewide races rather than congressional races to assess the partisan character of the districts. He showed why he concluded the major-party vote had been evenly divided over the preceding decade and why he concluded that 12 of these districts had been "Republican" districts and nine of them "Democratic" districts.

Turning to the plan of Act 1, Lichtman observed that his methodology yielded 14 "Republican" districts and five "Democratic" districts. That was a 4.5 seat, or a 74 percent to 26 percent pro-Republican bias. Similarly, the Democrats' Alternative Plan 3 yielded 12 "Republican" districts and seven "Democratic" districts. The same split held for the Democrats' Alternative Plan 4. In 18 of the 21 districts in the 1992 plan the party with a majority held that

district in the election of 2000—a projection that was 86 percent correct. Turning to Table 9 of his exhibit, Lichtman pointed to inter-year linear correlations from 1992 to 2000 between percent Democratic in statewide elections that ranged from 0.924 to 0.966, using precinct-level data.

Table 10 of his exhibit showed linear correlations between mean percent Democratic in statewide elections and percent Democratic in contested congressional elections that ranged from 0.827 to 0.872. Finally, Table 11 of his exhibit showed a predicted change in percent Democrat in congressional elections for a one percent change in percent Democrat in statewide elections that ranged from 0.94 percent to 1.1 percent. These high correlations lent credibility to his conclusions regarding the partisan character of the districts in his analysis. The trial recessed for lunch.

Resuming the stand in the afternoon session, Lichtman presented his second analysis: the treatment of incumbents. Tables 1-4 of his exhibit each had a column listing the pairings of individual incumbents when such occurred. They revealed that in the plan of Act 1 two Democrats were paired in each of two districts (Borski/Hoeffel in CD 13; Coyne/Doyle in CD 14). A third Democrat (Holden) was paired with a Republican (Gekas) in a district (CD 17) that was 58.3 percent Republican. In CD 4 Republican incumbent Hart enjoyed a 3.4 percent “enhancement” (per Grofman Indicator No. 5) in the lowering of her district’s “percent Democrat” rating from 52.0 to 48.6. But in CD 18 Democratic incumbent Mascara sustained a 7.6 percent “reduction” (per Grofman Indicator No. 7) in the lowering of his district’s “percent Democrat” rating from 54.4 to 46.8. With respect to open-district advantage (Grofman Indicator No. 8) Lichtman’s Table 1 showed that the sole open-district in the plan of Act 1 had a “percent Democrat” rating of 44.5—a decidedly pro-Republican slant.

Lichtman then proceeded to examine the Democrats’ Alternative Plan 4 from the same perspective. He found a Coyne/Doyle pairing in Pittsburgh, just as had been the case

with Act 1. But then he also found two Republicans (Shuster/Platt) paired in CD 19. He found a 4.5 percent “reduction” in Democrat Borski’s “percent Democrat” from 59.5 to 55.0. He found a 6.9 percent “enhancement” of Hart’s “percent Democrat” from 52.0 to 45.1. Finally, he found a 2 percent “reduction” of Republican English’s “percent Democrat” from 47.7 to 49.7. In short, he found in this plan that all the bad luck did not happen to Democrats. Then he journeyed to Table 8 of his exhibit to consider the subject of incumbent carryover. Comparing the mean incumbent carryover for Republicans with that for Democrats in each of the four plans, he found that Act 1 gave Republicans 76 percent to 51 percent for Democrats. Alternative 3 gave Republican incumbents a mean carryover of 60 percent compared to a carryover of 66 percent for Democrat incumbents. Alternative 4 gave Republicans 55 percent, as opposed to 63 percent for Democrats. Thus Alternatives 3 and 4 gave a higher mean carryover to Democrats, but the differential was smaller (6 and 8 percent) than that found in Act 1 (25 percent).

In contrast to Table 8, which gave the mean incumbent carryover for each party for each of the four plans under comparison, Table 12 looked just at the plan of Act 1 and gave the individual carryover for each of that plan’s 11 Republican incumbents and 10 Democratic incumbents. Lichtman pointed to CD 17 where Holden had a 39.1 percent carryover, contrasting that to the 60.4 percent carryover for Gekas. He pointed to Mascara’s 44 percent carryover in CD 18 and to the 47 percent carryover for both Borski and Hoeffel in CD 13. To wind up his direct examination Lichtman turned to his exhibit tables 6 and 7 summarizing the compactness scores and the local governmental unit fragmentation of the plans under examination. This constituted his third analysis.

The compactness of districts had been measured by two different methods, as advised by Niemi, et al.<sup>16</sup> The first method is called a “dispersion” measure; the second is called a “perimeter” measure, of which our Compactness Index is the prime example. Using either measure, we are usually interested in (1) the mean value for the districts in the plan and (2)



the value for its least compact (minimum) district. Taking aim at the plan of Act 1, Lichtman pointed out that it had both the lowest mean compactness score and the lowest minimum score by either measure. Then he proceeded to Table 7 which listed the county splits, municipal splits, and precinct splits for each plan. This table showed that Act 1 had the highest number of precinct splits (6) and of municipal splits (65). It was tied with Alternative 4 for the highest number of county splits (25). In overall conclusion, Lichtman found that Act 1 “does not treat the two parties equally but rather on every measure is quite significantly tilted in favor of the Republicans.”<sup>17</sup>

*Lichtman Cross Examination.* John P. Krill, Jr., lead attorney for the defendants, began the cross examination of Lichtman by verifying how Lichtman had come up with his “50.3” figure as the overall Democratic baseline vote over the preceding decade. It was the mean of the percentages of 21 districts each of which was obtained by averaging in that district the outcomes of 19 separate statewide elections over the preceding decade. Thus, Lichtman was computing statewide votes as mean district vote, rather than as aggregate statewide vote. We recognize our old controversy, first pointed out in Chapter 8, and the parties to the controversy are acting just as predicted: Democrats arguing for mean district vote; Republicans arguing for aggregate statewide vote.

Lichtman stoutly defended his choice of statewide votes measure. He observed that the party of the occupant of the district in 2001 agreed with the partisan character of the district, as measured by his methodology, 86 percent of the time. Krill argued that Lichtman’s assessment of 12 “Republican” districts in the 1992 State plan was in error by two seats because throughout most of the 1990s only 10 Republican congresspersons had been elected from Pennsylvania. Therefore, it stood to reason that his estimate of 14 “Republican” districts in Act 1 was similarly inflated. There were exchanges about the “majoritarian principle,” about a “double” partisan gerrymander and about the difference between the “balloon effect”

and proportional representation. Krill tried to make the case that Act 1, though it did not provide for PR, insured that the majoritarian principle would be adhered to because the winner of the statewide vote in elections of the period 1991-2000 had always carried a majority of the 19 districts established by Act 1. He pointed to Sen. Specter's 1998 victory in which he carried 17 of the 19 CDs of Act 1 and to the 1992 Treasurer's race in which Democrat Knoll carried 18 of the 19 CDs established by Act 1. Good candidates of either party, he said, can win most of the districts in the challenged plan.

Lichtman countered by saying these races proved just the opposite. In his 1998 victory, Specter had received 64 percent of the statewide vote. It took a majority of that size for Democrats to win the major share of the state's districts. A much smaller majority was required for Republicans to win a comparable share of the districts. Therein lay the partisan bias of Act 1. The examination turned to the compactness measurements listed in Table 6 and to Table 7, which listed both compactness summaries and counts of county, municipal and precinct splits.

Lichtman had ranked the five plans by population deviation, by two different compactness measures, and by three fragmentation criteria. Then he made a composite rating for each plan in which Act 1 came out last. Krill attacked these composite ratings as mixing apples and oranges; Lichtman defended them. Krill made an issue of the raw precinct data on which the statistical correlations in Tables 9, 10, and 11 were based not being in the courtroom. Lichtman said the defendants had ample opportunity to raise questions about the accuracy of his statistics during discovery and had not done so. Krill returned to the issue of the data on which the partisan character of the districts in Tables 1-5 was based. He wanted to know why Lichtman had not employed the state judicial elections that occurred in the intervening odd-numbered years during the previous decade. Lichtman answered by saying one needed to employ statewide elections that occurred simultaneously with congressional elections to get meaningful statistical correlations. These judicial elections did not. Moreover,

their results were not in electronic form. Finally, they were multi-seat multi-candidate elections, and unsuitable for that reason as well.

On re-direct examination Smith had only one question: looking at each election over the preceding decade did Lichtman think the districts of Act 1 were “fair or unfair in terms of their partisan impact?”<sup>18</sup> Lichtman answered by comparing the number of Act 1’s districts (14) carried by Republican Hafer in 2000 with 51 percent of the major-party vote to the number of its districts carried by Democrat Clinton in 1992 (11) with 56 percent of the major-party vote. The asymmetry in those numbers demonstrated the plan’s unfairness. On re-cross examination Krill asked whether Lichtman had found a “significant difference” between candidates of the “national Republican Party” and the “Pennsylvania Republican Party” in terms of their electoral performance? He compared Bush’s loss by 2 percent in Pennsylvania in 2000 to Santorum’s 3 percent win in the state in the same election. Lichtman said those races also proved his point: with 52 percent of the vote Democrat Gore was only able to carry 10 districts. Yet with just 53 percent of the vote Republican Santorum had carried 15 districts. Finally, the judges had some questions to ask. Their query was why hadn’t Lichtman used party registration as a means of assessing the partisan character of the districts in his analysis? He responded by saying that political scientists had often found party registration to be a poor predictor of voting behavior in general elections; that how people voted in general elections was the better predictor of how they would vote in other general elections.

*Ceisler Direct Examination.* The plaintiffs next called Larry Ceisler, a 45-year old Democratic political consultant who had been involved in Pennsylvania political campaigns for over 20 years and whom they retained as an expert to do political analyses aimed at projecting who or what party would prevail in the 19 districts established by the challenged plan. Under questioning by Jenner & Block attorney Bruce Spiva, he rendered the opinion that the 2002 election would result in either a 13-6 or a 14-5 Republican majority under the

districts of Act 1. He identified the five likely Democratic general election winners as Brady, Fattah, Kanjorski, Murtha and Doyle. He said that Hoeffel might be the sixth Democratic general election winner if he won the primary election against a northeast Philadelphia opponent. Ceisler said Act 1 was bad for the people of Pennsylvania because loss of representatives of competence and seniority like Robert Borski would diminish the state's power in Congress. Further, the excessive fragmentation of counties and municipalities would cause many of them to lose out in the competition for federal dollars.

The questioning then turned to the dilemma facing Rep. Frank Mascara of old CD 20 in the southwest corner of the state. If he ran in the new CD 18 where he lived he would find himself in a 53.2 percent "Republican" district facing State Senator Tim Murphy all of whose senate district was contained in the new CD. If he ran in the new CD12, which was 59.5 percent "Democratic" he would be facing fellow Democratic incumbent Jack Murtha. Next Ceisler predicted that Democratic incumbent Tim Holden would lose to Republican incumbent George Gekas in a new CD 17 that was 58.3 percent "Republican" and in which Holden had only a 39 percent carryover compared to 60 percent for Gekas. Looking at Philadelphia and adjacent Montgomery County, Ceisler explained how by pairing Borski and Hoeffel the Republicans were attempting to set up a northeast Philadelphia Democrat as the Party's nominee who would then be vulnerable to the Republican nominee Melissa Brown in the general election. He explained how the odd-shaped "Greenwood gash" in eastern Montgomery County weakened the Democratic candidate facing Brown in CD 13. He opined that CD 6, the 55.5 percent "Republican" open district created by Act 1, was tailor-made for Republican state senator Jim Gerlach. Spiva's final questions dealt with the value of party registration figures to a political analysis, the definition and location of "Reagan Democrats," and the long-term consequences of Act 1. Then the Court adjourned until the following morning.

*Ceisler Cross Examination.* Krill began by questioning Ceisler on what sources of information were important in shaping his opinions, eliciting from the witness a reaffirmation that he didn't have much confidence in party registration as an indicator of voting behavior. Then Krill—by getting Ceisler to concede that Republicans held all statewide offices save one; had majorities in both houses of the legislature and in the state's congressional delegation— attempted to elicit the conclusion that Pennsylvania was “a Republican state” Ceisler wouldn't buy into that saying it looked like Democrats were about to elect a governor. Krill then asked several questions about the identity of state senate districts that seemed to serve no useful purpose and then bore in on where Ceisler got his information on the Borski-Hoeffel-CD 13 situation. Krill asked a series of questions insinuating that Ceisler should have done some polling in anticipation of his court appearance; that he should have an orderly file of newspaper clippings; that he should keep a diary recording conversations with people; and that he should know how much money various candidates had in their war chests. His final question was how well Ceisler thought Act 1 “protected incumbents.” Then the Court asked Ceisler how it was that “motor voter” registration laws and failure to “purge” voter lists had caused party registration figures to become misleading. Finally, when Smith moved to admit plaintiffs' Exhibit 12 containing Lichtman's tables Krill objected claiming it was “based on flawed unreliable evidence.”<sup>19</sup> The objection was overruled.

*Mascara Examination.* The plaintiffs' final witness was U.S. Representative Frank Mascara. He was examined by Jenner & Block attorney Daniel Mach. Mascara's testimony contributed little information bearing on how to “prove” an unconstitutional partisan gerrymander, but it provided a very human dimension to what otherwise might be viewed as a bloodless legal controversy. In response to Mach's questions, he explained why he had chosen to run against Murtha in CD 12 rather than against Murphy in CD 18 where he lived. Under cross examination by Krill he made this statement which best conveys his attitude toward what had happened to him:

This is not about Frank Mascara. I am not here because of myself. I am here because the people of my district and the people of Pennsylvania have been wronged. I call it political carnage is what I call it.<sup>20</sup>

His testimony also revealed the behind-the-scenes infighting among Democrats triggered by this partisan action of Republicans. Reminded by Krill that 42 Democratic members of the Pennsylvania House had voted for Act 1, Mascara revealed that Democratic congressmen Murtha, Kanjorski, Brady and Doyle had called those representatives pressuring them to vote for Act 1. The picture was not one of party solidarity in the face of adversity but rather one of every- man-for-himself. The plaintiffs rested their case.

*Brunell Direct Examination.* The defendants' rebuttal witness was Thomas Brunell, Assistant Professor of Political Science at the State University of New York, Binghamton. A graduate of the University of California, Irvine, he had studied under Bernard Grofman. He had been present during Lichtman's testimony the preceding day and under prodding by Krill launched into an attack on Lichtman's work. He identified the centerpiece of Lichtman's analysis to be his conclusion that Act 1 had a 24 percent pro-Republican bias. That "24," in turn, depended on the correctness of two other numbers: (1) the underlying partisan character of Pennsylvania was approximately 50/50, so one could say 50 percent of its voters normally voted Republican; (2) The plan of Act 1 created 14 "Republican" districts; that is 14/19, or 74 percent of the plan's districts were "Republican." Therefore, if a party with 50 percent statewide support found itself a majority in 74 percent of the state's districts, the districting plan carried a 24 percent partisan bias. Brunell said if either of these numbers was off, then the analysis was wrong. As it is, he said, both numbers were off. He said that "common sense" would tell us Republicans had won most of the state's recent elections and that, therefore, they are the majority party.

Brunell said Act 1 reflects a "majoritarian principle." He cited the 1992 Treasurer's race where Democrat Knoll had carried 18 of the 19 CDs created by Act 1, as proof that

Democrats could win almost any district in the challenged plan. He sketched a seats-votes curve to make one of his points. He faulted Lichtman for failing to use the off-year judicial races in assessing the partisan character of the Act 1 districts. He argued that “50” doesn’t accurately represent the strength of the two parties in Pennsylvania. In response to Krill’s questions about Lichtman’s Table 7 he said, “I have never seen anybody rank things like this, and then take an average of the ranks.” He said this was not “meaningful output for a table.”<sup>21</sup> Directed to comment on Lichtman’s statistical analysis, he acknowledged that Table 9 demonstrated “the stability of voting” over time and was “reasonable.” Concerning Table 10, he conceded that it “shows there is a strong positive relationship” between voting in congressional and statewide contests but it is not one-to-one. He was critical of Lichtman’s 24 percent bias figure because it was reported as a “point” estimate without any indication of its statistical probability. He said:

“The best method to measure partisan bias—the most systematic, the most rigorous method available today is a program called JudgeIt...developed by Professors Gary King and Andrew Gelman, and it was developed specifically for the question we’re addressing here today. They were both involved in court cases like this trying to get at the question of partisan bias in electoral systems, and they developed a canned software package to measure partisan bias. And it gives us estimates, like Professor Lichtman did, of 24 percent, but it uses congressional data and it also provides another important component which is measure of standard error. ...there is an old joke that statistics means never having to say you’re certain, Right? There are some truths to that, Right? As statisticians, we never say it’s going to be exactly 24 percent. We can give you a point estimate of 24 percent, but it’s going to be plus or minus, right? ... Whenever there are polls you always see the plus or minus 3 percent range, the 95 percent confidence level.

O.K. So there is an element of uncertainty, and JudgeIt uses that and reports it. It gives us all a better idea of where the real—where the true partisan bias might really be.

Krill then asked:

Now in statistics, whether or not you're using JudgeIt, is it a standard practice in your profession to report the margin of error for any analysis? ... Did Professor Lichtman do that?

Brunell responded:

His method wouldn't allow him to do it, which is one of [its] major shortcomings. He couldn't. It wasn't a technique that would allow him to derive an estimate with measures of error associated with it. So it's not that he didn't; it's that he couldn't because he didn't use JudgeIt, which he should have used to measure partisan bias.<sup>22</sup>

Looking at Lichtman's Table 11, Brunell said the numbers lacked sufficient precision: they should all be carried out to two decimal places. He thought the standard errors associated with these coefficients should be reported. He said the regressions of vote for statewide candidates on vote for congressional candidate were based on data from precincts of greatly differing size and that these precincts ought to be weighted to compensate for this fact. He said the sensitivity analyses Lichtman claimed to have performed on his data should have been reported.

*Brunell Cross Examination.* Smith began the cross examination by asking whether partisan bias in a districting plan implied asymmetry. Brunell agreed that it did. Smith then elicited from Brunell the admission that Brunell had not run JudgeIt on the districts of Act 1. Even though he was certain that Lichtman's "estimate of 24 percent cannot be true." Then came this exchange:



Q You don't have any idea what the correct [bias] number is, do

you? A I don't. I don't have an estimate to provide.

Q ...So you don't have an opinion whether or not that curve crosses the 50/50 mark or is way to the right of the 50/50 mark, do you?

A I don't.

Q In fact, you studiously avoided, through two trials, coming to any opinion on that subject, have you not?...

A No. That's not true.

Q Did you ever suggest to counsel that you might want to do an analysis to find out the answer to that question?

A No.<sup>23</sup>

Turning to Brunell's assertion that "Pennsylvania cannot be a 50/50 state." Smith suggested that Brunell ignored elections "that went the other way"—such as the last three presidential contests. Brunell said there was a "disjuncture" between voting for state-level and national level candidates in Pennsylvania. When Smith suggested that the aggregate statewide vote for Democratic congressional candidates exceeded that for Republican candidates Brunell conceded that he had not looked at that. Smith asked whether Brunell had any opinion about whether packing and fracturing had been employed in crafting Act 1. Brunell answered, "I didn't look at that."<sup>24</sup> Smith asked whether, by looking at Lichtman's results, one could draw the conclusion that Democrats had been concentrated in five districts leaving Republican majorities in the remaining 14. Brunell replied that he "didn't look at that...based on the majoritarian principle alone the plan treats both parties equally."<sup>25</sup> Smith asked if that was the same as saying there was symmetry? Brunell replied "Not necessarily."

Smith produced Plaintiffs' Exhibit 22, a summary of nine of the 19 statewide races Lichtman had used in his analysis. Six of those elections Republicans had won with 51 percent of the vote, carrying 13 or 14 of the districts of Act 1. Democrats won the remaining three with 52-56 percent of the vote, but carried only 10 or 11 of the Act 1 districts. Brunell

stuck with his claim that the asymmetry Lichtman claimed is not there; to find out what it really is one should use JudgeIt. Brunell had faulted Lichtman for employing statewide elections, rather than past congressional elections, to measure the partisan character of the districts in Act 1. But now Smith confronted Brunell with the fact that in earlier litigation in Texas, Brunell had, himself, employed statewide rather than congressional elections:

Q You told the court in Texas that the reason you were using statewide elections, as opposed to congressional elections, was that congressional election results have complications with incumbency and variance with cross races in terms of campaign finance, candidate quality and a host of other variances. Did you not tell them that?

A I did tell them that.<sup>26</sup>

The cross examination ended with Smith asking whether Brunell had any criticism of Lichtman's analysis respecting the treatment of incumbents. Brunell replied that he did not.

*Hallowell Examination.* The defendants' second and final witness was Hank Hallowell, a political consultant with a resume very similar to Ceisler's except that his clients were Republicans. Like Ceisler, he was asked to give a practical politician's assessment of which party's candidate was likely to prevail in the electoral contests that would occur in the districts established by Act 1. He was asked if he had heard Ceisler's testimony and whether he agreed with Ceisler's conclusions. He answered that he had heard Ceisler's testimony and that he didn't "entirely" agree with Ceisler's conclusions. Krill then questioned him about specific races. Asked first about Mascara, he opined that if Mascara ran in CD 18 against Sen. Murphy it would be a "tough, close race" with Murphy the winner. Asked whether CD 4 was now a safe Republican seat, he expressed the view that in Pennsylvania there were now only three safe seats: CDs 1, 2, and 14—the inner-city districts of Philadelphia and Pittsburgh. If the incumbent retired in any other of the state's districts it would be up for grabs. He predicted Hoeffel would win the new CD 13; that suburban growth in southeast Pennsylvania

made it probable a new, open district like CD 6 would naturally occur. He thought CD 6 would be a toss-up in November. He thought Rep. Holden was a very strong candidate and that the Holden-Gekas match-up in CD 17 would be a toss-up. He thought the Democrats were foolish not to make a major effort in CD 18 and that they were “giving CD 18 away.” All in all, he thought the election looked like 11-6-2 when it might have been 10-6-3 had Democrats not thrown in the towel in CD. His assessment differed from Ceisler’s with respect to just three districts: 6, 13, and 17. Ceisler thought 6 and 17 were probable Republican wins, with 13 uncertain. Hallowell thought 6 and 17 were toss-ups with 13 a probable Democrat win. When the votes were counted Hallowell turned out to be right in two cases: CDs 6 and 17 were toss-ups. Ceisler turned out to be right in one case: CD 13 was a toss-up. The winner’s share of the major-party vote in all three cases fell within the range of 51.17-51.84 percent.

*The Panel’s One Person-One Vote Decision.* On April 8, the district Court published its opinion and order disposing of the plaintiffs’ final remaining claim: excessive deviation of district populations from the constitutional requirement of absolute equality.<sup>27</sup> The Court found the 19-person spread between the least populous and most populous districts was not unavoidable and that, therefore, the burden shifted to the State to justify its deviations. The State’s proffered justification—of avoiding additional precinct splits beyond the six it already had—was rejected, in part, because the Plaintiffs’ Alternative Plan 4 showed it was possible to craft a plan of zero population deviation that split no precincts. The Court gave the State three weeks to come up with a plan that would remedy the deficiency. This it did by passage of Act 34 on April 18. Because the filing deadline for the primary election was now past, the Court granted the State’s request to employ the districts of Act 1 for the 2002 election only. Act 34 districts would apply for the remainder of the decade.

## Notes

- <sup>1</sup> *Republican Party of Virginia v. Wilder* 774 F.Supp. 400 (W.D.Va. 1991).
- <sup>2</sup> *Ibid.*, pg. 404 Note 7.
- <sup>3</sup> *Gentile v. State Bar of Nevada* 501 U.S. 1278 (1991).
- <sup>4</sup> *Pope v. Blue* 809 F.Supp. 392 (W.D.N.C. 1992).
- <sup>5</sup> *Ibid.*, pg. 396.
- <sup>6</sup> *Daubert v. Merrell Dow* 113 S.Ct. 30 (1992).
- <sup>7</sup> *Shaw v. Reno* 509 U.S. 630 (1993).
- <sup>8</sup> For a clear and well-illustrated account of the 1990s North Carolina congressional districting mess see Monmonier, pp. 35-48.
- <sup>9</sup> Hirsch, Sam, "The United States House of Unrepresentatives: What Went Wrong in the Latest Round of Congressional Redistricting", *Election Law Journal*, Vol. 2, No. 2, (2003) pg. 201.
- <sup>10</sup> Jenner & Block 601 13th St., NW Washington, D.C.
- <sup>11</sup> Hirsch, *op. cit.* Note 9, pg. 204.
- <sup>12</sup> *Ibid.*, pg. 207.
- <sup>13</sup> *Davis v. Bandemer* 478 U.S. at 126 Note 9 (plurality opinion).
- <sup>14</sup> Hirsch, *op. cit.* Note 9, pg. 209.
- <sup>15</sup> 188 F.Supp.2d at 535.
- <sup>16</sup> Niemi, Richard G., et al. "Measuring Compactness and the Role of a Compactness Standard in a Test for Partisan and Racial Gerrymandering" *Journal of Politics*, 52 (1990): 1176-1177.
- <sup>17</sup> *Vieth v. Jubelirer* Trial transcript: Vol 3 pg. 126 (JA pg. 60).
- <sup>18</sup> *Ibid.*, Vol. 3 pg. 188 (JA pg. 111).
- <sup>19</sup> *Ibid.*, Vol. 3 pg. 250 (JA pg. 161).
- <sup>20</sup> *Ibid.*, Vol. 3 pg. 268 (JA pg. 176).
- <sup>21</sup> *Ibid.*, Vol. 4 pg. 20 (JA pg. 198).
- <sup>22</sup> *Ibid.*, Vol. 4 pg. 24 (JA pg. 200-201).
- <sup>23</sup> *Ibid.*, Vol. 4 pg. 32 (JA pg. 208).
- <sup>24</sup> *Ibid.*, Vol. 4 pg. 37 (JA pg. 212).
- <sup>25</sup> *Ibid.*, Vol. 4 pg. 38 (JA pg. 213).
- <sup>26</sup> *Ibid.*, Vol. 4 pg. 45-46 (JA pg. 219).
- <sup>27</sup> 195 F.Supp.2d 672 (M.D.Pa. 2002).

## Chapter 29

### Vieth Analysis and Outcome

The *Vieth* plaintiffs promptly appealed the Panel's February 22 dismissal of the partisan gerrymandering allegations in their complaint. Before we take up that appeal we should first compare Act 1 to the Horn and Holderly plans, and to the Democrats' alternative plans, as to their likely political impact. We are able to aggregate the votes of only five of the 19 statewide races covering the previous decade—the five statewide races of 2000—among the districts of these plans, so we cannot replicate Lichtman's methodology. But we can use these races to perform the test of Backstrom/Robins/Eller. We can compute a political index from the available data, and with it can apply Niemi's swing ratio analysis and determine Grofman's prima facie indicators. Finally, with five statewide races aggregated among the districts of these plans, we ought to have a sufficient number of “explanatory variables” to use Gelman and King's JudgeIt program. Let us, therefore, proceed to construct a Democratic Index applicable to Pennsylvania congressional districting in 2001.

#### *Democratic Index*

As was done in Chapter 9 for Indiana and in Chapter 17 for California, we derived a Democratic Index by following the procedural rules recounted in these chapters. We used previous election results rather than party registration and used a statewide contest rather than aggregations of district-wide contests. We employed the most recent elections possible—those of 2000—and used only the vote for major party candidates. We faced the usual problem in applying Rule No. 5 because there is no election that reflects only partisan preferences and is free of idiosyncratic factors. We, therefore, fell back on the option of correlating various statewide races, precinct-by-precinct, with open-district congressional races in the same election year and

chose the race that had the smallest standard error and/or highest coefficient of determination.

Table 29.1 lists the five statewide races of 2000 with the parameters resulting when each of these races was regressed on the vote for Democratic congressional candidate in open district precincts. In the 2000 congressional election there were two open districts in Pennsylvania: CD 4 with 445 precincts in Allegheny, Beaver, Butler, Lawrence and Westmoreland counties; and CD 19 with 284 precincts in Adams, Cumberland and York counties.

We observe that the Attorney General's race gave both the highest coefficient of determination (0.921) and the lowest standard error (4.21 percent), although all five statewide races correlated well. We will, therefore, use this race as the "base race" in our Backstrom/Robins/Eller analysis and as the index election for the Niemi and Grofman tests. As we did in Indiana and California, we compute the Democratic Index for an individual district by starting with the equation obtained from our regression analysis:

$$C = 1.6469 + 0.9115 AG \quad [29.1]$$

This equation says the mean district vote for Democratic congressional candidates ought to be about 91 percent of the mean district vote for the Democratic candidate for Attorney General. In 2000 the Democratic attorney general candidate's vote was 44.72 percent, which would make the mean Democratic congressional vote 42.41 percent—if no incumbents were running. However, we want to know what the Democratic vote in each individual district would be if the mean district vote for congressional candidates were 50 percent instead of 42.41 percent. Therefore, in Equation 28.1 we set "C" equal to 50 and solve for "AG" and find that under such circumstances the AG candidate's vote would have to be 53.05 percent. Comparing 53.05 percent to 44.72 percent tells us that we need to add  $53.05 - 44.72 = 8.33$  percent to the Democratic attorney general candidate's vote in each district before plugging that vote into our regression equation to determine what the Democratic congressional candidate's vote in that district would be if it were an open district race. Let's run the Backstrom/Robins/Eller test now, and pick up on our Democratic Index computations when we determine Niemi's swing-ratio.

Table 29.1

Pennsylvania: Precinct-by-Precinct Correlations of Open District  
Congressional Races with Statewide Races in 2000

<u>Bivariate Regression</u>	<u>Democratic Percentage</u>		<u>Number of Precincts</u>	<u>Regression Parameters</u>	
	<u>of Major- Party Vote</u>	<u>of Total Vote</u>		<u>Coefficient of Determination</u>	<u>Standard Error, %</u>
U.S. President (Gore)	52.15	50.60	729	0.8980	4.777
U.S. Senator (Klink)	46.47	45.51	729	0.9105	4.476
Attorney General (Eisenhower)	44.38	43.78	729	0.9209	4.209
Auditor General (Casey)	58.73	57.66	729	0.8726	5.336
State Treasurer (Knoll)	48.94	47.98	729	0.8691	5.413
<u>Multiple Regression</u>					
All Five Statewide Offices	50.13	49.11	729	0.9266	4.064

*Backstrom/Robins/Eller*

Although we have concluded that we should use the 2000 vote for attorney general as the base race in our B/R/E analysis, it would still be interesting to see what results we would obtain had we employed one of the other four statewide races in 2000 as our base race, instead. Table 29.2 shows the result. Note that in two races—President and Auditor General—the Democrat was the statewide winner and we subtract the correction factor from the Democratic vote in each district to determine the partisan character of the district. In the other three races—U.S. Senator, Attorney General, and Treasurer—the Republican was the statewide winner and we subtract the correction factor from the Republican vote in each district to determine its partisan character. All five alternatives yield the conclusion that Act 1 is a Republican gerrymander. The biggest gerrymander is indicated by the U.S. Senator and Auditor General's races, which show a 13-6 Republican advantage. The next biggest Republican gerrymander is indicated by the Presidential race, which shows a 12-7 Republican advantage. The least severe gerrymander is indicated by the Attorney General and Auditor General's races, which show an 11-8 Republican advantage. The Vieth plaintiffs might argue that our criterion for selecting the base race was arbitrary and that the presidential or auditor's race should be employed as the base race, instead. We will just show the

analysis and let others make such arguments, noting only that even with an 11-8 split the Democrats are at a 1.5 seat disadvantage.

The other thing we need to do is apply the Attorney General base race to the other six plans to see how they compare as to partisan character. Table 29.3 shows the result. We note first, that the plan for the previous decade, a supposedly impartially-drawn plan promulgated by the Pennsylvania Supreme Court, is judged by B/R/E to be a Republican gerrymander by awarding Republicans a 12-9 advantage when the 2000 vote for Attorney General is aggregated among the districts in the plan and “normalized” at 50 percent. Of the remaining plans, all having 19 districts and pertaining to the decade beginning with 2001, four—Alternative 2, Alternative 4, Horn and

Table 29.2

Pennsylvania Congressional: 2001 "Act 1" (Republican) Plan  
Backstrom/Robins/Eller Analysis Using Different Statewide Races to Derive Base Percentage

CD	2000 U.S. President (Democrat)		2000 U.S. Senator (Republican)		2000 Attorney General (Republican)		2000 Auditor General (Democrat)		2000 Treasurer (Republican)	
	Demo. %	- 2.15	Repub. %	- 3.53	Repub. %	- 5.62	Demo. %	- 8.73	Repub. %	- 1.06
1	85.17	83.02	18.98	15.45	16.89	11.27	87.58	78.85	17.27	16.21
2	88.30	86.15	15.28	11.75	13.77	8.15	89.84	81.11	15.02	13.96
3	47.73	45.58	58.11	54.58	61.83	56.21	58.60	49.87	50.29	49.23
4	46.93	44.78	53.94	50.41	60.20	54.58	57.13	48.40	53.05	51.99
5	39.30	37.15	65.91	62.38	66.24	60.62	48.70	39.97	59.47	58.41
6	50.30	48.15	59.03	55.50	57.87	52.25	55.18	46.45	56.57	55.51
7	51.62	49.47	59.40	55.87	58.46	52.84	53.69	44.96	56.85	55.79
8	52.66	50.51	57.94	54.41	54.92	49.30	55.43	46.70	54.17	53.11
9	34.92	32.77	67.61	64.08	70.48	64.86	45.30	36.57	63.67	62.61
10	41.83	39.68	65.10	61.57	67.34	61.72	50.49	41.76	60.29	59.23
11	55.64	53.49	51.54	48.01	53.83	48.21	66.38	57.65	45.53	44.47
12	55.55	53.40	45.30	41.77	50.00	44.38	66.90	58.17	41.88	40.82
13	57.01	54.86	53.47	49.94	51.90	46.28	60.37	52.14	50.19	49.13
14	71.26	69.11	31.67	28.14	38.69	33.07	76.63	67.90	35.30	34.24
15	50.57	48.42	68.13	64.60	55.42	49.80	57.96	49.23	53.43	52.37
16	36.36	34.21	68.73	65.20	70.71	65.09	36.17	27.44	65.69	64.63
17	43.05	40.90	61.92	58.39	66.32	60.70	51.33	42.60	63.46	62.40
18	47.49	45.34	54.71	51.18	63.80	58.18	57.07	48.34	54.82	53.76
19	36.94	34.79	66.10	62.57	71.74	66.12	45.67	36.94	67.84	66.78
	-	7 D 12 R	-	6 D 13 R	-	8 D 11 R	-	6 D 13 R	-	7 D 12 R
Adjustment based upon Mean District Vote	-2.24		-3.84		-5.28		-9.00		-0.78	



Holderly—give Republicans an 11-8 advantage. So the Horn and Holderly plans, both drawn with meticulous impartiality, turn out to be as “gerrymandered” in their effects as the Republican plan under judicial challenge. The remaining plan—Alternative 3—turns out to be an even bigger Republican gerrymander, awarding that party a 13-6 seat advantage.

### *Niemi's Swing-Ratio*

Using the Democratic Index calculated from Equation 29.1 and the results of the 2002 congressional election in Pennsylvania, we constructed two seats-votes curves for the plan of Act 1. As we learned in Chapter 12's discussion of these curves in Indiana and in Chapter 20's discussion of these curves in California, the big contrast is not between the curves for different plans for the same election but between curves for the same plan computed from the results of an actual election as contrasted to being constructed from the Democratic indices of the plan's districts under an hypothetical even division of the statewide vote. In Indiana, curves computed by the former methodology had swing-ratios (*i.e.*, 1.60, 1.68, 2.00) about half the value of those computed by the latter methodology (*i.e.*, 3.68). In California, curves computed by the former methodology had swing-ratios (*i.e.*, 0.38, 0.80, 1.15) about one-fourth to one-tenth the value of those computed by the latter methodology (*i.e.*, 4.03, 4.62).

Figure 29.1 shows the curve for the election of 2002 following the uniform percentage swing methodology employed by Niemi. Then, for each of these curves, the swing ratio is computed both for a 10 percent interval centered at 50 percent of the statewide vote and for a 10 percent interval centered at 45.20 percent of the mean district vote—the level of support received by the Democrats in 2002. We get different values of the swing-ratio depending both upon the “votes” interval chosen and upon whether the curve is based upon the Democratic indices of the districts or upon the 2002 election outcome.

Table 29.3

Backstrom/Robins/Eller Analysis\*:  
Alternative Pennsylvania Congressional Districting Plans: Summary

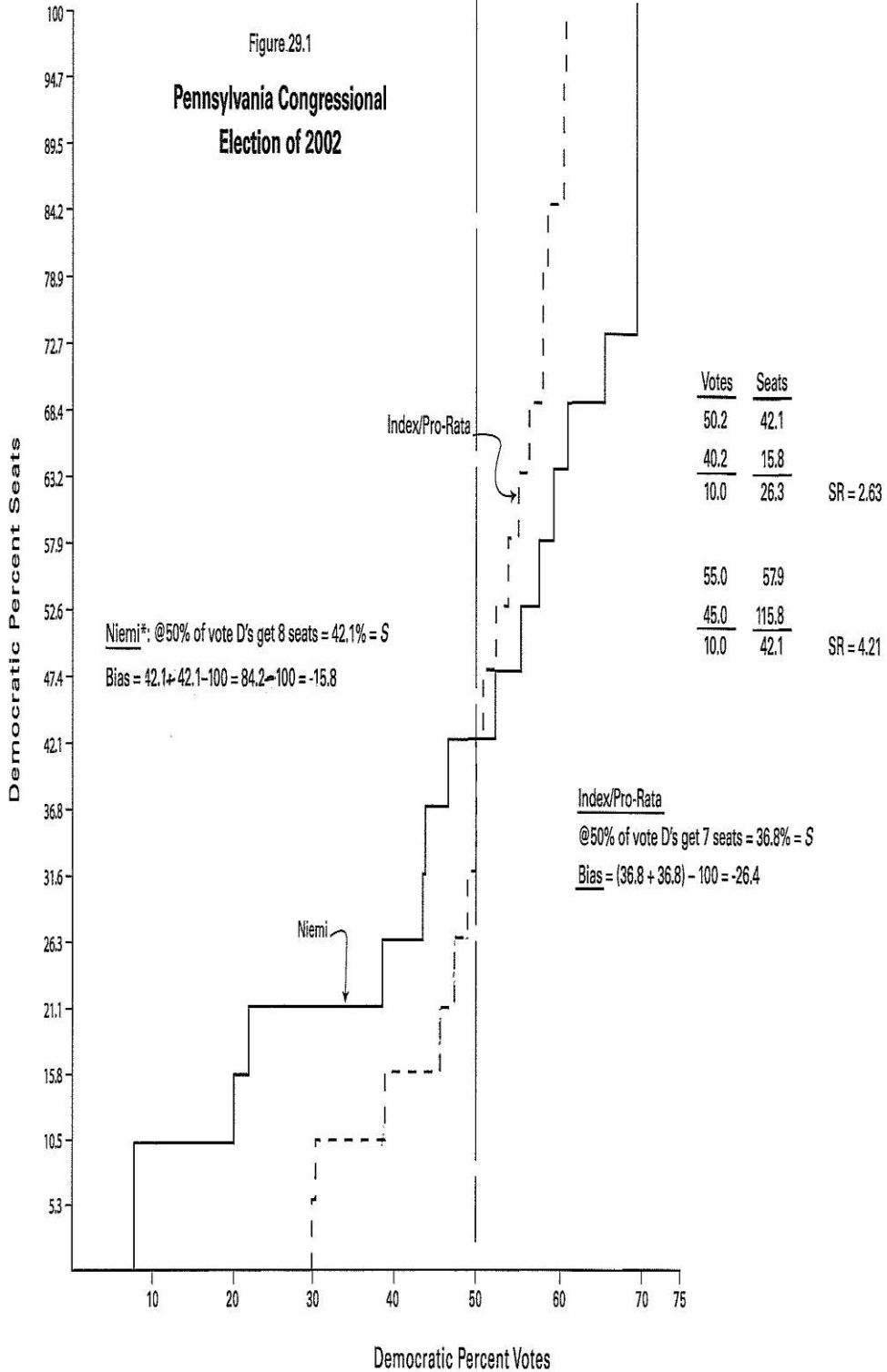
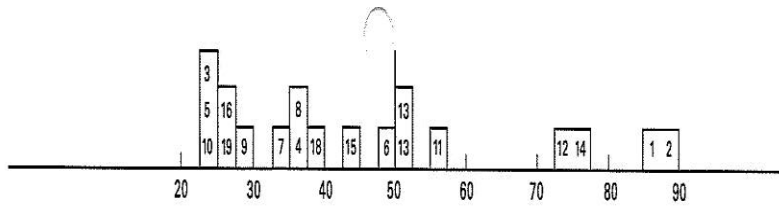
(1) Plan	(2) Republican Seats	(3) Democratic Seats	(4) Partisan Split by Democratic Index
1992 Pennsylvania Supreme Court (21 districts)	12	9	14 R - 7 D
2002 Act 1 (Republican)	11	8	12 R - 7 D
2002 Plaintiffs' Alternative Plan 2	11	8	11 R - 8 D
2002 Plaintiffs' Alternative Plan 3	13	6	13 R - 6 D
2002 Plaintiffs' Alternative Plan 4	11	8	11 R - 8 D
2003 Horn Plan	11	8	11 R - 8 D
2003 Holderly Plan	11	8	12 R - 7 D

\*2000 State Attorney General's race used as the "base race."

Table 29.4

Grofman's *Prima Facie* Indicator No. 1: Pennsylvania Congressional: "Packing" of Districts Under Different Plans as Measured by Democratic Index

1992 Court-Drawn	2002 Act 1/Act 34	2002 Plaintiffs' Alt 2	2002 Plaintiffs' Alt 3	2002 Plaintiffs' Alt 4	2003 Holderly	2003 Horn
<u>Democrats (3)</u>	<u>Democrats (3)</u>	<u>Democrats (3)</u>	<u>Democrats (4)</u>	<u>Democrats (3)</u>	<u>Democrats (4)</u>	<u>Democrats (3)</u>
CD 2 88.46	CD 2 85.46	CD 2 87.87	CD 2 87.32	CD 2 88.00	CD 1 89.42	CD 1 89.12
CD 1 86.13	CD 1 85.20	CD 1 84.60	CD 1 81.94	CD 1 83.96		
CD 3 64.74	CD 14 65.11	CD 18 60.46	CD 18 63.62	CD 18 64.14	CD 2 68.96	CD 2 69.94
			CD 3 61.25		CD 13 63.07	CD 13 61.51
					CD 14 61.23	
<u>Republicans (5)</u>	<u>Republicans (5)</u>	<u>Republicans (4)</u>	<u>Republicans (5)</u>	<u>Republicans (4)</u>	<u>Republicans (5)</u>	<u>Republicans (4)</u>
CD 5 39.98	CD 17 39.97	CD 17 37.17	CD 5 39.90	CD 17 36.88	CD 5 39.81	CD 9 39.13
CD 16 37.96	CD 10 39.58	CD 10 36.14	CD 16 35.98	CD 10 36.54	CD 16 39.32	CD 5 38.38
CD 17 34.93	CD 9 36.12	CD 19 34.47	CD 9 35.66	CD 19 34.61	CD 9 38.62	CD 19 35.38
CD 19 34.69	CD 16 36.07	CD 16 34.46	CD 17 35.49	CD 16 34.34	CD 17 36.37	CD 16 33.04
CD 9 33.56	CD 19 35.02		CD 19 35.01		CD 19 35.90	



As we recall from our studies in Indiana and California, swing ratios derived from actual election results are invariably lower than those derived from the inherent partisan character of the districts (*i.e.*, from their Democratic indices), and these observations receive further corroboration here: the swing ratios for pro-rata swing based on Democratic Index (2.63 and 4.21) are higher than those based upon the election of 2002 (1.06 and 1.58). No consistent pattern emerges based upon the center point of the “votes” interval. If a swing-ratio of unity is the threshold separating a gerrymander from an acceptable plan, then the plan of Act 1 passes muster regardless of which assumptions we make.

We are a little more interested in the estimates of partisan bias derived from these curves than we have been in Indiana and California because the proper way to measure partisan bias was a major issue in the evidentiary hearing we just reported on. Lichtman employed his own methodology in arriving at a pro-Republican bias estimate of 24 percent. Brunell strenuously disputed this estimate but declined to offer his own, saying only that JudgeIt would give the definitive answer—and he had not run JudgeIt on this plan. When we examine Table 29.4 and Figure 29.1, we see that the 2002 election curve gives a pro-Republican bias of 15.8 percent and the Democratic Index/Pro-Rata swing curve gives a pro-Republican bias of 26.4 percent. The latter figure is very close to Lichtman’s 24 percent value. Since neither Brunell nor Lichtman consulted the Black Box, that task is left to us.

### *Grofman’s Prima Facie Indicators*

The *Vieth* plaintiffs’ case did not sink or swim on the strength of Lichtman’s seats-votes analysis. We should recall that was one of three analyses he performed. The second of those analyses had to do with the treatment of each party’s incumbents<sup>1</sup> and it corresponds roughly to a partial application of Grofman’s prima facie indicators. Let’s go through those indicators using the data compiled by Priest and Lichtman plus some data generated by our own efforts, and see what we come up with.

Table 29.4  
Grofman's *Prima Facie* Indicator No. 1: Pennsylvania Congressional: "Packing" of Districts Under Different Plans as Measured by Democratic Index

1992 Court-Drawn	2002 Act 1/Act 34	2002 Plaintiffs' Alt 2	2002 Plaintiffs' Alt 3	2002 Plaintiffs' Alt 4	2003 Holderly	2003 Horn
<b>Democrats (3)</b>	<b>Democrats (3)</b>	<b>Democrats (3)</b>	<b>Democrats (4)</b>	<b>Democrats (3)</b>	<b>Democrats (4)</b>	<b>Democrats (3)</b>
CD 2 88.46	CD 2 85.46	CD 2 87.87	CD 2 87.32	CD 2 88.00	CD 1 89.42	CD 1 89.12
CD 1 86.13	CD 1 85.20	CD 1 84.60	CD 1 81.94	CD 1 83.96		
CD 3 64.74	CD 14 65.11	CD 18 60.46	CD 18 63.62	CD 18 64.14	CD 2 68.96	CD 2 69.94
			CD 3 61.25		CD 13 63.07	CD 13 61.51
					CD 14 61.23	
<b>Republicans (5)</b>	<b>Republicans (5)</b>	<b>Republicans (4)</b>	<b>Republicans (5)</b>	<b>Republicans (4)</b>	<b>Republicans (5)</b>	<b>Republicans (4)</b>
CD 5 39.98	CD 17 39.97	CD 17 37.17	CD 5 39.90	CD 17 36.88	CD 5 39.81	CD 9 39.13
CD 16 37.96	CD 10 39.58	CD 10 36.14	CD 16 35.98	CD 10 36.54	CD 16 39.32	CD 5 38.98
CD 17 34.93	CD 9 36.12	CD 19 34.47	CD 9 35.66	CD 19 34.61	CD 9 38.62	CD 19 35.38
CD 19 34.69	CD 16 36.07	CD 16 34.46	CD 17 35.49	CD 16 34.34	CD 17 36.37	CD 16 33.04
CD 9 33.56	CD 19 35.02		CD 19 35.01		CD 19 35.90	

*Indicator No. 1: Packing.* Table 29.4 shows what results when we look at each plan under the assumption that any district with a D.I. over 60 represents a packing of Democrats and any district with a D.I. less than 40 represents a packing of Republicans. What strikes us is how similar the plans are to each other when compared in this manner. If we simply compare the total number of “packed” Democratic districts to “packed” Republican districts we see the number of packed Republican districts exceeds the number of packed Democratic districts by two in the case of the 1992 plan and Act 1; and by one in the case of the Democrats’ Horn and Holderly plans. But we also note that in each plan CDs 1 and 2 of the Democratic plans are packed much more heavily than any of the Republican districts. We realize that if we redefined “packing” as present only when the district’s D.I. exceeds 70, then there would be no packing of Republicans in any of the plans, and packing of Democrats would occur in just two districts in each plan.

Finally, we observe that in the impartially-drawn Horn and Holderly plans one of the Philadelphia districts is packed about 20 points heavier than the other, whereas with the other plans the two Philadelphia districts are much closer together. It is difficult to find any significant difference between these plans as to degree of packing without making even more arbitrary judgments than we have already.

*Indicator No. 2. Fragmenting.* We have defined fragmenting as occurring only when a “fairly compact concentration” of the “out-party’s supporters” is divided between two or more districts—and not whenever a plan fails to string together isolated pockets of those supporters to

form a majority a district. As in California, using this definition leads us to find no instances of fragmenting in any of the plans under scrutiny. The only instance where it comes close is in the Horn and Holderly plans where a concentration of voters in the Scranton/Wilkes-Barre area is divided between CDs 10 and 11 to yield two CDs with Democratic indices between 46 and 47. Act 1 achieves a Democratic majority district in the region by splitting Lackawanna County to put Scranton and Wilkes-Barre together. But this enables critics to charge that packing is taking place.

*Indicator No. 3 Pairing.* Table 29.5 summarizes the pairing of incumbents in the various plans. Because of the two-seat reduction in the state's plans each feature five pairings: three pairings of Democrats, one pairing of Republicans, and one bipartisan congressional delegation; there will have to be a minimum of two pairings in any post-2000 plan. The Democrats' Alternative plans 2, 3 and 4 each have just that number. Further, the pairings are equally divided between the major parties with each party suffering one. In Act 1, however, we find three pairings, all of them harmful to Democrats: Democrat-Democrat pairings in Pittsburgh and Philadelphia; and a bipartisan pairing in CD 17 where the D.I. indicates a strong Republican advantage. The Horn and Holderly pairing where the Index strongly favors the Republican. Although the pairings work both ways in these plans, the Republicans have a 4-to-one advantage. Before we condemn these plans as unintentional partisan gerrymanders we should look for whatever open district advantage they confer.

*Indicator No. 8. Open-District Advantage.* Table 29.7 summarizes the open-district situation in each of the plans created by the pairings of Table 29.6. As expected, the Democrats' Alternative plans 2, 3 and 4 have no open districts. Also, as expected, one open district (CD 6) is indicating a critically marginal Republican classification. This is at odds with Lichtman's assessment of "44.5 percent Democratic." On the other hand, it is a near-perfect match with the

Table 29, 5

Grofman's *Prima Facie* Indicator No. 3  
 Pennsylvania Congressional: "Pairing" of Incumbents Under Different Plans

1992 State of Pennsylvania	2002 Act 1 (Republican)	2002 Alternative 2 (Democrat)	2002 Alternative 3 (Democrat)	2002 Alternative 4 (Democrat)	2003 Horn	2003 Holderly
Not Applicable	<u>Democrats (2)</u> Borski D Hoeffel D  Coyne D Doyle D  <u>Republicans</u> None  <u>Bipartisan (1)</u> Holden D Gekas R* (41.7)	<u>Democrats (1)</u> Coyne D Doyle D  <u>Republicans (1)</u> Shuster R Platts R  <u>Bipartisan</u>  None	<u>Democrats (1)</u> Coyne D Doyle D  <u>Republicans (1)</u> Sherwood R Toomey R  <u>Bipartisan</u>  None	<u>Democrats (1)</u> Coyne D Doyle D  <u>Republicans (1)</u> Shuster R Platts R  <u>Bipartisan</u>  None	<u>Democrats (3)</u> Brady D Fattah D Holden D Kanjorski D Coyne D Doyle D  <u>Republicans (1)</u> English R Peterson R  <u>Bipartisan (1)</u> Murtha D Shuster R (39.1)	<u>Democrats (3)</u> Brady D Fattah D Holden D Kanjorski D Coyne D Doyle D  <u>Republicans (1)</u> English R Peterson R  <u>Bipartisan (1)</u> Murtha D Shuster R* (38.6)

\*Party having advantage in a bipartisan pairing of incumbents. Number in parentheses is Democratic Index of district.

created by the Republicans' Act 1. We computed a D.I. of 49.15 for this district, 2000 general election outcome in that district of 48.63 percent for the Democratic candidate. If we follow the rule we did in our Indiana and California investigations, this is a critically marginal district in which neither party enjoys a significant advantage. The Horn and Holderly plans each contain three open districts of which two are safely Republican. The third open district in the Horn plan, CD 4, is critically marginal Republican, implying no significant advantage for either party. The third open district in the Holderly plan, CD 12, is marginally Republican, implying a significant advantage for that party. Looking at the pairings and open-district advantage together, we are forced to conclude that the partisan bias of the Horn and Holderly plans is, arguably, at least as great as that found in Act 1. Democrats are at a 4-to-1 disadvantage in the pairings and this is not compensated by any advantage in the open districts. In fact, in five of the six open districts in the Horn and Holderly plans Republicans enjoy a significant advantage.

*Indicators 5/7: Reducing/Enhancing Marginal Incumbents' Districts.* As in the Indiana and California studies, our first task is to define which incumbents are "marginal." The criterion was a D.I. between 45 and 55. Looking at the districts in the 1992 plan, we find five Democratic and four Republican incumbents whose districts meet that definition. They are listed in Table

29.8, which, like Table 21.4 in the California section, shows to what extent each incumbent is in a friendlier or a less friendly situation under each plan. Act 1 and Alternative 3 are the only plans of the six analyzed here in which significant reduction is visited exclusively on Democrats. In the Horn and Holderly plans, it is visited upon incumbents of both parties. In Alternative plans 2 and 4 it is visited on incumbents of neither party.

Table 29.6  
Grofman's *Prima Facie* Indicator No. 8:  
Pennsylvania Congressional: Open-District Advantage Under Different Plans

1992 State of Pennsylvania	2002 Act 1 (Republican)	2002 Alternative 2 (Democrat)	2002 Alternative 3 (Democrat)	2002 Alternative 4 (Democrat)	2003 Horn	2003 Holderly
Not Applicable	(1 District) CD 6: 49.2	No Open Districts	No Open Districts	No Open Districts	(3 Districts) CD 4: 48.0 CD 5: 38.4 R* CD 19 35.4 R*	(3 Districts) CD 5: 39.8 R* CD 12: 46.8 R* CD 16: 39.3 R*

\*Party having advantage in an open district. Preceding number is the Democratic Index (D.I.) of the district, rounded to one decimal

Table 29.7  
Grofman's *Prima Facie* Indicators 5 & 7: Reducing/Enhancing Marginal Incumbents' Districts  
Pennsylvania Congressional: Change in Democratic Index of Marginal Incumbents' Districts Under Different Plans

Incumbent	1992 Court-Drawn	Act 1/Act 34	Alt. 2	Alt. 3	Alt. 4	Horn	Holderly
<b>DEMOCRATS (5)</b>							
Hoeffel	51.01	53.11 + 2.10	50.69 - 0.32	49.76 - 1.25	50.17 - 0.84	61.51 + 10.50	63.07 + 12.06
Doyle	50.16	65.11 + 14.95	60.46 + 10.30	63.62 + 13.46	64.14 + 13.98	57.73 + 7.57	61.23 + 11.07
Mascara	49.28	42.21 - 7.07	56.46 + 7.18	52.66 + 3.38	52.05 + 2.77	51.72 + 2.44	50.02 + 0.74
Kanjorski	48.00	51.18 + 3.18	50.78 + 2.78	51.34 + 3.34	50.62 + 2.62	46.62 - 1.38	44.15 - 3.85
Murtha	46.68	54.75 + 8.07	48.96 + 2.28	49.05 + 2.37	47.99 + 1.31	39.13 - 7.55	38.62 - 8.06
Nbr. Receiving > 1% Reduction	-	1	0	1	0	2	2
Nbr. Receiving > 1% Enhancmt	-	4	4	3	4	3	3
Maximum Unfavorable Change in Index	-	- 7.07	- 0.32	- 1.25	- 0.84	- 7.55	- 8.06
<b>REPUBLICANS (4)</b>							
Toomey	50.10	49.90 + 0.20	50.60 - 0.50	46.34 + 3.76	50.59 - 0.49	50.83 - 0.73	50.92 - 0.82
Greenwood	49.37	50.33 - 0.96	42.64 + 6.73	46.34 + 3.03	43.41 + 5.96	50.17 - 0.80	49.65 - 0.28
Hart	47.65	45.50 + 2.15	40.18 + 7.47	41.18 + 6.47	41.09 + 6.56	48.02 - 0.37	45.10 + 2.55
Weldon	46.69	47.40 - 0.71	44.43 + 2.26	46.14 + 0.55	44.26 + 2.43	52.91 - 6.22	52.93 - 6.24
Nbr. Receiving > 1% Reduction	-	0	0	0	0	1	1
Nbr. Receiving > 1% Enhancmt	-	1	3	3	3	0	1
Maximum Unfavorable Change in Index	-	- 0.96	- 0.50	0	- 0.49	- 6.22	- 6.24



*Indicators 4/6: Altering/Preserving Incumbents' Districts.* In making the plaintiffs' case that defendants had exercised partisan bias in their treatment of incumbents in crafting Act 1/Act 34, Lichtman produced a final table in his Exhibit 12 that listed each of the 21 incumbents of 2001 with their "Percent Constituents Retained." This analysis is exactly what we did in applying Grofman's Indicators 4 and 6 to the plans at issue in the Indiana and California controversies. Lichtman made these computations only for the districts of the plan under challenge and we copied his figures into Column 2 of our Table 29.8. Lichtman computed the mean carryover percentage for all 21 incumbents and found it to be 64 percent. Then he computed the same number separately for each party's incumbents and found that the mean carryover for Democrats was 51 percent, as opposed to 76 percent for Republicans.

We draw from Lichtman's numbers the additional observations that (1) the lowest carryover for any Democrat was 38.4 percent while the lowest carryover for any Republican was 60.4 percent; (2) whereas 6 of the 10 Democrats had less than 50 percent carryover none of the 11 Republicans had less than 50 percent carryover. The Democrats would have made an even stronger case had they made the carryover computations for their three alternative plans and thus given the Court an idea of what the numbers might have looked like if an impartial redistricting had taken place. That job was left for us and we provide the corresponding numbers for the Horn and Holderly plans in Columns (5) and (6) of Table 29.8. Here we see that under the Horn plan the mean carryover for Democrats, while still less than that for Republicans, is smaller by 11 percent rather than by 25 percent; we see that the smallest carryover for any Republican is 7 percent less than the smallest carryover for any Democrat; and we see that each party has two incumbents with less than 50 percent carryover. Under the Holderly plan we see the mean carryover percentages are nearly identical to those of the Horn plan; that the smallest carryover for any Republican is 14 percent less than that for any Democrat; and that two Democrats and one Republican have carryovers less than 50 percent. In other words, in contrast to Act 1, these

Table 29.8

Grofman's *Prima Facie* Indicators 4 & 6: Altering/Preserving Incumbents' Districts  
 Pennsylvania Congressional: Incumbents' Population Carryover Under Different Plans

Incumbent	* Act 1/ Act 34	Alternative # 2	Alternative # 3	Alternative # 4	5 Horn	6 Holderly
<b>DEMOCRATS (10)</b>						
Brady	54.6				52.13	51.46
Fattah	64.4				<del>64.92</del>	67.93
Borski	47.3				<del>93.97</del>	93.66
Holden	39.1				33.62	33.62
Kanjorski	70.1				77.51	64.22
Murtha	49.1				54.89	41.89
Hoeffel	46.9				54.22	62.29
Coyne	60.7				35.32	69.56
Doyle	38.4				73.49	83.87
Mascara	44.1				<del>77.80</del>	71.53
Mean:	51.5				<del>62.27</del>	61.0
Lowest:	38.4				33.6	33.6
Number Having < 50% Carryover	6				2	2
<b>REPUBLICANS (11)</b>						
Hart	68.1				65.92	51.97
Peterson	75.8				<del>29.59</del>	13.03
Weldon	77.5				82.14	82.14
Greenwood	92.5				96.12	95.80
Shuster	65.3				<del>54.54</del>	70.52
Sherwood	60.4				<del>83.85</del>	80.92
Toomey	93.0				94.59	94.59
Pitts	67.4				51.03	54.77
Gekas	60.4				<del>64.60</del>	54.49
Platts	91.7				<del>26.49</del>	56.08
English	87.5				81.98	80.39
Mean:	76.3				72.8	73.6
Lowest:	60.4				26.5	14.05
Number Having < 50% Carryover	0				2	1

\*Column 2 #Research incomplete on these three alternative plans

indicia point in different directions and lack the consistent pattern of adverse discrimination evident in the corresponding indicia for the plan of Act 1.

### *The Legal Arguments*

As noted in the previous chapter, the *Vieth* plaintiffs filed their complaint on January 11, 2002 and on February 22 the district court threw out all of their claims save for the one-person one-vote claim. We would like to trace the legal argument from beginning to end of this litigation, but wading through a dozen briefs and oral argument transcripts uncovered little that is new. The plaintiffs tried to argue that the *Vieth* plan's bias "contrasted dramatically with..." that of *Bandemer* or *Badham*. But such requires use of selective statistics and the other side can always come up with a comparable selection. The appellants tried to argue that cases since *Bandemer* provide new legal ammunition for discriminatory districting suits.

*Brief for Defendants in Support of Their Motion to Dismiss.* Following a brief "procedural History," the Defendants make a "Statement of Facts" in which they emphasize that 42 of the 97 Democrats in the Pennsylvania House voted for this supposedly partisan measure. Secondly, they report the statewide percentages of registered Democrats and registered Republicans as percentages of total registration rather than as percentages of major-party registration. Democrats comprise 48 percent of Pennsylvania voters by the former measure; 53.6 percent by the latter measure.

The Republican Defendants take the offensive by refusing to concede—*Davis v. Bandemer* notwithstanding—that partisan gerrymandering claims are even justiciable. Saying "Time and experience have shown that Justice O'Connor's opposing view is right,"<sup>2</sup> they quote her concurrence in *Davis* asserting "The Equal Protection Clause does not supply judicially manageable standards for resolving purely partisan gerrymandering claims, and no group right to an equal share of political power was ever intended by the Framers of the Fourteenth

Amendment.”<sup>3</sup> The Defendants next challenge the *Vieth* plaintiffs’ standing to bring this action because (1) they are not in a position to represent all Democratic voters in Pennsylvania and (2) they are alleging only group harm, not harm to their individual interests. The Defendants do not concede the *Vieth* plaintiffs have standing to pursue any of the five claims in their complaint. The Defendants disputed the *Vieth* plaintiffs’ one person-one vote claim on grounds that Act 1’s 19-person population spread rounded off to 0.00 percent and was, therefore, functionally equivalent to zero.

But the major part of the Republican Defendants’ brief was devoted to knocking down the *Vieth* plaintiffs’ partisan gerrymandering claim according to the standard erected in *Davis*. That standard had three requisites: (1) an identifiable political group; (2) an intentional discrimination against that group; and (3) an actual discriminatory effect on that group. The Defendants reached back to Justice Stevens’ concurring opinions of 20 years earlier for authority to assert that in order to constitute an “identifiable political group”<sup>4</sup> the individuals concerned must be sufficiently cohesive to “vote in the same way.”<sup>5</sup> When this “identifiable political group” standard is applied to *Vieth* it is seen that registered Democratic voters are not sufficiently cohesive to constitute such a group because of the widespread split-ticket and cross-over voting by “Democrats.” Regarding the standard for discriminatory intent, the Defendants stated that the *Bandemer* plurality “glossed over” this “factor” and that subsequent gerrymandering cases had “given short shrift” to it.<sup>6</sup> When this “discriminatory intent” standard is applied to *Vieth* it is seen that all Democrat plaintiffs have done is make “bald accusations” concerning the shape of certain districts and the motives of republican legislators, while ignoring the fact that without a bipartisan majority including 42 House Democrats, Act 1 would never have passed.

Turning, at last, to the standard for actual discriminatory effects, the Republican Defendants read *Davis* to require “a two-prong showing: (1) of an actual or projected history of disproportionate results; and (2) that ‘the electoral system is arranged in a manner that will

consistently degrade a voter's or a group of voters' influence on the political process as a whole."<sup>7</sup> According to the Defendants, the Plaintiffs' "projected history of disproportionate results" consisted of winning less than one-third of Pennsylvania's congressional seats with half of the statewide vote.<sup>8</sup> To satisfy the second prong of this standard, Plaintiffs must allege that Act 1 "prevents or substantially interferes with the ability of Democrats to raise money or recruit candidates." The brief goes on for two more pages in much the same vein as the District Court's opinion in *Badham v. Eu* citing circumstances which, if true, would add up to shutting the plaintiffs out of the electoral process.

The remainder of the brief rebuts the *Vieth* plaintiffs' claims under the Privileges and Immunities Clause, the freedom of association doctrine under the First Amendment, and Section 1983 of Title 42 of the United States Code. Such claims have been made in previous gerrymandering cases and have gotten nowhere. We shall not use up space discussing them. In the brief's final paragraph the Defendants argue against the Plaintiffs' proposed remedy of having this Court promulgate its own congressional districting plan, saying the Court must first give the state legislature an opportunity to enact a plan that corrects whatever defects the Court may have found in the challenged plan.

*Plaintiffs' Brief in Opposition to Defendants' Motion to Dismiss.* On February 5, the *Vieth* plaintiffs filed their brief in opposition to the Defendants motion to dismiss. The first two pages of the brief were devoted to rebutting the Defendants' assertion that the *Vieth* plaintiffs lacked standing to bring this action. The next two pages rebutted the Defendants' arguments on the one person-one vote claim. Then they waded into the issue of *Bandemer's* standard for unconstitutional partisan gerrymandering. They asserted that "time and experience have not shown [those]...standards to be any less manageable than the standards for resolving racial gerrymandering cases."<sup>9</sup> To the contrary, since *Bandemer* the Court has issued two sets of decisions that have sharpened the distinction between mere consideration of politics in districting

and “gerrymandering that amounts to unconstitutional discrimination.”<sup>10</sup> The first set of decisions began with *U.S. Term Limits*.<sup>11</sup> The second set began with *Shaw v. Reno*.<sup>12</sup>

In *U.S. Term Limits v. Thornton* the Court said the power granted the states under Article 1 Sec. 4 to set the “times, places and manner of holding elections for . . . representatives” was “a grant of authority to issue procedural regulations, and not a source of power to dictate electoral outcomes, to favor or disfavor a class of candidates or to evade important constitutional restraints.”<sup>13</sup> The Plaintiffs argued:

The elections clause was thus drafted as a limited delegation of authority to the states, not as a plenary grant of power, confined to matters such as “notices, registration, supervision of voting, protection of voters, prevention of fraud and corrupt practices, counting of votes, duties of inspectors and canvassers, and making and publication of election returns.”<sup>14</sup>

The Plaintiffs argued further that Article 1 of the Constitution was an even more fundamental limitation on partisan gerrymandering than the Fourteenth Amendment’s Equal Protection Clause because the House of Representatives was intended to represent “the people”—and not the states. Accordingly, the right to choose House members “belongs not to the States, but to the people.”<sup>15</sup> *Westerly v. Sanders* forbade states from valuing one person’s vote in a congressional election more than another’s *U. S. Term Limits* forbade states from excluding *Cook v. Gralike* congressional candidates who have served more than two terms from appearing on state ballots<sup>16</sup> forbade states from noting on the ballot a congressional candidate’s failure to support term limits. Similarly, *Vieth* ought to forbid states from infringing the right of a majority of voters in a state to choose whom they wish to represent them by manipulating district lines.

The High Court’s second set of decisions that sharpen the distinction between permissible and impermissible “gerrymandering” begins with *Shaw v. Reno* and continues through *Miller v. Johnson*.<sup>17</sup> In these cases:

“the Court established principles that are equally applicable to political gerrymandering claims under the Equal Protection Clause. The Court held that a redistricting plan is unconstitutional where it is based predominantly on race to the exclusion of traditional, neutral districting criteria—even though race is otherwise a permissible consideration in redistricting. Similarly, although politics, like race, is a permissible consideration in redistricting, state legislatures are not authorized to jettison neutral districting criteria with the predominant aim of drawing districts that advantage or disadvantage a particular group of voters.”<sup>18</sup>

The Plaintiffs argued that “the principles of *Shaw* apply to political gerrymandering claims,” first, because “when district lines are drawn solely to maximize the number of voters likely to vote for a candidate of a particular party the legislature sends an unmistakable message to the representative of that district that he or she need only respond to the concerns of that party’s voters.”<sup>19</sup> Second, government classifications based upon partisan affiliation or political views are barred by the First and Fourteenth Amendment absent a compelling state interest.

The Plaintiffs sought to tie their case to *Shaw* by phrasing parts of their brief in a manner very similar to key passages in *Shaw*. For example, they described Act 1 as:

“a districting plan so extremely irregular on its face that it can rationally be viewed only as an effort to classify voters on the basis of their political party affiliation, without regard to traditional districting principles.”<sup>20</sup>

Most of the remainder of the Plaintiffs’ brief was devoted to refuting miscellaneous points made in the Defendants’ brief: the significance of 42 House Democrats’ voting for Act 1; whether Pennsylvania Democrats were an “identifiable group;” whether projection of “extremely disproportionate” election results satisfies *Bandemer*’s discriminatory effects requirement; whether the *Vieth* plan, like the plan litigated in *Shaw*, conveys to representatives the message that they are accountable only to the dominant faction in their districts; the level of “partisan skew” in

*Vieth* compared to that in *Bandemer*, and whether a party winning 5 or 6 seats out of a 19-seat delegation is being “shut out of the political process.” The final two pages of the brief contain brief rebuttals to the Defendants’ arguments opposing Plaintiffs’ claims made under the Privileges and Immunities Clause and under the First Amendment’s right to free speech and association.

*Defendants’ Reply Brief in Support of their Motion to Dismiss.* On February 8, three days after the *Vieth* plaintiffs filed their Brief in Opposition to the Motion to Dismiss, the Defendants filed a 13-page Reply Brief. The first one-and-one-half pages continued their argument over the *Vieth* plaintiffs’ standing to bring this action. The next one-and-one-half pages continued their argument against the one person-one vote claim. Then they took up the partisan gerrymandering claim arising under Article 1 Section 4 stating that “Any argument that this provision provides protection against partisan gerrymandering is essentially an argument for proportionality, a requirement that the Supreme Court roundly rejected in the redistricting context.”<sup>21</sup>

The core of the brief, however, dealt with the Plaintiffs’ Equal Protection Claim. The Defendants denied that *Shaw v. Reno* “further clarified the boundary” between constitutional and unconstitutional partisan gerrymandering, instead characterizing it as “the case that initiated the growing tension between claims of racial gerrymandering and partisan gerrymandering.”<sup>22</sup> The standard for showing a prima facie case of partisan gerrymandering is different from that required for showing a prima facie case of racial gerrymandering. To establish the latter, the plaintiff must show that race was the predominant factor motivating the legislature’s actions and it is never permissible for that to be so. On the other hand, “it can be legitimate for politics to be a predominate reason for drawing districts.”<sup>23</sup>

From the foregoing premises, the Defendants reason that a different level of scrutiny applies in partisan than in racial gerrymandering cases once the prima facie case has been met and the burden shifts to the proponent of the plan to show a compelling state interest to justify the use



that the High Court does not believe “that racial and political gerrymanders are subject to precisely the same constitutional scrutiny.” And they quote *Bandemer* to indicate that the Court does not believe political gerrymanders should be subjected to strict scrutiny.

Most of the final section of the Defendants’ Reply Brief demonstrated how, by stating party registration and election results as percentages of the major-party vote, the Plaintiffs were able to report slightly higher percentages for Democrats and thereby buttress their claim that Democrats “constitute at least half of Pennsylvania’s voters.”<sup>24</sup> In addition, the Republican Defendants disputed the *Vieth* Plaintiffs’ assertion that their case “contrast[ed] dramatically with the facts present in *Bandemer*.”<sup>25</sup>

*The Trial Court’s Opinion and Order.* As recounted in the previous chapter, and again earlier in this chapter, the Trial Court on February 22 threw out all of the Democrats’ claims except the one person-one vote claim. Here we report what this court gave as the reasoning behind its actions. First, it declined to throw out the Plaintiffs’ claim pursuant to F.R.C.P. 12(b)(1) which denies consideration on grounds that the Court lacks subject matter jurisdiction to hear the case—*i.e.*, that the matter is non-justiciable. Instead of arguing for dismissal on these grounds, the Republican Defendants had their objection to *Bandemer*’s holding that partisan gerrymandering was justiciable noted on the record in case they sought to raise the issue at a later time. The Court also declined to dismiss the complaint on grounds that the *Vieth* plaintiffs lacked standing.

With respect to Defendants’ motion to dismiss pursuant to F.R.C.P. 12(b)(6) the Court took a different tack. It read the case law to deny the Defendants’ motion to dismiss the one person-one vote Claim 1 of the complaint. Concerning Claim 2, the partisan gerrymandering claim, it followed the *Bandemer* plurality’s analysis as constituting the governing standards to be applied in this case: “intentional discrimination against an identifiable political group, and an actual discriminatory effect on that group.” It would not buy the Defendants’ argument that Democrats in

Pennsylvania had to “vote as a block” to qualify as an “identifiable political group.” Instead they need only “allege that they are Pennsylvania citizens who vote for Democrats.”<sup>26</sup> Concerning discriminatory intent, the Court had no difficulty in viewing the *Vieth* plaintiffs’ assertion that “the Republican majority in the Pennsylvania General Assembly prevented all Democratic input on Act 1 in order to create a Republican super-majority in Pennsylvania’s congressional caucus” sufficient to satisfy their pleading requirement.

But the Democrats’ case faltered when it came up against the “discriminatory effects” requirement. As in *Badham*, the Court viewed this requirement as two-pronged. First, there must be “an actual or projected history of disproportionate election results.” The Court opined that the “Plaintiffs’ allegations may be sufficient to satisfy” such a “projected history of disproportionate election results.” But regarding the second prong, the Court believed that Plaintiffs had not alleged that the electoral system is arranged in a manner that will consistently degrade a “group of voters’ influence” on the political process as a whole. They had failed to allege that “those who are elected will disregard the proportionately underrepresented group.” The Court referred to the same passage in *Badham* we quoted in Chapter 22 in which the Trial Court had said:

There are no allegations that California Republicans have been “shut out” of the political process...nor allegations that anyone has ever interfered with Republican registration, organizing, voting, fund-raising, or campaigning... Particularly conspicuous by its absence is any allegation that Plaintiffs’ interests are being entirely ignored by their congressional representatives.

The Court (1) concluded that the Plaintiffs’ allegation that the Republicans will get a super-majority of the State’s congressional delegation despite their status as a minority party, statewide was “simply an argument for proportional representation,” (2) rejected the proposition that “voters who vote for losing candidates will not be adequately represented,” (3) deemed as

“irrelevant” the Plaintiffs’ “allegation that due to Act 1 the Democratic Party will have greater difficulty in fielding competitive candidates;” It again quoted *Davis*:

The mere fact that a particular apportionment scheme makes it more difficult for a particular group in a particular district to elect representatives of its choice does not render that scheme constitutionally infirm.<sup>27</sup>

(4) Finally, it found that Plaintiffs’ allegations do not indicate that Act 1 “essentially shuts Democratic voters out of the political process.” Shutting Democratic legislators out of the redistricting process does not amount to shutting Democratic voters out of the electoral process.

The remainder of the Court’s opinion disposed of the *Vieth* plaintiffs’ claims under the privileges and immunities clause, the First Amendment, and Title 42 U.S. Code Section 1973. We note that the plaintiffs lost on all of them. Also note that the Court did not address Plaintiffs’ claim under Article 1 Section 2 that “the right to choose congressional representatives belongs not to the states, but to the people”<sup>28</sup>

*The Vieth Plaintiffs’/Appellants’ Jurisdictional Statement.* The *Vieth* Plaintiffs/Appellants appealed the District Court’s dismissal of their partisan gerrymandering challenge to Act 1/Act 34 by petitioning the Supreme Court for a writ of certiorari. They filed their 30-page Jurisdictional Statement on April 25, 2003. The first ten pages laid out the history of the case and signaled what themes they would emphasize in the appellate phase of the litigation.

The first theme was that the lower courts, beginning with *Badham*, had gone beyond *Bandemer* in “requir[ing] plaintiffs to prove some harm in addition to the harm caused by a severely biased redistricting map.”<sup>29</sup> Stated in another way:

The severely biased map enacted by the Commonwealth would become unconstitutional only if it were accompanied by entirely separate and independently unconstitutional limitations on Democrats’ ability to vote, campaign for candidates, and speak out about political issues.<sup>30</sup>

Stated in yet another way, the *Badham* misinterpretation of *Bandemer* requires voters challenging a partisan gerrymander to demonstrate not only severe bias in a districting map but also exclusion from any opportunity to participate in the political process through voting, organizing, and campaigning for office.<sup>31</sup>

A second theme was that the district court examined the *Vieth* appellants' gerrymandering "claims entirely within the framework set forth by the plurality opinion in *Bandemer*, never acknowledging Appellants' separate Article 1 arguments."<sup>32</sup> Those arguments drew upon the High Court's rulings in *U. S. Term Limits* and *Cook v. Gralike* that states may not use their power under Art. 1 § 4 "to dictate electoral outcomes, to advantage one class of candidates over another, or to frustrate the will of the majority of the voters."<sup>33</sup> The appellants used the last six pages of this brief to repeat the same arguments made on pages 7-12 of their Brief in Opposition to Defendants' Motion to Dismiss (including identical citations). We shall not repeat them here.

A third theme was the continuation of a major theme of the trial court phase of the litigation that a huge disparity existed between votes for Congress statewide and the electoral outcomes deliberately created by the map makers. This required the Appellants to assert their case "contrasts dramatically with the facts present in *Bandemer*" and to make selective use of election statistics to support that assertion. For instance, they belittled the partisan disparity in the 1982-84 State Senate elections in Indiana by repeating the falsehood that Democrats won "52 percent of the seats in the [Indiana] Senate" in the 1982 election.<sup>34</sup> Likewise, it was a stretch for them to maintain that "Democrats consistently constitute a majority of Pennsylvania voters in congressional elections." As revealed in Table 8.1, the only way that statement could be true for 2002 would be by considering only the 13 districts contested by both major parties that year.

The Appellants, likewise, felt compelled to contrast the partisan election outcome disparity in their case with that in *Badham*:

where the alleged partisan gerrymander resulted in a difference of 10.1 percent between votes and seats in one election and just 3.2 percent in the next election—results that appeared to be neither grossly disproportionate nor long-lasting. Here, Appellants alleged that Act 34 would produce a consistent gap of nearly 20 percent between votes and seats.<sup>35</sup>

If our Table 17.7 for California is correct, the 1984 *Badham* discrepancy is 10.00 by aggregate statewide vote and 7.82 by mean district vote. The 1986 discrepancy is 7.32 by aggregate statewide vote and 5.40 by mean district vote. There is no way we can come up with 3.2 percent.

Referring to our Table 28.1 for Pennsylvania, we find if we take the highest Democratic congressional vote-share from either 2002 or 2004 by either aggregate statewide or mean district vote we get 49.73 percent. If we contrast that with the percent seats Democrats won in either of those years, we would subtract 36.84 percent for a discrepancy of 12.89 percent. That is no trivial difference, but neither is it “nearly 20 percent.” The only way we can get close to 20 percent is if we take the most pessimistic seats-shares projected by the Appellants—6 out of 19 (31.6 percent) or 5 out of 19 (26.3 percent)—and compare those numbers with 49.73 percent. In that case we get discrepancies of 18.15 percent and 23.41 percent.

It was very important to the Appellants’ case to say that Act 1 /Act 34 went far beyond simple failure to achieve proportional representation in the make-up of the Pennsylvania congressional delegation—that its bias far exceeded that of *Bandemer* and *Badham* and, therefore, consigned “a political party to roughly one-third or less of the congressional seats, even if that party consistently wins a majority of the popular vote statewide.”<sup>36</sup>

*Defendants Motion to affirm.* On May 30, 2003 the Republican Defendants/Appellees filed their Motion to Affirm. The first quarter of the brief was a “Statement of the Case” which contained little information we are not already familiar with except for the outcome of the 2002 Pennsylvania congressional elections, which yielded a 12-7 Republican/Democrat split. As the Democrats had done in their Jurisdictional Statement, the Republicans in their Motion to Affirm interpreted this outcome to support their side of the argument—*i.e.*, put their “spin” on it.

The “Argument” section of the brief was divided into five parts. The first part dealt with the third prong, or “discriminatory effects” prong of the *Bandemer* standard. The Appellees said:

The fact that partisan gerrymandering claims typically rise or fall on the “discriminatory effects” prong of the analysis is by design and derives from the standard set forth by the *Bandemer* plurality itself, and not, as Appellants posit, from some extreme misinterpretation of that standard crafted and followed by the lower courts.<sup>37</sup>

The Appellees said Appellants are proposing a “different standard than every court that has ever applied *Bandemer* and one without grounding in *Bandemer* itself;” that they were attempting to “cobble together a purported majority view;” that the *Vieth* court “did not err in its choice of standard.”<sup>38</sup>

The second part of the “Argument” section addressed the Appellants’ use of *Shaw v. Reno* and *Miller v. Johnson* to attack partisan gerrymandering. In these cases the Court held that using race to the exclusion of traditionally-neutral districting criteria was unconstitutional. The *Vieth* Appellants were asking the Court to “take the next step and recognize that equally irregular districts drawn predominantly on the basis of voters’ political viewpoint are also constitutionally suspect.”<sup>39</sup> The Appellees argued that the district court was “absolutely correct in not relying on *Shaw* or *Miller* to interpret *Bandemer* or to recognize a theory of partisan gerrymandering independent of *Bandemer*” because “the concepts applicable to partisan gerrymandering and racial gerrymandering are not interchangeable.”<sup>40</sup> “It can be legitimate for politics to be a

predominant reason for drawing districts, but it is never legitimate for race to be so.”<sup>41</sup> Partisan and racial gerrymandering also differ in the level of scrutiny applied once plaintiffs have made their prima facie case and the burden shifts to the defendants to justify their action. In cases of racial gerrymandering the state’s justification must be able to withstand strict scrutiny. In cases of partisan gerrymandering only a rational basis need exist to justify the defendants’ action.

In the third part of their “Argument” section the Appellees took up the *Vieth* appellants’ claim under Article 1 § 4 argued in both their Brief in Opposition to Defendants’ Motion to Dismiss (pp. 7 - 12) and in their Jurisdictional Statement (pp. 25 - 29). The Appellees had spent only one paragraph (pg. 5) in responding to this claim in their Reply Brief in Support of Defendants’ Motion to Dismiss and the District Court had ignored it altogether in its opinion and order of February 22, 2002. Now, however, the Appellees responded with vigor. The Appellants had argued that “Article 1 strictly constrains the political faction that happens to control the state legislature at the right moment in the decennial redistricting cycle from dictating the composition of Pennsylvania’s congressional delegation.”<sup>42</sup>

The Appellees’ answer to this argument was to say (1) that it had been made by plaintiffs in *O’Lear v. Miller*<sup>43</sup> and was rejected by the Court in that case; (2) that Art. 1 § 4 “has never been used as an independent basis for invalidating congressional redistricting legislation as a political gerrymander;”<sup>44</sup> and (3) that it “is essentially another plea for proportionality.” They then quote both the *Bandemer* plurality and Justice O’Connor’s concurring opinion in *Bandemer* to support their contention that “proportionality has been roundly rejected in the redistricting context.”<sup>45</sup>

The fourth and fifth parts of the “Argument” section of the brief re-state the Appellees’ views that plaintiffs/appellants are not an “identifiable political group” and that partisan gerrymandering claims should be ruled non-justiciable.

*Appellants’ Brief Opposing Motions to Affirm.* On June 9, 2003 the Democrat Appellants filed their Brief Opposing Motions to Affirm. They had not much time, and even less space, in

which to make their arguments so they zeroed-in on their “linchpin” claim, which they captioned: “Under the District Court’s Misinterpretation of *Bandemer*, It is Impossible to Vindicate the Constitutional Guarantee of Majority Rule.” They had to create a bright line between majority rule which they asserted the Constitution requires, and what courts had “roundly” said it does not require: proportional representation. To prevail in the instant litigation, they had to establish that they were the majority party. That is where it gets a bit sticky.

What measure do we use to define who is the majority party? If party registration is the litmus test, do we calculate it as Democrat percent of major-party registration (53.6) or as Democrat percent of total registration (48.0)? If vote for statewide office is the litmus test, which race do we use? If we use the most recent statewide race—2002 Governor—then more than 53 percent of all Pennsylvania voters are “Democrats.” If we go back to 2000, there are five statewide races to choose from among: two won by Democrats with a majority of the total vote; one won by a Republican with a majority of the major-party vote; and two won by Republicans with a majority of the total vote. If we average various statewide races to get some composite percentage, which ones? If vote for district-wide (*i.e.*, congressional) office is the litmus test, we know from Table 8.1 that there are six ways of coming up with a party’s “statewide vote.” Actually, we can double that to twelve ways because the numbers in Table 8.1 were all calculated as percentages of the major-party vote and it would also be possible to re-calculate those numbers as percentages of the total vote.

In the present brief the Appellants compare the Democratic percentage of seats won in 2002 (36.84) with their percentage of the gubernatorial vote (53). The Appellees, unsurprisingly, look at the Republican percentage of total congressional vote using the methodology employed in the upper left-hand corner of Table 8.1 which gives them 56.2 percent to the Democrats’ 41.5 percent. The Appellants, unsurprisingly, look at the percentages computed using the methodology employed in the lower right-hand corner of Table 8.1 which gives Democrats nearly 52 percent of the vote to the Republicans’ 48 percent.



The Appellants also state that “in several key respects” the Vieth gerrymander “is more extreme than the Michigan plan” at issue in *O’Lear v. Miller*. “The disproportionality in congressional seats is greater” in *Vieth* than in *O’Lear*, “both as alleged in the plaintiffs’ complaints and as confirmed by actual election results.”<sup>46</sup> Moreover, in *Vieth* the District Court “made specific factual findings that in enacting the plan the legislature ‘jettison[ed] every...neutral non-discriminatory redistricting criteri[on],’ other than” population equality among districts. The District Court had not made such findings in *O’Lear*. Finally, in *Vieth* the districts “are more bizarrely shaped, are less compact, and split far more counties and municipalities”<sup>47</sup> than in *O’Lear*.

The Vieth Appellants closed their brief with one-page rebuttals to the Appellees’ contention that the Appellants are not an “Identifiable Political Group” and to their contention that political gerrymandering claims are non-justiciable.

*Brief for Appellants.* The High Court granted the Democrat Appellants’ petition for a writ of certiorari and set up a briefing schedule that culminated in oral argument on December 10. The Court does not reveal how justices vote on granting such writs. We only know that a minimum of four justices must favor such a grant in order for it to happen. We can only speculate who the four justices were in this instance. On August 29 the Appellants submitted their 50-page brief, accompanied by amicus curiae briefs in their support from nine other parties. A tenth amicus brief, submitted by professors Bernard Grofman and Gary Jacobsen, supported neither party. In this phase of the litigation we go back to Square One and permit each side to lay out its entire case, from beginning to end. A certain amount of repetition of what was said in earlier briefs inevitably occurs. This brief begins with an eleven-page overview of the redistricting issue and its effect upon contemporary American government and politics that, predictably, describes a crisis situation. The brief’s next six pages recount the history of the instant litigation from the passage of Act 1 to the District Court’s rejecting the Democrats’ partisan gerrymandering claims. Following a two-page summary of their argument, the argument, itself appears.

The Argument leads off by asserting that “the Constitution prohibits state legislatures from manipulating congressional district lines to thwart majority rule.” This prohibition is rooted both in the Equal Protection Clause and in Article 1. Regarding the former, a strand of constitutional law rooted in the one person-one vote cases prohibits states from using “electoral schemes that render the votes of some citizens more valuable than the votes cast by others.”<sup>48</sup> Another strand of constitutional law “is the First Amendment bar to governmental viewpoint discrimination.” These strands combine in *Bandemer* to mandate an electoral system that ensures “that majorities are not consigned to minority status.” But, since 1986, lower courts have gutted *Bandemer* by requiring plaintiffs to show that the challenged plan not only thwarts majority rule but “is accompanied by separate and independent constitutional violations.”<sup>49</sup>

“Extreme partisan gerrymandering of congressional districts offends Article 1”<sup>50</sup> because, while Art. 1 § 4 delegates to states power to regulate the “manner” of holding elections for U.S. House of Representatives, it must do so in a way that does not thwart the right of “the people” to do the choosing. The Appellants then state for the third time the argument first made in pages 7 -12 of their Brief in Opposition to Defendants’ Motion to Dismiss and then repeated in pages 25-30 of their Jurisdictional Statement. Citations such as the following appeared for the third time:

*Smiley v. Holm* 285 U.S. 355, 366-67(1932)

2 *Records of the Federal Convention* 239-241

2 “*Elliot's Debates*” 27

*U.S. Term Limits* 514 U.S. at 821; 833-834

*Cook V. Gralike*, 531 U.S. 510, 523 525-26 (2001)

1 *Annals of Congress* 768-73 (1789) (Ames)

The Appellants then embarked on the task of formulating what would be “a clear standard for identifying unconstitutional partisan gerrymanders” to use in lieu of the unworkable one the courts had tried to extract from *Bandemer*. Like the current standard this proposed standard has an “intent” element and an “effects” element. The “intent” element was actually more stringent than that of *Bandemer*. It would require the plaintiffs to show that partisan advantage was the predominant motivation behind the entire statewide plan. That intent could be shown either directly or through circumstantial evidence showing “that other legitimate and neutral...criteria were subordinated to partisan considerations.”<sup>51</sup> The “effects” element is based on a majoritarian principle that says “a party that earns majority support should have at least a fighting chance (not a guarantee) of winning a majority of seats.”<sup>52</sup> It must reject the lower courts’ misguided requirement that plaintiffs prove they “will be completely shut out of the political process.” Applying this standard will require a two-step inquiry. First, it must be shown that the plan “packs” and “cracks” the out-party’s voters. Second, it must be shown, based on the “totality of circumstances,” that the plan would consistently prevent the out-party from winning a majority of seats even if its candidates repeatedly earned a narrow majority of votes statewide.

To identify “systematic packing and cracking” of the out-party’s voters one would consider whether, in a 50-50 election, the in-party would consistently carry more than half the districts. To answer that question one could apply Backstrom’s base race methodology with which the reader is by now quite familiar. To distinguish between (“natural”) packing and cracking caused by geography and that caused by manipulation, the “plaintiffs should be required at trial to present an alternative ‘illustrative’ plan that eliminates or substantially reduces the partisan bias in the challenged plan”<sup>53</sup> while following “traditional neutral” criteria. To prove frustration of majority rule under “totality of Circumstances” courts “could consider many factors at this stage of the inquiry” including incumbent advantage and pairing of incumbents.

In the final ten pages of the brief titled “This is a Textbook Case of Unconstitutional Partisan Gerrymandering” the Appellants apply their revised standard to Act 1/Act 34 and conclude that their “complaint alleged more than sufficient discriminatory intent to satisfy even the elevated intent standard that Appellants propose here.” As for discriminatory effects, the complaint alleged Act 1/Act 34 would “consistently degrade...the votes of Democrats” and “frustrate the will of the majority.” In the November 2000 congressional elections [Democrats] had garnered 50.6 percent of the major-party vote cast across the State.”<sup>54</sup> The Appellants reviewed the evidence presented by Professor Lichtman at trial, all of which buttressed their allegations. Finally, the 2002 election outcomes were cited as proof that the Democrats’ allegations were on target and Pennsylvania Supreme Court Chief Justice Zappala’s comment was quoted to sum it all up: “If the record of this case does not establish unconstitutional political gerrymandering, no such claim exists.”<sup>55</sup>

*Brief of Appellees.* The Republican Appellees filed their brief on October 17. It was supported by a single amicus brief filed by the Democratic leadership in the Alabama House and Senate. The Appellees’ brief began with an 8-page “Counterstatement of the Case” which described Democrats as “a major, although not majority party” in a state where voters “frequently and massively engage in cross-over and split-ticket voting.”<sup>56</sup> Among many facts cited were 2000 election results showing that in six of the 19 new districts voters had given majorities to both a Democrat for President and a Republican for U.S. Senator. If Democratic congressional candidates could win all six of these districts, plus the seven they did win in 2002, plus the 4th district (which has a majority of Democrat-registered voters) they “could plausibly capture 12 seats in a future election, reducing Republican seats to 7 and reversing what happened in 2002.”<sup>57</sup>

The Appellees then launched into their “Argument.” They took up the *Bandemer* plurality’s standard spending one paragraph discussing legislative intent, four pages stating the

requirements for an “identifiable group” and two more pages defining “actual discriminatory effect.” Then they applied these standards to the facts of *Vieth*. With respect to legislative intent they faulted the District Court for ignoring “legislative privilege” in its assessment. As for “identifiable group,” the Appellees, after a two-page analysis, concluded that the Appellants did not state a claim. Concerning actual discriminatory effect, the Appellees’ one-paragraph analysis unsurprisingly concluded “The district court’s analysis should stand.”<sup>58</sup> The Appellees opined that the *Vieth* plan depicts a situation “much less extreme than the facts in *Bandemer*, or even in *O’Leary v. Miller*.”

The Appellees next deal with three “policy reasons” that have been suggested, directly or indirectly, for “relaxing” the standards laid down in *Bandemer*. The first attributes an alleged increased “polarization” in the U.S. House to partisan gerrymandering. This claim is attributed to the Appellants, and receives support from data in the amicus brief of Jacobson and Grofman. The Appellees take almost four pages to knock it down. We would only point out that arguments like this are not relevant to the legal questions being decided. (Beyond that, is “polarization” necessarily a bad thing?) The second policy reason alleges that the U.S. House is “unrepresentative” due to gerrymandering and receives support from the amicus brief submitted by four historians led by Professor Jack Rakove. The Appellees take five pages to counter this “policy reason.” The third controversy addressed here is the Appellees’ support of Justice O’Connor’s statement in *Bandemer* that gerrymandering is “self-limiting.”

In the next major segment of their brief the Appellees finally address the Art. 1 argument first made by Plaintiffs/Appellants in their Brief in Opposition to Defendants’ Motion to Dismiss. The Appellees state “The Framers knew that gerrymandering was within the scope of the power given the States, yet did not narrow the grant of power.”<sup>59</sup> The Appellees interpreted the passage in *U.S. Term Limits* to say that “a state cannot, under the guise of regulating the manner of elections, add qualifications for candidates beyond those enumerated in the Constitution.”<sup>60</sup>

The Framers understood the Elections Clause as a grant of authority to issue procedural regulations, and not as a source of power to dictate electoral outcomes...<sup>61</sup>

In the next to last segment of their brief, the Appellees take up the alternative standard for identifying partisan gerrymandering proposed by the Appellants. They see the test's proposed "intent" element as "ludicrous," since "districting is political by nature" a "showing that politics were the predominant reason for district lines" amounts to proving a tautology. The "intent" element also "founders in equating boundaries based on politics"—a mutable and private characteristic—"with those based on race"—an immutable and observable characteristic. The test's "effects" element involves a proposed statistical test which when applied to the challenged plan in the 2002 elections was "'manifestly defective.'" They point to Professor Lichtman's analysis of the previous decade's 18 races for statewide office and say the analysis was flawed because it omitted all seven appellate judicial races in 2001—races that were won by Republicans. Further, Lichtman's predictions were proven wrong in 2002 "with Republicans winning fewer seats and even losing what he called a 'heavily Republican' district." Finally, Lichtman's methodology wrongly 'post-dicted' the results of congressional races from 1992-2000 in 9 situations."<sup>62</sup> The final segment of the Appellees' brief returns to the issue of justiciability.

*Appellants' Reply Brief.* On November 19 the Democrat Appellants filed the final brief in the *Vieth* controversy. They led off stating that the "Appellees cannot point to a single set of circumstances—past or present, real or hypothetical—in which plaintiffs could bring a successful partisan gerrymandering claim under their reading of the...Constitution."<sup>63</sup> The Appellants next drew attention to a recent APSA Working Group report "which identifies redistricting as a major cause of partisan polarization, lack of political competition, and low turnout."<sup>64</sup> Then they took a page-and-a-half responding to the Appellees' assertion that the *Vieth* Democrats were not "an identifiable political group."

The main body of the brief began with a defense of the Appellants' proposed standard, which they asserted "avoids the twin dangers of proportional representation and judicial unmanageability." The Appellants insisted that they were "defend[ing] the constitutional principle of majority rule, not the extra-constitutional policy of proportional representation."<sup>65</sup> They re-stated their proposed standard as containing an "intent" element and a "effects" element. They repeated that under their effects element "plaintiffs must show that the plan (1) systematically 'packs' and 'cracks' one party's voters, and (2) would consistently prevent that party from winning a majority of seats even if its candidates repeatedly earned a narrow majority of votes statewide."<sup>66</sup> To determine whether the plan "packs and cracks," aggregate among its districts all 18 of the statewide elections of the previous decade that appeared on the ballot with congressional elections and perform a Backstrom/Robins/Eller analysis for each. When this is done it will confirm that Democrats can win only 5 to 8 districts with half of the mean district vote and, therefore, that they were systematically "packed and cracked." With the "packing/cracking" requirement thus satisfied, we would take the final step of "appraising the 'totality of circumstances' that might bear on the issue"<sup>67</sup>—such as the treatment of each party's incumbents."

The main body of the brief continued with a refutation of the Appellees' specific critiques of the proposed standard. First, they were wrong in assuming the test would apply only to closely divided states like Pennsylvania. Second, they were wrong in claiming the proposed standard is too "subjective." Third, they were wrong in claiming that Appellants' standard requires states to maximize competition at the district level rather than maximize protection of incumbents. Fourth, they were wrong in characterizing the proposed test as assuming, without proof, a tight correlation between statewide and congressional election returns. Fifth, they were wrong in claiming that Republican candidates garnered 56.2 percent of the vote cast for Congress in Pennsylvania in 2002. Sixth, the Alabama Democratic amici are wrong in fearing the proposed standard will come in conflict with minority voters' rights.

The final two pages of the brief returned to the question of whether Article 1 offered an independent constitutional basis for voiding gerrymandered congressional districting plans. If the Appellees' argument that "only Congress, not the courts, can contain the state legislatures' power to draw congressional districts" is "right, then *Wesberry v. Sanders* and the entire line of Article 1 malapportionment cases would have to be overruled."<sup>68</sup>

*Oral Argument before the Supreme Court.* On Wednesday, December 10, 2003 the lawyers for the Democrat Appellants and the Republican Appellees stood before the nine justices of the U.S. Supreme Court for one hour and attempted to sum up their respective cases. Paul M. Smith, lead attorney for the petitioners, went first. As he began the third sentence of his presentation he was interrupted by Justice Rehnquist who asked if Smith thought the lower courts hadn't followed *Bandemer*. Smith stated that the requirement that plaintiffs show they suffered other deprivations of their constitutional rights in conjunction with being gerrymandered made it impossible to state a claim. Rehnquist then asked if maybe "the way to go is just stay hands off these things." Smith referred to Article 1 and Rehnquist said that Art. 1 § 4 "suggests to me" that congressional districting "is none of our business." Smith cited *Wesberry*, *Cook*, and *U.S. Term Limits* to prove that the courts have stepped in when states abused their power under Art. 1 § 4. Rehnquist conceded the point and shifted to the issue of standards. Smith stumbled around trying to connect with Rehnquist, and finally regained his feet describing the majoritarian standard.

But he couldn't stay on his feet for long, because other justices broke in with questions and comments and the discussion wandered off in several directions: the ability of experts to predict partisan voting behavior; whether Plaintiffs had changed their legal theory since drafting their complaint; what to do if some individual districts were gerrymandered while others looked O.K.; comparisons with racial vote dilution cases; how you identify who is a Democrat and who is a Republican; whether there must be some "outer boundary" to



consideration of “politics” in districting; comparisons with *Bandemer*, are geographical district boundaries inherently “unfair,” whether we can use a “wait-and-see” rule by observing what happens over the course of three or four elections; what principle will govern the crafting of the “reformed” plan; is there any state where a partisan gerrymander has persisted over time? Smith did not appear to have scored any breakthroughs.

The Court next heard from John P. Krill, Jr. on behalf of the Appellees. Krill began by stating that any test for partisan gerrymandering “requires inherent political choices to be made...choices inappropriate for the judiciary to make.” He had hardly completed his third sentence before he was interrupted by Justice Stevens, who wanted to know whether it would raise any question in his mind if the plan was “drafted by relying exclusively on a principle of maximum partisan advantage”...and “the evidence show[ed] that no neutral criteria at all were used?”<sup>69</sup> Krill said it wouldn’t. Stevens bore in asking whether it would be permissible if a particular district had been similarly crafted. Krill said it would be permissible. Stevens bore in deeper asking what if the State were given opportunity to explain a really strangely distorted district, and could offer no explanation. Krill replied that even if the legislature acknowledged that the districts were drawn for partisan advantage it was still O.K. because in crafting Article 1 § 4 the Framers intended to give such power to state legislatures. Stevens asked if there is “any duty at all” for a legislature in drawing districts “to try to do it impartially.” Krill said there was no constitutional duty, but political pressures might work to achieve that result. Stevens then asked if it was O.K. if a legislature decided that the salaries of majority legislators should be 10 percent higher than those of minority legislators?

Krill was uncomfortable. Finally he stammered “No. I - I don’t think so, Your Honor. I - I can’t imagine that even happening.”

Justice Breyer entered asking a hypothetical that implied the Constitution imposed three requirements on legislatures engaged in redistricting. Krill cited the Indiana House elections in

1988 and 1990 (the “aftermath” of *Bandemer*), where Democrats achieved first parity and then a majority of seats, as evidence “the system is self-correcting.”<sup>70</sup> He criticized the Democrats for employing elections reaching back for ten years to evaluate the *Vieth* plan; for including “high-profile” offices among those races, and for excluding “non-charismatic” appellate judicial races—races won by Republicans. He criticized the Appellants for “normalizing” the races employed in their analysis and for not using the 2000 presidential race “in constructing their test.” Justice Stevens re-entered, asking Krill what was wrong with the standard Justice Powell would have employed in *Bandemer*. Krill said Powell’s standard was “impossible to prove and improper to prove.” Stevens asked whether Krill thought it was “impossible to prove that race was the predominant motive in a particular redistricting plan.” After four more exchanges Justice Scalia entered saying “it doesn’t make much sense to find something justiciable that you can’t possibly devise a remedy for.”

Krill emphatically agreed with Scalia. Stevens shot back “But, of course, the remedy would be [to] redraw districts using some neutral criteria.” Krill insisted “there are no neutral criteria.” There was more discussion of criteria and then Krill cited the 2002 *Gekas v. Holden* race in CD 17 as proof that gerrymandering could not guarantee election outcomes—because the experts had all predicted Gekas would win. Stevens then reminded everyone that the experts had correctly predicted the other 18 races. Krill tried to argue that there had been other close races under their plan but his time was up.

J. Bart DeLone, Pennsylvania Senior Deputy Attorney General, then appeared for the Appellees. Reading from a prepared statement, he said the Appellants’ proposed standard would lead to proportionality and that the proper standard requires that plaintiffs “be shut out of the political process.”<sup>71</sup> Justice Breyer asked why, if the courts could develop standards to control positive discrimination in racial cases, why couldn’t they do the same thing to control political discrimination in districting? DeLone responded saying that political discrimination was O.K.

Breyer said it wasn't O.K. and an inconclusive exchange continued over the issue of "proportionality" versus "majority rule." DeLone stuck to his theme that "there is no need for any neutral justification when you're drawing districts."<sup>72</sup> He stood by the Appellees' position that political gerrymandering is non-justiciable. Justice Powell's opinion in *Bandemer* came in for discussion, as did the issue of discriminatory intent, but DeLone and Breyer did not appear to be connecting and their colloquy was disjointed and almost incoherent. Stevens re-entered saying "there's a duty to govern impartially, and if you have no duty except partisan advantage, the case is just like saying we're going to pay the majority legislators a higher salary than the minority legislators."<sup>73</sup> DeLone's stammered reply was hard to decipher. Stevens' follow-up statement was on a different track. DeLone returned to his theme of being "shut out of the process," causing Stevens to say "You're saying there's no gerrymandering unless there's something else." DeLone said "Yes."

Smith was given the two minutes of his time he had reserved for rebuttal and began by saying he thought the Plaintiffs' complaint satisfied the standard of the Powell opinion in *Bandemer*. Then he said the problem with the test of "wait and see how the elections come out" is that the "statewide vote" totals in the challenged plan will be, in part, determined by the plan itself. Finally, regarding the Appellees' argument for using off-year judicial races to evaluate congressional districting plans, Smith pointed out that in the most recent such race, in 2003, the Democratic candidate got 52 percent of the statewide vote but carried only 6 out of 19 districts in the *Vieth* plan. That concluded the 59-minute oral argument and the case was submitted.

*The Supreme Court's Decision.* It did not take the High Court nearly as long to render its decision in this case as it did in *Davis*: four months and 18 days. Once again the Court split into three groups: (1) four justices who thought partisan gerrymandering was a non-justiciable "political" question: Rehnquist and O'Connor who had voted that way in *Davis*, joined by Scalia and Thomas; (2) four justices who thought the Appellants' complaint stated a claim which

merited a remand to the District Court for further proceedings: Stevens who voted that way in *Davis*, joined by Breyer, Ginsburg and Souter; (3) Kennedy who concurred in the judgment but was unwilling to rule gerrymandering non-justiciable. For reformers the outcome was both encouraging and worrisome: encouraging because there were now four justices willing to void a districting plan on grounds of political gerrymandering, instead of two. That meant being one vote away from an historic breakthrough; worrisome because we are also one vote away from a Court majority that will overturn the *Davis* precedent and slam the door against future gerrymander suits. The other noteworthy feature of the decision was that the four dissenters filed three separate opinions. Again, this could be worrisome or encouraging: worrisome because it lends credence to Justice Scalia's argument that the issue is not subject to manageable standards; encouraging because it opens the door to consideration of new perspectives on the issue, one of which we shall offer in the next two chapters.

Compared to analysis of the plurality opinion in *Davis*, analysis of the plurality opinion in *Vieth* is a slam-dunk: Justice Scalia wrote the opinion, and this justice is much less prone to ambiguities than was the spokesman for the *Bandemer* plurality, Byron White. Scalia's starting point is the six independent tests laid down in *Baker v. Carr*<sup>74</sup> for the existence of a non-justiciable political question. Scalia said that one of these criteria applied to *Vieth*: "a lack of judicially discoverable and manageable standards" for the case's resolution. He said the courts' inability to come up with a workable standard for unconstitutional partisan gerrymandering in the 18 years since *Bandemer* was a strong sign that no such standards exist. He said the inability of the dissenters to agree upon a single alternative standard was further evidence for that conclusion. He then proceeded to review, in turn, five proposed standards for resolving partisan gerrymandering claims, beginning with that articulated by Justice White in *Davis*.

As we are aware, the *Davis* standard involved an "intent" prong and an "effects" prong. The intent prong was rather easily satisfied. The effects prong was another matter. It could not

be satisfied merely by a failure to achieve proportional representation on the part of the plaintiff group, or by demonstrating that “the scheme made its winning of elections more difficult.”

Rather, it would have to be shown that the group had been “denied its chance to effectively influence the political process” as a whole. “A statewide challenge... would involve an analysis of the voters’ direct or indirect influence on the elections of the state legislature as a whole.”<sup>75</sup>

Scalia then pointed out that both the O'Connor concurrence and the Powell dissent (comprising a majority of the Court) predicted that such a standard would prove unmanageable. Scalia wrote “In the lower courts the legacy of the plurality’s test is one long record of puzzlement and consternation.” Then he cited nine court cases and academic commentaries to document that assertion. He concluded:

Because this standard was misguided when proposed, has not been improved in subsequent application, and is not even defended before us today by the appellants, we decline to affirm it as a constitutional requirement.<sup>76</sup>

Scalia next took aim at the standard enunciated by the *Vieth* Appellants. It “retains the two-pronged framework of the *Bandemer* plurality... but modifies the type of showing sufficient to satisfy each.” Its “intent” prong involves “act[ing] with a predominant intent to achieve partisan advantage.”<sup>77</sup> The Appellants claimed this intent test is discernible and manageable because it was borrowed from racial gerrymandering cases but Scalia was unimpressed. He observed that the “predominant intent” test was developed in the context of challenges to a single district, whereas here the Appellants were trying to apply it to an entire statewide plan. “The effects prong of appellants’ proposal replaces the *Bandemer* plurality’s vague test... with criteria that are seemingly more specific.”<sup>78</sup> We recall that the Appellants would first determine whether the plan’s districts systematically “pack” and “crack” the out-party’s voters. If that requirement was met, then the inquiry would proceed to a determination of the “totality of circumstances.” This test is “loosely based” on cases applying the Voting Rights Act to discrimination based on race; but discerning a person’s politics is not comparable to discerning a person’s race.

Scalia interpreted the effects prong of the Appellants' test as "invalidat[ing] the districting only when it prevents a majority of the electorate from electing a majority of representatives." The Appellants notwithstanding, he said "this standard rests upon the principle that groups have a right to proportional representation,"<sup>79</sup> a principle not contained in the Constitution. Moreover, the standard is judicially unmanageable because it is unclear how a party's majority status is to be established. Results of statewide races are flawed as indicators of majority status because some of a party's statewide candidates may win, and others lose, in the same election. Finally, "no matter how the district lines are drawn," we cannot guarantee "that a majority of party votes statewide will produce a majority of seats for that party."<sup>80</sup> That fact is demonstrated by the outcome of the 2000 congressional elections in Pennsylvania where, under a court-drawn (presumably impartial) plan Democratic congressional candidates received 50.6 percent of the major-party vote but won only 10 of the 21 seats.

The third proposed standard to come under the Scalia pluralit's scrutiny is the one proposed by Justice Powell in *Bandemer*. Powell:

agreed with the plurality that a plaintiff should show intent and effect, but...the ultimate inquiry ought to focus on whether district boundaries had been drawn solely for partisan ends to the exclusion of "all other neutral factors relevant to the fairness of districting." ...the courts should consider numerous factors though "[n]o one factor should be dispositive." The most important would be "the shapes of voting districts and adherence to established political subdivision boundaries... Other relevant considerations include the nature of the legislative procedures by which the...law was adopted... These factors...combined with "evidence concerning population disparities and statistics tending to show vote dilution," make out a claim of unconstitutional partisan gerrymandering.<sup>81,82</sup>

Scalia thought this formulation also fell short of the mark for being “a constitutionally-based judicially manageable standard.” He termed it “essentially a totality-of-the-circumstances analysis, where all conceivable factors none of which is dispositive, are weighed” to achieve a judgment on whether the plan is “fair.” “Fairness” did not seem to Scalia to be a judicially manageable standard. “Some criterion more solid and more demonstrably met seems to us necessary...”

The fourth proposed standard to receive attention from the Scalia plurality was the first of three proposed by the four *Vieth* dissenters: that of Justice Stevens. Stevens concurs with the plurality “that we should not address plaintiffs’ statewide political gerrymandering challenges”<sup>83</sup> but would require courts to consider them at the individual-district level. Stevens “relies on First Amendment cases to suggest that politically discriminatory gerrymanders are subject to strict scrutiny under the Equal Protection Clause.” Not so, says Scalia. “To say that suppression of political speech triggers strict scrutiny is not to say that failure to give political groups equal representation triggers strict scrutiny. *Vieth* is an equal protection claim. If it were sustained as a First Amendment claim it would “render unlawful all consideration of political affiliation in districting”<sup>84</sup>—a requirement more drastic than anyone on the High Court could contemplate.

Then Scalia took up the fifth proposed standard, the one offered by Justices Souter and Ginsburg. Like Justice Stevens, Souter would restrict plaintiffs to district-specific gerrymandering claims. His proposed standard involves “a five-step prima facie test...to...detect the constitutional crime...[of]...‘an extremity of unfairness.’” A plaintiff must show: (1) that he is a member of a ‘cohesive political group’; (2) ‘that the district of his residence...paid little or no heed to traditional districting principles; (3) that there were ‘specific correlations between the district’s deviations from those principles and the distribution of the population of his group; (4) that an hypothetical district exists which remedies the packing and cracking of the plaintiffs’ group and deviates less from traditional districting principles; and (5) that the defendants acted intentionally to manipulate the shape of the district.

Scalia pointed out that each of the last four steps requires an “unguided quantitative judgment” ill-suited for use in a judicial standard: How much disregard of traditional districting principles? Etc. Scalia says “the central problem is determining when political gerrymandering has gone too far. It does not solve that problem to break down the original unanswerable question into four more discrete but unanswerable questions.”<sup>85</sup> Beyond that, Scalia asks what is Souter testing for? “No element of his test looks to the effect of the gerrymander on the electoral success, the electoral opportunity, or even the political influence of the plaintiff group.”

Finally, Scalia considers the sixth alternative standard: that offered by Justice Breyer. Breyer believes “political considerations will likely play an important, and proper role in the drawing of district boundaries.”<sup>86</sup> Like the other dissenters, he attempts to draw a line between “good” politics and “bad” politics. The key criterion is “the unjustified use of political factors to entrench a minority in power.” He lists sets of circumstances that lay out the indicia of abuse along a continuum from the most clearly unconstitutional to the possibly constitutional. All of these scenarios suffer from at least one problem, “most notably the difficulties of assessing partisan strength statewide and of ascertaining whether an entire statewide plan is motivated by political or neutral justifications.” Scalia clearly sees the adoption of Breyer’s standard as opening a door to much litigation—litigation not in the public interest.

Part V of the Scalia plurality opinion is an argument with Justice Kennedy who concurred in the judgment but refused to join them in ruling the suit as non-justiciable. This argument, while interesting, is not germane to the main issue of the constitutionality of the *Vieth* districting plan and we shall not comment on it. The Plurality’s conclusion (Part VI) is that “neither Article 1 § 2 nor the Equal Protection Clause, nor Article 1 § 4 provides a judicially enforceable limit on the political considerations that the States and Congress may take into account when districting.”



The next part of the decision is the 12-page concurring opinion of Justice Kennedy. He agrees with the plurality that no one has come up with a judicially discernible and manageable standard for adjudicating claims of partisan gerrymandering. But he disagrees with the plurality in saying “That no such standard has emerged in this case should not be taken to prove that none will emerge in the future.”<sup>87</sup> He doesn’t like gerrymandering and believes “if courts refuse to entertain any claims of partisan gerrymandering, the temptation to use partisan favoritism in districting in an unconstitutional manner will grow.” He offers plaintiffs in future gerrymandering suits a ray of hope when he says:

The First Amendment may be the more relevant constitutional provision in future cases that allege unconstitutional partisan gerrymandering. After all, these allegations involve the First Amendment interest of not burdening or penalizing citizens because of their participation in the electoral process, their voting history, their association with a political party, or their expression of political views.<sup>88</sup>

But Justice Kennedy does not comment on the First Amendment argument the *Vieth* plaintiffs did make and the reason appears to be his view that success for any argument of this sort...depends first on courts’ having available a manageable standard by which to measure the effect of the apportionment and so to conclude that the State did impose a burden or restriction on the rights of a party’s voters.<sup>89</sup>

Finally, we come to the three dissenting opinions, each of which proffered an alternative standard to the one erected in *Bandemer*. These alternative standards we have already discussed in our study of the plurality opinion and here we just add further comment that appears useful. Justice Souter, in a 14-page dissent joined by Justice Ginsburg, sees “fairness” as the objective in redistricting but recognizes the difficulty in translating that notion into workable criteria. He sees the problem posed by the question of how much is too much and concedes that “we can be no more exact in stating a verbal test for too much partisanship than we can be in

defining too much race consciousness when some is inevitable and legitimate.”<sup>90</sup> He is not daunted by the failure of the courts, since *Davis*, to devise practical criteria for political gerrymandering and thinks the major reason was “the plurality’s specification that any criterion of forbidden gerrymandering must require a showing that members of the plaintiffs’ group had essentially been shut out of the political process.” “Since this Court created the problem...it is up to us to make a fresh start.”<sup>91</sup> He then proceeds to lay out the five-step test that was described in our account of the Scalia plurality’s opinion. Then he suggests legitimate defenses the State might offer to justify its map (one being an effort to achieve “proportional representation” of parties). Finally, after responding to Scalia’s critique of his standard, he concludes stating he would grant plaintiff Furey leave to amend the part of the complaint pertaining to her own District 6 to allege what his standard would require—thus vacating the District Court’s judgment and remanding the case for further proceedings.

Justice Breyer’s 15-page dissent begins with a theoretical overview that sees political parties as necessary for transforming the will of the majority into effective government. He discusses why the SMD/plurality electoral system is employed in the United States (instead of proportional representation), the “balloon effect” that often results from SMD systems, the claim that the so-called “formal” districting criteria carry partisan bias, and justifies the use of “purely political boundary-drawing factors” in redistricting. He believes, however, that these factors can be used, unjustifiably, to entrench a minority in power. He then enumerates the three sets of circumstances referred to in our discussion of the plurality opinion and in the final section of his opinion responds to Scalia’s criticisms of his approach. He says some of those criticisms are “overstated” and points to four examples that suggest Scalia might be a little inconsistent in the way he characterizes things. Breyer concludes by answering Scalia’s observation that the proposing of three sets of standards by four dissenting justices “goes a long way to establishing that there is no constitutionally discernible standard.” Does it? asks Breyer. Maybe “the more

thorough specific reasoning that accompanies separate statements will stimulate further discussion”<sup>92</sup> that would benefit jurists, like Justice Kennedy, who “remain in search of appropriate standards.”

Justice Stevens opens by restating the ultimate issue at stake in this and all the previous gerrymandering cases:

The concept of equal justice under law requires the State to govern impartially.<sup>93</sup> From this springboard he launches into a 26-page critique of the plurality opinion ending with this conclusion:

What is clear is that it is not the unavailability of judicially manageable standards that drives today’s decision. It is, instead, a failure of judicial will to condemn even the most blatant violations of a state legislature’s fundamental duty to govern impartially.<sup>94</sup>

## Notes

<sup>1</sup> Lichtman’s third analysis dealt with physical characteristics of the plans: compactness and fragmentation of local governmental units.

<sup>2</sup> *Vieth v. Commonwealth of Pennsylvania* No. 3:CV-01-2439: Brief for Defendants Lieutenant Governor Jubelirer and Speaker Ryan in Support of their Motion to Dismiss: pg. 4.

<sup>3</sup> *Davis v. Bandemer* 478 U.S. at 147.

<sup>4</sup> *Karcher v. Daggett* 462 U.S. 725, 754 (1983).

<sup>5</sup> *Mobile v. Bolden* 446 U.S. 55, 88 (1980).

<sup>6</sup> *Vieth v. Pennsylvania*. Op. cit. Note 2: pg. 11.

<sup>7</sup> *Ibid.*, pp. 12-13 (quoting *Davis v. Bandemer*, 478 U.S. at 132).

<sup>8</sup> *Ibid.* p. 16. Since *Bandemer* “in the only one case have plaintiffs been held to have alleged facts that, if true, would establish the discriminatory effects standard.” This case involved a challenge to North Carolina’s system of electing superior court judges in at-large, statewide races, which up to that time had led to the election of only a single Republican judge since 1900. This case did *not* involve the drawing of district lines and, therefore, was not a gerrymandering case in the usual sense. *Republican Party of North Carolina v. Martin*, 980F. 2d 943, 948 (CA 4 1992).

<sup>9</sup> *Vieth v. Commonwealth of Pennsylvania* No. 3:CV-01-2439: Plaintiffs’ in Opposition to Defendants Motion to Dismiss: pp. 5-6.

<sup>10</sup> *Ibid.*, p.6 (quoting 478 U.S. at 165).

<sup>11</sup> *Term Limits v. Thornton* 514 U.S. 779 (1995).

<sup>12</sup> *Shaw v. Reno* 509 U.S. 630 (1993).

<sup>13</sup> *Term Limits v. Thornton* 514 U.S. at 833-34.

<sup>14</sup> Plaintiffs’ brief at 10 quoting *Smiley v. Holm*, 285 U.S. 355, 367 (1932).

<sup>15</sup> *U.S. Term Limits* 514 U.S. at 821.

<sup>16</sup> *Cook v. Gralike* 531 U.S. 510 (1995).

<sup>17</sup> *Miller v. Johnson* 515 U.S. 900 (1995).

<sup>18</sup> Plaintiffs’ brief, p. 6-7.

<sup>19</sup> *Ibid.*, p. 14.

<sup>20</sup> *Ibid.*, p. 16. Compare with “...a...plan...so highly irregular that, on its face, it rationally cannot be understood as anything other than as an effort to segregate voters on the basis of race.” *Shaw v. Reno*, 509 U.S. at 644.

<sup>21</sup> *Vieth v. Commonwealth of Pennsylvania* No. 3: CV-01-2439: Reply Brief for Defendants Lieutenant Governor

Jubelirer and Speaker Ryan in Support of their Motion to Dismiss: pg. 5.  
<sup>22</sup> *Ibid*, pp. 5-6.  
<sup>23</sup> *Ibid*, p. 7.  
<sup>24</sup> *Ibid*, p. 9 quoting Plaintiffs' brief at 19.  
<sup>25</sup> *Ibid*, p. 11 quoting Plaintiffs' brief at 19.  
<sup>26</sup> *Vieth v. Pennsylvania* 188 F.Supp.2d 532, 544 (M.D.Pa. 2002).  
<sup>27</sup> 188 F.Supp.2d 532, 546 (M.D.Pa. 2002).  
<sup>28</sup> Plaintiffs' Brief in Opposition to Defendants' Motion to Dismiss: pp. 7 - 12 (quoting 514 U.S. at 821).  
<sup>29</sup> *Vieth v. Jubelirer* No. 02-1580 Jurisdictional Statement: pg. 3.  
<sup>30</sup> *Ibid*, p. 8.  
<sup>31</sup> *Ibid*, p. 12.  
<sup>32</sup> *Ibid*, p. 6.  
<sup>33</sup> *Ibid*, p. 14.  
<sup>34</sup> *Ibid*, p. 16. For a more credible estimate of the 1982-84 Indiana State Senate election outcomes see Chapter 22 Note 6.  
<sup>35</sup> *Ibid*, pp. 16-17.  
<sup>36</sup> *Ibid*, p. 12.  
<sup>37</sup> *Ibid*, p. 10.  
<sup>38</sup> *Ibid*, p. 12.  
<sup>39</sup> *Ibid*, p. 14.  
<sup>40</sup> *Ibid*, p. 14.  
<sup>41</sup> *Ibid*, p. 16.  
<sup>42</sup> *Vieth v. Jubelirer* No. 02-1580 Jurisdictional Statement: pg. 29.  
<sup>43</sup> 222 F.Supp.2d at 859.  
<sup>44</sup> Motion to Affirm pg. 19.  
<sup>45</sup> *Ibid*, p. 20.  
<sup>46</sup> Appellants' Brief Opposing Motions to Affirm: pg. 6. In 2002 Democrats won 6 of 15 congressional races in Michigan (40 percent) as opposed to only 36.84 percent in Pennsylvania  
<sup>47</sup> *Ibid*, pp. 6-7.  
<sup>48</sup> *Vieth v. Jubelirer* No. 02-1580. Brief for Appellants p. 21.  
<sup>49</sup> *Ibid*, p. 22.  
<sup>50</sup> *Ibid*, p. 23.  
<sup>51</sup> *Ibid*, p. 32.  
<sup>52</sup> *Ibid*, p. 35.  
<sup>53</sup> *Ibid*, p. 43.  
<sup>54</sup> *Ibid*.  
<sup>55</sup> *Ibid*, p. 14, p. 41.  
<sup>56</sup> *Vieth v. Jubelirer* No. 02-1580. Brief for Appellees p. 2.  
<sup>57</sup> *Ibid*, p. 8.  
<sup>58</sup> *Ibid*, p. 21.  
<sup>59</sup> *Vieth v. Jubelirer* No. 02-1580. Brief for Appellees p. 32.  
<sup>60</sup> *Vieth v. Jubelirer* No. 02-1580. Brief for Appellees p. 34.  
<sup>61</sup> 514 U.S. at 533-34.  
<sup>62</sup> *Ibid*, p. 38.  
<sup>63</sup> *Vieth v. Jubelirer* No. 02-1580 Appellants Reply Brief. p. 1.  
<sup>64</sup> *Ibid*, p. 2.  
<sup>65</sup> *Ibid*, p. 5.  
<sup>66</sup> *Ibid*, p. 8.  
<sup>67</sup> *Ibid*, p. 12.  
<sup>68</sup> *Ibid*, p. 29.  
<sup>69</sup> *Ibid*, p. 30.  
<sup>70</sup> *Ibid*, p. 35.  
<sup>71</sup> *Ibid*, pp. 43-44.  
<sup>72</sup> *Ibid*, p. 48.  
<sup>73</sup> *Ibid*, p. 53.  
<sup>74</sup> *Baker v. Carr* 369 U.S. at 217.  
<sup>75</sup> *Davis v. Bandemer* 478 U.S. at 132-133.  
<sup>76</sup> *Vieth v. Jubelirer* 541 U.S. (2004).  
<sup>77</sup> *Ibid*, p.  
<sup>78</sup> *Ibid*, p.  
<sup>79</sup> *Ibid*, p.  
<sup>80</sup> *Ibid*, p.

- <sup>81</sup> *Ibid*, p.  
<sup>82</sup> *Ibid*, p.  
<sup>83</sup> *Ibid*, p. 23.  
<sup>84</sup> *Ibid*, p. 25.  
<sup>85</sup> *Ibid*, pp. 27-28.  
<sup>86</sup> *Ibid*, p. 30.  
<sup>87</sup> *Ibid*, p. \_\_\_\_.  
<sup>88</sup> *Ibid*, p. \_\_\_\_.  
<sup>89</sup> *Ibid*, p. \_\_\_\_.  
<sup>90</sup> *Ibid*, p. \_\_\_\_.  
<sup>91</sup> *Ibid*, p. \_\_\_\_.  
<sup>92</sup> *Ibid*, p. \_\_\_\_.  
<sup>93</sup> *Ibid*, p. \_\_\_\_.  
<sup>94</sup> *Ibid*, p. \_\_\_\_.

## Chapter 30

### The Neutrality Principle: A Bow to Arthur Eisenberg

#### *Could Justice Scalia be Right?*

We have examined the three biggest cases of alleged partisan gerrymandering to come before the U.S. Supreme Court and now ask: Has anyone really come up with a judicially discernible and manageable standard for judging when a districting plan should be voided by the courts? We think not. In assessing Justice Souter's proposed "five element" standard, Justice Scalia poses the crucial questions (*How much* disregard of traditional districting principles? *How many* correlations between deviations and distribution? *How much* remedying of packing and cracking...?) and receives no convincing answers from Justice Souter or anyone else. When the Vieth appellants in their final brief became more specific in describing their proposed standard by saying they would apply the Backstrom/Robins/Eller methodology using each of the 18 statewide races of the preceding decade to determine whether systematic packing and cracking had taken place it looked like we might be latching onto something discernible and manageable.

Professor Lichtman's aggregation and normalization of those 18 elections had yielded two contests with an 8D-11R split, five contests with a 7D-12R split, six with a 6D-13R split, and five with a 5D-14R split. "Not one of these 18 contests revealed a pattern in which at least 10 of the 19 districts...were more Democratic than the average district."<sup>1</sup> This analysis, said Appellants, proves there was systematic packing and cracking of Democrats and thus satisfies the first "effects" prong of Appellants' proposed standard. But suppose there had been some other breakdown of those 18 aggregations? Like eleven contests of 8D-11R and eight contests of 12D-7R? It wouldn't be quite as easy to say whether Appellants' first "effects" prong had been satisfied. It is the old issue of how-much-is-too-much—where do you draw the line? How in this example could the courts specify which possible D-R breakdowns would satisfy the first "effects prong" and which would not, without being arbitrary?

### *The ACLU Amicus Brief in Davis v. Bandemer*

Notice that the Scalia plurality did not say anything in rebuttal to the powerful case the Appellants had made under Article 1 § 2 and made no attempt to contradict Justice Stevens' invocation of the State's "duty to govern impartially." The Scalia plurality simply ignored this argument, acting as though it didn't exist. They probably felt they did not reach the other legal issues raised in this litigation because the lack of judicially discernible and manageable standards was, by itself, dispositive.

If one were to ask the proverbial "man in the street" whether it is constitutional for a state to take sides in an election between two candidates—which is what discriminatory districting (a.k.a. "gerrymandering") boils down to—the answer is likely to be "Of course -not!" The issue should be an intellectual slam-dunk. But it isn't. Strange as it may seem, the Supreme Court has never formally recognized an electoral neutrality principle—the principle of the level playing field—the idea that, instead of taking sides in an election, the proper role of the state is that of neutral referee.

Therefore, when *Davis v. Bandemer* was before the High Court in 1986, Arthur Eisenberg of the New York Civil Liberties Union and others, writing for the ACLU as *amici curiae*, found it necessary to extract from the case law a general theory of governmental neutrality in religious and political controversies.<sup>2</sup> Citing additional cases, they extended this theory into the realm of electoral process and concluded that the districting plans at issue in *Bandemer* violated this governmental neutrality principle and, therefore, must be voided. We now take a brief look at the cases Eisenberg believed undergirded a general theory of governmental neutrality.

### *General Neutrality Principles*

Eisenberg *et al.* developed their general theory of governmental neutrality in religious and political controversies from eight cases involving governmental regulation of speechmaking,

access to streets, sidewalks and parks, patronage dismissals, and access to meeting rooms in schools and universities. They might have cited a ninth case in which the High Court laid down the neutrality principle in the simplest and broadest of terms. In *New York City Transit Authority v. Beazer*<sup>3</sup> Justice Stevens, writing for a Court majority, articulated what can only be characterized as a general, unqualified principle of governmental neutrality:

The Equal Protection Clause...announces a fundamental principle: the State must govern impartially. General rules that apply evenhandedly to all persons within the jurisdiction unquestionably comply with this principle. Only when a governmental unit adopts a rule that has a special impact on less than all the persons subject to its jurisdiction does the question whether this principle is violated arise.<sup>4</sup>

At issue was whether the Transit Authority's policy of refusing employment to persons currently receiving methadone for curing heroin addiction violated the Equal Protection clause. The Court majority, plus Justice Powell in concurrence, concluded that it did not. Dissenting justices White, Brennan and Marshall concluded that it did. Neither the concurrence nor the dissent differed with the Stevens majority over its assertion of the impartiality mandate. The disagreement was over whether it was being adhered to in the instant case. Therefore, Justice Stevens was speaking for a unanimous Court when he made this declaration. He repeated it, without qualification, in the context of a discussion of partisan gerrymandering in *Karcher v. Daggett*.<sup>5</sup>

#### *The Neutrality Principle Applied to the Electoral Process*

Eisenberg, *et al.*, in their brief had proceeded to extend the neutrality principle into the electoral realm citing seventeen additional cases. It is appropriate to review their work and ask how sound their argument is. They begin by asserting:



“The neutrality principle acquires a special force in cases involving regulation of our electoral system. In a very real sense, our electoral system is simply a more formalized and structured marketplace of expression. It is an organized competition of ideas presented by opposing candidates and political parties. As such, the obligation of governmental neutrality takes on heightened importance. For unless government remains neutral in fashioning and administering the rules of the contest, the electoral competition cannot operate fairly.

“If a state were to rig voting machines so that they could only register the votes for Democratic candidates, no one would doubt that the state was not playing fairly, in a clear violation of neutrality principles. Although acts of favoritism by the state will rarely, if ever, be that transparent, courts have carefully scrutinized, and where appropriate invalidated, legislative enactment designed to favor particular parties or groups.”<sup>6</sup>

The object of political speech is to persuade the body politic to support or oppose a particular public policy. If the people one has persuaded are not permitted to vote or the value of their vote is diminished by one or another species of discriminatory electoral mechanism, then the motivating political ideas and expression are being nullified and the people are being usurped by their government. This inversion cuts against the most central commitments of democracy.

The foregoing reasoning proceeds from the First Amendment, standing by itself. A simpler line of reasoning, proceeding from the Fourteenth Amendment’s Equal Protection Clause, bolsters the centrality of the governmental neutrality principle. The Court in *Romer v. Evans*<sup>7</sup> stated that the basic idea of Equal Protection is “the principle that government and each of its parts remain open on impartial terms to all who seek its assistance.” To the citizens of our country this guarantee means that all citizens must be treated equally by government. Therefore, plaintiffs in a complaint alleging political gerrymandering state causes of action arising independently from

the First Amendment and the Equal Protection Clause, as well as a neutrality principle arising jointly from these two foundation blocks. With this theoretical framework, let us examine the case law.

*Electoral Neutrality Principle: The Case Law*

In *Hunter v. Erickson*<sup>8</sup> the Supreme Court invalidated a city charter provision subjecting fair housing ordinances to a unique referendum procedure as an unconstitutional attempt to rig the electoral process in such a way as to unfairly hinder “one group in its struggle with its opponents.”<sup>9</sup> In this instance, the neutrality principle meant that advocates of fair housing ordinances should not be forced to jump through more hoops than advocates of any other issue. That would mean the state was taking sides against advocates of fair housing ordinances.

In *First National Bank of Boston v. Bellotti*<sup>10</sup> the High Court overturned a statute prohibiting banks from making certain campaign expenditures in referendum elections in which interests of banks could be at stake. In so doing it regarded this attempt to prevent corporations from participating in the campaigns surrounding referendum elections as:

“...an impermissible legislative prohibition of [electoral] speech based on the identity of the interests that spokesmen may represent in public debate over controversial issues...”<sup>11</sup>

In this instance the neutrality principle meant that the State may not permit opponents of corporate interests from spending money in referenda while prohibiting corporations from doing so. That would mean the State was taking sides against corporations.

In *Carrington v. Rash*,<sup>12</sup> the Court struck down a Texas constitutional provision prohibiting armed forces personnel who moved to Texas during a tour of duty from voting in that state so long as they remained in the service. The State argued that the provision was necessary to prevent military personnel from “taking over” communities near military bases; but the Court stated that “fencing out” from the franchise a sector of the population because of the way they

may vote is constitutionally impermissible.<sup>13</sup> In this instance the neutrality principle meant that the State may not prohibit military personnel from voting where they live while permitting civilians to vote where they live.<sup>14</sup> That would mean the State was taking sides against military personnel.

At issue in *Williams v Rhodes*<sup>15</sup> was whether the newly formed American Independent Party and its presidential candidate George Wallace could be placed on the Ohio ballot despite having failed to file their petitions by the State's February deadline. The Court held that Ohio's restrictive election laws, taken as a whole, are invidiously discriminatory and violate the Equal Protection Clause because they give the two old, established parties a decided advantage over new parties<sup>16</sup> and heavily burden the First Amendment right of individuals to associate for the advancement of political beliefs and the right of qualified voters to cast their votes effectively.<sup>17</sup> In this instance the neutrality principle meant that the State may not favor the Democratic and Republican parties over other parties by making it more difficult for the latter to appear on the ballot.<sup>18</sup>

In *Greenberg v. Bolger*<sup>19</sup> a federal district court struck down the provision of the Postal Service Appropriation Act of 1980, which conferred reduced third-class mailing rates upon the Democratic and Republican parties but excluded other political parties competing for federal office in that presidential year. That court said:

Congressional debate demonstrates—what is clear from the provision itself—that the 1980 imitation was adopted to reserve the special rate for the two dominant political parties while denying it to others.<sup>20</sup>

In this instance the neutrality principle again meant—as with ballot access in *Williams*—that the State may not favor the Democratic and Republican parties over other parties. In this case the issue was postal subsidies.

At the time of *Williams* there was no mechanism under Ohio law whereby one could run for office as an independent. The only way was to be the candidate of a party, and formation of a new party was a cumbersome and time-consuming process. In the wake of *Williams* the petition requirement for formation of a new party was lowered from fifteen percent to one percent of the preceding gubernatorial vote and provision was made for independent candidates. The petition requirement for such (statewide) candidates was set at 5,000 signatures. However, the February filing deadline of *Williams* remained.

In *Anderson v. Celebrezze*<sup>21</sup> the Court struck down this deadline that forced independent presidential candidates to file their petitions in February, whereas Democratic or Republican candidates who may not have run in the Ohio primary could be nominated at a party convention in August and still appear on the general election ballot. Thus, another ballot access case extended the neutrality principle to say that the State may not favor Democratic or Republican candidates over independent candidates.

In the area of racial discrimination, the cases and issues are too numerous to elaborate. In a line of vote dilution cases stretching from *Gomillion v. Lightfoot*<sup>22</sup> to *White v. Regester*<sup>23</sup> the Court first applied the neutrality principle to political districting. The organizing theme has been that a state may not draw legislative or congressional districts to favor whites over African-Americans or Hispanic-Americans. And now, with *Shaw v. Reno*<sup>24</sup> and *Bush v. Vera*<sup>25</sup> it appears to have invoked a kind of neutrality principle to say that a state may not use race as the dominant factor in the drawing of majority African-American or Hispanic-American districts. Ironically, this vigorous line of authority has produced the anomalous state of affairs where legislatures freely draw grotesquely shaped districts to promote the reelection of white incumbents but are forbidden to draw grotesquely shaped districts to facilitate election of African-American or Hispanic candidates.

Before we take up the cases which extend the electoral neutrality principle into the realm of partisan group rights we need to look at a case never cited in the legal/academic debate over districting, but which may turn out to be the linchpin in a successful challenge to discriminatory districting—if there is ever to be one. Consider *Bullock v. Carter*.<sup>26</sup> The plaintiffs were three candidates for local office in the Texas Democratic Party primary who challenged a Texas statute which in their cases required payment of filing fees of \$1,424.60, \$6,300 and \$1,000, respectively. The three-judge lower court concluded these fees fell with unequal weight upon candidates and voters according to their ability to pay the fees and, therefore, needed to be “closely scrutinized.” Such scrutiny led the panel to rule that the statute violated equal protection. The Supreme Court upheld that ruling 7-0, invoking *personal* and *individual* rights to extend the neutrality principle to individual candidates for elective office, saying that a state cannot arrange the electoral process to favor wealthy candidates over less-affluent ones.

In *Gaffney v. Cummings*<sup>27</sup> the Supreme Court, for the first time, extended the neutrality principle into the realm of political districting in a non-racial context. As we shall elaborate in Chapter 37, the primary issues involved population inequality and a claimed violation of a “right to participate effectively in the political process”<sup>28</sup> by persons living in towns fragmented by the plan. The secondary issue was a claim of partisan gerrymandering perpetrated by a nominally bipartisan board.<sup>29</sup> The district court did not address the gerrymandering claim, invalidating the plan on grounds of district population inequalities.<sup>30</sup> On appeal to the High Court the partisan gerrymandering claim was addressed in Part III of Justice White’s opinion.<sup>31</sup> The majority concluded that, as a matter of fact, the plan was not a partisan gerrymander, implying that if it had been it could have been struck down. Thus the neutrality principle was extended a few centimeters. In this instance the neutrality principle meant that a state may not draw legislative districts to favor the Republican Party over the Democratic Party—and vice versa. That would mean the State was taking sides in favor of one major party and against the other.

Thirteen years later the High Court, in *Davis v. Bandemer* pushed the neutrality principle a few centimeters further by affirming what *Gaffney* only implied: a state may not draw legislative districts to favor one major party over the other to a degree that would mean one party has “essentially been shut out of the political process.”<sup>32</sup> Eighteen years after that, in *Vieth v. Jubelirer*, the High Court came within one vote of reversing this long sequence of precedents by holding that partisan gerrymandering was a non-justiciable, “political” question not subject to judicial determination. That brings us to the present.

### *A Fresh Look at Faulty Assumptions*

We are persuaded that the *Vieth* plurality is probably correct in saying there is no judicially discernible and manageable standard by which we can determine whether a districting plan is an unconstitutional partisan gerrymander. But we disagree with the plurality as to what conclusion we should draw from this discovery. The plurality’s conclusion is that the courts should stay “hands off” redistricting; let the legislative power brokers draw districts any way they please; and acquiesce in what boils down to state-sponsored election rigging. This is a most unsatisfactory conclusion; one we cannot accept. Maybe we should go back to Square One, take a fresh look at the broader issue and maybe jettison some assumptions that have long permeated scholarly thinking about districting: (1) gerrymandering necessarily involves political parties and, therefore group rights; (2) redistricting necessarily involves giving someone discretion in drawing district lines; (3) it would be a far greater task to get rid of all “gerrymandering” than to get rid of just the most egregious examples; to get rid of bi-partisan gerrymandering than just get rid of partisan gerrymandering. Let us examine each of these assumptions in turn.

(1) The assumption that “gerrymandering” necessarily involves political parties draws much support from its “official” definition in *Black’s Law Dictionary* (7th ed. 1999):

The practice of dividing a plan of district boundaries and populations for partisan or personal political purposes.<sup>33</sup>

Notice that Justice Fortas includes the words “or personal” in his definition whereas Black’s definition assumes that it is necessarily a party-versus-party matter. We are as concerned with boundary manipulation applied to individual candidates, as we are when it applies to groups. Maybe we should stop talking about “gerrymandering” and, instead, talk about “discriminatory districting”—because that is what we are really upset about. Looking at the issue from this broader “Fortas” perspective has the immense advantage of avoiding the nettlesome matter of defining what constitutes a “group”—and the whole issue of group rights which is so disturbing to Justice O’Connor who wrote in her concurrence in *Davis*:

The right asserted in *Baker v. Carr* was an individual right to vote whose weight was not arbitrarily subjected to “debasement” ... The rights asserted in this case are group rights to an equal share of political power and representation...

*Reynolds [v. Sims]* makes plain that the one person, one vote principle safeguards the individual’s right to vote, not the interests of political groups.<sup>34</sup>

In challenging a districting plan from this broader perspective the plaintiffs would be individual candidates and voters from specific districts who would allege diminution of their prospects of electoral success by a discriminatory election law promulgated by the State. If there were challengers in a sufficient number of districts, it might add up to a statewide challenge. In summary, if our target is discriminatory districting rather than “partisan gerrymandering,” we sidestep some nasty problems even though we are tackling a bigger issue.

(2) The assumption that districting necessarily requires discretion we (hopefully) knocked apart in Chapters 24 and 25 by demonstrating that discretion can be removed from districting by a well-crafted districting procedure.

(3) We are puzzled by some statements in the *Bandemer* plurality opinion, but by none more than these two:

...the mere fact that a particular apportionment scheme makes it more difficult for a particular group in a particular district to elect the representative of its choice does not render that scheme constitutionally infirm.<sup>35</sup>

...a group's electoral power is not unconstitutionally diminished by the simple fact of an apportionment scheme that makes winning of elections more difficult...<sup>36</sup>

It seems to us that if an “apportionment scheme” makes it “more difficult” for a candidate or party to win an election, and it can be shown that this was done with deliberate intent, then the “scheme” has to be “constitutionally *infirm*” regardless of how mild the “discriminatory effect” may have been. The neutrality principle says there is to be no taking of sides by the State. Period. The State must be a neutral referee and ought to be prohibited from even trying to help one side prevail over the other. The attempt of the *Bandemer* plurality to sanction a “little bit” of discriminatory boundary manipulation (what Justice Powell called “gerrymandering in the ‘loose’ sense<sup>37</sup>) but not “too much,” means the courts are saddled with the job of establishing a bright line that will necessarily have to be arbitrary. This is what justices O’Connor and Scalia see and are afraid of. We think it would be far easier to erect a standard of absolute impartiality on the part of the State that would permit no manipulation, than to erect a standard that would permit gerrymandering in the “loose” sense but would negate it were it “severe.”

In summary, our starting point would be the electoral neutrality principle. If there were an aggrieved candidate or voter, that person—instead of having to allege a group harm that exceeded some threshold—would simply allege that the State had failed to govern impartially: that it had done so by engaging in discriminatory districting against that person. That plaintiff would allege, further, that the discriminatory state action was intentional. The State’s defense would be that the plaintiff’s misfortune was accidental and would show that the challenged plan



was either (1) crafted by a truly impartial person or (2) was the outcome of an impartial districting procedure.

*What Sets Discriminatory Districting Apart from Other Violations of the Electoral Neutrality Principle?*

Why has it been so difficult for the courts to extend the electoral neutrality principle to include redistricting in a non-racial context? We seek the answer to this question by examining the remedy that was applicable in those cases we cited earlier where a constitutional violation was found.

In *Hunter v. Erickson* the remedy was to strike down the referendum procedure that was uniquely applicable to advocates of fair housing ordinances in the city of Seattle. In *First National Bank of Boston v. Bellotti* the remedy was simply to permit the banking industry to make the campaign expenditures in referenda campaigns that it sought to make. In *Carrington v. Rash* the remedy was simply to permit out-of-state armed forces personnel to vote in local elections in the Texas communities near where they were stationed. In *Williams v. Rhodes* the remedy was simply to order the American Independent Party's presidential candidate's name to go on the 1984 general election ballot. In *Greenberg v. Bolger* the remedy was to order the Postal Service to make its reduced third-class mailing rate available to all candidates—not just of those of the major parties. In *Anderson v. Celebrezze* the remedy was to order the State of Ohio to put independent presidential candidate John Anderson's name on the 1980 general election ballot. In *Bullock v. Carter* the remedy was to order the State of Texas to lower its filing fees for candidates for local office. In all cases the remedy was simple and self-evident.

But with non-racial political districting cases it is a different story. The courts cannot just say to the State of Indiana: “Stop gerrymandering!” It is significant that the *Bandemer* plaintiffs, in their prayer,<sup>38</sup> did not specify what remedy they wanted the Court to impose. The *Badham*

plaintiffs were more specific: they asked the Court to promulgate its own map “if the California legislature failed to adopt, in a timely manner,” a constitutional plan. The *Veith* plaintiffs also asked the Court to impose its own map. But it is not clear, in each of those cases, what a constitutional map would look like and different courts might come up with different maps if forced to impose remedial plans. There is no such thing as an impartial plan: any and every alternative plan will help certain candidates and hurt others. Thus, for good reason, the courts have avoided getting into the redistricting thicket. We are proposing a way to avoid that thicket: order the state defendants to promulgate impartial *procedures* for crafting districting plans, rather than draw the plans themselves.

#### *One Reaction to Our Characterization of Gerrymandering as a Violation of Individual Rights*

Among the nine *amicus* briefs submitted in support of the *Vieth* Appellants was one by us.<sup>39</sup> In it we made the case for the neutrality principle and urged the Court to look upon the gerrymandering issue from the perspective of individual rights of candidates and voters. Even though they had opportunity to read all of the *amicus* briefs prior to submitting their final pleadings, the litigants did not, for the most part, respond to the arguments made by amici. October 17, the deadline for submission of the Appellees’ final brief, was also the deadline for submission of briefs by amici who wished to support them. One such brief appeared. It was submitted by the (Democratic) leaderships of the Alabama Senate and House of representatives. They were concerned that the *Veith* Appellants might win and the High Court might “establish a new constitutional rule that requires rough proportional representation between the two major parties.”<sup>40</sup> Such a rule, they said, would threaten the representative gains made by African-Americans in their long struggle for civil rights.

The Alabama amici noted that our brief “argues that the problem of indeterminacy of an identifiable partisan political group can be solved by addressing gerrymandering claims strictly as violations of individual rights rather than violations of group rights.” They responded saying “But such an atomizing approach would transform the nature of alleged gerrymanders from

encroachments on the rights of members of protected classes to a failure accurately to aggregate individual opinions or preferences.” We are not sure we understand what they are talking about. All we are saying is that prospective plaintiffs in a gerrymandering lawsuit, such as former congressmen Borski and Mascara, could have alleged they suffered individual harm when the State of Pennsylvania crafted Act 1 in 2002. We don’t see what “aggregation of individual opinions or preferences” has to do with it.

## Notes

<sup>1</sup> *Vieth v. Jubelirer*, No. 02-1580. Brief for Appellants, pg. 46.

<sup>2</sup> *Davis v. Bandemer*, No. 84-1244: Brief of the American Civil Liberties Union and the Indiana Civil Liberties Union as amici curiae; pp. 9 -16.

<sup>3</sup> *New York Transit Authority* 440 U.S. 568, 587 (1979).

<sup>4</sup> *Ibid.*

<sup>5</sup> *Kacher v. Daggett* 462 U.S. 725, 748.

<sup>6</sup> Eisenberg, et al. Op. cit. Note 2: pp. 16 – 17.

<sup>7</sup> *Romer v. Evans* 116 S. Ct. 1620, 1628 (1996).

<sup>8</sup> *Hunter v. Erickson*

<sup>9</sup> *First National Bank of Boston v. Bellotti* 393 U.S. 385 (1969).

<sup>10</sup> *First National Bank of Boston v. Bellotti* 393 U.S. at 393 (Harlan, J., concurring).

<sup>11</sup> *Carrington v. Rash* 435 U.S. 765 (1978).

<sup>12</sup> *Carrington v. Rash* 435 U.S. at 784.

<sup>13</sup> *Carrington v. Rash* 380 U.S. 89 (1965).

<sup>14</sup> *Williams v. Rhodes* 393 U.S. 23 (1).

<sup>15</sup> *Williams v. Rhodes* 380 U.S., at 94.

<sup>16</sup> *Williams v. Rhodes* 393 U.S. 23 (2968).

<sup>17</sup> *Williams v. Rhodes* 393 U.S., at 30-34.

<sup>18</sup> *Ibid.*, at 30-31.

<sup>19</sup> *Greenberg v. Bolger* 497 F.Supp. 756 (E.D.N.Y.1980).

<sup>20</sup> *Greenberg v. Bolger* 497 F.Supp., at 765.

<sup>21</sup> *Anderson v. Celebrezze* 460 U.S. 480 (1983).

<sup>22</sup> *Gamillion v. Lightfoot* 364 U.S. 339 (1960).

<sup>23</sup> *White v. Regester* 412 U.S. 755 (1973).

<sup>24</sup> *Shaw v. Reno* 509 U.S. 630 (1993).

<sup>25</sup> *Bush v. Vera* 517 U.S. 952 (1996).

<sup>26</sup> *Bullock v. Carter* 478 U.S., at 139.

<sup>27</sup> *Gaffney v. Cummins* 412 U.S. 735 (1973).

<sup>28</sup>

<sup>29</sup> *Ibid.*, Allegation Nos. 15 and 16, pg. 11.

<sup>30</sup> *Cummings v. Meskill*, 341 F.Supp. 139, 148, 149 (1972).

<sup>31</sup> *White v. Regester* 412 U.S., at 751.

<sup>32</sup> *Gaffney*

<sup>33</sup> *Kirkpatrick v. Preisler* 394 U.S. 526, 538 (1969).

<sup>34</sup> *Davis v. Bandemer* 478 U.S., at 149 (O’Connor, J. concurring).

<sup>35</sup> *Davis v. Bandemer* 478 U.S., at 131.

<sup>36</sup> *Davis v. Bandemer* 478 U.S., at 132.

<sup>37</sup> *Davis v. Bandemer* 478 U.S., at 165.

<sup>38</sup> See Appendix A-1.

<sup>39</sup> *Veith v. Jubelirer*, No. 02-1580. Brief of the Center for Research into Governmental Processes, Inc. as *Amicus Curiae* in Support of Appellants.

<sup>40</sup> *Ibid.*, p. 15.

## Chapter 31

### Choosing U.S. Representatives: Whose Prerogative?

The electoral neutrality principle, if it were formally recognized by the courts, would be sufficient to void all discretionary districting plans in the nation—local, state and congressional; partisan and bipartisan. It would truly finish the long unfinished “reapportionment revolution.” But in the case of congressional districting a second legal theory, arising independently from Article 1 Section 2 of the Constitution, would suffice to overturn all discriminatory districting plans drawn to elect representatives to Congress. That theory hinges upon an interpretation of what the Framers meant when they employed the phrase “by the people.”

#### *The Federal Convention of 1787*

At the Federal Convention of 1787 in Philadelphia the first substantive business was debate and voting on fifteen resolutions—collectively referred to as the “Virginia plan”—offered by delegate Edmund Randolph on Tuesday, May 29, 1787. The first clause of the fourth of these resolutions was:

“Resolved that the members of the first branch of the national legislature ought to be elected by the people of the several states every for the term of ;”<sup>1</sup> (pg. 20)

Debate on this resolution took place on Thursday, May 31. Six delegates spoke during the debate: delegates Mason, Wilson, and Madison supporting the resolution; delegates Pinckney, Gerry (*sic*), and Sherman opposing it. Delegate Gerry spoke twice. A reading of the record of this debate—whether from the notes of Madison, Yates, King, or Pierce—shows that the proposed alternative to having “the people” choose those members was to have the state legislatures do it. No other method was proposed.<sup>2</sup>

No opponent of the resolution offered the argument that the state legislatures could act as the surrogates of the people because they were “the voice of the people.” The issue was whether the people *or* the legislatures should have this prerogative. Gerry, in particular, did not want to entrust this responsibility to the people. He said:

“The people...are the dupes of pretended patriots. In Massachusetts it has been fully confirmed by experience that they are daily misled into the most baneful measures and opinions...”<sup>3</sup>

Gerry was unsuccessful in persuading a majority of his colleagues. When the vote was taken six state delegations supported the resolution; only two opposed it. Two delegations were divided.

Debate then turned to the fifth resolution, which proposed, “that the members of the second branch of the National Legislature ought to be elected by those of the first...” This proposition failed on a 3 - 7 vote. From June 1 through 5, the convention gave first consideration to the remaining ten resolutions, at the conclusion of which it passed a motion by delegate Pinckney to reconsider—on the following day—its May 31 decision endorsing the fourth resolution.<sup>4</sup>

On that day (Wednesday, June 6) the convention again debated whether the members of the “first branch of the national legislature” should be elected by the people, or by the state legislatures. Pinckney moved, and Rutledge seconded, to strike the word “people” and insert in its place the word “Legislatures.” Again, the alternatives being debated could not be clearer. Speaking in favor of the substitution were delegates Pinckney, Gerry, and Sherman. Speaking in opposition were delegates Wilson, Mason, Madison, Dickenson and Pierce. Much the same arguments were made as on May 31.<sup>5</sup> Again a vote was taken, and again “the people” prevailed: eight delegations to three.<sup>6</sup> “The people” was no idle cliché. In the context of that debate it meant *in contrast to the state legislatures*.

The following day (Friday, June 7) the convention again took up the question of electing the *second* branch by considering Dickenson's motion that this branch "ought to be chosen by the individual legislatures."<sup>7</sup> It passed unanimously. The "first branch of the National Legislature" became the U.S. House of Representatives. The "second branch" became the U.S. Senate. The proponents of both means of selection had achieved a chamber of their liking. It remained this way until passage of the Seventeenth Amendment in 1913 gave "the people" the prerogative of choosing the "second branch," as well.

*The Federalist No. 52*

In *Wesberry v. Sanders* 376 U.S. 1 (1964) the Supreme Court defined "the people" as meaning that one person's vote in a congressional election should carry as much weight as any other's. When the Governor and 132 members of the Ohio General Assembly are empowered to influence the selection of the state's congressional delegation by means of discriminatory districting, their votes are weighted by a factor of many thousand times the votes of their ten million fellow Ohioans. In the case of plaintiff Clarence Miller, there is evidence to suggest that the decision to terminate his congressional career was made by one person: defendant Stanley Aronoff. If true, it would mean that the vote of Senator Aronoff has been weighted by a factor of several *hundred* thousand times that of other Ohioans.

That the prerogative of choosing U.S. representatives belonged *solely* and *exclusively* to "the people" is documented in *The Federalist* No. 52 wherein Alexander Hamilton discusses what should be the qualifications of persons elected to the House of Representatives, and what should be the qualifications of those who do the electing. At issue concerning the latter was whether (1) states should be permitted *unlimited* discretion in deciding who would be eligible to vote in congressional elections, (2) the federal constitution should tell the states who would be eligible, or (3) the federal constitution should permit the states *limited* discretion in deciding who would be eligible.

The Framers chose the third option by concluding the first sentence of Article I Section 2 with the words:

“...the electors in each state shall have the qualifications requisite for electors of the most numerous branch of the State legislature.”

In support of the Framers’ decision that states should not be able to establish qualifications for voting in congressional elections any different from those regulating who chooses state representatives Hamilton wrote:

“To have submitted [the matter of qualifications of electors of the U.S. House of Representatives] to the legislative discretion of the states would have been improper... for the additional reason that it would have rendered too dependent on the State governments that branch of the federal government *which ought to be dependent on the people alone.*” (emphasis added)

In short, the framers believed that who should—and who should not—be elected to the U.S. House of Representatives was a matter to be decided by “the people *alone.*” If the framers were unwilling to give state legislatures full discretion in setting qualifications for congressional electors because doing so “would have rendered too dependent on State governments” the U.S. House of Representatives, how much *more* strongly would they have opposed permitting states to pass congressional districting laws designed to facilitate the election of certain candidates and the defeat of others!

The framers could not have anticipated that, by the device of discriminatory districting (*i.e.*, “gerrymandering”), state legislatures would find a means of exerting a significant—if not dominant—influence over the selection of U.S. representatives. Usually, that discrimination is subtle, unacknowledged, and difficult to prove. In the case at bar, however, the discrimination was dramatic and blatant with respect to plaintiff Clarence Miller. Defendant Sheerer shamelessly admitted it in the Ohio House of Representatives on March 26, 1992. In her

remarkable speech she named certain congressional incumbents and said why their re-election was so important to the state of Ohio that everything possible should be done to afford them “safe” districts. It was a speech eerily reminiscent of delegate Elbridge Gerry’s speech at the federal convention in its assumption that the people could not be entrusted with choosing their representatives unassisted.

The framers could only bequeath to us the *principle* that “the people alone” were to choose U.S. representatives and leave it to those whose job it is to interpret our Constitution to *apply* that principle in the light of unforeseen future circumstances. For “the people alone” to do this choosing there must, of course, be elections for this purpose. Not only elections, but also elections conducted under *impartial election laws—including the election laws pertaining to the establishment of district boundaries*.

For most of the past two centuries it was assumed that discretion was a necessary and inevitable component of political districting, as witnessed by Justice White’s statements to that effect in *Gaffney* (which we will see in Chapter 37). If that were so, then there would be no practical alternative to permitting states to engage in discriminatory districting and the courts would be justifiably prudent in staying out of the “political thicket” by letting states district as they see fit.

The advent of neutral districting procedures has changed all that. The means is now at hand to implement the people’s constitutional right to be the exclusive chooser of U.S. representatives, and to prevent state legislatures from usurping that right. No state legislature will voluntarily relinquish its current power to engage in such usurpation, however, and for that reason the courts have a constitutional duty to intervene.

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Against this overwhelming evidence that state legislatures were not to encroach upon the people's right to be the sole choosers of U.S. representatives, the state Defendants made a skimpy and superficial response. They cite a split ruling by a district court in a 1992 congressional districting case in Maryland: *Anne Arundel County Republican Central Committee et. al. v. The State Administrative Board of Election Laws et.al.*<sup>8</sup>

*Anne Arundel* alleged two constitutional violations: (1) a *Karcher* claim that defendants failed to make a good faith effort to achieve numerical equality among the eight new congressional districts and (2) an Article 1 § 2 claim that the plan “deprived the plaintiffs of an opportunity to effectively participate in the political process” by fragmenting the county in which they lived among four districts.

The state's plan achieved a population variance of ten persons, but it also had before it a plan with a variance of nine persons. The court majority held that the state must justify its choice of the plan having the greater variance; and when such justification was proffered accepted the justification and upheld the plan. The dissenting judge (Niemeyer) held that the state did *not* have to justify its greater variance. Therefore, all three judges held for the defendants on the *Karcher* claim.

The court split over the Article 1 § 2 claim with the majority ruling that Art. 1 § 2 does not prohibit a state from taking “political” factors into account in crafting a districting plan. They stated that relief from political discrimination was available under the First and Fourteenth Amendments. Judge Niemeyer, on the other hand, argued that the legislature “drew... district lines to depict the classic gerrymander in an attempt to control the outcome of future congressional election” and in so doing “the people are not represented directly and equally, as required by Art. 1 § 2.”<sup>9</sup>

In his lengthy dissent, which skirts the argument made by plaintiffs in the case at bar, Judge Niemeyer notes the same debate at the federal convention as do we, with its decision that

the people, as opposed to the state legislatures, were to elect the members of the U.S. House of Representatives. At one point he states:

“...it must be conceded that the right of the people to elect directly their representatives...means nothing if the Constitution does not forbid the states from manipulating the boundaries of congressional districts in attempts to influence the outcome of the people's congressional elections.”<sup>10</sup>

But Judge Niemeyer’s argument faltered at the point of prescribing a remedy would secure this “right” of the people—without leading the courts into a morass. He states “we are left with criteria for creating districts in a manner that is ‘neutral;’” then goes on to cite “geological structures” and finally “compactness and contiguity.” He did not say how such “neutral” criteria can be organized in a manner that would afford a clear-cut demarcation between what the courts must accept and what they must void.

The majority, sensing that Judge Niemeyer’s prescription could lead their court into a quagmire, noted:

“What constitutes political gerrymandering going so far beyond the pale as to be long-standing boundaries, including state, municipal, and county subdivision boundaries, and unacceptable...is hard to define... We can well afford...leaving to another day and another case the task of establishing federal constitutional limits to gerrymandering in congressional districting.”<sup>11</sup>

The majority also noted that:

“...the ‘neutral criteria’ districting called for by the dissent would in no way ensure maintenance of the territorial integrity of Anne Arundel County, which is what brought on this suit in the first place.”<sup>12</sup>

They observed that four other counties had been fragmented by the plan and “doubted” that “the territorial of Anne Arundel County is a classification.” Their conclusion (quoted in Defendants

memorandum at 27-28) was that “a federal court should think long and hard about rejecting the reasons—the justification—of the state legislature.”

Indeed it should.

But the court majority could not deny the framers’ mandate that U.S. representatives ought to be chosen by “the people.” Judge Niemeyer, on the other hand, could not persuade the court majority that there was any means by which “the people” could exercise their prerogative without imposing upon the courts “a sort of judicial receivership” that would obligate them to “ultimately conduct redistricting.”<sup>13</sup> The court majority attempted to escape this dilemma by erecting a straw man:

“...the ‘people’ of the State of Maryland cannot in 1991, even if they could have done so in 1789, practically be heard individually *via* a statewide town meeting of the whole. The most direct channel of action by ‘the people’ is *via* their elected representatives in both houses of Maryland’s legislature...”<sup>14</sup>

The alternative to state-sponsored election rigging is not “a statewide town meeting.” It is to compel the legislature to promulgate a neutral districting *procedure* which will take away its opportunity to play a significant—if not dominant—role in the choosing of U.S. representatives. Neither Judge Niemeyer nor the court majority can be faulted for being unaware that this other alternative was available.

In the case at bar, plaintiffs are putting this alternative before the court. That is why

*Miller v. Ohio* is not “on all fours” with *Anne Arundel*.

## Notes

<sup>1</sup>Farrand, Max: *The Records of the Federal Convention of 1787 Vol. 1*, 1937 edition (Connecticut: Yale University Press, 1966): 20.

<sup>2</sup> *Ibid.* pp. 40-60.

<sup>3</sup> *Ibid.*, p. 48.

<sup>4</sup> *Ibid.*, p. 118.

<sup>5</sup> *Ibid.*, pp. 130-147.

<sup>6</sup> *Ibid.*, p. 130.

<sup>7</sup> *Ibid.*, p.148.

<sup>8</sup> *Anne Armendel County Republican Central Committee et. al. v. The State Administrative Board of Election Laws et. al.* 81 F.Supp. 394 (D. Md. 1991).

<sup>9</sup> *Ibid* 781 F.Supp. 394, 401.

<sup>10</sup> *Ibid* 781 F.Supp. 394, 406.

<sup>11</sup> *Ibid* 781 F.Supp 394, 400 (note 11).

<sup>12</sup> *Ibid* 781 F.Supp. 394, 398.

<sup>13</sup> *Ibid* 781 F.Supp. 394, 398.

<sup>14</sup> *Ibid* 781 F.Supp. 394, 400.

## Part VII.

# Bipartisan Gerrymandering

## Chapter 32

### Bipartisan Gerrymandering: *Miller v. Ohio*

To the conventional wisdom the term “Bipartisan Gerrymandering” is an oxymoron. According to this school of thought “Gerrymandering” isn't gerrymandering unless one of the major parties has control of the districting process and uses that control to hurt the other party. If the leaders of the two parties in a state legislature can work out a compromise as to which candidates are to be favored, and craft a plan to carry out that political decision, then it may even be characterized as an act of “bipartisan statesmanship.” That is why we prefer to talk about discriminatory districting, and to remind the reader that partisan gerrymandering is only one species of discriminatory districting. One could make a case for the proposition that bipartisan gerrymandering is an even greater barrier to democracy than partisan gerrymandering, because under the latter there is the possibility of change over time. Under the former, however, one may end up with a totally closed system. We are advised that in New York state, for example, that the major parties have worked out a *modus vivendi* whereby Republicans redistrict the Senate and Democrats redistrict the Assembly. This virtually assures perpetual Republican control of the New York Senate and perpetual Democrat control of the New York Assembly.<sup>1</sup>

#### *Ohio Congressional Districting History Since 1950*

Ohio provides a good case study of how discriminatory districting of both partisan and bipartisan varieties has worked over the past century to degrade the value of the ordinary citizen's vote. In Chapter 23 we recounted the 38-year history of the congressional districting plan passed by a Democrat-controlled General Assembly in 1913. Let's pick up on that history, beginning in 1951. Ohio was allotted 23 seats in Congress for the decade of the 1950s—the same number it had throughout the 1940s. The 1913 plan, still in effect, contained only 22 districts, so for the elections of 1942 -1950, the state had one congressman-at-large.

In 1950, Republicans achieved a 15-to-7 majority in the Ohio congressional delegation,<sup>2</sup> so all they now had to do was lock-in their incumbents. This they did. Following the 1950 elections, Republicans dominated the Ohio congressional delegation for 17 successive elections. A Democratic majority on the delegation did not reappear until 1984. The three censuses occurring during those decades further shrunk the delegation and the 1990 census would cut it to 19 members.

### *The 1992 Bipartisan Compromise*

The 1990 census led to yet another reduction in Ohio's congressional delegation, this time from 21 seats to 19. Once again power was divided at the statehouse, and again it was a Democrat-controlled House and a Republican governor and Republican-controlled Senate. Neither party could impose its will on the other in the drawing of new congressional districts. Based upon earlier experience, it was expected that each party would "give up one seat" in the process of arriving at the new bipartisan compromise plan. Newspaper speculation was that Rep. Clarence Miller of the (old) 10th CD would be the incumbent the Republicans would "sacrifice" if none of their other nine incumbents would retire voluntarily. Miller made it clear to all that he did not wish to retire. During the fall of 1991, Ohio House Speaker Vern Riffe emphatically stated that the Democrats would give up only one seat; that one Republican incumbent would have to be forced out; and that which Republican it was would be for Republican Senate President Stanley Aronoff to decide (in private conversation with Miller Riffe said "That's Stan's call"). Fratricide on the Democratic side was averted when both speculative Democrat "sacrifices" abruptly opted for retirement.

The legislature put off action on congressional districting until February 3, 1992 when the Senate finally held its first hearing on Senate Bill (S.B.) 292 sponsored by Sen. Richard Finan. Miller and some of his supporters came to the hearing and testified against the bill. Its political effect was to provide favorable districts for all incumbents—except Miller and Democratic Rep.

Douglas Applegate who were paired in the same district on terms advantageous to Applegate. Then followed seven weeks of the typical partisan and bi-partisan wrangling and horse trading that produces legislation in a pluralistic democracy. Amended Substitute Senate Bill 292 passed the senate 28-5 with bipartisan support and bipartisan opposition. It amended the Ohio Revised Code to establish the congressional district boundaries in effect for the decade 1992-2001. It is shown in Figure 32.1.

### *Miller's Fate*

Clarence Miller, a Republican, was first elected U.S. Representative from the 10th Congressional District in 1966; the first election held after Ohio's congressional boundaries were realigned to satisfy the one person-one vote mandate of *Wesberry v. Sanders*. He represented Ohio's CD 10, as it was from time to time constituted, continuously from that time until January 3, 1993. As shown in Figure 32.2, Am. Sub. S.B. 292 split former CD 10 among four new districts:

1. Miller's residence and 103,461 people in Fairfield County were included in new CD 7, then represented by incumbent Republican congressman David Hobson of Clark County.

2. Some 218,701 people were shifted to new CD 6, then represented by incumbent Republican congressman Bob McEwen of Highland County. As shown in Figure 32.2, the new CD 6 then contained 342,680 people (60.0 percent of the total) who had also been included in the former CD 6; 218,701 from former CD 10 (38.3 percent of the total) and 9,520 (1.7 percent of the total) who had been included in former CD 18.

3. Another 186,706 people were assigned to new CD 18, which was then represented by incumbent Democratic congressman Doug Applegate of Jefferson County.

4. The remaining 17,607 people were assigned to new CD 12, which was then represented by incumbent Republican congressman John Kasich of Columbus.



Figure 32.1

Am. Sub. S.B. 292  
BIPARTISAN PLAN



Figure 32.1

MAP OF  
**OHIO**  
SHOWING  
COUNTIES, TOWNSHIPS &  
COUNTY SEATS

OHIO DEPARTMENT OF TRANSPORTATION

Figure 32.2

### CHECKMATE GERRYMANDER: BREAKUP OF OLD CD 10

1990 Population: 526,475  
(D.I. = "Democratic Index")

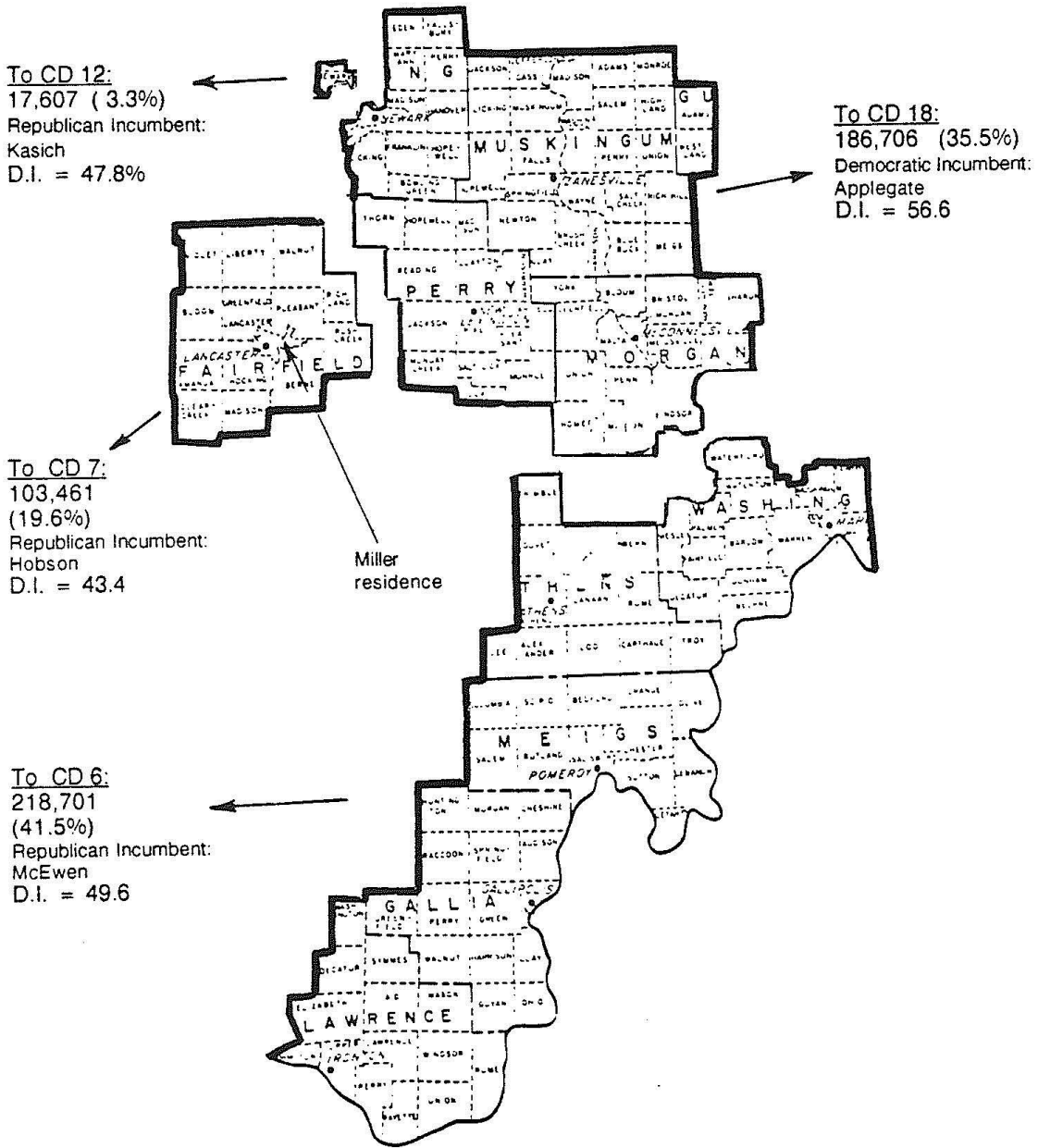


Figure 32.3

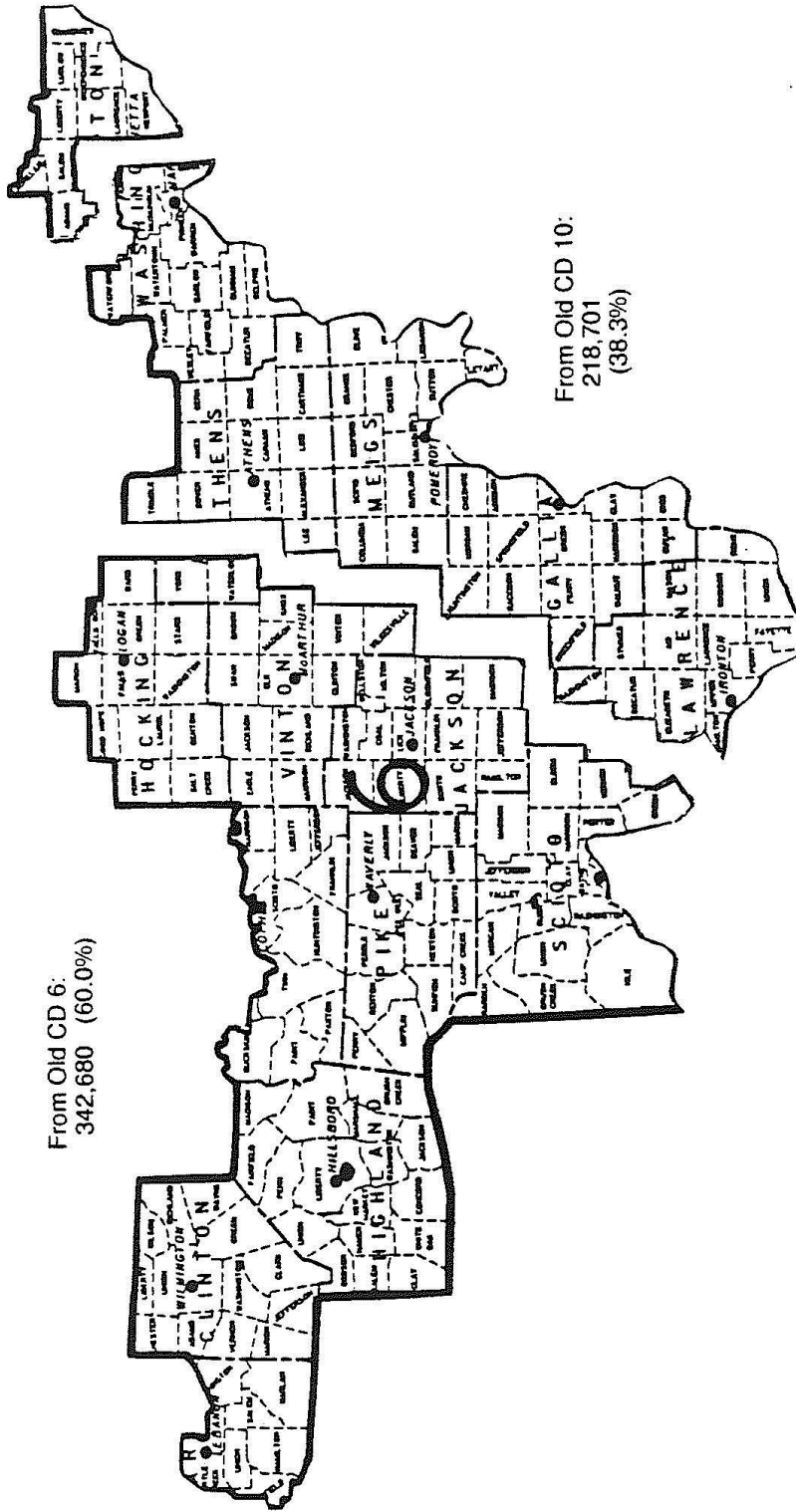
### MAKEUP OF NEW CD 6

1990 Population: 570,901

From Old CD 18:  
9,520 (1.7%)

From Old CD 6:  
342,680 (60.0%)

From Old CD 10:  
218,701 (38.3%)



With the loss of two Ohio seats, district numbers 20 and 21 were rendered obsolete. Former districts 20 and 21 were located in the far northeastern part of the state. The numbering pattern used throughout the 1980s was not retained in this redistricting, however. Former CD 10, represented by Rep. Miller for more than two decades, ceased to be the designation for a southeast Ohio congressional district and instead became the designation for a new district in Cuyahoga County. The numbers of the districts being voluntarily vacated by retiring congressmen Eckart and Pease (11 and 13) logically would have been given to the new districts in Cuyahoga County. But the numbers of the new districts in Cuyahoga County were 11 and 10. This all constituted evidence that Miller's district had been consciously and specifically singled out for annihilation.

The congressional districts as drawn by Am. Sub. S.B. 292 presented Rep. Miller with a “checkmate gerrymander:” like a king check-mated in a game of chess, any move he made, or no move, would require his running against a well-entrenched incumbent in a district where the advantage would lie with the other incumbent. Other than Congressman Miller, the plan was drawn to protect all incumbents—both Republican and Democratic—and was defended on that ground by Rep. Sheerer and other behind-the-scenes negotiators. Aronoff, Riffe and Sheerer publicly stated that one Republican congressman would have to be singled out for elimination in the downsizing of Ohio’s delegation. Miller was fingered as the Republican sacrifice to keep the Ohio delegation in “political balance.” He entered the Republican primary for new CD 6, running against incumbent Republican Rep. Bob McEwen and lost by 286 votes out of more than 65,000 cast. Miller decided to take the matter to court.

### *Miller’s Co-Plaintiffs*

For lead attorney Miller engaged David V. Stivison, a native of Hocking County in Miller’s Appalachian district. Following graduation from Harvard Law School, Stivison had worked for two major law firms before opening his own office in Philadelphia. Of counsel was

John B. Anderson, independent presidential candidate in 1980 and now Distinguished Visiting Professor of Law at Nova Southeastern University in Fort Lauderdale, Florida. Since this suit was unprecedented and, if successful, would have an impact comparable to *Baker v. Carr*, additional individuals and parties who had plausible grounds for complaint were invited to join as co-plaintiffs.

*Other Individual Candidates.* Other individual candidates for Congress—past, present and future challengers of both major parties—suffer discrimination when the State crafts districts to facilitate re-election of their favored incumbent-opponents. From Columbus and Franklin County there were two unsuccessful Democratic challengers from 1990 and 1992, Robert J. Fittrakis and Thomas V. Erney. Since 1966, Columbus' sizeable concentration of inner-city Democratic voters had been evenly split between CDs 12 and 15 so that Democratic congressional candidates had little prospect of success in either district.

To the south and west, several strongly Republican counties were strung together into a new CD 7 which provided a safe harbor for congressman, Michael DeWine. In the north-central Ohio isolated Republican counties were strung together to insure that newly-elected congressman Michael Oxley would have nothing to fear at election time. Plaintiff Donald Hollister had challenged DeWine's predecessor Clarence J. Brown Jr. in 1980.

In Cleveland and Cuyahoga County Plaintiff Robert L. Woodall was one of many challenger "also-rans" who attempted to achieve higher office without the blessing of the power brokers in Columbus and Cleveland. Nearby, in the industrial Mahoning valley, Plaintiff Salvatore Pansino, a Republican, went through the motions of challenging Democratic incumbent James Traficant. At the other end of the state, in Cincinnati/Hamilton County, Plaintiff Steve Grote ran a strong race in a district he was not expected to do well in.

*Minor Parties.* When the leaders of the two major parties, in collusion, craft a districting plan to facilitate election of the candidates—usually, but not always, the incumbents—they

favor, the most obvious persons harmed by this action are the challengers of both major parties. Therefore, in *Miller v. Ohio* most of the plaintiffs were major party “also-rans” who saw their already dim prospects of success further diminished by boundary manipulation of the districts they were running in. By the same token, another category of persons harmed by a collusive, bipartisan gerrymander are the candidates of parties other than the Democrats and Republicans.

The best representative of this group of plaintiffs during the last two decades of the twentieth century is the Libertarian Party. The Libertarians have rarely elected anyone to public office (in considerable part due to the SMD-plurality electoral system prevalent in the United States) but they have maintained a small but persistent presence in our body politic, reminding us that Democrats and Republicans do not speak for everybody. Because Libertarians, unlike many ethnic groups, are not geographically concentrated, they are unlikely to elect many people to public office in an SMD-plurality system. But that does not negate the possibility that should they become a plurality in one or more of a state’s SMDs, discriminatory districting by the major-party power brokers would “crack” them into politically impotent enclaves. Therefore, the Libertarian Party of Ohio, when invited, readily signed on as a co-plaintiff in this case.

*Independent Candidates and Voters.* A final category of plaintiffs in a suit challenging a collusive bipartisan gerrymander are independent candidates for district-wide office and a large number of independent voters. Unlike successful minor party candidates, successful independent candidates are not a rarity. Maine and Connecticut have elected independent governors within the past two decades. Ohio elected an independent member of Congress for two terms in the 1950s. More significant, perhaps, than independent candidates are independent voters. There are several ways to define an independent voter. Legally, in Ohio, an independent voter is any voter who has never voted in a party primary election. That would constitute a majority of voters in some counties. Yet it would exclude many voters with strong partisan feelings or loyalties but who do not vote in party primaries. A better definition would be any voter for whom maximizing of the

number of candidates of his party who get elected is not as important as having the maximum impact of his own vote. One could contrast this attitude with that of a partisan voter who would be willing to live in a district which is a “throw-away” to the other party and in which his vote has little prospect of affecting the outcome, if it were part of a plan designed to inefficiently distribute the votes for the other party and reduce the number of its candidates elected.

If we use this “better definition,” we would find there are many independent voters, because most voters who consider themselves Democrats and Republicans also want their votes to have the maximum impact. To make the point that there are many “independent” voters who (often unwittingly) suffer from dilution of the power of their votes due to partisan and bipartisan gerrymandering, the Miller plaintiffs included Diana Kukor, an independent voter who is not a member of the Republican, the Democratic nor any other political party. In 1980, Ms. Kukor had been Ohio chairperson for John B. Anderson, the independent candidate for President. Her situation is described in the part of the complaint applicable to independent voters:

A political gerrymander consistently degrades the influence of independent voters by deliberately drawing each district to produce a lopsided contest that favors a specific major party candidate—whether Democrat or Republican—and assures that independents’ votes count for very little.<sup>3</sup>

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*Miller v. Ohio* was filed in the United States District Court Southern District of Ohio Eastern Division on 18 November, 1994. But the groundwork for such a case had been laid three years earlier when publication of the 1990 census data confirmed that Ohio would lose two congressional seats in the 1991 reapportionment. Publication of that data made possible the first and absolutely essential component of that groundwork: crafting of alternative congressional districting plans for the state of Ohio for the decade of the 1990s. We therefore turn to a consideration of such plans and a comparison of them with the plans crafted by the political powers-that-be.

## Notes

<sup>1</sup> Wells, David I. *Article* submitted to the *New Republic*, Jan. 14, 2004.

<sup>2</sup> The twenty-third seat on the delegation was held by Independent congressman Frazier Reams, who ousted a Democratic incumbent in 1950 and was, in turn, ousted by another Democrat in 1954.

<sup>3</sup> *Miller, et al v. Ohio et al.* Op. cit. note 4, p. 28.



## Chapter 33

### 1990s Ohio Congressional Plan Comparisons: Physical

To be helpful in a legal challenge to the status quo alternative congressional districting plans would have to meet certain requirements. First, their deviations from population equality must be equal to or less than those of the State's plan. Second, they would have to have at least one minority-majority district with over 50 percent African-American population and two "minority influence" districts with 25-50 percent black population. Third, the plans should be drawn, either to achieve exact population equality in all districts, or to a  $\pm 1$  percent deviation from equality in all districts. Fourth, the plan must be finished in time to be presented to the appropriate committees of the General Assembly once the dates were set for those committees to commence public hearings.

The plans available for comparison came from two sources (individual citizens and politicians) and fell into two categories: (1) plans drawn to a  $\pm 1$  percent deviation; (2) plans drawn in a (presumed) effort to achieve exact district population equality. These plans were presented to the Senate committee on Elections on February 3, which duly noted their receipt, but otherwise showed little interest in them. Four of the "citizen" plans achieved absolute population equality among their districts. Total deviations for the "political" plans ranged from 8 persons to 15 persons. Four citizen plans split from 11 to 15 counties producing from 30 to 38 county fragments. Three political plans split from 20 to 24 counties producing from 42 to 49 county fragments. Whether the criterion was county fragments, city/village fragments or township fragments, in all cases the citizen plan showed less fragmentation than the corresponding political plan.

Compactness measurements were made on all plans, using the Goedicke measure. In addition, the five citizen plans were measured by each of two additional (credible) techniques:

Gibbs Longest-Axis Circle and the Blair/Biss Relative Second Moment of Area. The rank-order correlations agreed nearly perfectly. By the minority population distribution criterion all plans passed muster—for all intents and purposes.

In October 1991, the senior author (Horn) sent a memo to the junior author (Hampton), to Larry Holderly (whose plans had been consistent winners in the Indiana and Ohio districting competitions of the late 1980s), and to John Lucid (who had also participated in those competitions). The memo proposed that these four individuals each prepare two congressional districting plans for the state of Ohio using the 1990 census data, which had now become available. The 1990 Ohio population of 10,847,115 when divided equally as possible among districts would require 15 districts of 570,901 and four districts of 570,900. The first plan should be drawn to a  $\pm 1$  percent population deviation. The second should be drawn to achieve absolute population equality among districts and should be identical to the first plan except for the minor alterations necessary at 18 district interfaces to duce deviations to zero. The objective was to have each author's set of plans finished in time to be presented to the appropriate committees of the General Assembly once the dates were set for those committees to commence public hearings.

The State, despite well-publicized claims to the contrary, did not make a districting database available to the general public in any meaningful way. Individuals who wished to travel to the state capitol in Columbus had opportunity during working hours to use a public access computer at the Legislative Services Commission (LSC) loaded with the necessary data. However, if several individuals wished to use it, the LSC could not guarantee access to that computer for more than one hour at a time. It takes an experienced technician about 2-3 days (16 to 24 hours) to draw a statewide plan for congressional or state senate districts having a population deviation of one to five percent. To bring those deviations down to zero could easily take a week. Such realities meant anyone hoping to craft a plan to offer, as an alternative to those

authored by the major parties, would be naive to think he could do it with the public access computer at the LSC.

The LSC, however, is located in the same building just a few floors down from the offices of Ohio House members. One member, sympathetic with our work on the districting issue, was able to secure from the LSC paper print-outs of census tract maps for any of Ohio's 88 counties, census block maps for anyone of Ohio's 3200 census tracts, and population tables for the census blocks comprising any census tract in the state. In addition, the Data Users Center of the Ohio Department of Development had published a 357-page document<sup>1</sup> listing the populations, broken down by race, of every county, township, city, and incorporated village in the state. With 16 x 18-inch state maps showing county and township boundaries published by the Ohio Department of Highways and 1980 county maps of census tract boundaries left over from the Ohio districting competitions of 1989 and 1990, it became possible to supply each of the citizen plan-drawers with the maps and data he needed to produce a congressional districting plan drawn to any level of population equality precision.

The only "rules" set for the citizen plan-drawers besides the two different population equality requirements were that each plan contain one "minority-majority" district of 50+ percent African American population and two "minority influence" districts of 25-50 percent African American population. Plan-drawers were advised to "just do what [they] think 'seems right. Strike any balance between compactness and splitting of local governmental units [they] deem appropriate. Follow a maximum districts rule or a spillover rule only if [they] feel like it."<sup>2</sup>

Preparation of plans having a  $\pm 1$  percent population deviation was neither difficult nor time consuming. The only counties requiring maps showing census tract boundaries that anyone needed were Cuyahoga, Franklin, Hamilton, Montgomery, Summit, Stark, and Butler. Achievement of the  $\pm 1$  percent population deviation did not require splitting any census tract in any county by any of these craftsmen. Horn decided to draw plans having two alternative configurations:

Plan A would seek to minimize county fragmentation whatever the cost in loss of compactness. Plan B would observe the compactness thresholds embodied in the Ohio Anti-Gerrymander Amendment and split whatever counties were necessary to observe those thresholds. Hampton was not satisfied with the given population deviations and drew his plan to observe a maximum deviation of  $\pm 1,000$  persons (about  $\pm 0.2$  percent). To get comparability with other plans this plan was modified to provide both a  $\pm 1$  percent version and an absolute equality version. Lucid did not do an absolute population equality version of his plan. Table 33.1 summarizes the population deviations of the ten plans created by the four citizen plan-drawers, along with those of the Democrat, Republican and bipartisan plans generated by the Ohio General Assembly in the course of the struggle recounted in the previous chapter.

### *Population Carryover*

As in our investigations in Indiana, California and Pennsylvania, we begin by examining the previous plan noting which districts have gained population and which have lost population—and assessing the magnitude of the gains and losses. Table 33.2 reveals the important facts. Again, we see a significant difference in population gains/losses between the districts of Democrat incumbents and those of Republican incumbents. The mean 1990 population of a Democrat incumbent congressman's district (498,136) is about 38,000 less than that of a Republican congressman. Note that the five districts (overall rankings 1 through 5), which gained the most population during the decade, are those of Republicans and that the eight districts (overall rankings 14 through 21) which lost the most population during the decade were those of Democrats. To reach the new congressional population of 570,901 over 112,000 must be added to CD 21 of Congressman Louis Stokes—even if 100 percent of his old district is carried over. On the other hand, a minimum of 2,300 must be removed from Congressman Chalmers Wylie's CD 15 to reach the new population. It is impossible for him to receive a 100 percent carryover of his old district.

Table 33.1

Population Deviations of 1992 Ohio Congressional Districting Plans

	Maximum Plus Deviation		Maximum Minus Deviation	
	Magnitude	CD	Magnitude	CD
<u>Citizen Plans</u>				
Hampton ± 1%	4,729	18	4,782	4
Hampton ± 1,000	842	19	704	6
Hampton ± Zero	0	-	0	-
Holderly ± 1%	4,729	9	5,031	13
Holderly ± Zero	0	-	0	-
Horn A ± 1%	4,955	15	5,455	17
Horn A ± Zero	0	-	0	-
Horn B ± 1%	5,154	6	5,644	8
Horn B ± Zero	0	-	0	-
<u>Political Plans</u>				
S.B. 292 (Republican)	4	12	4	18
Sub. S.B. 292 (Democrat)	7	10	8	6, 11
Am. Sub. S.B. 292 (Bipartisan)	2	10	7	13

Table 33.2

1990 Populations of Ohio Congressional Districts (1985 Plan)

District	Incumbent	Population*	Overall Ranking
<u>Democrats</u>			
11	Eckart	530,838	6
13	Pease	521,359	9
19	Feighan	516,807	10
1	Luken	509,109	14
9	Kaptur	504,915	15
3	Hall	504,503	16
14	Sawyer	503,390	17
18	Applegate	477,614	18
20	Oakar	476,682	19
17	Traficant	475,303	20
21	Stokes	458,125	21
	Mean:	498,136	
<u>Republicans</u>			
15	Wylle	573,234	1
12	Kasich	569,755	2
8	Boehner	551,433	3
6	McEwen	548,784	4
2	Gradison	535,264	5
7	Hobson	527,006	7
10	Miller	526,475	8
5	Gillmor	514,936	11
4	Oxley	510,847	12
16	Regula	510,736	13
	Mean:	536,762	

\*U.S. Census Bureau figures

### *Fragmentation of Local Governmental Units*

Tables 33.3 and 33.4 summarize the fragmentation of counties, cities, townships and incorporated villages for the plans under scrutiny. Here we divide the plans into two groups: those drawn to observe a population deviation of  $\pm 1$  percent from precise mathematical equality; and those drawn to zero deviation from that standard. Looking first at plans drawn to the one percent standard, we see Lucid ranking highest in avoiding fragmentation of counties and cities and second highest in avoiding township splits. Horn Plan A ranks second in avoiding county and city fragments. Recall that Horn's Plan A was an all-out attempt to avoid fragmentation, but he still split 5 counties creating 13 county fragments. Lucid found a way to reduce his county splits to four, creating only 9 county fragments. However, as we will see shortly, there is a trade-off involved in achieving reduced fragmentation. In order to make a fair comparison of the three versions of S.B. 292 with the citizen plans, the former were re-drawn to a  $\pm 1$  percent deviation standard, which reduced their fragmentation considerably. Even so, their county fragment range of 32 to 43 compares poorly with the 9 to 32 fragment range present in the citizen plans. With respect to number of county splits, the 4 to 14 range of the citizen plans contrasts similarly with the 15 to 21 range of the political plans.

Turning to the plans drawn to zero deviation from absolute population equality, we find—as expected—greater fragmentation in all cases. The four citizen plans show a range of 11 to 15 in number of counties split and a range of 30 to 38 in number of county fragments. The political plans show a range of 20 to 24 in county splits and a range of 42 to 49 in number of county fragments. So, with respect to county fragmentation, the citizen plans are all superior to the political plans at zero deviation from population equality, as well as at one percent deviation. With respect to cities and villages, the superiority of the citizen plans is also dramatic. They range from 4 to 7 in the number split while the political plans show a range of 19 to 31 in the number split. In the number of resulting fragments the citizen plans range from 7 to 18 while the political plans show a range of 38 to 62.

Table 33.3

Fragmentation of Governmental Units: 1992 Ohio Congressional Districting Plans  
Single-Digit or Zero Population Deviation

	COUNTIES		CITIES/VILLAGES		TOWNSHIPS	
	Number Split	Number of Fragments	Number Split	Number of Fragments	Number Split	Number of Fragments
<u>Citizen Plans</u>						
Horn A	11	30	4	8	18	37
Holderly	13	31	3	7	16	34
Hampton	12	32	7	18	14	28
Horn B	15	38	6	13	20	41
<u>Political Plans</u>						
Republican	20	42	26	52	44	88
Democratic	24	49	19	38	30	60
Bipartisan	20	42	31	62	63	126

Table 33.4

Fragmentation of Governmental Units: 1992 Ohio Congressional Districting Plans  
± One Percent Population Deviation

	COUNTIES		CITIES/VILLAGES		TOWNSHIPS	
	Number Split	Number of Fragments	Number Split	Number of Fragments	Number Split	Number of Fragments
<u>Citizen Plans</u>						
Lucid	4	9	1	2	3	6
Horn A	5	13	2	4	9	18
Holderly	7	18	2	5	7	15
Hampton	9	22	5	11	2	4
Horn B	14	32	3	7	11	23
<u>Political Plans</u>						
Republican	17	36	4	8	5	10
Democratic	21	43	4	8	6	12
Bipartisan	15	32	16	32	10	20

## *Compactness*

As in our examination of the plans at issue in Indiana, California and Pennsylvania, we chose the Goedicke Compactness Index as our measure of compactness. In this case we were able to apply two additional compactness measures to the five citizen plans: the Gibbs Longest Axis Circle measure and the Blair-Biss Relative Second Moment of Area. In their study of compactness measures Horn, et. al. concluded that although “no single measure of compactness is theoretically perfect...relative second moment comes close.”<sup>3</sup> Table 33.5 shows the compactness indices for two congressional districting plans of the 1980s, the three incarnations of S.B. 292, and the five citizen plans of the Miller controversy as overall indicator of the plan’s compactness. When that is done we are not very surprised to discover that the least compact citizen plan (i.e., Lucid) is still 6 points higher (51.6) than the most compact of the political plans (i.e., Republican) with 45.5. In the case of the five citizen plans, where we were able to apply all three compactness measures, the two additional measures mostly confirm what the Goedicke measure indicated: Lucid is the least compact, and Horn A the second least compact plan by all three measures; relative second moment supports Goedicke’s conclusion that Horn 8 is the most compact plan. Earlier, we compared the sum of the mean and minimum indices for each plan because it gives the best.

We mentioned a bit earlier that Lucid’s superiority in avoiding fragmentation was achieved at the price of a “trade-off.” Figure 33.1 shows what that trade-off was: ten districts (CDs 1, 2, 5, 6, 7, 10, 13, 15, 16, and 18) that fall below the compactness threshold (37.7) of the Ohio Anti-Gerrymander Amendment, the lowest of which (CD 10) has a C.I. of only 16.2. Horn Plan A had five districts below the Anti-Gerrymander Amendment, but was not as successful in avoiding fragmentation as was Lucid. Hampton’s minimum C.I. of 37.1 narrowly missed meeting the Amendment’s threshold. Holderly and Horn 8 both met the Amendment’s compactness threshold. If they were in a competition conducted under the Amendment’s



Table 33.5

1992 Ohio Congressional Districting Plans:  
Compactness Comparisons Using Three Alternative Measures

	Area/Perimeter-Squared (Goedicke)	Longest-Axis Circle (Gibbs)	Relative Second Moment of Area (Blair/Biss)
<b>1985 Plans</b>			
ACLU Amicus (Horn)			
Mean:	48.3		
Minimum (Least compact):	29.3	-	-
Mean + Minimum:	77.6		
Am. Sub. H.B. 160 (Bipartisan; State of Ohio)			
Mean:	33.0		
Minimum:	9.1	-	-
Mean + Minimum:	42.1		
<b>1992 Plans</b>			
Hampton			
Mean:	51.6	0.513	0.818
Minimum:	37.1	0.360	0.548
Mean + Minimum:	88.7	0.873	1.366
Holderly			
Mean:	51.0	0.519	0.816
Minimum:	37.2	0.391	0.631
Mean + Minimum:	88.2	0.910	1.447
Horn A			
Mean:	44.4	0.440	0.737
Minimum:	29.4	0.221	0.309
Mean + Minimum:	73.8	0.661	1.046
Horn B			
Mean:	52.9	0.532	0.840
Minimum:	37.8	0.365	0.641
Mean + Minimum:	90.7	0.897	1.481
Lucid			
Mean:	35.4	0.385	0.637
Minimum:	16.2	0.242	0.353
Mean + Minimum:	51.6	0.627	0.990
Republican (S.B. 292)			
Mean:	29.4		
Minimum:	16.1	-	-
Mean + Minimum:	45.5		
Democratic (Sub. S.B. 292)			
Mean:	29.9		
Minimum:	10.1	-	-
Mean + Minimum:	40.0		
Bipartisan (Am. Sub. S.B. 292)			
Mean:	29.7		
Minimum:	11.3	-	-
Mean + Minimum:	41.0		

Figure 33.1

LUCID: ±1%

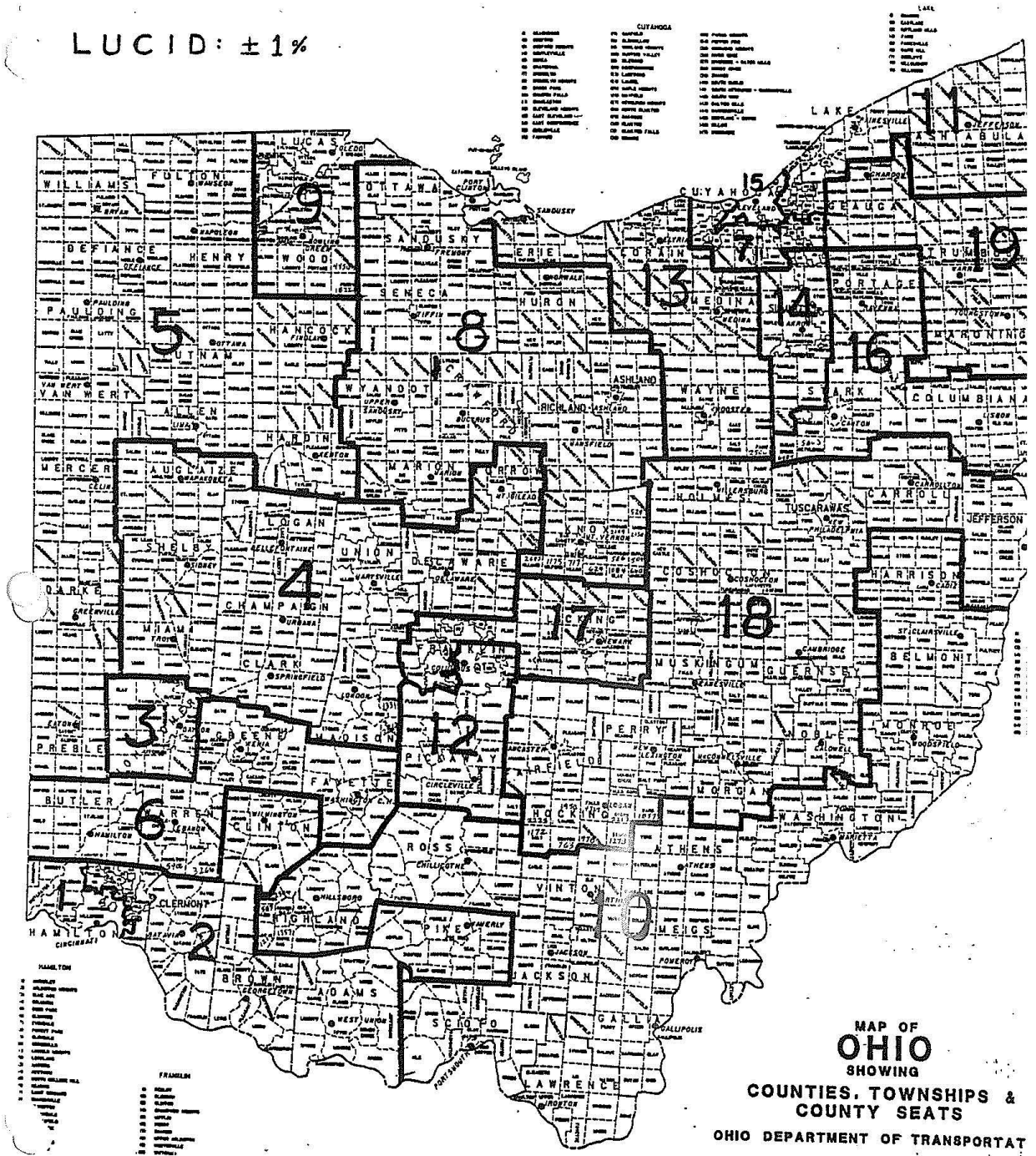
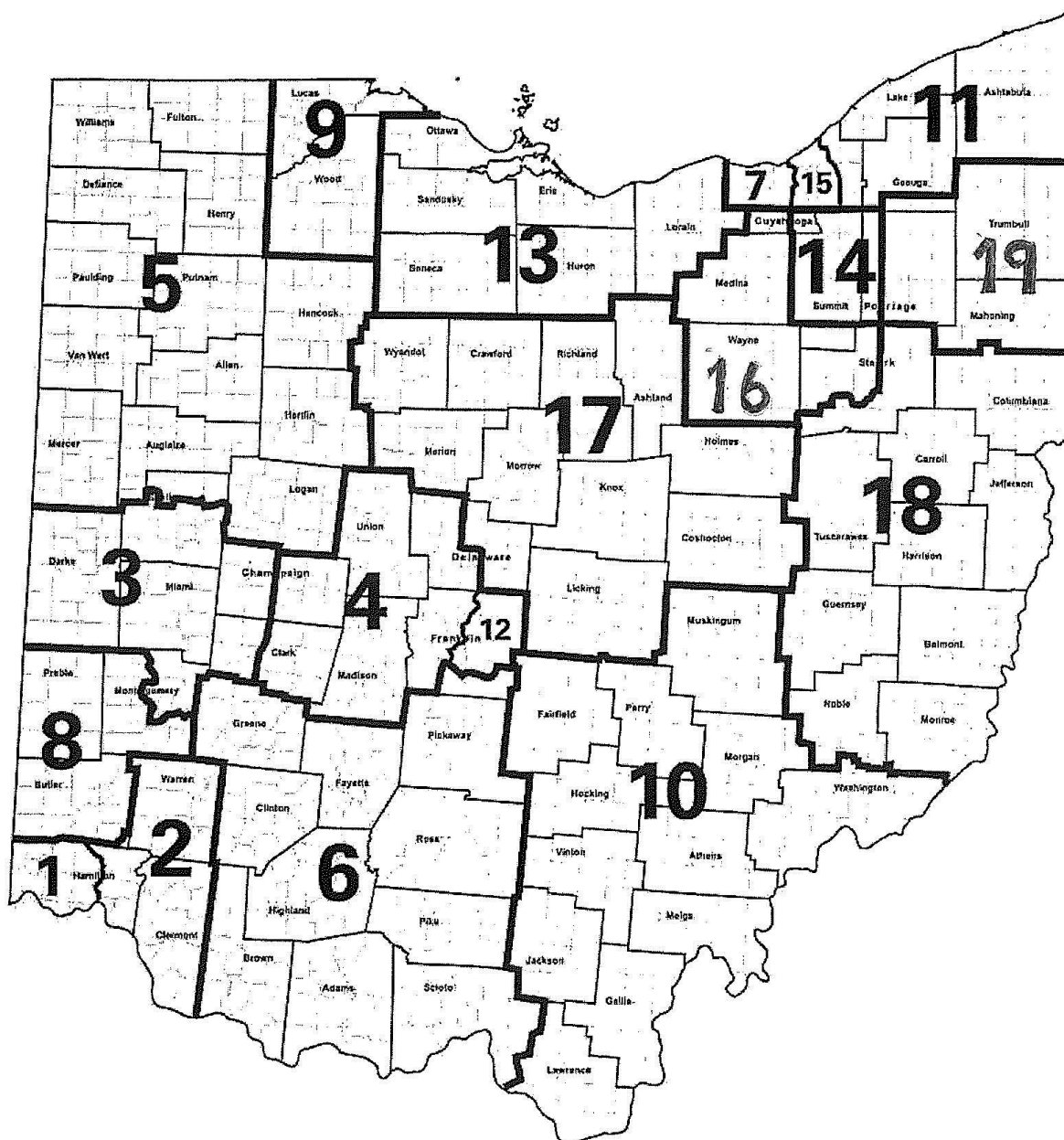


Figure 33.2:  
HORN PLAN B:  $\pm 1\%$



Horn B (shown in Figure 33.2) would win out narrowly because its least compact district has a higher C.I. (37.8) than the least compact district of Holderly (37.2).<sup>4</sup>

### *Distribution of Minority Populations*

In Ohio, African-Americans form the only minority group whose numbers and geographical concentration enable them to achieve majority status in a congressional district of population 570,901. In Table 33.6, we report the African-American populations and percentages of congressional districts situated in counties where that population is sufficient to constitute 25 percent of a CD. For comparison we show first, these numbers for the preceding State of Ohio plan of 1985—both in terms of the 1980 census data with which it was constructed and the 1990 census data which shows the demographic change over the decade. Examination of the figures for the 1992 plans shows that all plan drawers except Lucid were able to create a black majority district and all located that district in Cuyahoga County. Lucid obviously was determined to avoid splitting the city of Cleveland and his plan demonstrates it is probably impossible to create a black majority CD in Ohio without splitting at least one city. Notice too, that the 1992 plan drawers' majority-minority districts all have black percentages in the 50s whereas the corresponding district for the 1980s had black percentages in the 60s. This reflects what happens when the CD population is increased from 514,000 to 571,000 without a proportional increase in the black population.

Looking at Hamilton County, we see that all plan drawers were able to create a “minority influence” district with a black population exceeding 25 percent. When the focus is on Franklin County we see that only one plan drawer—Holderly—was able to surmount the 25 percent threshold, although the other citizen plans exceeded 24 percent. None of the “political” plans were able to come up with a 25 percent district in Franklin County, although the Democrats' 24.98 percent shows an obvious effort on their part. The 21.74 percent in the Republican plan

Table 33.6

## African-American Populations and Percentages of Congressional Districts in Largest Urban Counties Under Different Plans

	Cuyahoga		Hamilton		Franklin	
	Population	%	Population	%	Population	%
<u>Ceiling</u> <sup>1</sup>	350,185	61.34	181,145	31.73	152,840	26.77
<u>1985 Plan</u>						
(1980 census)	322,400	62.7 <sup>2</sup>	83,300	16.2 <sup>2</sup>	77,600	15.13 <sup>2</sup>
(1990 census)	313,703	68.30 <sup>3</sup>	100,606	19.75 <sup>4</sup>	95,167	16.74 <sup>5</sup>
<u>1992 Plans</u>						
Bipartisan (+ 2, - 7)	334,348	58.56	171,883	30.08	132,728	23.24
Democratic (+ 7, - 8)	332,967	58.42	176,954	31.00	142,506	24.98
Republican (+ 4, - 4)	323,521	56.67	170,273	29.83	124,088	21.74
Hampton (Zero)	325,391	57.00	154,300	27.03	138,026	24.18
Holderly (Zero)	322,841	56.55	147,519	25.84	143,753	25.18
Horn A (Zero)	311,411	54.55	145,752	25.53	140,849	24.67
Horn B (Zero)	317,709	55.65	152,458	26.70	141,838	24.84
Lucid ( $\pm 1\%$ )	271,239	47.06	142,797	25.01	136,100	24.06

<sup>1</sup> If all African-Americans in county could be put in a single district of population 570,901

<sup>2</sup> Percentages computed on the basis of a district population of 514,172. These percentages are from the Opinion of U.S. District Court Southern District of Ohio Eastern Division Case C-2-82-173 (*Flanagan v. Gillmor*) dated May 25, 1982.

<sup>3</sup> Based upon District 21 population of 458,746

<sup>4</sup> Based upon District 1 population of 509,277

<sup>5</sup> Based upon District 12 population of 568,597

suggests a corresponding lack of effort. All drawers who tried to meet this requirement in Franklin County also paid a price in terms of compactness—as examination of a detailed map of the Franklin County portions of their plans would show.

## Notes

<sup>1</sup> Simon, Edward, *Ohio Population by Race and Governmental Unit: 1970, 1980 and 1990*, (Ohio: Ohio Data Users Center, 1991).

<sup>2</sup> Memo from David Horn to Larry Holderly, Charles Hampton, and John Lucid dated 13 October 1991.

<sup>3</sup> Horn, et al. 1993: p. 111.

<sup>4</sup> Holderly's 37.2 C.1. does not disqualify his plan because the Amendment's threshold is lowered to 30.1 for any district contained wholly or partly within the three counties more populous than a CD. His 37.2 C.1. applies to his CD 1, which is located entirely within Hamilton County (*i.e.*, Cincinnati).

Unintentional Gerrymander Hypothesis: Conventional Political Analysis

*Unintentional Gerrymander Hypothesis.*

We are now sailing uncharted waters. We asserted that bi-partisan gerrymandering, no less than partisan gerrymandering, is a species of discriminatory districting<sup>1</sup> and ought to be declared unconstitutional by the courts. We have expressed skepticism about the scholars' tests for partisan gerrymandering but have not proposed any test of our own for partisan gerrymandering, let alone for bi-partisan gerrymandering. Further, say some of the country's leading scholars of redistricting, in our zeal to prevent manipulation by partisan or personal interests we are advocating politics-blind procedures which could result in plans which unintentionally confer a significant advantage on one or the other of the major parties. We call this assertion the Unintentional Gerrymander Hypothesis (UGH). Figure 34.1 gives a selection of the scholarly comment encompassed by the UGH. These scholars obviously use a definition of gerrymandering that does not require intent upon the part of the perpetrator—in contrast to Justice Fortas whose definition requires that the “distortion of district boundaries” be “deliberate.” If deliberate intent is not a necessary part of what constitutes a gerrymander, then we must ask: “What is?”

We can think of only two answers the individuals quoted in Figure 34.1 might give: The first would be any plan under which electoral outcomes in the major-party votes-seats relationship are grossly disproportionate. This sounds a little too much like saying “any plan that does not yield proportional representation,” so they are likely to give a second, more sophisticated answer by saying a plan is a gerrymander if it produces electoral outcomes that fail to achieve symmetry in the major-party seats-votes relationship. Figure 1.1 reminds us that a winner-take all districting plan does not yield proportional outcomes but still would not be considered as gerrymandered. But implicit in this critique is the assumption that discretionary districting, when

Figure 34.1  
UNINTENTIONAL GERRYMANDER HYPOTHESIS

Charles H. Backstrom:

"... a gerrymander may be created unintentionally that is no less distasteful and undemocratic than if it were created purposefully."  
*Minnesota Law Review* 62: 1148 (1978)

"Our own empirical efforts show that you can make districts look beautiful, and *be* beautiful, and meet all population standards, and still be a horrendous gerrymander; and that you've got to retain as the absolute minimum a political test..."

Roundtable on Gerrymandering APSA Annual Meeting  
Washington D.C. September 4, 1988

Richard G. Niemi:

"Because of the way that individuals cluster together, even a neutral districting plan can yield what many would regard as unfair results. For instance, it is quite easy to create an example in which the minority party wins a large percentage of the votes and almost no seats despite a districting plan that gives every appearance of being completely neutral."

*UCLA Law Review* 33(1): 207 (1985)

Bernard Grofman:

"In my view the notion of blindfolded districting, paying no attention to political outcome but instead looking only at formal guidelines such as compactness or equal population, is fundamentally misguided."

*Voting Rights, Voting Wrongs: the Legacy of Baker v. Carr*  
A Twentieth Century Fund Paper (1990) page 32

Frank R. Parker:

"... what we call the traditional measures ... is not adequate because we do have ... we have seen many gerrymanders that have been compact, contiguous, conform to supposedly neutral principles ... advocates of those criteria have not proved themselves in many many cases."

Roundtable on Gerrymandering September 4, 1988

Kimball W. Brace:

"I cite to you what took place in Michigan in 1980---where the court appointed a special master to draw the districts ... with all of the 'good government' kind of criteria ... when (the master) drew the legislative districts he kept all the townships together, and all the counties together, and all that, as best he could ... and the Republicans claimed it was a *great* plan ... And the Democrats, of course, said it was a partisan gerrymander ... because when you took a look at the *impact* of that plan it did cause Democrats to lose seats in the legislature. And, in fact, ... Republicans are in control of the state senate and the Democrats are just barely in control of the state House ..."

Roundtable on Gerrymandering September 4, 1988

David Butler and Bruce Cain:

"The first three considerations (*i.e.*, 'equal numbers;' 'natural frontiers;' 'compactness and contiguity') are in a sense technical or aesthetic, dealing with the ideal shape and size of constituencies in a fashion that is, ostensibly, politically neutral. But constituencies devised to meet these principles may not meet the political requirements of fairness to the various groups in the community, above all to the parties contending for power."

*Congressional Redistricting* page 66

Leonard Robins:

"The real problem of the 'hard liners' is ... that oldest of political questions: who shall guard the guardians? Because when you rank the factors someone has to pass a law that ranks the factors! And suppose that someone (calculates) 'our party will do better if compactness is ranked higher and community of interest lower.' And what if, in another state, someone says 'we do better if we do it the other way'? ... What if we decide that a 3 percent population deviation might work well in our state, versus a 5 percent? (It) might make all the difference in some ways ... What is the basis of ranking those factors? And you know who is going to determine that? The political powers in the legislature! ... there'll be *two* constitutional amendments on the ballot---by initiative: one ranking one set of factors and one ranking the other set of factors. Each party will say 'we've got to oppose this amendment because the way they rank the factors will hurt us.' I do not really believe ... that you're going to be able to get a set of criteria in a rank order that is non-partisan ..."

Roundtable on Gerrymandering September 4, 1988

done by the proper persons, will produce districting plans that yield symmetrical, if not proportional representation. Does it?

Let's apply the scholars' tests for partisan gerrymandering to both the political and the citizen plans that appeared in *Miller v. Ohio* and see what they tell us. If we follow this course, we would proceed as we did in the Indiana, California and Pennsylvania investigations. As the reader is by now well aware, we begin by equipping ourselves with the two basic analytical tools required for a political analysis: incumbent carryover calculations and a political index.

### *Incumbent Carryover Calculations*

In Chapter 33's discussion of the physical characteristics of the plans under scrutiny in *Miller* we touched upon the subject of population carryover only briefly and that was in the context of the impact of the previous decade's population gains and losses upon the districts held by Democrats in contrast to those held by Republicans. For gerrymander analysis we are interested in population carryover, rather than gains and losses, and especially the carryover experienced by individual incumbents of the two parties. This information is crucial to application of Grofman's prima facie Indicators 4/6: altering/preserving incumbents' districts.

We noted in Chapter 9 that there are two ways of measuring population carryover: (1) as a percentage of the incumbent's old district that is carried over into his new district and (2) as a percentage of the incumbent's new district that is composed of population from his old district. Since, in this case, district size increased from 514,172 to 570,901 we might expect that in most cases (1) will be a larger number than (2). This is indeed so. As Table 34.1 indicates, we computed population carryover by method (1) for all the incumbents in all of the plans. We also computed population carryover by method (2) for all the incumbents in all of the plans, but save space do not show the results here. In all cases but Wylie the carryover by method (1) is higher than that by method (2), and this conforms to our expectation because Wylie is the only incumbent whose new district has a smaller population than his old district (see Table 33.2).



Table 34.1

INCUMBENTS' PREDILECTION CARRYOVER  
Percent of Old District Carried Over into New District

Incumbent	Hampton Plan	Holderly Plan	Horn Plan A	Horn Plan B	Lucid Plan	Republican Plan	Democratic Plan	Bipartisan Plan
<b>DEMOCRATS</b>								
Luken	95.0	64.1	76.3	95.0	76.5	86.9	74.9	86.3
Hall	100	100	100	65.8	100	99.4	100	99.4
Kaptur	95.9	95.9	95.9	95.9	95.9	100	100	100
Sawyer	100	84.9	87.7	93.0	100	74.9	93.7	93.0
Traficant	100	91.3	98.4	98.4	98.4	94.6	98.4	97.5
Applegate	80.2	* 37.3	98.0	90.6	55.4	59.8	100	77.2
Oakar	87.4	72.9	65.6	73.8	57.2	82.0	84.1	73.9
Stokes	96.0	97.0	88.6	96.2	66.2	97.8	98.8	98.9
Feighan	* 24.7 (86.6)	* 32.0 (75.7)	* 41.3 (83.5)	* 38.7 (83.0)	63.9 (79.3)	* 50.5 (82.9)	* 51.8 (89.1)	* 38.2 (84.9)
Average:								
<b>REPUBLICANS</b>								
Gradison	16.5	45.6	34.9	* 77.3	* 66.1	* 76.4	35.4	75.4
Oxley	57.8	49.0	53.9	34.5	40.4	90.1	59.2	84.2
Gillmor	49.2	47.8	47.8	47.8	32.9	87.3	72.3	87.2
McEwen	17.9	41.8	18.8	51.8	43.0	62.5	86.2	62.4
Hobson	78.4	58.8	72.4	31.8	49.6	94.2	54.0	80.8
Boehner	82.1	60.2	82.4	58.6	52.9	95.2	32.4	93.0
Miller	51.0	51.0	69.9	87.0	44.7	52.4	91.5	19.7
Kasich	44.9	* 57.8	69.1	69.7	* 49.1	77.1	38.4	79.7
Wylie	* 59.3	37.0	68.5	59.2	58.5	80.8	52.8	80.9
Regula	98.4	73.7	72.1	* 69.8 (58.8)	62.2 (49.9)	99.9 (81.6)	91.2 (61.3)	97.7 (76.1)
Average:								
Average of All Incumbents:	70.25	63.37	70.62	70.26	63.84	82.20	74.48	80.28
Republicans: Average Minus Lowest Incumbent	39.1	15.3	40.2	27.0	17.0	29.2	28.9	56.4
Republicans: Next Lowest Minus Lowest Incumbent	1.4	4.8	16.1	2.7	7.5	10.1	3.0	42.7

\* Based upon nearby open district containing a significant fraction of incumbent's former constituents — rather than district incumbent lives in.

To be consistent with our practice in Indiana, California and Pennsylvania we would use whichever method gave the incumbent the higher carryover, but in this case Wylie is the only incumbent for whom method (2) gives the higher carryover and that carryover is less than one percent higher in all plans. So, in the analysis to follow we employ method (1). We also prefer method (1) because the mapmakers have greater power to achieve a 100 percent goal in terms of old district carried over than they do to achieve a 100 percent goal in terms of new district composed of population from the old. The analyses will yield nearly identical conclusions whichever definition we apply to population carryover.

Table 34.1 shows the population carryovers of the districts in the five citizen plans and the three political plans. Note that, as expected, the mean carryover in each plan's Democratic incumbent districts is higher than that of its Republican incumbent districts. In the citizen plans and the Democratic plan the differential ranges from 23.4 to 31.0 percent. In the Republican plan, however, the difference is only 1.3 percent, which supports an inference that the Republican mapmakers made a deliberate effort to maximize the carryover of their incumbent congressmen. The 8.8 percent carryover differential for the Bipartisan plan, while somewhat greater than that of the Republican plan, is still significantly less than that of any of the citizen plans. When the mean carryover for *all* incumbents is examined it is seen to be higher in all of the political plans than in any of the citizen plans. The difference is smallest in the case of the Democratic plan whose 74.48 percent is only 3.86 percent higher than the 70.62 percent value of Horn Plan A. In the case of the Bipartisan plan the difference rises to 9.66 percent and in the Republican plan the difference is highest at 11.58 percent.

When mean carryover for Republican incumbents is examined it is also seen to be higher in all of the political plans than in any of the citizen plans. The difference is again smallest in the case of the Democratic plan whose 61.3 percent is only 2.3 percent higher than the 59.0 percent value of Horn Plan A. In the case of the Bipartisan plan the difference rises to 17.1 percent and in the Republican plan the difference is highest at 22.6 percent.

Among the Democratic incumbents Feighan's carryover is significantly lower in all of the plans except Lucid—and in those plans has to be computed on the basis of a nearby open district containing a significant fraction of his former constituents rather than district he resides in. This correlates with the fact that his district did not lose population in the manner of those of most of the other incumbents (it gained about 1,000 over the decade). More significantly, his district in the 1982/85 plan had an extremely low compactness index and was configured in such a way that any effort to draw compact districts in the Cleveland metro area would inevitably chop it up in a way that would result in low carryover for Rep. Feighan.

Among Republican incumbents the differential between that of the incumbent having the lowest carryover and the mean of all Republican incumbents is worth noting. This differential is highest in the bipartisan plan where there is a spread of 56.4 percent between the 19.7 percent of Miller and the 76.1 percent Republican average. The next highest differential is 40.2 percent (McEwen) in Horn Plan A.

Also worth noting is the differential between that of the Republican incumbents having the lowest carryover and the next lowest carryover. This differential is highest in the bipartisan plan where there is a spread of 42.7 percent between Miller's 19.7 percent and the 62.4 percent of McEwen. The next highest differential is 16.1 percent (McEwen/Gradison) in Horn Plan A.

#### *A Political Index for Analyzing 1992 Ohio Congressional Districting Plans*

Again we follow the procedure spelled out in detail in Chapter 9. We use previous election results rather than party registration or survey research. We use statewide elections rather than aggregations of district-wide contests. We employ the most recent election possible: 1990. We use only the vote for major party candidates. In effort to “use elections that reflect only partisan preferences and are free of idiosyncratic factors” we correlated all five 1990 statewide races, precinct-by-precinct, with congressional races in open districts that year and picked the election (or elections) that yielded the highest coefficient of determination.

There were only two open-district congressional races in Ohio in 1990: Hobson (R) versus Schira (D) in CD 7, comprising 707 precincts in nine rural counties in west-central Ohio; Boehner (R) versus Jolivette (D) in CD 8, comprising 489 precincts in seven mostly rural counties in southwestern Ohio. We had the resources to obtain the election abstracts covering all five statewide races in these districts and to have all this data keypunched into a computer. That done we could perform most of the possible correlations and see which were highest. Table 34.2 shows the results obtained. As shown, we first correlated the vote for each statewide candidate, individually, with the vote for the party's congressional candidate. The highest value was 0.679. Next, we correlated the congressional vote with all ten combinations of two statewide races using the mean of those two races as the independent variable in each precinct. The combination having the highest correlation was Governor + Auditor: 0.719. Next we correlated the congressional vote with all ten combinations of three statewide races, using the means of those three races in each precinct. The combination having the highest correlation was Governor + Auditor + Treasurer: 0.729. Next we correlated the congressional vote with all five combinations of four statewide races, using the mean of those four races in each precinct. The combination having the highest correlation was Governor + Attorney General + Auditor + Treasurer: 0.736. Finally, we correlated the congressional vote with the mean of the vote for all statewide races in each precinct and obtained 0.731—slightly smaller value than that obtained by the best mean of four races.

We also performed multiple regression for all the combinations of two-or-more statewide races, with those races serving as independent variables, to see how much more of the variance we could account for using this methodology. Here the highest correlation, 0.739, was obtained using all five statewide races—as one would expect. The same value was obtained using the same four races whose mean gave the highest correlation in bivariate regression. But this 0.739 value was only a very slight improvement (0.003) over the best value obtained from bivariate

Table 34.2

Correlation ( $r^2$ ) of Vote for Congressional Candidate with Vote for Various Combinations of Statewide Candidates Open-District Races in Ohio, 1990\*

Combination	Correlation of Bivariate Regression of Single Statewide Race or of Average of Multiple Statewide Races	Correlation of Multiple Regression with Multiple Statewide Races Serving as Independent Variables
Governor (G)	.679	Not Applicable
Attorney General (AG)	.679	Not Applicable
Auditor (A)	.646	Not Applicable
Secretary of State (S)	.651	Not Applicable
Treasurer (T)	.532	Not Applicable
G + AG	.710	.710
G + A	** .719	.720
G + S	.699	.700
G + T	.701	.717
AG + A	.702	.704
AG + S	.692	.694
AG + T	.683	.703
A + S	.692	.692
A + T	.673	.685
S + T	.654	.670
G + AG + A	.726	.726
G + AG + S	.711	.713
G + AG + T	.725	.729
AG + A + S	.708	.709
AG + A + T	.713	.718
A + S + T	.698	.703
A + S + G	.719	.722
S + T + G	.709	.720
S + T + AG	.698	.707
T + G + A	*** .729	.736
G + AG + A + S	.723	.727
G + AG + A + T	**** .736	.739
G + AG + S + T	.722	.729
G + A + S + T	.727	.736
AG + A + S + T	.715	.719
G + AG + A + S + T	.731	.739

\*CD 7 (707 Precincts) + CD 8 (489 Precincts) = 1196 Precincts

\*\*Best correlation for an average of 2 statewide races. Regression Equation:  $C^T = -2.95 + 0.955(G + A)$

\*\*\*Best correlation for an average of 3 statewide races.  $C = -8.33 + 0.996(G + A + T)$

\*\*\*\*Best correlation for an average of 4 statewide races.  $C = -6.99 + 0.999(G + AG + A + T)$

$^T C$  = expected vote for congressional candidate

regression. With a computer to save the laborious computation in applying the index to the districts in the various plans, one might argue that the best choice *would* be multiple regression. However, when the indices of the districts in the previous (21-district) plan were computed by this method they turned out to be, uniformly, 6 to 8 percentage points lower than what political “common sense” indicated they should be: 47.22 in Democratic CD 3; 50.52 in heavily Democratic CD 20; 66.83 in very heavily Democratic DC 21; 40.90 in marginally Republican CD 16, etc.

Therefore, we opted for the single-variable best-mean-of-four races with the correlation of 0.736, and redesignated this average as V4. The scatter gram resulting from regressing the

vote for congressional candidates on V4 is similar to the Indiana scatter gram of Figure 9.1, although its 6.162 standard error is slightly greater than the 5.672 standard error of the Indiana scatter gram. A win probability curve for a Democratic Index based on V4 is also similar to that for the Indiana case shown in Figure 9.2. Again, the slightly greater standard error for the Ohio congressional case causes the Ohio “S-curve” to be a little bit flatter.

It should be noted here that the 0.736 correlation of V4 is only 0.007 better than that for the best mean-of-three races<sup>2</sup> (0.729) and 0.017 better than that for the best mean-of-two races.<sup>3</sup> The real improvement in correlation—0.400—takes place between that for the best individual races (0.679) and that for the best mean-of-two. This observation supports the statement by Horn and Hampton that “factoring more than one or two elections into the prediction equation adds very little to our ability to account for variance.”<sup>4</sup> Nevertheless, since we have a computer to do the work for us, we shall employ V4 as the basis of our index.

The authors of the “Republican,” “Democratic” and “Bipartisan” plans which we shall be analyzing appear to have used for the political indices of these plans a simple average of the five statewide races. While such a methodology lacks the theoretical underpinning of the index we have just derived, it has a “common sense” simplicity that is appealing and we shall compute indices for the districts in the plans we are analyzing by this means as well. There is a total of 173 districts in the nine plans we shall consider. When a correlation of the indices computed by V4 is made with those computed from a simple average of the five statewide races.<sup>5</sup> The outcome of the political analysis of the plans will be the same whichever value—V4 or V5—we use as the basis of our analysis.

In using the Index in the analysis that follows we must consider the conditions restricting its application,<sup>6</sup> in particular Condition Two which warns us that an index can only be valid with respect to a given level of statewide support for a party’s candidates. In 1990 the statewide mean for the four Democratic candidates designated by V4 was 51.64. The regression equation relating this mean to the level of support for Democratic congressional candidates should be solved to

find out what level of mean district congressional vote theoretically obtains under this circumstance.

$$C = -6.99 + 0.999V4 = -6.99 + 0.999(51.64) = 44.60 \quad [34.1]$$

In our analysis we are really not interested in the situation where statewide support for Democratic congressional candidates is only 44.6 percent. To afford the most meaningful comparisons we should compute the indices of the districts for the case where statewide support for those candidates is 50.0 percent. Therefore, following Horn and Hampton<sup>7</sup> we set  $C = 50$ , solve for  $V4$ , and obtain 57.05. The difference between 57.05 and 51.64, or 5.41, is the correction we should add to  $V4$  before plugging that value into the prediction equation to obtain the index for a district when statewide support for Democratic congressional candidates (assuming all districts are open) is the index implies that the propensity to vote for Democratic congressional candidates is the same as it is for Democratic statewide candidates, all we need to do is correct  $V5$  by the difference between 50.71 and 50.00—or 0.71—to obtain the index for the district under the same condition we are considering in the case of  $V4$ . This corrected value we designate as  $V5$ .

In the McDonald/Engstrom analysis we find it useful to compute the indices of the districts on the basis of  $V2$  and  $V3$  as well as  $V4$  and  $Vs$ . To be consistent we should also correct these parameters to reflect 50 percent statewide support for Democratic congressional candidates. In the case of  $V2$  the necessary correction is to add 6.90 in order to get  $V2$ .<sup>7</sup> In the case of  $V3$  the necessary correction is to add 6.38 in order to get  $V3$ .<sup>7</sup> These corrections are shown in the regression equations that appear in the captions of the tables showing the characteristics of the plans analyzed according to these alternative formulations of the index.

#### *Backstrom/Robins/Eller Analysis*

As we know from its application in the Indiana, California and Pennsylvania controversies, this test requires the selection of a statewide election, or combination of elections,

that will function as the base race. This race must be "...an estimate of the percentage of the electorate that, all else being equal, could be expected to vote for candidates of a particular party, simply because of that affiliation." For evaluation of Ohio districting plans drawn in 1991/92 the universe of elections from which the base race must be chosen consists of the same five 1990 statewide races that were available to us when we chose the best races for developing our political index. Those elections, and the percentage of the vote received by the Democratic candidates, are:

As demonstrated during the derivation of the Democratic Index, there are in addition to these five single races, ten combinations of two races, ten combinations of three races, five combinations of four races and one combination of five races. When the mean of each of these combinations of two, three, four or *five* races was correlated, precinct-by-precinct, with the vote for congressional candidate in the 1196 precincts found in the two congressional districts in which no incumbent ran in 1990 we found the highest correlation of each combination of races was: (mean Democratic vote, in parentheses)

Best combination of two races:	Governor + Auditor	(48 .54%)
Best combination of three races:	Governor + Auditor + Treasurer	(52 .18%)
Best combination of four races :	Governor + Auditor + Treasurer + Atty. General	(51.64%)
Mean of all five races:		(50.71 %)

It seems reasonable, therefore, to try using as the base race the above four combinations in addition to each of the five individual elections.

The base race having been chosen, the next step is to aggregate that race (or combination of races) among the districts in each plan, adjusting each of these "base races" to 50.00 percent by adding or subtracting the appropriate number. This means adding 5.73 to the governor vote in each district, subtracting 2.80 from the auditor vote, etc. The theory behind these adjustments is that we are asking how many districts would each party win if its congressional candidates



received exactly 50 percent of the mean district vote, the underlying assumption being that the base race indicates what seats each party is *entitled* to win based upon the propensity of the electorate to vote for its congressional candidates.

The final step is to count up the number of districts in each plan that each party would be entitled to win when the base race has been adjusted to 50.00 percent. If the plan is free from partisan gerrymandering, there should be an even split. Since there are 19 districts in the plans we are considering, either a 9/10 or a 10/9 split would be acceptable.

Table 34.3 summarizes the results when the authors' technique is applied to the earlier (1982/1985 Bipartisan) plan, the five citizen plans, and the three political plans. We note a significant range in the partisan breakdown depending upon which race, or combination of races, is chosen as the base race. This supports the critics' argument that the technique yields differing verdicts depending upon what race is chosen as the base race and that this choice is too subjective a matter to warrant judging a plan's constitutionality on the basis of it.

We can, however, make a plausible argument, based upon the correlations obtained in the search for the best combination of races to employ in deriving the index, that none of the statewide races, by itself, should be employed as the base race (the highest  $r^2$  was 67.9 percent). The best combination of two races ( $r^2 = 71.9$ ) should probably be rejected, as well. The most credible combinations are, therefore, those we have designated as V3, V4 and Vs. When we analyze the plans using these combinations for the base race we do find some consistencies. We note that, whichever of these three combinations is employed as the base race, the Republican plan and the two bipartisan plans are judged to be Republican gerrymanders; and that Holderly, Horn A and Horn B are judged as neutral.

Table 34.3

BACKSTROM/ROBINS/ELLER ANALYSIS

	Plan										1992
Base Race (Adjustment to 50.00%)	1982/1985 Bipartisan	Hampton	Holderly	Horn A	Horn B	Lucid	Republican	Democratic			Bipartisan
Governor (+ 5.73)	9 D 12 R	9 D 10 R	9 D 10 R	7 D 12 R	8 D 11 R	9 D 10 R	10 D 9 R	10 D 9 R	10 D 9 R	10 D 9 R	9 D 10 R
Attorney General (- 0.02)	10 D 11 R	9 D 10 R	10 D 9 R	11 D 8 R	10 D 9 R	9 D 10 R	8 D 11 R	10 D 9 R	10 D 9 R	10 D 9 R	9 D 10 R
Auditor (- 2.80)	9 D 12 R	7 D 12 R	9 D 10 R	8 D 11 R	10 D 9 R	7 D 12 R	6 D 13 R	8 D 11 R	8 D 11 R	8 D 11 R	6 D 13 R
Secretary of State (+ 3.01)	9 D 12 R	11 D 8 R	10 D 9 R	11 D 8 R	10 D 9 R	11 D 8 R	8 D 11 R	10 D 9 R	10 D 9 R	10 D 9 R	9 D 10 R
Treasurer (- 9.47)	11 D 10 R	12 D 7 R	10 D 9 R	11 D 8 R	9 D 10 R	12 D 7 R	10 D 9 R	12 D 7 R	12 D 7 R	12 D 7 R	11 D 8 R
Average of all 5 Statewide Races (- 0.71) (V5)	7 D 14 R	8 D 11 R	10 D 9 R	9 D 10 R	10 D 9 R	10 D 9 R	7 D 12 R	9 D 10 R	9 D 10 R	9 D 10 R	8 D 11 R
Avg. (Gov. + Auditor + Treas. + Att'y. Gen.) (- 1.64) (V4)	7 D 14 R	9 D 10 R	10 D 9 R	9 D 10 R	10 D 9 R	10 D 9 R	8 D 11 R	8 D 11 R	8 D 11 R	8 D 11 R	7 D 12 R
Avg. (Gov. + Auditor + Treasurer) (- 2.16) (V3)	8 D 13 R	8 D 11 R	10 D 9 R	9 D 10 R	9 D 10 R	8 D 11 R	7 D 12 R	9 D 10 R	9 D 10 R	9 D 10 R	7 D 12 R
Avg. (Governor + Auditor) (+ 1.46) (V2)	8 D 13 R	7 D 12 R	8 D 11 R	7 D 12 R	8 D 11 R	7 D 12 R	8 D 11 R	8 D 11 R	8 D 11 R	8 D 11 R	7 D 12 R
Range	7D/14R to 11D/10R	7D/12R to 12D/7R	8D/11R to 10D/9R	7D/12R to 11D/8R	8D/11R to 10D/9R	7D/12R tp 11D/8R	7D/12R to 10D/9R	8D/11R to 12D/7R	Inconclusive by V3, V4, V5	7D/12R tp 11D/8R	7D/12R tp 11D/8R
Comment	Repub GM by V3, V4, V5	Inconclusive by V3, V4, V5	Neutral by V3, V4, V5	Neutral by V3, V4, V5	Neutral by V3, V4, V5	Inconclusive by V3, V4, V5	Repub GM by V3, V4, V5	Inconclusive by V3, V4, V5	Repub GM by V3, V4, V5		

### *McDonald/Engstrom Analysis*

With only nine plans available for analysis, we have a less favorable opportunity to apply this test than we did in the California investigation where we had close to 60 plans to work with. With a universe of only seven plans to work with, we made no attempt to apply this test in our Pennsylvania study. With nine plans to work with, we have mixed feelings about attempting to use this test in *Miller*, but we did the work and think we ought to report our findings, for what they may be worth. First off, we faced the same problem we had in Indiana and California: how to quantify the partisan character of the districts in the plans at issue. In our attempt to apply this test to congressional districting plans considered by the Ohio General Assembly in 1992 we employed the mean vote for the five statewide offices (*i.e.*, Vs), plus three versions of the Horn/Hampton political index (*i.e.*, V2, V3 and V4), as our measure of partisan character. We used this test to compare the three political plans, the five citizen plans and the 1982/85 plan—and see what those comparisons reveal.

The first step is to compute the standard deviation (*S2*) and skewness (*S3*) statistics pertaining to the histogram for each plan, and tabulate these values. Since we constructed our histograms using an index corrected for the hypothetical situation in which there is a 50/50 split in the mean district vote for congressional candidates, we did not have to apply the cube law to determine what number of districts each party is supposed to win.<sup>8</sup> If a plan is politically neutral, a 50/50 split in the mean district vote should result in an even split in the number of districts won. Since the total number of districts in this case is 19—uneven number—either a 9-10 or a 10-9 split would have to be considered an acceptable outcome according to the author's Rule No. 1.<sup>9</sup>

The most desirable value of *S2* a plan could have is the one closest to the value of *S2* obtained by averaging that of all possible plans. As noted earlier, determining this value is impossible in the real world. The only feasible alternative is to average this value for the nine plans we are comparing. It turns out that the range of *S2* is very narrow (0.90 to 0.94) whichever

index is employed, so we might assume that the value obtained by averaging all possible plans would not fall much outside this range. We, therefore, tabulated S2 for each plan, obtained the mean, and then tabulated each plan's deviation from this mean. Then we ranked each plan according to this parameter and the skewness parameter to determine which plans, if any, dominate which other plans. When using a Democratic Index derived from V4 we got the results shown in Table 34.4. We made the same tabulation using Democratic Indices based on V2, V3, and V5 but to save space do not show them here. The histograms for the bipartisan plan and Horn Plan B, basing the Democratic Index on V4, are depicted in Figures 34.2(a) and (b).<sup>10</sup>

Using a Democratic index derived from V4, the tabulation shown in Table 34.4, and the rule which says the only acceptable outcomes are those which yield a 9-10 or a 10-9 split, we are reduced to the 5 citizen plans and the Democratic plan. Within this group Horn A and Lucid are dominated by both Hampton and Horn B, so the authors' Rule No. 2<sup>11</sup> cannot be satisfied. Therefore, we must follow the authors' Rule No. 3 and designate the "undominated set" of Hampton, Holderly, Horn B and Democratic plans as the acceptable solutions. The other five plans are unacceptably biased and can be classified as partisan gerrymanders.

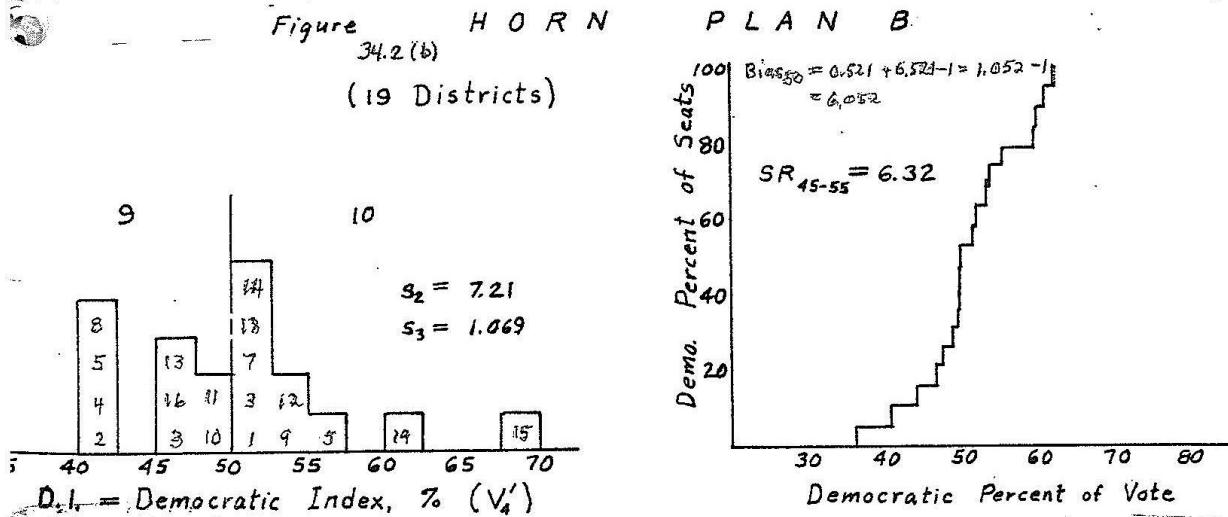
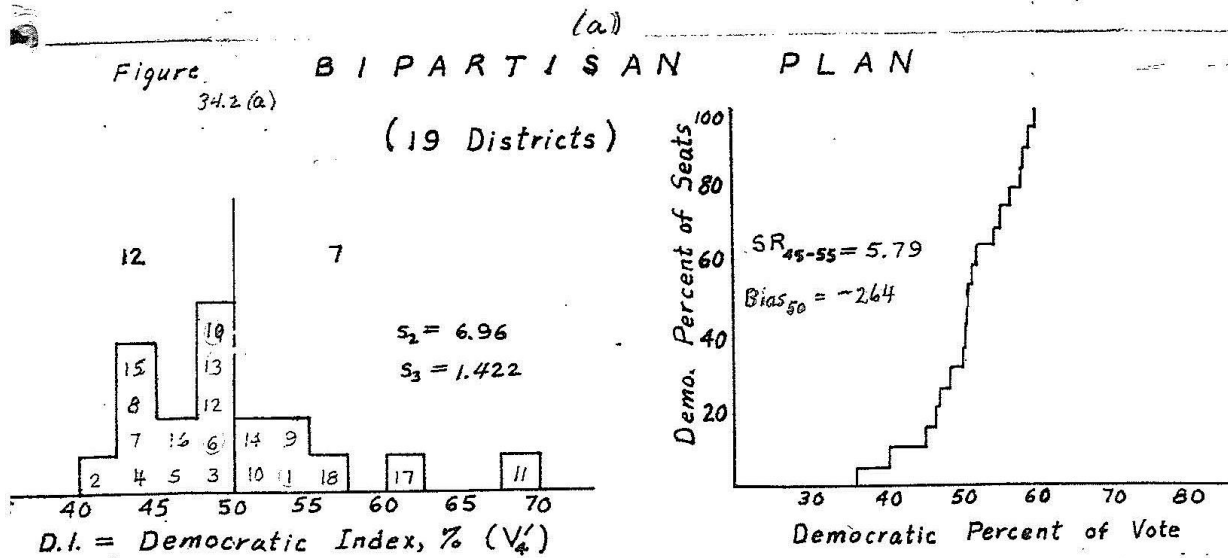
When we went through this same procedure using a Democratic Index based on V2 we ended up with no acceptable solutions because none of the nine plans came up with more than eight "Democratic" districts. When we went through this procedure using a 0.1 based on V3 we ended up with the undominated set of Holderly, Horn A and Horn B. When we went through this procedure using a 0.1 based on V<sub>5</sub> we ended up with the undominated set of Democratic, Horn A and Horn B. If we look at the overall picture resulting from using all four versions of the Democratic Index we find Horn B occurs most frequently in the undominated set (in 3 of 4 cases); Horn, Holderly and Democratic occur next most frequently (in 2 of 4 cases); and Hampton occurs least frequently in the undominated set (in one of four cases).

Table 34.4  
Standard Deviation and Skewness of 1992 Ohio Congressional Districting Plans

Index Based upon Governor + Auditor + Treasurer + Attorney General [ = - 6.99 + .999(V<sub>4</sub> + 5.41)

Plan	Mean Democratic Vote	Number of "Republican" Districts	Skewness		Standard Deviation		
			Value	Rank	Value	Deviation from s <sub>2</sub>	Rank
1982/85							
Bipartisan	50.47	14	1.746	9	7.42	0.24	7
Hampton	50.14	10	0.883	2	7.23	0.05	3
Holderly	50.20	8 or 9	1.111	5	7.22	0.04	2
Horn A	50.09	10	0.990	3	6.76	- 0.42	8
Horn B	50.12	9	1.069	4	7.21	0.03	1
Lucid	50.29	9	1.155	6	7.10	- 0.08	4
Republican	50.07	12	1.465	8	7.00	- 0.18	5
Democratic	50.33	10	0.651	1	7.70	0.52	9
Bipartisan	50.05	12	1.422	7	6.96	- 0.22	6
Σ =					64.60	+ 9 = 7.18 = s <sub>2</sub>	

Figure 34.2



The results one obtains from this test obviously depend upon how the political index is calculated. However, one can note some consistencies in the results despite this problem. If one throws out the index computation based upon only two statewide races (V2) by which all nine plans produce unacceptable partisan outcomes, we note the following:

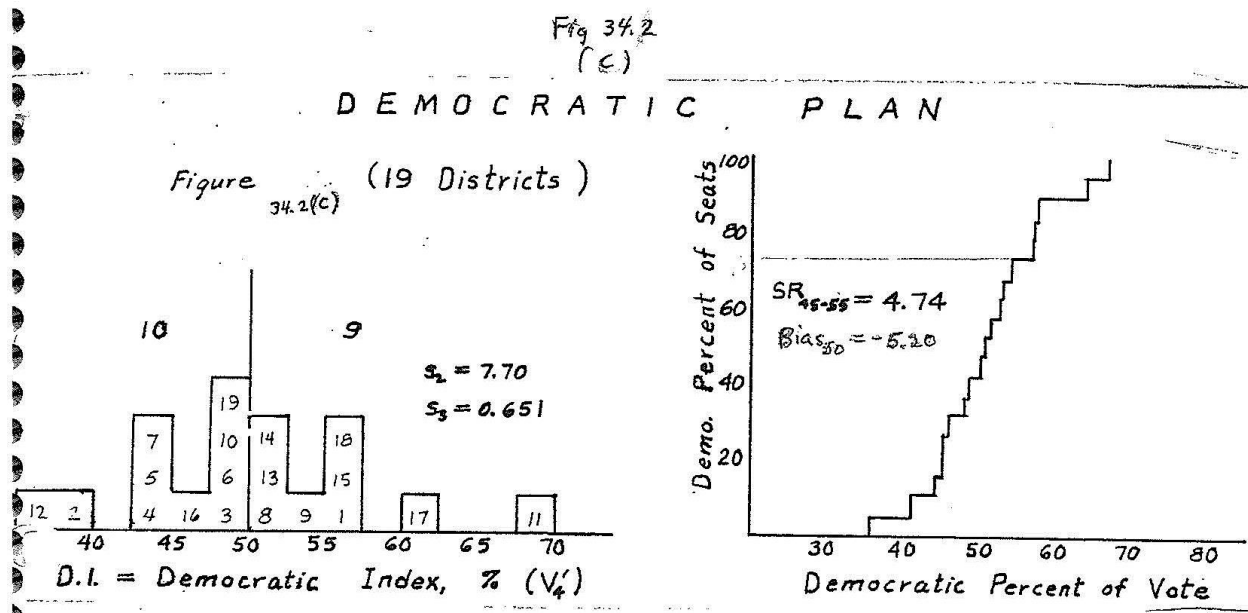
- a. The skewness rankings of the plans are identical, with one minor discrepancy: the rankings of the Republican and bipartisan plans are reversed in V3.
- b. The Democratic plan has the least skewness (ranked first) and the highest dispersion in all cases (ranked 9th).
- c. The Republican plan, and both bipartisan plans, produce unacceptable outcomes and qualify as partisan gerrymanders however the index is computed.
- d. Holderly, Horn A and Horn B produce acceptable outcomes in all cases.
- e. Holderly and Horn B produce acceptable outcomes and are not dominated in any case where the index is computed on the basis of V3, V4, or V5.

We believe this test is based upon assumptions too tenuous to warrant condemning the Republican and bipartisan plans as partisan gerrymanders—although they may fairly be said to have a Republican *bias*. Study of the histograms does provide support for the claim that there is a certain amount of “natural” packing of Democratic voters in Ohio: the citizen (and political) plans all create an east-side Cleveland district with an index around 70 and a Mahoning valley district with an index just over 60. There is no comparable configuration on the Republican side of the histogram—that is, there is no district with an index around 30 and no second district with an index just below 40, in any of the citizen plans. However, this symmetry is created deliberately in the Democratic plan where Republicans are packed in the environs of Columbus and Cincinnati (*i.e.*, Districts 2 and 12 are the only districts in any of the plans with indices below 40. See Figure 34.2(c)) in order to produce strongly Democratic inner-city districts 1 and 15. Ironically, this partisan manipulation causes the Democratic plan to have the most favorable

ranking on skewness, regardless of the index. Despite their “natural” packing of Democrats, the citizen plans produce so many marginal districts that it is possible for either party to win a lopsided majority of the congressional delegation with a partisan swing of only five percent—or less. For this reason we conclude that, by this application of the McDonald/Engstrom test, the citizen plans—contrary to the UGH—have less partisan bias than the political plans, as well as less incumbent bias.

*Niemi’s Swing-Ratio Analysis*

From our construction and analysis of seats-votes curves in the Indiana, California and Pennsylvania studies the reader is familiar with our application of this test for partisan gerrymandering. In seven of the nine plans under scrutiny in 1990s Ohio congressional districting we are dealing with plans under which no election has ever been held or ever will be held. That means seats-votes curves for these plans must be constructed from the political indices of the



districts making up those plans. Only in the case of the 1982/85 and 1992 bipartisan plans, which became the plans of the State of Ohio, do we have the opportunity to supplement our work with

curves based on actual elections that were held under the plans in question. The most efficient way to report our findings is by means of Table 34.5—a table similar to the Table 20.1 in which we summarized in our California findings.

The 21-district bipartisan plan of 1982/85 set the stage for the plans of 1992. It is characterized at the beginning of its tenure by a Democratic Index derived from 1978 election returns. That index gave it a swing ratio of 2.38 and a pro-Republican bias of 4.8 percent. In the first election held under that plan (1982) its swing-ratio turned out to be only 0.48; but its partisan bias was just as predicted by its 1978 index: 4.8 percent. At the end of its tenure it was characterized by a D.I. derived from 1990 election returns. That index gave it a swing-ratio of 6.19 and a pro-Republican bias of 33.3 percent, which suggests that demographic and/or political change occurred in its districts during the 1980s.

S.B. 292, the Republican plan of 1992, bore the high swing-ratio of 6.32 and displayed a substantial pro-Republican bias of 26.4 percent. Its histogram (not depicted here) revealed 12 “Republican” districts and 7 “Democratic” districts. The Democratic House substituted its H.B. 649 for S.B. 292, making it into Sub. S.B. 292 (depicted in Figure 34.2(c)). By lowering its swing ratio to 4.74 and by creating 10 “Republican” districts versus 9 “Democratic” districts its pro-Republican partisan bias was reduced to 5.2 percent. The final stage of the legislative process produced Amended Substitute S.B. 292, the bipartisan compromise bill depicted in Figure 34.2(a), which was characterized by a swing-ratio of 5.79 and a pro-Republican partisan bias of 26.4 percent.

The first of the citizen plans, the Hampton plan depicted in Figure 34.3(a), yielded 10 “Republican” districts and 9 “Democratic” districts. Inspection of Table 34.5 reveals that this plan has a swing-ratio of 5.26 and a pro-Republican partisan bias of 5.2 percent. The second of the citizen plans, the Holderly plan depicted in Figure 34.3(b), has 9 “Republican” districts and



Table 34.5

## Swing-Ratios and Partisan Biases of 1992 Ohio Congressional Districting Plans

(1) Year of Plan	(2) Plan	(3) Figure	Swing-Ratio		Bias at 50	Percent
			(4) (Based Upon Political Indices of Districts)	(5) Based Upon Actual Election Result (Year)	(6) Based Upon Political Indices of Districts	(7) Based Upon Actual Election Result (Year)
1982/ 85	Bipartisan	<sup>2</sup> 34.8(a)	1978: 2.38 1990: 6.19	0.48 (1982)	1978: 4.80 (R) 1990: 33.3 (R)	4.80 (R) (1982)
1992	S.B. 292 (Republican drawn)		6.32		- 26.4 (R)	
1992	Sub. S.B. 292 (H.B. 649) (Democrat drawn)	34.2 (c)	4.74		- 5.20 (D)	
1992	Am. Sub. S.B. 292 (Bipartisan)	34.2(a)	5.79	2.10 (1992)	- 26.4 (R)	5.20 (D) (1992)
1992	Hampton (Impartially drawn)		5.26		- 5.20 (R)	
1992	Holderly (Impartially drawn)		5.79		15.80 (D)	
1992	Horn A (Impartially drawn)		5.26		- 5.20 (R)	
1992	Horn B (Impartially drawn)	34.2(b)	6.32		5.20 (D)	
1992	Lucid (Impartially drawn)		6.32		5.20 (D)	

10 “Democratic” districts. Table 34.5 reveals it to have a swing-ratio of 5.79 and a pro-Democrat partisan bias of 15.8 percent. The third citizen plan, Horn plan A (not depicted here), features 10 “Republican” districts and 9 “Democratic” districts. Its histogram and seats-votes curve resemble Hampton and have the identical parameters of a 5.26 and a pro-Republican partisan bias of 5.2 percent. The fourth citizen plan, Horn plan B shown in Figure 34.2(b), contains 9 “Republican” districts and 10 “Democratic” districts. These give the plan a swing-ratio of 6.32 and a pro-Democrat partisan bias of 5.2 percent. The fifth and final citizen plan, Lucid (not depicted here), also contains 9 “Republican” districts and 10 “Democratic” districts. Its histogram and seats-votes curve resemble Horn plan B and have the identical parameters of a 6.32 swing-ratio and a pro-Democrat bias of 5.2 percent.

In Figure 34.3(c) we have the histogram and seats-vote curve for the 1992 bipartisan plan derived from the outcome of the first election conducted under it—the election of 1992. This affords a comparison to what we projected in Figure 34.2(a). The plan’s 2.10 swing-ratio is a significant drop from the 5.79 swing-ratio projected on the basis of previous statewide election outcomes and it displays a 5.2 percent pro-Democrat bias instead of the projected 26.4 percent pro Republican bias. We now have enough experience with this sort of analysis to not be surprised when the numbers come out this way: real elections have incumbents running and incumbents typically run ahead of their party index; scandals and personal relations between politicians can cause electoral outcomes to differ from what a political index might predict—and in *Miller* there is ample reason to believe that such factors played a significant role.

We wrap up Niemi’s swing-ratio analysis of 1992 Ohio congressional districting by noting that whatever methodological faults it might arguably possess it was consistently applied to both the political plans and the citizen plans. Amended Substitute S.B. 292 was the product of

a bipartisan compromise that both party leaderships signed on to and presumably treats both parties fairly. Yet we find that its projected 5.79 swing ratio is less than the 6.32 swing-ratio of Horn plan B—a plan that was a conscious effort to best satisfy the criteria of the Ohio Anti Gerrymander Amendment. Further, we find that the 26.4 percent pro-Republican bias projected for Am. Sub. S.B. 292 is significantly higher than the 5.2 percent pro-Democrat bias of Horn B. If Horn B is an unintentional partisan gerrymander, Niemi’s swing-ratio analysis certainly fails to prove it.

### *The Black Box*

We had enough information about the plans at issue in *Miller* to apply Gelman and King’s JudgeIt program and see what answers it gave to the question of which of these plans, if any, were partisan gerrymanders. Eight explanatory variables were regressed against the 1990 vote for major party congressional candidates to determine likely future electoral outcomes. Those variables were (1 -5) the five statewide races of 1990; (6) the voting age black population; (7) whether an incumbent was running in each district; and (8) whether a major party failed to contest the district. When these eight independent variables were entered in the required places in the program and 100 elections were simulated in each plan to recognize that partisan swing is characterized by a random element, we obtained the results that appear in Table 34.6.

Our table shows only the partisan bias outcomes for each plan. We omitted the “responsiveness” outcomes to save space and to focus on the greater emphasis this test assigns to the bias parameter. Table 34.6 shows that all plans except the plan adopted by the Ohio General Assembly (*i.e.*, Am. Sub. S.B. 292) carry a pro-Republican partisan bias. This bias is striking in the case of the 1982/85 bipartisan compromise plan where Republicans are shown to have about a 42 percent advantage in the percentage of the seats they are expected to win. Otherwise, the

Table 34.6

1992 Ohio Congressional Districting Plans: JudgeIt Output

Plan	Partisan Bias, $\lambda$		Standard Error, $S_e$	
	Bias	Bias <sub>5</sub>	Bias	Bias <sub>5</sub>
1982/85 Bipartisan				
Run No. 1	- 0.4154	- 0.4154	0.0369	0.0371
Run No. 2	- 0.4167	- 0.4167	0.0345	0.0345
Hampton				
Run No. 1	- 0.0084	- 0.0124	0.0533	0.0650
Run No. 2	- 0.0008	- 0.0061	0.0683	0.0876
Holderly				
Run No. 1	- 0.0143	- 0.0154	0.0501	0.0518
Run No. 2	- 0.0092	- 0.0094	0.0512	0.0547
Horn A				
Run No. 1	- 0.0265	- 0.0289	0.0450	0.0580
Run No. 2	- 0.0210	- 0.0217	0.0462	0.0554
Horn B				
Run No. 1	- 0.0185	- 0.0217	0.0358	0.0519
Run No. 2	- 0.0166	- 0.0172	0.0390	0.0397
Lucid				
Run No. 1	- 0.0137	- 0.0129	0.0505	0.0509
Run No. 2	- 0.0144	- 0.0134	0.0388	0.0438
S.B. 292 (Republican)				
Run No. 1				
Run No. 2				
Sub. S.B. 292				
Run No. 1				
Run No. 2				
Am. Sub. 292 (1992 Bipartisan)				
Run No. 1	0.0034	0.0041	0.0592	0.0602
Run No. 2	0.0013	0.0018	0.0469	0.0490

bias ranges from less than one percent to 2.65 percent—the latter in the case of Horn Plan A. How do these values agree with the values given in Table 34.5 for Niemi’s methodology? Looking at Column (6) we find the strongest bias in the bipartisan plan of 1982/85: Niemi’s in absolute terms we can see that the two figures are quite similar in terms of their both being about 33 percent according to the index derived from 1990 data. While JudgeIt’s bias is about 9 percent greater than significantly greater than those of the other plans.

A significant disagreement does emerge in the way the two tests assess the partisan character of Am. Sub. S.B. 292. JudgeIt finds it has a slight pro-Democrat bias whereas Niemi finds it with a 26.4 percent pro-Republican bias. The election of 1992 conducted under this plan yielded a seats-votes curve (per Niemi) showing a 5.2 percent pro-Democrat bias (see Table 34.5 Column 7), which supports JudgeIt. We should point out that JudgeIt measures a plan’s partisan bias in two ways. First, it averages the biases found at the 45- and 55 percent markers on the mean

district vote scale. These are the numbers we are citing and which appear in Column (2) of Table 34.6. Second, it takes a bias reading at the 50 percent marker on the votes scale—and only there—just what we did in reporting the biases per Niemi in Column (6) of Table 34.5—and enters that reading in Column (3) of Table 34.6. Judgelt gets consistent agreement between these two bias measurements: the greatest difference between any value in Column (2) and the corresponding value in Column (3) is 0.0053. Judgelt also gets consistent values when its program is run again on the same data. Table 34.6 indicates that two runs were made on the plans we are examining. While the parameter value for Run No.2 differs from the corresponding value for Run No.1, the differences are not great and do not affect the overall character of the plan to which they apply.

While Judgelt involves far more sophisticated procedures for estimating the same bias and responsiveness parameters featured in Niemi's work it shares with Niemi's methodology a similar inability to give a definitive answer to the question: what value of is too high? How much partisan bias is too much? The inability to give an answer to such questions that does not require arbitrary, subjective judgment is a flaw common to all of the tests for partisan gerrymandering proposed by the scholarly community.

#### *Grofman's Prima Facie Indicators*

Finally, we come to Grofman's twelve prima facie indicators of gerrymandering; the first eight of which are relevant to an investigation of the five "citizen" plans to determine whether they unintentionally confer a significant advantage on one of the major parties. As in Indiana, California and Pennsylvania, we had to make some rules of our own to apply these indicators to the plans in question. We first assumed we could use our Democratic Index as the measure of partisan "voting strength." We used the previous Ohio congressional districting plan (*i.e.*, the 1982/85 Bipartisan plan) as our point of reference in applying indicators 4 through 7. We now apply the first eight of these indicators in detail to Am. Sub. S.B. 292, the 1992 bipartisan plan under challenge. To save space we forego a detailed report of our application of these indicators

to the other plans. Instead, we make just a one-paragraph summary of what our detailed examination of each of the other plans revealed.

*1992 Bipartisan Plan.* We find two districts with a D.I. exceeding 60 but none with a D.I. less than 40. Therefore, we conclude the Packing indicator shows a bias favoring Republicans. As with the Republican Plan (discussed below), we find that Franklin County is split between CDs 12 and 15 so that one safely Republican district, and one marginally Republican district are created. We conclude that, arguably, the Fragmenting indicator has been satisfied. With respect to incumbent pairing we note that two Democrats are paired in CD 10 and two Republicans in CD 7. The symmetry of these pairings shows no partisan bias by the Incumbent Pairing indicator. The two pairings create two open districts, both of which are critically marginal, leading us to conclude no partisan bias by the Open-District Advantage Indicator.

With respect to Altering/Preserving Incumbents' Districts, Table 34.1 shows that one Democrat (Feighan) and one Republican (Miller) suffer less than 50 percent carryover. This symmetry of misfortune leads us to conclude no partisan bias by these indicators. With respect to Reducing Marginal Incumbents' Districts we note that one Democrat and two Republicans suffer such reduction. Here we would infer a slight partisan bias favoring Democrats. With respect to Enhancing Marginal Incumbents' Districts, Table 34.7 shows that two Democrats and two Republicans receive significant enhancement. This symmetry of treatment leads us to conclude no partisan bias by this pair of indicators.

As with the Republican and Democratic plans (see below), this bipartisan plan has two physical characteristics which satisfy Grofman's indicators: it compares badly with all of the citizen plans when evaluated as to compactness and as to splitting of local governmental units. It would qualify as a gerrymander by Indicators 9 and 10.

Assessing the overall impact of these factors in the Bipartisan Plan, we can say that by five of them (incumbent pairing, open-district advantage, altering/preserving incumbents' districts, enhancing marginal incumbents' districts) neither party gains significantly. Of the

remaining three political effects indicators, two (packing, fragmenting) show pro-Republican bias and one (reducing marginal incumbents' districts) shows a slight pro-Democrat bias. Two of the physical characteristics indicators point to gerrymandering but it is not clear which party benefits. Since the majority of the political effects indicators show partisan neutrality, and the others point in both directions, this bipartisan plan would probably not qualify as a *partisan* gerrymander.

*Hampton Plan.* Four of these indicators (2, 5/7, and 8) award no advantage to either party. With respect to the other four, Republicans enjoy a slight advantage with respect to one (packing), but Democrats enjoy slight advantages with respect to the other (pairing; altering/preserving). Applying these indicators *in toto* as a means of establishing the presence of a partisan gerrymander, we might leave it to Professor Grofman to pronounce the verdict on the Hampton plan. He applied these indicators in his testimony in *Badham v. Eu*, concluding that the 1981-82 California congressional districting plans were partisan gerrymanders favoring Democrats. In that testimony (1985b, pg. 573) he stated, "eleven of these twelve methods were used" in drawing the plans (including all eight of the indicators we are considering). Here we note bias in only four of those eight, the bias pointing in both directions. Our conclusion would have to be that the Hampton plan is not a partisan gerrymander.

*Holderly Plan.* Assessing the overall impact of these factors in the Holderly Plan, we can say that by four of them (fragmenting; open-district advantage; altering/preserving incumbents' districts) neither party gains significantly. By the other four, Republicans are favored by packing while Democrats are favored by pairing and by reduction/enhancement of marginal incumbents' districts. Again, with only four of these eight factors indicating partisan bias, and with that bias pointing in both directions, we would have to conclude that the Holderly Plan fails to qualify as a partisan gerrymander.

Table 34.7

CHANGE IN DEMOCRATIC INDEX OF INCUMBENTS' DISTRICTS UNDER DIFFERENT 1992 PLANS  
 Democratic Index (D.I.) = -6.99 + 0.999(V<sub>4</sub> + 5.41) [V<sub>4</sub> = Average of 4 Statewide Candidates in 1990]\*\*

1982/85 Plan	Hampton Plan		Holderly Plan		Horn Plan A		Horn Plan B		Lucid Plan		Republican Plan		Democratic Plan		Bipartisan Plan	
	Change	**	Change	**	Change	**	Change	**	Change	**	Change	**	Change	**	Change	**
<b>DEMOCRATS</b>																
Luken	49.36		51.73 + 3.37	51.87 + 3.51	52.24 + 3.80	51.73 + 3.37	52.10 + 3.82	53.69 + 5.33	56.01 + 7.65	53.76 + 5.40						
Hall	52.55		49.76 - 2.79	49.76 - 2.79	49.76 - 2.79	51.26 - 1.29	49.76 - 2.79	49.83 - 2.72	49.89 - 2.66	49.82 - 2.73						
Kaptur	55.40		53.93 - 1.47	53.87 - 1.53	53.87 - 1.53	53.87 - 1.53	53.87 - 1.53	53.17 - 2.23	54.59 - .84	54.05 - 1.35						
Sawyer	51.67		50.90 - .77	51.95 + .28	49.71 - 1.90	50.89 - .78	50.47 - 1.20	54.66 + 2.99	52.06 + .39	52.01 + .34						
Traficant	63.13		61.43 - 1.70	61.87 - 1.26	59.93 - 3.20	61.55 - 1.58	59.93 - 3.25	61.91 - 1.22	60.61 - 2.52	61.63 - 1.50						
Applegate	58.18		56.19 - 1.99	50.77 - 7.41	56.48 - 1.70	56.57 - 1.61	51.64 - 6.54	54.41 - 3.77	56.62 - 1.56	56.04 - 2.14						
Oakar	56.85		53.89 - 2.96	51.25 - 5.60	49.35 - 7.50	50.88 - 5.97	70.64 + 13.79	52.36 - 4.49	51.39 - 5.46	50.17 - 6.68						
Stokes	73.21		68.77 - 4.44	70.10 - 3.11	68.31 - 4.90	69.68 - 3.53	70.64 - 2.57	70.02 - 3.19	69.88 - 3.33	69.77 - 3.44						
Feighan	47.03		* 47.11 + .08	* 48.33 + 1.30	* 51.74 + 4.71	* 48.85 + 1.82	48.27 + 1.24	* 47.85 + .82	* 48.90 + 1.87	* 49.77 + 2.74						
<b>REPUBLICANS</b>																
Gradison	47.94		51.73 - 3.79	51.87 - 3.93	52.24 - 4.30	* 42.26 + 5.68	* 44.40 + 3.54	* 43.92 + 4.02	56.01 - 8.07	42.12 + 5.82						
Oxley	42.90		42.04 + .86	41.94 + .96	43.74 - .84	41.37 + 1.93	42.25 + .65	43.10 - .20	43.50 - .60	44.49 - 1.59						
Gillmor	46.00		48.47 - 2.47	50.65 - 4.65	50.65 - 4.65	50.65 - 4.65	47.36 - 1.36	46.89 - .89	43.79 + 2.21	45.67 + .33						
McEwen	45.82		44.19 + 1.63	41.14 + 4.68	43.78 + 2.04	46.95 - 1.13	53.83 - 8.01	48.43 - 2.61	47.80 - 1.98	49.57 - 3.75						
Hobson	44.16		41.42 + 2.74	42.89 + 1.27	42.49 + 1.67	40.15 + 4.01	41.90 + 2.26	43.85 + .31	44.15 + .01	43.43 + .73						
Boehner	43.16		42.47 + .69	44.60 - 1.44	42.78 + .38	41.96 + 1.20	41.83 + 1.33	43.40 - .24	39.19 + 3.97	43.37 - .21						
Miller	48.33		50.00 - 1.67	50.00 - 1.67	50.06 - 1.73	48.43 - .10	51.64 - 3.31	54.41 - 6.08	47.87 + .46	43.37 + 4.96						
Kasich	46.45		39.97 + 6.48	* 55.20 - 8.75	53.07 - 6.62	53.04 - 6.59	* 54.16 - 7.71	48.61 - 2.16	37.40 + 9.05	47.76 - 1.31						
Wylie	44.26		* 55.58 - 11.32	40.63 + 3.63	40.59 + 3.67	40.15 + 4.11	40.73 + 3.53	42.27 + 1.99	56.22 - 11.96	42.60 + 1.66						
Regula	46.83		46.28 + .55	51.99 - 5.16	49.07 - 2.24	* 45.44 + 1.39	50.55 - 3.72	47.19 - .36	46.19 + .64	46.29 + .54						

\*\*\* Governor + Auditor + Attorney General + Treasurer

\*\* + = Favorable Change; - = Unfavorable Change (from perspective of incumbent)

\*Based upon nearby open district containing a significant fraction of incumbent's former constituents - rather than district incumbent lives in.



*Horn Plan A.* Assessing the overall impact of these factors in Horn Plan A, we can say that by two of them (fragmenting; incumbent pairing) neither party gains significantly. By the other six, Republicans are favored with respect to Packing and Open-District Advantage, while Democrats are favored by Altering/Preserving Incumbents' Districts and by Reducing/Enhancing Marginal Incumbents' Districts. With two of these eight factors indicating no partisan bias, and with the bias shown by the remaining six factors pointing about equally in both directions, we ought to conclude that Horn Plan A fails to qualify as a partisan gerrymander.

*Horn Plan B.* Assessing the overall impact of these factors in Horn Plan B, we can say that by two of them (fragmenting, enhancing marginal incumbents' districts) neither party gains significantly. The other six show partisan bias. Two of the factors (packing, open-district advantage) point to pro-Republican bias, while the others (incumbent pairing, altering incumbents' districts, reducing marginal incumbents' districts) show bias toward Democrats. Again, the manner in which discernible bias points in both directions leads to the conclusion that Horn Plan B fails to qualify as a partisan gerrymander.

*Lucid Plan.* Assessing the overall impact of these factors in the Lucid Plan, we can say that by two of them (fragmenting, open-district advantage) neither party gains significantly. One indicator (packing) shows pro-Republican bias. Five others (pairing, altering/preserving incumbents' districts, reducing/enhancing marginal incumbents' districts) show pro-Democrat bias. An additional indicator (non-compactness) suggests gerrymandering, but the beneficiary is uncertain. This plan probably shows more partisan bias than any of the other citizen plans, but is this bias sufficient to warrant condemning the plan as a partisan gerrymander? Not if Grofman's standard of eleven-out-of-twelve, enunciated in *Badham vs. Euro*, is to be our guide.

*S.B. 292 (Republican Plan).* Assessing the overall impact of these factors in the Republican Plan, we can say that by three of them (pairing, altering/preserving incumbents' districts) neither party gains significantly. The other five political effects indicators show partisan bias but that bias points in both directions. With respect to Packing, Fragmenting, and

Open District Advantage the bias favors Republicans. With respect to Reducing/Enhancing Marginal Incumbents' Districts the bias favors Democrats. Two of the physical characteristics indicators point to gerrymandering but it is not clear which party benefits. Given this confusing picture one could not condemn this plan as a *partisan* gerrymander.

*Sub. S.B. 292 (Democrat Plan).* Assessing the overall impact of these factors in the Democratic Plan, we can say that by four of them (packing, fragmenting, open-district advantage, Reducing marginal incumbents' districts) neither party gains significantly. Of the other four political effects indicators three (pairing, altering/preserving incumbents' districts) show pro-Democratic bias and one (enhancing marginal incumbents' districts) shows a slight pro-Republican bias. Two of the physical characteristics indicators point to gerrymandering but it is not clear which party benefits. Given the equivocal way in which these indicators apply, one could not condemn the Democratic plan as a *partisan* gerrymander.

*Summary for All Eight Plans.* While each of these plans can be judged to carry some degree of *partisan bias*, none of them would qualify as a *partisan gerrymander*—assuming that we have properly applied Grofman's twelve *prima facie* indicators of partisan gerrymandering.

### *Overall Conclusion*

We have now applied the tests for partisan gerrymandering advanced by leading students of the districting issue to the congressional districting plan of the preceding decade (*i.e.*, 1982/85 bipartisan), the five citizen plans, and the three political plans of 1992. We stated “if there is any merit in the Unintentional Gerrymander Hypothesis for Ohio we should find that the citizen plans show more partisan bias than the bipartisan plans promulgated by the State of Ohio in order to ensure ‘fairness’ to the two major parties.” What have we discovered?

In the case of Grofman's *prima facie* indicators of partisan gerrymandering we concluded, “while each of these plans can be judged to carry some degree of *partisan bias*, none of them would qualify as a *partisan gerrymander*.” We observed that these indicators “suffer

from being imprecise and relativistic in their application.” We attempted by means of quantifiable indicia, such as political index and population carryover, to make them more precise. But the result in all plans was that some indicators pointed, to some degree, in one direction while others pointed, to some degree, in the opposite direction.

Niemi’s swing-ratio analysis did “not lead us to condemn any of the 1992 plans as a gerrymander,” although the plan of the preceding decade did qualify as a bipartisan gerrymander, both when evaluated by the indices of its districts and by actual election results. We noted that this analysis would be much more likely to condemn a plan when evaluation is by actual election results than by political indices of its districts and suggested that a different threshold would have to apply depending upon which data were employed. We refined this analysis by demonstrating that the location of a “plateau” in the seats-votes curve could differentiate between Democratic, Republican, and bipartisan gerrymanders. Even with such refinements, however, this test suffers from the problem of establishing some numerical value as separating gerrymandered from non-gerrymandered plans.

The “black box” showed pro-Republican bias for all plans except the 1992 bipartisan plan, which showed a pro-Democrat bias. Standard errors associated with each bias figure reported gave us an indication of how good these bias estimates were from a statistical standpoint but did not answer the question of how much bias was necessary for the plan to qualify as a partisan gerrymander.

We anticipated that “the tests” advanced by Backstrom et al., and by McDonald/Engstrom (would have) much more easily attainable thresholds and this proved to be the case. We addressed the problem of selecting the proper statewide election—or combination of elections—to serve as Backstrom's “base race” and came up with the three most plausible combinations. Employing each of these gave us consistent findings: the Republican plan and each of the two bipartisan plans were judged to be Republican gerrymanders; the Holderly plan,

Horn Plan A, and Horn Plan B were judged as neutral. This test, therefore, leads us to conclude the *direct opposite* of the Unintentional Gerrymander Hypothesis: plans drawn to best satisfy objective criteria are likely to have *less* partisan bias than plans crafted by political interests.

We stated that the McDonald/Engstrom “test for partisan gerrymandering is based upon assumptions too tenuous to warrant condemning plans as partisan gerrymanders.” But to whatever extent this test has validity, it is the political plans that fail; not the citizen plans. When the most plausible formulations of the political index were employed by the Republican plan, and each of the two bipartisan plans, were judged to be partisan gerrymanders; the Holderly plan and Horn Plan B were judged as most neutral. We note that the conclusions from this test are nearly congruent with those of Backstrom et al.

We conclude, therefore, that so far as 1992 Ohio congressional districting is concerned the Unintentional Gerrymander Hypothesis is without merit and that plans drawn to best satisfy objective criteria are likely to carry less partisan bias than plans crafted by political interests, ostensibly, to achieve “political fairness.”

## Notes

<sup>1</sup> See our discussion of gerrymander definitions in Chapter 30’s section “A Fresh Look at Faulty Assumptions.”

<sup>2</sup> Hereinafter designated as V2.

<sup>3</sup> Hereinafter designated as V3.

<sup>4</sup> Horn, David L. and Charles R. Hampton, 1991: p. 17.

<sup>5</sup> Hereinafter designated as V5.

<sup>6</sup> *Ibid*, p. 9.

<sup>7</sup> *Ibid*, p. 27.

<sup>8</sup> McDonald, Michael D. and Richard L. Engstrom, “Minority Representation and City Council Electoral Systems: A Black and Hispanic Comparison” (Westport, Conn.: Greenwood) 1990: 194.

<sup>9</sup> *Ibid*, p. 193.

<sup>10</sup> Alongside each of these histograms is the corresponding seats-votes curve which will be discussed in the course of Niemi’s swing-ratio analysis in the next section of this chapter.

<sup>12</sup> *Ibid*, pg. 195.

## Chapter 35

### A Test for Bipartisan Gerrymandering: Desirability Analysis

At the beginning of the previous chapter we acknowledged that we have not proposed any test of our own for partisan gerrymandering, “let alone for bipartisan gerrymandering.” It should now be apparent why we have not done the former: because we think that to “prove” partisan gerrymandering requires using criteria and making judgments that are inherently arbitrary. But paradoxically, we believe it *is* possible to erect a judicially manageable standard to adjudicate claims of discriminatory districting (i.e., “bipartisan gerrymandering”) suffered by individuals, which is not arbitrary. If the courts pick up where they left off in *Bullock v. Carter*, they will extend the electoral neutrality principle into other arenas of the political process, including redistricting. The standard will inevitably become absolute governmental neutrality, just as the standard in the one-person one vote jurisprudence evolved to absolute population equality.<sup>1</sup> Such standards are logical, not arbitrary.

So what test would we apply to adjudicate a claim of discriminatory districting made by an individual—in particular, an incumbent congressperson, state senator or state representative? We call it a desirability analysis—the desirability of each plan at issue from the perspective of the incumbent. Three components determine how desirable a plan may be from the typical incumbent’s perspective: carryover, index, and the presence or absence of a potentially strong opponent—usually another incumbent—in the incumbent’s district in the subject plan. Let’s start with the Democratic incumbent in District 1, Charles Luken, and see how he would fare under each of the eight plans in this analysis.

*Luken.* From Table 34.1 we see that his best carryover is Hampton/Horn B\* with 95.0 percent. Next best is Republican and Bipartisan with 86.9 and 86.3; then Lucid, Horn A, and Democratic with 76.5. Worst is Holderly with 64.1. From Table 34.7 we see that all 8 plans show

“improvement” in Luken’s index. The best is Democratic with 56.0; then Bipar and Repub with 53.8 and 53.7. Less desirable are the 5 “citizen” plans with indices ranging from 51.7 to 52.2. (But even these plans represent a better-than-3 percent “improvement” over the 48.4 index of the previous plan.) Hampton/Horn B, Holderly, Horn A, and Demo pair Luken with Republican incumbent Gradison in a situation where no open district is available to Gradison. Luken would be favored in such a pairing, but no-pairing-at-all would still be preferable. Taking all criteria together, no one plan is ideal. The best overall combination is in the Repub and Bipar plans: they rank second highest by carryover and index, and involve no pairing. Undesirable is Holderly which ranks last by all three of these criteria.

We would then repeat the same analysis for each of the other incumbents, using the carryover data presented in Table 34.1 and the political index data recorded in Table 34.7. The next eighteen paragraphs show what we discovered in the cases of the other 18 Ohio congressional incumbents at the time of the 1991-92 redistricting:

*Gradison.* Best carryover is Bipar, Repub, and Horn B with 77.3 to 75.4; Lucid (66.1) is intermediate. The other plans are undesirable, ranging from 45.6 to 16.5. Best index is Bipar (42.1) and Horn B (42.3). Republican (43.9) and Lucid (44.0) are almost as good. These indices all represent a 4 percent -or-better improvement over the 47.9 percent of his former district. Hampton, Holderly, Horn A, and Demo would be very undesirable: they pair Gradison with a Demo incumbent in a situation where both carryover and index favor the Democrat. Taking all criteria together, the best over-all combination is in Bipar, Repub, and Horn B.

*Hall.* All plans but Horn B give 100 percent, or virtually 100 percent carryover. Horn B gives 65.8. All plans but Horn B give an index of 49.8, which represents a 2.8 percent drop from the 52.6 in the previous plan. Horn B's index of 51.3 is 1.5 percent better, but this small improvement does not compensate for the plan’s considerable loss in carryover. No pairings occur under any of the plans. Overall, Horn B is less desirable than the other plans.

*Oxley.* Best carryover is in the Repub plan (90.1) with the Bipar plan (84.2) a close second. Hampton, Holderly, Horn A, and Demo plans are intermediate with values between 49.0 and 59.2. Lucid (40.4) and Horn B (34.5) would be undesirable. Indices of all 8 plans are favorable, ranging from 41.4 to 44.5, and all are close to the 42.9 of the preceding plan. Any Republican candidate would be an overwhelming favorite under these indices. No pairings occur under any of the plans. Overall, Repub and Bipar are best; Lucid and Horn are undesirable.

*Gillmor.* Best carryover is in the Repub (87.3) and Bipar (87.2) plans. The Demo plan (72.3) is also good. Hampton and Holderly/Horn A/Horn B are less desirable, ranging from 47.8 to 49.2. Lucid, with 32.9 is undesirable. Best indices are Demo (43.8), Bipar (45.7), and Repub (46.9). All are better than, or close to, the 46.0 of the previous plan. Hampton (48.5) and Lucid (47.4) are intermediate. Undesirable is the 50.7 of Holderly/Horn A/Horn B. No pairings occur under any of the plans. Overall, Repub and Bipar plans are best; Holderly and both Horn plans are undesirable.

*McEwen.* Best carryover is in the Demo plan (86.2), with the Repub (62.5) and Bipar (62.4) plans ranking second. Holderly, Horn B, and Lucid are intermediate, ranging from 41.8 to 51.8. Hampton (17.9) and Horn A (18.8) are undesirable. Best indices are Holderly (41.1), Horn A (43.8), and Hampton (44.2)—all of which are below the 45.8 of the preceding plan. Horn B (47.0), Demo (47.8), Repub (48.4), and Bipar (49.7) are intermediate. Lucid (53.8) is undesirable. No pairings occur under any of the plans, though the threat of a Gradison move into CD 6 to avoid pairing with Luken is posed by Hampton and Horn A. Overall, best plans are Demo, Repub, and Bipar. Hampton, Horn A, and Lucid are undesirable.

*Hobson.* Best carryover is in the Repub (94.2), Bipar (80.8), and Hampton (78.4) plans. Horn A (72.4), Holderly (58.8), Demo (54.0), and Lucid (49.6) are intermediate. Horn B (31.8) is undesirable. Indices of all 8 plans are desirable, ranging from 40.15 to 44.15, and all are better than the 44.16 of the previous plan. In Horn B, Hobson is paired, on unfavorable terms, with

another Repub incumbent. Overall, best plans are Repub, Bipar, and Hampton. Horn B is undesirable.

*Boehner.* Best carryover is Repub (95.2) with Bipar (93.0) a close second. Horn A, Hampton, Holderly, Horn B, and Lucid are intermediate, ranging from 82.6 to 52.9. The Demo plan (32.4) is undesirable. Indices of all 8 plans are desirable, ranging from 39.2 to 44.6; all compare favorably with the 43.2 value of the previous plan and would give any Repub candidate an overwhelming advantage. Though none of the plans pair him with another incumbent, he would be vulnerable, in the Demo plan, if Gradison moved into the district to avoid being paired with Luken. Overall, best plans are Repub and Bipar. The Demo plan is undesirable.

*Kaptur.* Best carryover is in the 3 “political” plans: Demo, Repub, and Bipar—all of which give 100 percent. The 5 “citizen” plans each do almost as well, each giving her 95.9 percent. Indices of all 8 plans are favorable and all represent a slight comedown from the 55.4 of the previous plan. The best are in the Demo (54.6) and Bipar (54.1) plans, but the 53.2 to 53.9 range of the other 6 plans is not significantly less. No pairings occur under any of the plans. Overall, the best plans are Demo and Bipar.

*Miller.* Best carryover is in Demo plan (91.5) and Horn B (87.0). Hampton/Holderly, Horn A, Repub. and Lucid are intermediate, ranging from 69.9 to 44.7. The Bipar plan with 19.7 is undesirable. Best index is in the Bipar plan with 43.4, nearly a 5 percent improvement over that of his district (48.3) in the previous plan. Indices of Demo, Holderly/Hampton, Horn A, Horn B, and Lucid are close to that of the previous plan, ranging from 47.9 to 51.6. The index of the Repub plan (54.4) is undesirable. Pairings occur in 2 plans and in both cases the advantage is with Miller’s opponent: in the Repub plan he is paired with a Demo where carryover, and especially the index, favors the Demo; in the Bipar plan he is paired with another Republican where carryover is heavily against him (19.7 vs. 80.8). Overall, best plans are Demo and Horn B, Repub and Bipar plans are undesirable



*Kasich.* Best carryover is in the Bipar (79.7) and Repub (77,1) plans. Holderly (57.8), Horn A (69.1), and Horn B (69.7) are intermediate, Lucid (49.1), Hampton (44.9) and Demo (38.4) are undesirable. Best index is in the Demo (37.4) and Hampton (40.0) plans, representing a 6 to 9 percent improvement over the 46.5 value for the previous plan. Republican (48.6) and Bipar (47.8) are intermediate, representing a 1.3 to 2.1 percent degradation. The indices of the remaining plans exceed 53 percent and are undesirable for a Republican. Pairings with Repub Wylie occur in Hampton, Holderly and Lucid rendering these plans undesirable. Overall, best plans are Bipar and Repub, where high carryover offsets the slight degradation of their indices. The Hampton, Holderly, Horn and Lucid plans are undesirable.

*Sawyer.* All plans have over 74 percent carryover and are desirable by this criterion. Hampton, Lucid, Demo, Bipar, and Horn B are the best, with values ranging from 93 to 100. Best index is Repub, with 54.7, which represents a 3 percent improvement over the 51.7 of the previous plan. The indices of the other 7 plans are all favorable, however, ranging from 49.8 to 52.1. The highest are Bipar (52.0) and Demo (52.1). No pairings occur under any of the plans. Overall, the best plans are Demo and Bipar.

*Wylie.* Best carryover is in the Repub (80,8) and Bipar (80.9) plans. Hampton, Horn A, Horn B, Lucid, and Demo are intermediate, from 52.8 to 68.5. Holderly is undesirable, with a value of only 37.0. Best indices are Holderly, Horn A, Horn B, and Lucid with values between 40.15 and 40.73—representing about a 4 percent improvement over the 44.3 value of the previous plan. However, the 42.3 and 42.6 values of the Repub and Bipar plans are nearly as good. The Hampton (55.6) and Demo (56.2) plans are undesirable. Pairing with Republican Hobson occurs in Horn B and pairing with Republican Kasich occurs in Lucid, Hampton, and Holderly. Overall, the best plans are Repub and Bipar. Hampton, Holderly, Lucid, and Demo plans are undesirable.

*Regula.* Best carryover is in Hampton, Repub, Demo, and Bipar—all with values exceeding 90 percent. The other 4 plans have acceptable values, ranging from 62.2 to 73.7. Best

indices are Horn B, Demo, Hampton, Bipar, and Repub, which range from 45.4 to 47.2, all of which are close to the 46.8 value of the previous plan. Horn A (49.1), Lucid (50.6), and Holderly (52.0) are less favorable. Pairing with Democrat Applegate occurs in Horn B and Holderly. Overall, best plans are Hampton, Repub, Demo, and Bipar. Holderly is undesirable.

*Traficant.* All plans have over 94 percent carryover and are essentially equal by this criterion. Best indices are in the Repub, Holderly, Bipar, Horn B, and Hampton plans, which range from 61.9 to 61.4. Demo (60.6) and Horn A/Lucid (59.9) are slightly less desirable. All these indices are lower than the previous plan's 63.1, but even so the district is overwhelmingly Demo, No pairings occur under any of the plans. Overall, the best plans are Hampton, Holderly, Horn B, Repub, Demo, and Bipar.

*Applegate.* Best carryover is in Demo (100), Horn A (98.0), Horn B (90.6), Hampton (80.2), and Bipar (77.2). Repub (59.8) and Lucid (55.4) are intermediate. Holderly (37.3) is undesirable. Best indices are Demo (56.6), Horn B (56.6), Horn A (56.5), Hampton (56.2) and Bipar (56.0), all of which are only 1.6 to 2.1 percent below the 58.2 of the previous plan. Less desirable are Repub (54.4), Lucid (51.6), and Holderly (50.8). Pairings occur with Republican Miller in Lucid and Repub; with Republican Regula in Holderly and Horn B. Overall, best plans are Demo, Horn A, Hampton, and Bipar. Pairings render the other plans undesirable.

*Feighan.* Best carryover is in Lucid with 63.9. Next best are Demo (51.8), Repub (50.5), Horn A (41.3), Horn B (38.7), and Bipar (38.2). Holderly with 32.0, and Hampton with 24.7, are undesirable, Best indices are Horn A (51.7), Bipar (49.8), Demo (48.9), Horn B (48.9), Holderly (48.3), and Lucid (48.3). Repub (47.9) and Hampton (47.1) are less desirable, but even these indices are an improvement over the 47.0 of the previous plan. All plans, except Lucid, pair him with fellow Democrat Oakar, but all of these plans also afford him a nearby open district containing a significant fraction of his former constituents, and it is on these districts that his carryover and index were figured. Overall, the best plan is Lucid with its high carryover and lack

of pairing. The best of the other plans are Demo, Horn A, Horn B and Bipar. Clearly undesirable is Hampton, which has both the lowest carryover and the lowest index.

*Oakar.* Best carryover are Hampton (87.4), Demo (84.1), and Repub (82.0). Intermediate are Bipar (73.9), Horn B (73.8), and Holderly (72.9). Undesirable are Horn A (65.6) and Lucid (57.2). Best index is Lucid at 70.6. Next best indices are Hampton (53.9), Repub (52.4), Demo (51.4), Holderly (51.3), Horn B (50.9), and Bipar (50.2). Least desirable is Horn A at 49.4. All of these indices, except Lucid, represent a 3 percent-or-better drop from the 56.9 of the previous plan. Pairing with fellow Democrat Feighan occurs in all plans except Lucid, but the pairing is on terms that favor her. In Lucid, even though not paired in the technical sense, she would, in all likelihood, succumb to a primary challenge from Stokes who would move into the district because it contains most of his former constituents. Overall, no plan is ideal for her. Hampton, Demo, Repub, Bipar, Horn B, and Holderly are all about equally good or bad. Clearly undesirable are Horn A and Lucid.

*Stokes.* All plans but Horn A and Lucid have 96 percent-or-better carryover and can be considered desirable. Horn A (88.6) is less desirable and Lucid (66.2) is undesirable. Indices all 8 plans are between 68.3 and 70.6. Though these represent a 2.6 to 4.9 percent drop from the 73.2 of the previous plan, the odds remain overwhelming for a Demo. No pairing occurs under any of the plans, though under Lucid he might opt to move into Oakar's district rather than run in CD 11.

Overall, any plan but Horn A or Lucid would be desirable.

The next step is to summarize, by incumbent, which plan or plans is the most desirable and which plan or plans is the least desirable. A three-column table such as Table 35.1 serves our purpose well. Then we should summarize, by plan, which incumbent(s) find it most desirable and which incumbent(s) find it the most undesirable. A three-column table such as Table 35.2 serves our purpose admirably.

Table 35.1  
Desirability Analysis Summary (by Incumbent)

Incumbent	Desirable Plan(s)	Undesirable Plan(s)
Luken	Repub, Bipar	Holderly
Gradison	Bipar, Repub, Horn B	Hampton, Holderly, Horn A, Demo
Hall	Hampton, Holderly, Horn A, Lucid, Repub, Demo, Bipar	
Oxley	Repub, Bipar	Lucid, Horn B
Gillmor	Repub, Bipar	Holderly/Horn A/Horn B*
McEwen	Demo, Repub, Bipar	Hampton, Horn A, Lucid
Hobson	Hampton, Repub, Bipar	Horn B
Boehner	Repub, Bipar	Demo
Kaptur	Demo, Bipar	
Miller	Demo, Horn B	Repub, Bipar, Lucid
Kasich	Repub, Bipar	Hampton, Holderly, Horn A, Horn B, Lucid
Sawyer	Demo, Bipar	
Wylie	Repub, Bipar	Hampton, Holderly, Lucid, Demo
Regula	Hampton, Repub, Demo, Bipar	Holderly
Traficant	Hampton, Holderly, Horn B, Repub, Demo, Bipar	
Applegate	Demo, Horn A, Hampton, Bipar	Repub, Holderly, Horn B, Lucid
Feighan	Lucid	Hampton
Oakar	Hampton, Demo, Repub, Bipar, Horn B, Holderly	Horn A, Lucid
Stokes	Hampton, Demo, Repub, Bipar, Horn B, Holderly	Horn A, Lucid

Table 35.2  
Desirability Analysis Summary (by Plan)

Plan	Best Plan For:	Undesirable to
Hampton	Hall, Hobson, Regula, Traficant, Applegate, Oakar, Stokes (7)	Gradison, McEwen, Kasich, Wylie, Feighan (5)
Holderly	Hall, Traficant, Oakar, Stokes (4)	Luken, Gradison, Gillmor, Kasich, Wylie, Regula, Applegate (7)
Horn A	Hall, Applegate (2)	Gradison, Gillmor, McEwen, Kasich, Oakar, Stokes (6)
Horn B	Gradison, Miller, Traficant, Oakar, Stokes (5)	Oxley, Gillmor, Hobson, Kasich, Applegate (5)
Lucid	Hall, Feighan (2)	Oxley, McEwen, Miller, Kasich, Wylie, Applegate, Oakar, Stokes (8)
Repub	All Repubs but Miller, plus Luken, Hall, Traficant, Oakar, & Stokes (14)	Miller, Applegate (2)
Demo	All Demos but Luken & Feighan, plus McEwen, Miller, & Regula (10)	Gradison, Boehner, Wylie (3)
Bipar	All but Feighan & Miller (17)	Miller (1)

\*Slash (/) between names of 2 different plans means district is identical in the 2 plans

An examination of these two tables reveals several noteworthy facts:

1. All of the citizen plans are undesirable to at least five incumbents. None of the three political plans is undesirable to more than three incumbents. One of the political plans is undesirable to only one incumbent: Miller. That plan turns out to be the one the State adopted.
2. Republican is a “best plan” for each Republican incumbent—except Miller; plus for five Democratic incumbents (Luken, Hall, Traficant, Oakar and Stokes).
3. Demo is a “best plan” for each Democratic incumbent but Luken & Feighan—and also for three Republicans (McEwen, Miller and Regula). It is undesirable to no Democrat, but is to three Republicans.
4. Bipar is a “best plan” for all incumbents but Feighan and Miller. It is undesirable to no one except Miller.

A statistician could calculate the odds of Miller’s being situated as he is by accident. We do not attempt that task. The foregoing analysis ought to constitute a *prima facie* case that Miller was subjected to adverse discrimination by a state that is commanded by the Constitution to govern impartially. The burden of proof should have shifted to the State of Ohio to justify its action. But it didn’t. On May 29, 1996, *Miller v. Ohio* was dismissed with prejudice by the U.S. District Court for the Southern District of Ohio Eastern Division. On December 1, 1996 the judgment was affirmed by the U.S. Supreme Court. In the next chapter we shall examine the arguments put forth by the litigants on both sides and the reasoning underpinning the Court’s decision.

## Notes

<sup>1</sup> --subject to deviations “incident to the effectuation of a consistently applied state policy” to maximize compactness, minimize fragmentation, etc. *Reynolds v. Simms* 533 U.S. at 38.

## Chapter 36

### *Miller*. The Legal Argument

The *Miller* Plaintiffs' complaint was assigned to District Judge George C. Smith who, in accordance with 28 U.S.C. § 2284(a), requested the chief judge of the Sixth Circuit to appoint a three judge Court to hear and determine the suit. Appointed to the panel, in addition to Smith, were District Judge Walter H. Rice and Circuit Judge Alan E. Norris. The State of Ohio, represented by its Assistant Attorney Generals Diane Richards and Susan Ashbrook, on February 6, 1995 responded as expected to the *Miller* plaintiffs' suit with a Motion to Dismiss pursuant to Federal Rules of Civil Procedure section 12(b)(6): failure to state a claim upon which relief can be granted. The state actions complained of by each of the *Miller* plaintiffs were stated in detail in Chapter 32. The constitutional provisions allegedly violated were virtually the same for all plaintiffs. They were:

- a. In contravention of Article 1 Section 2 of the Constitution, the Defendants "usurped a significant, if not dominant, role in selecting the congressional representatives from Ohio by consciously crafting congressional district boundaries to facilitate election of certain incumbents and facilitate defeat of other incumbents and candidates"<sup>1</sup>
- b. Violation of the rights of Miller and of other individual plaintiffs "under the first section of the Fourteenth Amendment...by denying...equal protection of law."<sup>2</sup>
- c. Abridgement of plaintiffs' rights of free speech and free association under the First Amendment as applied to the states by the Fourteenth Amendment.<sup>3</sup>
- d. Violation of the principle of governmental neutrality toward political parties and candidates embodied in the First and Fourteenth Amendments.<sup>4</sup>
- e. Violation of plaintiffs civil rights under Title 42 U.S. Code, Sec. 1983 et seq.<sup>5</sup>

The provision referred to in sub-paragraph (a) was the subject of Chapter 31. The provision referred to in sub-paragraph (d) was the subject of Chapter 30. Plaintiffs made two distinct claims under Art. 1 § 2: the “usurpation” claim referred to in sub-paragraph (a) and a “*Karcher*” claim of insufficient population equality among the plan’s districts. The plaintiffs’ attorneys Stivison and Anderson were not fervent about the *Karcher* claim but thought including it was a sure way to get the case to trial where they would then press their other claims.

### *Defendants’ Motion to Dismiss*

*Gaffney Argument.* As expected, the bedrock of the Defendants’ defense was *Gaffney v. Cummings* 412 U.S. 735 (1973). According to Richards and Ashbrook, *Gaffney* “requires that a districting plan devised by members of the Democratic and Republican parties, as a compromise to achieve relative proportionality between them in Congress and to protect incumbents, is constitutional.”<sup>6</sup> And if *Gaffney* does not control the fate of Plaintiffs’ gerrymandering claim, *Davis v. Bandemer* does. Plaintiffs’ *Karcher* claim is without merit and their proposed remedy—“politically neutral’ district lines—is neither preferable to the current method for drawing lines nor possible.”

Richards/Ashbrook argued the Supreme Court’s reference to redistricting as a “political process” in cases like *Gaffney and Karcher* meant that a state legislature has a right to draw a state’s congressional districts that was essentially without limitation. They claimed the *Miller* plaintiffs were asking this “court to step into the shoes of the [Ohio General Assembly] and create a less ‘political’ districting plan.” They stated that “in every relevant aspect” *Gaffney* was ‘on all fours’ with the case at bar.”<sup>7</sup> They said that in both cases the plan was “concededly designed to create safe seats for the major parties consistent with their existing relative strength in the relevant legislative body, the desired effect being the retention in office of as many

incumbent legislators as possible.” They then quoted extensively from Justice White’s majority opinion in *Gaffney* to support this contention.

Richards/Ashbrook went on to say “The similarities between the facts in *Gaffney* and the allegations in the [Miller] complaint...not only are striking, but dictate the dismissal of Plaintiffs’ political gerrymandering claim.” They acknowledged that “The Ohio Democratic and Republican parties...promulgated a redistricting plan designed to achieve relative proportionality between incumbents of both parties in the districting of Ohio’s delegation to Congress. ...Ohio’s bipartisan districting plan may make it more difficult for certain candidates to succeed at the polls because of their political affiliation. ...Additionally, the plan...may result in “[i]ndependent voters los[ing] any chance to influence the outcome of elections in their district, if one party has a sufficiently strong majority.”<sup>8</sup> Richards/Ashbrook thus conceded that their clients engaged in...discriminatory districting, harmful to individual candidates and to independent voters.

*Bandemer Argument.* Then they launched into a 9-page refutation of a partisan gerrymander claim the *Miller* plaintiffs never made. They cited *Davis v. Bandemer*’s requirement of proving both intentional discrimination against an identifiable political group and an actual discriminatory effect on that group. They rightly point out that the *Miller* plaintiffs do not constitute a group in the *Davis* sense and cannot seriously claim they have a common political interest that unites them.<sup>9</sup> The Defendants likewise pointed out that independent voters do not constitute an identifiable and cohesive group and they maintained there was no intentional discrimination against Plaintiff Libertarian Party of Ohio.

Richards/Ashbrook then proceeded to apply *Davis*’ second prong: a discriminatory effect that was severe and long lasting and unsurprisingly, found that, “as recognizable groups,”<sup>10</sup> the *Miller* plaintiffs did not suffer harm. The Defendants’ attorneys took a page arguing that Independent voters “cannot...be affected by redistricting” and three additional pages arguing the



complaint “does not allege discriminatory effect with regard to Plaintiff Libertarian Party’s political gerrymandering claim.”<sup>11</sup>

*Karcher Claim.* Having demolished their straw man partisan gerrymandering claim, Richards/Ashbrook turned to the Plaintiffs’ *Karcher* claim of insufficient equality of population among the districts in the State’s plan. As indicated in Table 33.1, that plan had a maximum plus deviation of 2 persons and a maximum minus deviation of 7 persons, comprising a total deviation of 9 persons. Although these deviations were minuscule, four of the five citizens’ plans were claimed to have absolute equality among their district populations—zero deviation. As Stivison read the *Karcher* opinion, if it was demonstrable that smaller deviations than those of the State’s plan were possible, then it became the State’s burden to *justify* each of the deviations in its plan that exceeded the largest deviation in the alternative plan in terms of a “consistently applied” “non-discriminatory”<sup>12</sup> state districting policy. Two obvious components of such a state policy would be to maximize district compactness and to minimize fragmentation of local governmental units.

But the Plaintiffs had measured the compactness of every district in each plan (Table 33.5); had counted their respective county and municipal corporation fragments (Table 33.3); and could demonstrate that the citizen plans were far superior by those criteria to the State’s plan. That demonstration could force the conclusion that the State had other reasons for the deviations in its plan: to pursue an inconsistent and discriminatory policy of favoring the election of some candidates over others in violation of the constitutional principle of electoral neutrality mandatory upon the state. The *Karcher* population equality claim had occupied one paragraph in the Plaintiffs’ 42-page complaint but refuting it took up nine pages of the Defendants’ 30-page memorandum in support of their motion to dismiss. We shall not discuss it because winning a *Karcher* claim was not the objective of the *Miller* plaintiffs’ suit—a suit that would have been

pursued with equal vigor even if the districts in the State’s plan had been absolutely equal in population.

*The Remedy.* The final two pages of the Defendants’ memorandum were devoted to attacking the remedy sought by the *Miller* plaintiffs—a remedy first referred to at the end of Chapter 32, and explicitly stated in Appendix A-4—which was to compel the State to promulgate an impartial *procedure* for crafting its congressional districts. The Defendants’ attorneys, for reasons that are baffling, completely misrepresented the remedy sought by the *Miller* plaintiffs. They first say it is to “craft a new *plan* which is politically neutral.” They next say, “Plaintiffs are simply not entitled to a ‘politically neutral *plan*.’” Thirdly, they refer to it as “a less ‘political’ districting *plan*.”<sup>13</sup> By substituting “plan” for “procedure” the Defendants create another straw man they can pound to pieces. Thus they can say the remedy of a “politically neutral plan” “is not possible”—a statement which is quite true; or “using criteria (p. 29) which are allegedly neutral or nonpolitical will not prevent the districting plan from having political results”—another true statement wholly irrelevant to the argument because the Plaintiffs were not praying for a “neutral plan.”

#### *Plaintiffs’ Answer to Defendants’ Motion to Dismiss Complaint*

The ball was now in Stivison’s court. On March 21, 1995 he filed a 34-page Answer to Defendants’ Motion to Dismiss of which seven pages were devoted to arguing the Plaintiffs’ *Karcher* claim. Again, we won’t take up space discussing this claim but move directly to an examination of the central issues in the case.

*Defendants’ Gaffney Argument.* Stivison asserted that “these Plaintiffs and each other Ohio voter and each other congressional candidate” had a right “to have Ohio’s districts drawn in an *impartial* manner using an *impartial* procedure.”<sup>14</sup> He said *Gaffney v. Cummings* was

“inapposite here,” first, because in that case the plaintiffs had alleged a partisan gerrymander, whereas the instant case “involves a *bipartisan* collusive gerrymander and is unique in American jurisprudential history because of that fact.”<sup>15</sup> Second, *Gaffney* differed because it pertained to a state legislature—not to congressional districting, as here. Stivison quoted Justice White, author of the *Gaffney* opinion, in support of the thesis that the two kinds of districting had “fundamental differences.”<sup>16</sup>

Stivison wrote, even if *Gaffney* were controlling “Plaintiffs wish[ed] to make it clear that they consider[ed] the reasoning in *Gaffney* to be limited to the facts before the Court in that case.” The development of impartial districting procedures in the twenty years since *Gaffney* has rendered obsolete one of its key underlying premises, “namely that ‘extirpating politics’ from the ‘essentially political processes of the sovereign states’ is an ‘impossible task.’” A second superseded premise underlying *Gaffney* is the assumption that the Court has only two alternatives if it wishes to give relief from gerrymanderers: (1) to hold elections at large, or (2) to turn the task of drawing districts over to supposedly disinterested technicians. Without directly saying that the imposition of impartial districting procedures now offered a third, and far preferable, alternative, Stivison addressed an attack by White on Alternative (2) which could—even if not intended by White—also apply to Alternative (3).

White termed Alternative (2) a “politically mindless approach” which could produce “whether intended or not the most grossly gerrymandered results.” In this context the word “gerrymandered” is being employed as a synonym for “disproportional.” This is the only meaning it could have in this context. Stivison cautioned “This is not a use of the term ‘gerrymander’ which should be encouraged: an ‘unintended gerrymander’ is an oxymoron. Gerrymandering requires intention.” He went on to quote approvingly Justice Fortas’ definition in *Kirkpatrick*, which we highlighted in Chapter 30. Stivison continued:

“The most scrupulously impartial districting procedure will *of course* have political effects, and may well ‘determine what district will be predominantly Democratic or predominantly Republican, or make a close race likely. Redistricting may pit incumbents against one another or make very difficult the election of the most experienced legislator.’ It is not these results that are constitutionally objectionable but rather the way in which they come about. If they arise from the impartial application of an impartial procedure, there is no basis of complaint. However, if they arise as a result of animus and calculation, they make the State a player in the game instead of a referee, which is the State’s proper role. The Court in *Gaffney* accepted the inevitability of political manipulation, stating ‘The reality is that districting inevitably has and is intended to have substantial political consequences.’ This intentional tilt need no longer haunt American politics.”<sup>17</sup>

Stivison described how an impartial districting procedure might operate and then segued into the second major constitutional argument<sup>18</sup> against discriminatory districting that we presented in Chapter 31. He noted how discretionary congressional districting skews power toward the leaders of a state *legislature*:

“When the sixteen individuals named as Defendants in this suit can accomplish an open intentional gerrymander, their power is multiplied many thousand fold over that of their ten million fellow Ohioans. Their votes on the redistricting plan are worth multiples of the votes of any other person cast in a congressional election and their influence is far more lopsided than the voting inequities found in *Reynolds v. Sims*, *Wesberry v. Sanders* or any other ‘one person-one vote’ case that has *ever* come before this or any court.”<sup>19</sup>

Stivison quoted the passage in *The Federalist Papers* No. 52 we cited in Chapter 31 and concluded this section saying:

“Plaintiffs believe they carry the mantle of their spiritual forbearers while Defendants repeat the tired, elitist rhetoric rejected over two centuries ago. This Court must choose between them...”

*Electoral Neutrality Principle.* In the final section of his brief, Stivison turned to the electoral neutrality principle we presented in Chapter 30. Like Arthur Eisenberg’s reasoning in crafting the ACLU *amicus* brief in *Davis v. Bandemer*, Stivison found the constitutional command to states to govern impartially rooted in the First Amendment’s rights of free speech and free association as well as in the Equal Protection Clause. Stivison cited the same cases as Eisenberg in erecting a governmental neutrality principle applicable to free speech and religion but did not, as did Eisenberg, cite the key cases extending the neutrality principle to the electoral process. Instead, he cited Justice Jackson’s famous words in *West Virginia Board of Education v. Barnette*<sup>20</sup> and Justice Brennan from *New York Times v. Sullivan*<sup>21</sup> and traced “our entire concept of equal protection and due process of law”<sup>22</sup> to Magna Carta.<sup>23</sup> A “guarantee, rooted in Magna Carta and incorporated into our Constitution and Bill of Rights over five centuries later, is what Plaintiffs desire Freedom from the arbitrary exercise of the powers of Ohio’s government in *favor* of some citizens and against others, with no other guideline than personal passion and party advantage.”<sup>24</sup>

*Conclusion.* Stivison concluded saying:

“No other similar case, challenging a collusive bipartisan gerrymander on the basis of the specific harm it has caused specific Individuals and groups, from across the political spectrum, has *ever* been brought to the Court for resolution. This will also be the first case to place before the Court the full districting

procedures developed in the past several years, which can be used by the Ohio legislature to cure the constitutional defects in Its districting decisions, procedures which are subject to independent objective verification and which will not bog the Court down in unending supervision of Ohio elections.”<sup>25</sup>

Appended to the brief, as Attachment A, was the 7-page text of the Ohio Anti-Gerrymander Amendment and a 41-page Explanation of the Ohio Anti-Gerrymander Amendment by David L. Horn and Joan W. Lawrence.

*Defendants’ Reply to Plaintiffs’ Answer to Defendants’ Motion to Dismiss*

In April, 1995 the Ohio Attorney General’s lawyers filed their final pleading for the District Court’s consideration: a 16-page reply to Stivison’s Answer to their Motion to Dismiss. In its introductory summary they say the *Miller* Plaintiffs’ allege Defendants *have* violated three sections of the Constitution: Art. 1 § 2; the Fourteenth Amendment; and the First Amendment.

*Art, 1 § 2.* They then take six pages of their rebuttal brief rehashing their Art. 1 § 2 population equality argument and in so doing side-step the *Miller* Plaintiffs’ Art. 1 § 2 “usurpation” argument. The lawyers characterize the Plaintiffs’ usurpation argument as violating Art. 1 § 2 by manipulating the “*characteristics*” of the *voters* grouped together in various districts. This argument, they say, “is without merit. The only criteria for a claim pursuant to Art. 1 § 2 is mathematical equality.”<sup>26</sup>

*Fourteenth Amendment.* The next four pages of the rebuttal brief are devoted to attacking Plaintiffs’ claims under the Equal Protection Clause. They correctly state the Plaintiffs “claim that the two seminal Supreme Court decisions regarding political gerrymandering are irrelevant.”<sup>27</sup> Turning first to *Gaffney*, they say that this case was not—as claimed by the *Miller* Plaintiffs—about partisan gerrymandering because its plaintiffs “were not aligned with a single party, but were merely taxpayers and *voters*.” Secondly, “while the *Gaffney* plan allegedly

*favored* Republicans...it was the result of a bipartisan effort.”<sup>28</sup> Regarding Plaintiffs’ point that *Gaffney* dealt with state legislative districting in contrast to *Miller* being a case about congressional districting they argue that this difference:

“Is only relevant to the population equality analysis contained therein. While the fact that a redistricting plan relates to state legislative seats may be relevant to the questions of numerical equality...there is nothing in *Gaffney* or elsewhere which relates this difference to the equal protection analysis of gerrymandering.”<sup>29</sup>

Thirdly, they respond to the Plaintiffs’ assertion that *Gaffney* was based on the false premise that it was “impossible” to “extirpate politics” from redistricting by (1) declaring that such *was* impossible, and (2) maintaining that *even* if such were possible it would not be desirable.

As for *Bandemer*, Richards/Ashbrook say, “Recognizing that they will *never* be able to meet the *Bandemer* test, Plaintiffs simply disavow it. Plaintiffs assume the fact that they are a bipartisan group helps their case when in fact it only makes their theory less ‘coherent.’”<sup>30</sup>

*First Amendment.* Richards/Ashbrook say they had dispatched Plaintiffs’ First Amendment claim in a footnote in their Motion to Dismiss asserting that “no court has *ever* held that the First Amendment states a separate cause of action in redistricting cases”—an assertion they back up with *seven* case citations.<sup>31</sup> In this pleading they repeat this contention, quoting extensively from two of those cases. They characterize Plaintiffs’ First Amendment argument as requiring “a ‘level playing field’ and an equal chance of success *at the polls*.”<sup>32</sup> Then they quote *Pope* saying one’s freedom of association and right to run for office “do not also include entitlement to success in those endeavors...”<sup>33</sup> And then they quote *Martin* saying “The First Amendment guarantees the right to participate in the political process. It does not guarantee political success.”<sup>34</sup> But the Plaintiffs’ First Amendment argument was that they were entitled to “a chance at success *not subject to state interference*.”<sup>35</sup> *Just* a little twist.

*Electoral Neutrality Principle* The next-to-final page of the State’s rebuttal brief addresses the Electoral Neutrality Principle we presented in Chapter 30. It is succinct. We quote it in its entirety:

Plaintiffs’ proposition is without support in the case law and is contrary to the *very* political nature of redistricting. In numerous cases courts *have* decided that congressional redistricting is a political, state legislative function. Far from finding a ‘constitutional command of neutrality’ in these cases, the Courts *have* instead tolerated ‘political’ decision-making designed to protect incumbents or to promote fairness between the parties. What Plaintiffs allege is ‘election rigging’ is in fact simply redistricting to promote certain legitimate goals, including making it easier for a specific candidate to win. This conduct has been expressly approved, and does not violate any constitutional requirement. Obviously, there are constitutional limits to congressional redistricting decisions. States may not create districts of substantially different sizes, engage in racial gerrymandering, or engage in partisan political gerrymandering which has a discriminatory effect on an identifiable group. Within these confines the State may pursue certain political goals. Because there is no constitutional requirement of governmental neutrality, these claims must be dismissed.<sup>36</sup>

“Within these confines” anything goes.

#### *Oral Argument Before the District Court*

So confident in their argument were Richards and Ashbrook that they included in their rebuttal brief a request for oral argument on their motion. It was granted. On August 29, 1995 the attorneys for Plaintiffs and Defendants stood before the three-judge panel. Circuit Judge Norris presided. He called Richards first. She reserved ten of her thirty minutes for rebuttal. She correctly recognized that the *Miller* Plaintiffs’ claim “is not a partisan political gerrymandering



claim” but an allegation of bipartisan gerrymandering “that has not been recognized through the courts.”<sup>37</sup> She correctly described the remedy sought by Plaintiffs as an “impartial procedure for districting. Not a new plan, but primarily an impartial procedure, which includes a number of factors such a remedy, is unprecedented...”<sup>38</sup>

Judge Norris interrupted her by asking what remedy she felt was appropriate for the population inequality of the State plan’s districts. Judge Rice asked her if, “in truth, isn’t [a bipartisan gerrymander] far more of a danger than a partisan gerrymandering?”<sup>39</sup> She replied that a “bipartisan compromise...has been recognized since *Gaffney*...as an entirely permissible, appropriate, and expected consequence of the legislative districting process.”<sup>40</sup> Judge Norris asked her if “one-party gerrymandering” was constitutional, which gave her an opportunity to state why *Miller* fails to meet the criteria of *Bandemer*. Norris asked her a couple questions that seemed to lead nowhere and then Smith spoke for the first time asking a question that seemed garbled but which gave Richards an opportunity to discuss the *Karcher* claim.

Rice re-joined the discussion by asking if Plaintiffs’ Article 1 § 2 claim wasn’t partly about an issue not addressed in the cases Richards cited, namely “whether the legislature has put itself impermissibly in front of the voting public”<sup>41</sup> in choosing the state’s congressional delegation? Richards replied that that allegation had been rejected in “very similar cases, most notably in the *Anne Arundel* case.”<sup>42</sup> She went on, giving her take on *Anne Arundel*, and then returned to *Bandemer* saying why its diverse plaintiffs did not constitute a cognizable group. Norris entered again saying he was a little surprised the Defendants hadn’t been arguing that Plaintiffs were “just passing through; that based on Supreme Court case law...they don’t have anything on their side, and they may very well have an argument in front of the Supreme Court, ...”<sup>43</sup> Richards replied that she was “in fact, making that argument;” that *Gaffney* made it clear that Plaintiffs don’t have the cause of action they are asserting and have no right to the remedy they request. Her time was up.

Stivison began by attempting to state Plaintiffs' *Karcher* claim but was immediately interrupted by Norris who displayed exasperation over challenging a plan that had only a 9-person population spread between its largest and smallest districts. After several minutes on the defensive to Norris' badgering Stivison acknowledged that "If the sole purpose of this proceeding were to require the State to" reduce the plan's single-digit population deviations to zero, while retaining the same overall configuration of its districts, then he wasn't sure "the plaintiffs in this case or the people of Ohio would have gained a lot..."<sup>44</sup> Norris then asked how pressing a population equality claim helped Plaintiffs to get to the issues they were really concerned about. Stivison replied that it would give Plaintiffs an opportunity to put people on the stand and find out whether Defendants' stated reasons for district configurations were their real ones. He said a state might lawfully do things with districts for its own legislature that would be impermissible if done in its congressional districting; and that may be the real meaning of *Gaffney*.

Rice interjected to ask whether the Plaintiffs did not want their complaint analyzed in terms of traditional partisan gerrymander cases but were saying their case was about the state legislature interposing itself between the voters and their congressional representatives? Stivison agreed and said that "to try to impose a *Davis v. Bandemer* analysis on this case" was "like asking how many corners are there to a circle."<sup>45</sup> Rice then asked for an analysis helpful for Plaintiffs' complaint. Stivison complied by recounting the origins of the U.S. House of Representatives and the Framers' fear of "what the states would do to hinder the effective operation of Congress."<sup>46</sup> He said the recently decided case of *U.S. Term Limits v. Thornton*

gives us great ammunition for this, that the founding fathers saw the state legislature as nothing more than administrators of these elections. Turn the lights on when you open the polls: turn them off when they close. It is a purely administrative function. The State has no business trying to determine who's going to be elected and who's going to be defeated by manipulating in a bipartisan manner how those lines are drawn.

NORRIS: If that be the case, why hasn't Congress stepped in, lo these many years, if it is just a congressional function to draw districts, and why don't they draw their own districts? They would love to do it.

RICE: How many of those congressmen are from a state that has more than one representative? Any state with more than one representative was probably gerrymandered to get them into office. I don't think that we can look to them to cure that problem,

NORRIS: So, it is our burden? We draw the maps?

STIVISON: No, sir. You absolutely do not draw a map. We have no map of our own.

NORRIS: Out of whole cloth, we devise some kind of nonpartisan process?<sup>47</sup>

Norris' questions revealed no grasp of the remedy Plaintiffs sought as he went on saying: You must live in a different world than I do, but it is going to take people to decide which towns get split, and there is politics.

STIVISON: What we are asking the Court to do is order the Ohio legislature to create an impartial procedure for doing redistricting...the state legislature does have an important role in this. Let them look at the different ways that you can do an impartial districting...

Stivison cited the various criteria that would go into a districting procedure and concluded:

And then in six months when the State comes back, you will be able to look at what they have done, and you can say: You did what we told you or you didn't do what we told you.<sup>48</sup>

Norris then posed a hypothetical bringing out the point that intent was a crucial element in establishing a gerrymander claim. There was an exchange over whether Miller had a possessory right to a district. Rice re-entered bringing up the issue of standing. Stivison explained how

Miller and the other candidate plaintiffs were harmed by actions of the State. Norris came back with another hypothetical about two congressmen who wanted to swap territory. Norris recalled an “anti-gerrymandering provision” of the Ohio constitution that “has never been enforced” because the “federal courts won’t allow it to be;” and that caused him to believe that “politics has a way of asserting itself anytime you talk about these things like geography.”<sup>49</sup> He referred to proposed districting procedures as “plans” vaguely remembering a proposal that had been on the Ohio ballot in 1981. He displayed an ignorance of how conflicting criteria might be dealt with in a districting procedure and his skepticism culminated in this outburst:

How do you get beyond that and eliminate politics? That's my question. What conceivable board can you dream up that is really going to be nonpartisan? I mean, the League of Women Voters will tell you that they are, but I am not sure everybody would agree with that. So, how do you do it?<sup>50</sup>

Stivison patiently explained how “impartial criteria” would be “laid out” and used to judge “the same set of maps.” Norris’ response showed that he still didn't get it:

So, if you bring in five maps to us, all equal population...and it is in the eye of the beholder which best comports with these variances because some are going to do their geography better, and some will do their community interest better.<sup>51</sup>

Then Rice revealed he didn't “get it” either when he interjected “Your beholders are partisan.”

Finally, Smith made it unanimous with this comment:

That seems to be the big problem, Mr. Stivison. Anything that any group does, no matter how many criteria there may be set out, it can always be read as political because people have some political bent one way or the other, no matter how hard they would try not to have. If they were qualified to do the job, they would have to have some understanding of the process.

Stivison labored on:

And any plan that was adopted, even under neutral criteria, will have political implications. There will be candidates who will be benefited and other candidates who will be harmed. The difference would be that that benefit or harm would come from...a value-free impartial procedure rather than having Speaker Riffe and President Aronoff get in the back room and cut the state up.

Then Rice posed a question that revealed a complete misunderstanding of the nature of the remedy the Plaintiffs sought:

Isn't that infinitely more evil than what we have...because wouldn't that just move the people one step further away from the direct election of their representatives? At least with the bipartisan gerrymandering, if the public doesn't like it, theoretically, the people responsible can be voted out at the next election. If you are going to an independent board, doesn't that insulate the partisan decision-makers...from any direct action by the public?

Instead of asking Rice where on earth he got the notion that the remedy sought by Plaintiffs was "an independent board," Stivison pursued the partisan versus bipartisan gerrymandering issue:

Well, a bipartisan gerrymander is not subject to correction at the polls... You would have to throw out the leaders of both parties who participated in the procedure, and that just simply won't work...

NORRIS: Well, it is correctible. You can throw out the leaders of both parties. I mean...

STIVISON: Theoretically.

NORRIS: Yeah.

STIVISON: It is much harder than a partisan gerrymander in the fact that you can't just go over to the other side and vote.

RICE: Then, what protection does the public have?

STIVISON: I think that Your Honors are the protection that the public has."<sup>52</sup>

SMITH: But you said you didn't want us to draw the lines.

STIVISON: No we don't. We want you to order the Ohio legislature to adopt an impartial districting procedure and then look to see if the procedure they adopt is impartial. And if it is, let the chips fall where they may.<sup>53</sup>

There followed an exchange over how successful the 1992 Ohio congressional gerrymander had been that ended when Rice brought the discussion back to issues of constitutional law by asking Stivison to "Give us a case or two from which we can hang our hats on this theory of yours."

Stivison again cited *U.S. Term Limits v. Thornton* where the High Court "really looked seriously at the history and intended application of Art. 1 § 2," and commended to the panel "the methodology...followed both by the majority and by the minority" in that case. He quoted a passage from *U.S. Term Limits* that he said, "could have been taken right out of our complaint."<sup>54</sup>

Norris had the final question:

Assuming that we don't agree with your analysis of *U.S. Term Limits*, aren't you just passing through? Isn't this a pretty dramatic revision in the law of districting that you would have us adopt? Shouldn't that be left to the Supreme Court?

STIVISON: Well, I would like to have the Supreme Court affirm your opinion, sir. SMITH:

That's a good answer.<sup>55</sup>

Stivison's time was up. Norris offered him a couple more minutes, which Stivison declined.

Richards stood to make her rebuttal. In the only question put to her during this final phase of the hearing Rice asked her about the applicability of her cited case law to the issue of districting of the Federal Congress as opposed to what the states can do with their own legislatures. Richards' response was long, rambling, somewhat incoherent and difficult to paraphrase. It is doubtful that it had any effect on the judges and we don't attempt to relate it. The Court stood adjourned.

### *The District Court's Opinion and Order*

On May 29, 1996—exactly nine months following oral argument—the Court unanimously granted the Defendants’ motion to dismiss in a ten-page opinion by Norris to which was attached a two-page concurrence by Rice. In a footnote to the first paragraph on the first page Norris offered a third definition of “gerrymander” to add to the first two we presented in Chapter 30. Here is the footnote in its entirety:

As plaintiffs freely acknowledge, a claim of bipartisan gerrymandering appears to be one of first impression. At first glance, students of political history might be excused for believing the term bipartisan gerrymandering to represent an oxymoron: “**gerrymander** 1: to divide (a territorial, a unit) into election districts in an unnatural and unfair way with the purpose of giving *one political party* an electoral majority in a large number of districts while concentrating the voting strength of the opposition in as few districts as possible,” Webster’s Third New International Dictionary 952 (1981) (emphasis added).

The first section of the opinion recited the essential facts of the case and correctly stated that the complaint alleged two separate and distinct violations of Art. 1 § 2: (1) a *Karcher* claim of insufficient population equality among districts and (2) a claim of “usurpation” by the State. An analysis of Plaintiffs’ *Karcher* claim occupied three pages and, as earlier, we shall not consume space discussing it. The two-and one-half page analysis of Plaintiffs’ usurpation claim deserves close scrutiny.

Norris attributes to Plaintiffs the view that congressional districting should be “an ‘open and impartial’ endeavor” in which “all persons and groups with an interest in the matter, from political parties to college computer classes, should be free to submit a proposal that conforms to constitutional requirements and criteria established by the state legislature. Ultimately, ‘[a]ll submitted plans would...be judged and ranked based on their compatibility with those criteria and the one that scores best will be identified.’” Norris further describes Plaintiffs’ view:

“According to plaintiffs, this reading of Art. 1 § 2 stems from the original intent of the founding fathers that sought to prevent state legislatures from choosing members of the House of Representatives. Whereas Art. 1 § 2 provides that representatives shall be chosen by ‘the People,’ Art. 1 § 3 indicated that senators shall be ‘chosen by the Legislature.’ ...When these contrasting provisions are read in the context of the debates heard during the constitutional convention of 1787 plaintiffs conclude that Art. 1 § 2 does more than secure the people the right to vote for their representative; it guarantees that reapportionment itself be ‘fastidiously neutral and objective...free of all political considerations and guided only by the controlling constitutional principle of strict accuracy in representative apportionment.’”<sup>56</sup>

Norris then asserts “Such a reading of Art. 1 § 2 is overbroad. Justice Marshall’s concurrence in *White* recognizes that the legislature retains the ‘primary responsibility’ in the area of apportionment. This comes as no surprise because the Supreme Court has made abundantly clear that ‘apportionment is a political process’<sup>57</sup> which permits the legislature to take any number of factors into consideration when engaged in the redistricting process, including ‘avoiding contests between incumbent Representatives,’<sup>58</sup> so long as it does so ‘consistent with constitutional norms.’”<sup>59</sup>

Norris went on: “The complaint makes no allegation that the congressional map at issue was so skewed that the legislature, not the electorate, selected the candidates. To the contrary, it charges that plaintiff Clarence Miller lost a bid for re-election in his party’s primary election by a ‘razor-thin’ margin because he was targeted for defeat by the defendants as the ‘sacrificial lamb’ needed to maintain the balance between the major parties. Rather than indicate that the people have been divested of their ability to choose their representatives by the congressional map, a razor-thin outcome inclines us to a contrary conclusion. The complaint’s other allegations are no



more compelling...” In a gratuitous slap, he added in a footnote: “Although not considered in resolving this action, we note that elections held subsequent to the adoption of the congressional map at issue have not unfolded with the iron-clad predictability alleged by plaintiffs.”

In a one-sentence fifth paragraph Norris concluded: “Given the complete absence of case law in support of a purely ministerial role on the part of the legislature in the apportionment process, we decline to read Art. 1 § 2 to require more than that congressional members are elected by popular vote from districts whose boundaries have been drawn in a manner consistent with the Constitution.”

Having disposed of Plaintiffs’ “usurpation” argument in five paragraphs, he made even shorter shrift of their electoral neutrality principle.

Although he concurred in full with Norris’ opinion, Rice wrote separately a two-page addendum to “emphasize two points.” The first concerned a legal technicality. The second concerned “the Court’s rejection of the Plaintiffs’ argument that the defendants violated the constitutional principle of ‘governmental neutrality.’” He conceded “It [was] clear that such a neutrality principle has been narrowly defined in the context of specific constitutional claims, most notably the First Amendment’s admonition that ‘Congress shall make no law respecting an establishment of religion,’ ‘...its guarantee of freedom of speech...’ “and the Fourteenth Amendment’s guarantee of the equal protection of the laws,...” “However,” he wrote:

the Constitution has not been broadly interpreted as setting forth a more general requirement that the government act in a neutral manner toward its citizens in matters which do not implicate specific constitutional protections. Since no specific constitutional protection is implicated here, and because there has been no constitutional recognition of a *general principle* of governmental neutrality, Plaintiffs’ arguments advocating such a principle in this case must fail.

On July 25, 1996 Stivison filed in behalf of the *Miller* plaintiffs a Note of Appeal to the Supreme Court of the United States.

## *The Jurisdictional Statement*

In September, 1996 Stivison submitted to the High Court, in behalf of the *Miller* plaintiffs, a jurisdictional statement presenting three questions to that body. The first concerned the neutrality principle; the second concerned the usurpation issue; the third concerned the *Karcher* argument. The Statement itself was only 25 pages long, but bound to it was a 195-page appendix containing supporting documents that included the same text and Explanation of the Ohio Anti-Gerrymander Amendment that had been attached to Stivison's Answer to the Defendants' Motion to Dismiss. Following a brief Statement of the Case, Stivison took up the first question:

1. Does the principle of governmental neutrality arising from the guarantees of equal protection and due process of law established by the Fourteenth Amendment to the U.S. Constitution, the rights of free speech, free association, and petition protected by the First Amendment, or a combination thereof, require that a state promulgate an impartial procedure to establish the boundaries of districts used to elect members of the U.S. House of Representatives?

In contrast to the one-and-one-half page treatment of the neutrality principle—citing only one case<sup>60</sup>—in his Answer to Defendants' Motion to Dismiss, Stivison took off from the Panel's tepid acknowledgement of “an as yet undefined constitutional right” saying:

This was an error. The neutrality principle has been applied to political contests on numerous occasions. It assures the right of armed forces personnel to vote where they live; the right of smaller political parties to have even-handed treatment; the right of independent candidates to be free of discriminatory filing deadlines. Special postal rates limited to the Democratic and Republican parties have been invalidated. The neutrality principle forbids states from favoring wealthy candidates... Simply stated...the State cannot play favorites. This also applies to drawing congressional boundaries...<sup>61</sup>

Stivison’s five-page treatment of the electoral neutrality principle cited most of the cases we mentioned in Chapter 30 and ended saying:

This neutrality principle and Article 1 Section 2...each *independently* limit the State to adopting “generally applicable and *evenhanded* restrictions that protect the integrity and reliability of the electoral process itself,”<sup>62</sup> and are designed to make elections “fair and honest.”<sup>63</sup> Any provision that tilts the playing field for or against only some of the players violates this principle and is unconstitutional. Appellants now ask this Honorable Court to explicitly apply this principle to the drawing of congressional district lines and to find that gerrymandering “reflects *no* policy, but simply arbitrary and capricious action.”<sup>64</sup>

In addressing the second question presented, Stivison did not attempt to respond to the specific points made in Norris’ five-paragraph disposal of Plaintiffs’ usurpation claim. Instead, he started from scratch, making an affirmative case for the usurpation claim:

2. Do Article 1, Section 2 and Section 4, and the First and Fourteenth Amendments to the U.S. Constitution prohibit attempts by a state legislature to assure election of some candidates and defeat of others by the manipulation of congressional district boundaries?

He begins by quoting *U.S. Term Limits*’ affirmation that “[T]he right to choose representatives belongs not to the states, but to the people.”<sup>65</sup> He quotes the Preamble to the Constitution’s words WE THE PEOPLE and from the debate at the federal convention between delegates Mason and Madison on one hand, and delegates Gerry and Sherman on the other, to document his observation that the proponents of direct election of U.S. representatives won out. That being so, Stivison concluded that “To allow states such control over [the peoples’] elections that they can choose a specific candidate and target him for defeat, as was done to Mr. Miller, is

an improper usurpation of control by a state over a federal function... The power to intentionally gerrymander a Member's district out of existence is a powerful instrument of control."<sup>66</sup>

Stivison noted the provisions the Framers wrote into the Constitution to prevent states from usurping control over congressional elections but observed "the growing role of organized political parties quickly acted to subvert that intent."<sup>67</sup> He noted that Plaintiffs' complaint

traces the results of Ohio gerrymanders for up to four decades. During that time only two political parties have dominated and, by acting in concert, they have had the same effect as if they were one monolithic organization. This is much more dangerous to democracy than a purely partisan gerrymander... If the sixteen individuals named as defendants in this suit can accomplish an open intentional gerrymander, their power is multiplied many thousand fold over that of their ten million fellow Ohioans. Their votes on the redistricting plan are worth multiples of the votes of any other person cast in a congressional election and their influence is far more lopsided than the voting inequities found in *Reynolds v.*

*Sims, Wesberry v. Sanders* or any other 'one voter-one vote' case that *has* ever come before this or any Court.<sup>68</sup>

Stivison made a concerted effort to make sure the High Court did not repeat the Norris court's failure to grasp the nature of the remedy sought by the *Miller* plaintiffs:

The cure sought by Appellants is that the trial court order the State to adopt an impartial districting procedure, without the discretion to gerrymander. It is important to note what the Appellants are not seeking: they are not asking the Court to replace the State's lines with a 'better' map they have drawn. They are not asking the Court to draw the lines itself. They are not asking to have a supposedly 'independent' board make a subjective choice among plans, as

implied in *Pope v. Blue*. The Appellants are not even asking the Court to mandate that a particular impartial procedure be used.<sup>69</sup>

He said that at trial Plaintiffs would present several alternative districting procedures, one of which is described in the Appendix: that their common feature was they removed discretion from the districting process. He said the State might opt for crafting its own districting procedure and cautioned that:

Lines drawn by an impartial method will still have political impacts: Some candidates will be helped and others will be hurt. But they will know that such effects reflect purely ‘the luck of the draw’ and not that some politico in Columbus has a personal vendetta to satisfy... ‘Sovereignty confers on the people the right to choose freely their representatives to the National Government’ that principle is violated as much when voters are assigned to districts for the purpose of electing or defeating specific candidates as when their choices are limited by disqualifying candidates using term limitations.<sup>70</sup>

A third section of the brief dealt with the *Karcher* claim, but as indicated earlier we do not discuss it.

#### *Appellants’ Motion to Dismiss or to Affirm*

On October 25 Defendants’ counsel Diane Richards made her final response to the *Miller* plaintiffs. The first six pages of her 25-page brief were a statement of the case and a summary of her argument. The next eight pages—Part 1 of the “Argument” section—dealt with the *Karcher* claim. In Part 2 of the “Argument” she attacks Plaintiffs’ proffered remedy saying it “disregards [the] Court’s precedents which recognize that the states have primary responsibility for redistricting.”<sup>71</sup> She quotes *White v. Weiser*, *Voinovich v Quilter* and *Grove v. Emison*<sup>72</sup> in

support of her interpretation of “primary responsibility,” and refers to as “novel” Plaintiffs’ “proposition that Art. 1 § 2 of the Constitution ordains a purely ministerial role for state legislatures in the redistricting process.”<sup>73</sup> She mischaracterizes Plaintiffs’ proffered remedy as a “plea that the districting process...be turned over [*sic*] to any and all groups with ‘an interest’ in the process,” and mischaracterizes the remedy sought by plaintiffs in *Pope v. Blue* as “requir[ing] that a computer program create redistricting plans that comport with non-partisan districting criteria.”<sup>74</sup>

In the next part of her argument Richards returns to *Gaffney v. Cummings* maintaining that it was, indeed a bipartisan gerrymander and was not challenged as a partisan gerrymander—as claimed by the *Miller* plaintiffs. She quotes passages from *Gaffney* that speak approvingly of attempts to achieve proportional representation by geographical districts, describes as “striking” the “similarities between the facts in *Gaffney* and the allegations in the complaint in” *Miller*, and denies that *Miller’s* being a congressional case distinguishes it from *Gaffney*. Finally, she cites *Bush V. Vera*<sup>75,76</sup> to affirm that incumbency protection is recognized as a legitimate state goal in congressional redistricting.

Richards then turns to *Bandemer* and, despite Stivison’s insistence since the beginning of the litigation that his clients were not making a *Bandemer* claim, spends four and two-thirds pages kicking and pummeling this straw man to lifeless pulp. By contrast, the final section—Part 3 of her Argument—devotes only one page to refuting Appellants’ first “principal argument in support of their claims”:<sup>77</sup> that the State of Ohio flagrantly violated their right to an impartial electoral process. Like Norris, she chose not to see the elephant standing in the living room. She did not even attempt to explain why *Beazer, Hunter, Carrington, Greenberg, Anderson, Williams* and *Bullock* were irrelevant to *Miller*. She was content to reiterate Norris’ statement that ““the

concept of government as neutral referee’ ...has not yet been recognized as a discrete constitutional right.” In fairness, she added two sentences:

This Court has exercised restraint in the creation of new constitutional rights, and should continue to do so in this instance in which the right Appellants ask this court to acknowledge is completely without foundation or precedent and totally without boundary or contour. While the government must be neutral in certain well-defined areas, beyond that, the government may, and does, promote certain policies while it disfavors others, as directed by the people who have elected its members.

Incredibly, the brief makes no response to—in fact, makes no mention of—Appellants’ second major argument in support of their claims: that the State usurped the peoples’ right under Article 1 Section 2 to be the sole and exclusive choosers of U.S. representatives.

*Appellants’ Brief Opposing Appellants’ Motion to Dismiss or to Affirm*

Stivison was down to his last shot. He was permitted a 15-page rebuttal to the Appellants’ Motion to Dismiss or to Affirm. He chose to caption the core issues in the simplest terms:

1. The Principle of Governmental Neutrality<sup>78</sup>
2. Direct Election of Representatives
3. One Person, One Vote

He proceeded to amplify his first point:

“As the lower court recognized...the principle that ‘the State must govern impartially’ has been applied to free speech, freedom of association and freedom of religion. ...This principle has also been applied in a variety of cases involving the electoral process. Congressman Miller and the other appellants here ask this...court to now apply this well-established principle to the drawing of congressional district

boundaries... The State simply does not address the validity of judging this case against the principle of governmental neutrality or impartiality. It merely urges the Court to exercise ‘restraint in the creation of new constitutional rights.’ But this is not a new right. It is the application to a new question of a well-established and well-recognized principle of governmental evenhandedness.

The Jurisdictional Statement... shows that this right is not ‘completely without foundation or precedent.’ To the contrary, it fulfills and extends rights long established by this... Court. Nor is the right sought ‘totally without boundary or contour.’ The right is simply the right to receive evenhanded treatment from state legislatures engaged in drawing boundaries for federal office, namely, membership in the U.S. House of Representatives.”<sup>79</sup>

Then he amplified his second point:

“The State has one note and one note only to play in response to the Appellants’ argument based on Article 1, Sections 2 and 4... *Gaffney* gives us the right to gerrymander... appellants have shown that ‘The Framers did their best to insulate congressional elections from state legislative machinations.’ According to the State, original intent means nothing in the face of *Gaffney*. Yet *Gaffney* has no bearing on this case for a number of reasons.”<sup>80</sup>

As he had done in his earlier briefs, Stivison recited the ways in which *Gaffney* differed from *Miller*: that it involved state legislative rather than U.S. congressional districting; that its plaintiffs had alleged partisan rather than bipartisan gerrymandering; that it involved a claim of group rights rather than a claim of individual rights; and that it was decided at a time when the remedy of an impartial districting procedure was not known to exist.



In a footnote Stivison pointed out why *Bandemer* was “inapposite”<sup>81</sup> whereas the relevant and recent case of *U.S. Term Limits v. Thornton* had been “completely ignored by the State in its motion.”<sup>82</sup> He quoted from *U. S. Term Limits*:

The Framers understood the Elections Clause as a grant of authority to issue procedural regulations, and not as a source of power to dictate electoral outcomes, to favor or disfavor a class of candidates, or to evade important constitutional constraints.<sup>83</sup>

and then added:

Appellants argue that that clause not only forbids favoring or disfavoring a *class* of candidates, but even more so the favoring or disfavoring of *specific individual candidates*, as they all allege was done by Ohio in 1992.<sup>84</sup>

The remainder of the brief was given to a refutation of the Defendants’ *Karcher* argument. On December 2, 1996 the United States Supreme Court issued a two-word statement: Judgment Affirmed.<sup>85</sup>

David V. Stivison was born October 11, 1946. Two weeks after his fiftieth birthday he was found to have a fast growing renal carcinoma. On May 3, 1997 he died.

## Notes

<sup>1</sup> U.S. Dist. Court Southern Dist. of Ohio Eastern Division Case No. C2-94-1116: Complaint, p. 14 ¶31.

<sup>2</sup> *Ibid.* p. 18 ¶44.

<sup>3</sup> *Ibid.* p. 18 ¶46 .

<sup>4</sup> *Ibid.* p. 19 ¶48 .

<sup>5</sup> *Ibid.* p. 19 ¶50.

<sup>6</sup> U.S. Dist. Court Southern Dist. of Ohio Eastern Division Case No. C2-94-1116: Defendants' Motion Dismiss. p. 2.

<sup>7</sup> *Ibid* p. 7.

<sup>8</sup> *Ibid* p. 9 quoting Justice O’Connor in *Davis v. Bandemer*, 478 U.S. at 154 (concurring in judgment).

<sup>9</sup> They *do* have a common political interest: they are all challengers. But they were not bringing this suit to vindicate a group right, and so chose not to emphasize this aspect of the case.

<sup>10</sup> Motion to Dismiss. *Op. cit.* Note 6, p. 14.

<sup>11</sup> *Ibid*, p. 16.

<sup>12</sup> *Karcher v. Daggett* 462 U.S. 725,740 (1983).

<sup>13</sup> Motion to Dismiss. *Op. cit.* Note 6, p. 28.

<sup>14</sup> U.S. Dist. Court Southern Dist. of Ohio Eastern Division Case No. C2-94-1116: Plaintiffs' Answer to Defendants' Motion to Dismiss. pp. 20-21.

<sup>15</sup> *Ibid*, p. 21.

<sup>16</sup> *Ibid*, p. 22.

<sup>17</sup> *Ibid*, pp. 23-24.

- <sup>18</sup> The first being the electoral neutrality principle presented in Chapter 30.
- <sup>19</sup> Plaintiffs' Answer. *Op. cit.* Note 14: pp. 27-28.
- <sup>20</sup> *West Virginia Board of Education v. Barnette* 319 U.S. 624, 641-642 (1943).
- <sup>21</sup> *New York Times v. Sullivan* 376 U.S. 254.
- <sup>22</sup> Plaintiffs' Answer. *Op. cit.* Note 14: pp. 31.
- <sup>23</sup> Magna Carta in America, David V. Stivison, Ed. p. 17.
- <sup>24</sup> Plaintiffs' Answer. *Op. cit.* Note 14: pp. 32.
- <sup>25</sup> *Ibid*, p. 33.
- <sup>26</sup> Defendants' Reply to Plaintiffs' Answer to Defendants' Motion to Dismiss, p. 3.
- <sup>27</sup> *Ibid*, p. 8.
- <sup>28</sup> *Ibid*, p. 9.
- <sup>29</sup> *Ibid*, p. 9.
- <sup>30</sup> *Ibid*, p. 11.
- <sup>31</sup> *Ibid*, p. 1 n. 1 quoting Defendants' Motion to Dismiss p. 4 n. 1.
- <sup>32</sup> *Ibid*, p. 12.
- <sup>33</sup> *Pope v. Blue*, 809 F.Supp. at 398.
- <sup>34</sup> *Republican Party of North Carolina v. Martin*, 980 F.2d 943, 960 (4th Cir., 1992).
- <sup>35</sup> Plaintiffs' Answer. *Op. cit.* Note 14: pp. 10.
- <sup>36</sup> Defendants' Reply to Plaintiffs' Answer to Defendants' Motion to Dismiss, p. 15.
- <sup>37</sup> U.S. Dist. Court Southern Dist. of Ohio Eastern Division Case No. C2-94-1116: Transcript of Proceedings. Tuesday Afternoon Session, August 29, 1995: p. 4.
- <sup>38</sup> *Ibid*, p. 4.
- <sup>39</sup> *Ibid*, p. 6.
- <sup>40</sup> *Ibid*, p. 7.
- <sup>41</sup> *Ibid*, p. 13.
- <sup>42</sup> *Ibid*, p. 14.
- <sup>43</sup> *Ibid*, p. 18.
- <sup>44</sup> *Ibid*, p. 22.
- <sup>45</sup> *Ibid*, p. 26.
- <sup>46</sup> *Ibid*, p. 27.
- <sup>47</sup> *Ibid*, p. 28.
- <sup>48</sup> *Ibid*, p. 29.
- <sup>49</sup> *Ibid*, pp. 35-36.
- <sup>50</sup> *Ibid*, p. 37.
- <sup>51</sup> *Ibid*, p. 38.
- <sup>52</sup> *Ibid*, p. 39.
- <sup>53</sup> *Ibid*, p. 40.
- <sup>54</sup> *Ibid*, p. 41.
- <sup>55</sup> *Ibid*, p. 42.
- <sup>56</sup> U.S. Dist. Court Southern Dist. of Ohio Eastern Division Case No. C2-94-1116 Opinion and Order May 29, 1996. p. 8 quoting *White v. Weiser*, 412 U.S. 783, 799 (1973) (Marshall, J., concurring).
- <sup>57</sup> *Karcher v. Daggett* 462 U.S. at 739.
- <sup>58</sup> *Ibid*. p. 740.
- <sup>59</sup> *White v. Weiser* 412 U.S. at 794.
- <sup>60</sup> Opinion and Order, *Op. cit.* Note 56 p. 10. i.e., *Williams v. Rhodes*.
- <sup>61</sup> *Clarence E. Miller, et al., v. State of Ohio, et al.* In the Supreme Court of the United States: October Term 1995: Case No. 96-471: Jurisdictional Statement. pp. 9-10.
- <sup>62</sup> *Anderson v. Celebrezze*, 460 U.S. 780, 788, n. 9 (1983)(emphasis added) .
- <sup>63</sup> *Storer v. Brown*, 415 U.S. 724, 730 (1974).
- <sup>64</sup> *Baker v. Carr*, 369 U.S. 186, 226 (1962).
- <sup>65</sup> *U.S. Term Limits, Inc. v. Thornton*, 115 S.Ct.1842, 1863 (1995).
- <sup>66</sup> Jurisdictional Statement, *Op. cit.*, note 62: pp. 16-17.
- <sup>67</sup> *Ibid*, p. 18.
- <sup>68</sup> *Ibid*, pp. 18-19.
- <sup>69</sup> *Ibid*, p. 20.
- <sup>70</sup> *Ibid*, pp. 21-22 quoting *U.S. Term Limits v. Thornton* 115 U.S. 1842, 1869 (1995).
- <sup>71</sup> *Clarence E. Miller, et al., v. State of Ohio, et al.* In the Supreme Court of the United States: October Term 1995: Case No. 96-471: Appellants' Motion to Dismiss or to Affirm, p. 15.
- <sup>72</sup> *White v. Weiser* 412 U.S. 783, 799 (1993); *Voinovich v. Quilter* 507 U.S. 147, 156 (1993); *Grove v. Emison* 507 U.S. 25, 34 (1993).
- <sup>73</sup> *Ibid*, p. 16.

<sup>74</sup> *Ibid*, p. 17.

<sup>75</sup> *Ibid*, p. 19.

<sup>76</sup> \_\_\_\_\_U.S. \_\_\_\_\_

<sup>77</sup> Appellants' Motion to Dismiss or to Affirm, *Op. cit.* note 12-p. 24.

<sup>78</sup> *Clarence E. Miller, et al., v. State of Ohio, et al.* In the Supreme Court of the United States: October Term 1995: Case No. 96-471: Appellants' Brief Opposing Appellants' Motion to Dismiss or to Affirm: p. 1.

<sup>79</sup> *Ibid*, pp. 1-2.

<sup>80</sup> *Ibid*, pp. 2-3.

<sup>81</sup> *Ibid*, p. 4 (n. 17).

<sup>82</sup> *Ibid*, p. 6.

<sup>83</sup> *Ibid*, p. 6 (quoting 115 S.Ct. at 1869).

<sup>84</sup> *Ibid*.

<sup>85</sup> Clarence E. MILLER, et al., appellants, v. OHIO, et al. 519 U.S. 1003, 117 S.Ct. 504 (1996).

## Chapter 37

### *Gaffney Revisited*

It is tempting to nurse the conclusion that *Gaffney v. Cummings* is to political gerrymandering what *Plessy v. Ferguson*<sup>1</sup> is to school segregation. Each is, or was, an imposing barrier to judicial proscription of a repugnant practice that prevent(ed) attainment of a truly democratic society. Each is, or was, based on a false factual premise: segregation on the premise that enforced confinement to physically equal facilities did no psychological harm to African-American children; gerrymandering on the premise that “politics” is inseparable from districting. We need to take a close look at this important decision and become clear on what it said; what it did not say; whether it is really applicable to the sort of case that needs to be won; or whether it can be side-stepped.

*Gaffney* is an odd case in some respects. At first glance it appears to be another case of the late ‘60s/early ‘70s that adjusted the band-width of district population inequality that the courts would tolerate. At second glance it appears to be the first case in which the High Court acknowledged that claims of partisan gerrymandering were justiciable. At third glance it appears to be a claim that the State had gone *too far* in creating equipopulous legislative districts. At fourth glance—and here is where it concerns us—it appears to give a judicial green light to collusive bi-partisan gerrymandering by the leaders of the two major parties. We begin with a statement of the salient facts.

In response to the one person-one vote litigation of the 1960s, Connecticut amended its constitution to provide for a single-member district Assembly of from 125-225 members and a SMD Senate of from 30-50 members. Towns rather than counties being the basic unit of local government in Connecticut, the new constitution provided that towns could not be divided except for the purpose of forming assembly districts wholly within a town. The first

districting performed under the new constitution applied only to the final three elections of the 1960s: 1966, 1968 and 1970 to elect in each case 36 senators and 177 assemblymen—all for two-year terms.

Beginning in 1971, the new constitution provided for the legislature to draw its own districts for the coming decade, if it could do so by April 1. If it failed to meet that deadline, it then must choose from its ranks an eight-member bipartisan commission to take over the task. If the commission failed to meet a July 1 deadline, the job was turned over to a 3-member bipartisan board consisting of two Superior Court judges chosen respectively by the Speaker of the House and the Minority Leader of the House and a third member, an elector, selected by the two judges. This board was given until September 30 to come up with a plan.

In 1971 neither the General Assembly nor the commission could meet its deadline, so in April the Democratic Speaker chose Democratic Superior Court Judge Leo Parskey and the Republican House Minority Leader chose Republican Superior Court Judge George Saden as the initial members of the districting board. To meet a July 1 deadline, “an elector,” needed to be chosen. How would they select the tie-breaking third member? Parskey took the initiative in a letter to Saden “sometime late in July” “with a list...of six judges” indicating that “any one of the six were satisfactory to him.”<sup>2</sup> Saden chose one John Thim, a former Republican Speaker of the Connecticut House, and communicated his agreement by a letter “some time the early part of August.” But then the board did not meet for the first time “to deliberate on the matter of redistricting” until “the latter part of August.”<sup>3</sup> The board appeared to have a laid-back attitude toward its responsibility. “Parskey had been away on a vacation from the end of July until sometime late in August.”

Neither did Parskey have anybody working for him on redistricting during his summer vacation so that he would have something to propose when the board finally got down to work. Saden, on the other hand, did have people hard at work formulating house and senate plans that

would presumably provide the Republican negotiating position. Chief of these people was one John Collins, an attorney who had been prominent on the Republican side during the earlier negotiations in the General Assembly and Commission phase and who had an encyclopedic knowledge of Connecticut districting. Saden was vague as to when the board first met and how many times it had met. In their attempt to craft a plan they started with the Senate, intending to tackle the House later. In fact, they never finished the Senate plan and consequently had virtually no discussions over the House. It was Friday, September 24. As Saden described it:

“...on that day we finally took a first vote on the senate plan, and Judge Thim voted for my plan at that time and Mr. Parskey became very angry about it and stormed out of the office so we never got a chance to go over the house plan with him from that point on.”<sup>4</sup>

When one says a plan was crafted by a “bipartisan commission” the picture that comes to mind is of two partisan delegations sitting around a table arguing over a map with an impartial mediator sitting between them suggesting compromises that might lead them to agreement. The reality we perceive from reading the Gaffney depositions is quite different: a partisan Republican commission working its will because its lone Democratic member is too naive, too ineffectual or too lazy to offer effective resistance.

### *Cummings v. Meskill*

Having failed to put up a struggle in the three-judge board for a districting plan that served their interests, the Democrats opted for the courts. On 18 November, 1971 they filed suit in Federal District Court alleging that the Board “erroneously applied the one man-one vote doctrine...to achieve smaller deviations from population equality for the assembly districts than was required by the Fourteenth Amendment...and thereby was compelled to ‘segment’ an excessive number of towns in forming assembly districts.”<sup>5</sup> According to the Cummings

plaintiffs, the underlying constitutional violation was that the excessive fragmentation of towns or other “political communities destroys voting patterns, isolates small groups of voters, and creates political and administrative confusion which deny to the[se] plaintiffs...the right to participate in the elective and political process as effectively as those who reside in districts wholly within town lines.”<sup>6,7</sup> The gravamen of their complaint is that they have a Fourteenth Amendment right either:

- a. to have a plan which gives maximum effectiveness to the state constitutional prohibition against segmenting towns in forming house districts consistent with a resulting percentage deviation from equality no higher than federal constitutional standards will permit; or
- b. to have a plan which keeps the deviation of the districts from equality to the smallest amount practicable while giving no significance to the State constitutional prohibition against segmenting towns in forming house districts.<sup>8</sup>

At trial in March, 1972 the Plaintiffs offered four alternative plans which exemplified these constitutional alternatives: Table 37.1 summarizes their salient features in its columns 3-6. Note that Exhibit 20—the plan described in Column (6)—is very close to the State Plan in its maximum deviation but has eleven fewer towns “segmented”—i.e., 36 as opposed to 47.

In holding for Plaintiffs, however, the three-judge trial Court ignored this bifurcated claim and simply struck down the Board plan for having excessive population deviations. In so doing the trial Court refused to accept the State’s proffered justification of achieving a “fair political balance.”

The *Cummings* Plaintiffs also included in their complaint allegations of partisan gerrymandering. Paragraph 15 of the complaint alleges “the deviations from equality of the senatorial and assembly districts result from an intent to achieve and do achieve partisan advantage for the Republican Party amounting to political gerrymandering...” Paragraph 16 of the complaint asserts that “the plan contains a built-in bias in favor of the Republican Party, denies or

Table 37.1  
House Plans at Issue in *Gaffney*: Physical Characteristics

(1) Characteristic	(2) State Board Plan	(3) Plaintiffs' Exhibit 23	(4) Plaintiffs' Exhibit 22	(5) Plaintiffs' Exhibit 21	(6) Plaintiffs' Exhibit 20	(7) Master's Plan
Number of Districts	151	151	151	151	151	144*
Maximum Deviation	3.93%	1.60%	7.43%	5.97%	4.08%	1.16%
Number of Towns "Segmented"	47	58	27	31	36	?
Number of "Segments" Created	78	88	35	39	49	?

\*Four Assembly districts were nested within each of the plan's 36 Senate districts.

dilutes voting power because of partisan political group characteristics, and reveals a pattern of discrimination based on partisan political consideration amounting to political gerrymandering..." They did little to back up these assertions with hard evidence. The principal evidence they offered consisted of drawings of selected assembly and senate districts of low compactness.

#### *The Gaffney Defendants' Appeal to the High Court*

Connecticut Republicans, while not pleased with their losses of the State's General Assembly elections in 1966 and 1968, at least had difficulty complaining that the districting system had treated them unfairly. Table 37.2 shows that in the 1966 House elections the Democratic candidates got 66.10 percent of the seats with 54.02 percent of the aggregate statewide vote—a discrepancy of 12.08 percent. In 1968 they got 62.15 percent of the seats with 51.98 percent of the aggregate statewide vote—a discrepancy of 10.17 percent. While these discrepancies were not a laughing matter they were arguably within the bounds of what one could expect from the "balloon effect." Similarly, Table 37.3 shows that in the 1966 Senate elections Democratic candidates got 69.44 percent of the seats with 53.94 percent of the aggregate statewide vote for senate candidates—a discrepancy of 15.50 percent. In 1968 they got 66.67 percent of the seats with 52.03 percent of the aggregate statewide vote—a discrepancy of 14.64 percent.



But then look at what happened in 1970. In the House election that year Democrat House candidates got 55.93 percent of the seats with only 49.90 percent of the aggregate statewide vote. This was a discrepancy of only 6.03 percent but it enabled the party with a minority of the statewide vote to win a majority of the seats in the chamber. Likewise, in the 1970 Senate elections Democratic candidates, with 49.16 percent of the aggregate statewide vote received 52.78 percent of the seats and with it control of the chamber.<sup>9</sup>

Table 37.2  
Connecticut Legislature: Electoral Outcomes Under 1971 ("Gaffney") House Districting Plan

(1) Election Year	(2) Democrat Votes	(3) Republican Votes	(4) Aggregate Statewide Vote, % Demo.	(5) Mean District Vote, % Demo.	Seats Won by†		(8)* Discre pancy	Uncontested by	
					(6) Demo.	(7) Repub.		(9) Demo.	(10) Repub
1966	537,895	457,769	54.02	54.94	117 66.10	60 33.90	+12.08 +11.16	1	0
1968	621,898	574,591	51.98	53.65	110 62.15	67 37.85	+10.17 +8.50	1	1
1970	530,012	532,062	49.90	51.98	99 55.93	78 44.07	+6.03 +3.95	0	2
1972	625,499	705,878	46.86	48.28	58 38.41	93 61.59	-8.45 -9.87	0	2
1974	611,919	450,220	57.58	59.24	118 78.15	33 21.85	+20.57 +18.91	0	1
1976	679,860	637,042	51.29	53.36	93 61.59	58 38.41	+10.30 +8.23	0	6
1978	554,067	458,072	54.74	56.85	103 68.21	48 31.78	+13.47 +11.36	1	7
1980	648,954	674,410	49.03	51.80	83 54.97	68 45.03	+5.94 +3.17	5	11

Table 37.3  
Connecticut Legislature: Electoral Outcomes Under 1971 ("Gaffney") Senate Districting Plan

(1) Election Year	(2) Democrat Votes	(3) Republican Votes	(4) Aggregate Statewide Vote, % Demo.	(5) Mean District Vote, % Demo.	Seats Won by†		(8)* Discre pancy	Uncontested by	
					(6) Demo.	(7) Repub		(9) Demo.	(10) Repub
1966	535,979	457,717	53.94	54.73	25 69.44	11 30.56	15.50 14.71	0	0
1968	621,523	573,038	52.03	53.39	24 66.67	12 33.33	14.64 13.28	0	0
1970	518,464	536,287	49.16	50.78	19 52.78	17 47.22	3.62 2.00	0	0
1972	611,186	724,471	45.76	46.71	13 36.11	23 63.89	-9.65 -10.60	0	0
1974	616,951	442,414	58.24	59.43	29 80.56	7 19.44	22.32 21.13	0	0
1976	673,215	648,036	50.95	52.34	22 61.11	14 38.89	10.16 8.77	0	0
1978	562,163	444,606	55.64	56.85	26 72.22	10 27.78	16.58 15.37	0	1
1980	666,008	651,147	50.56	52.14	23 63.89	13 36.11	13.33 11.75	0	0

†Upper number in cell is the number of seats won by each party. Lower number in cell is the percentage of seats it won, statewide.

\*Upper number in cell is the difference between the percent of seats won and the aggregate statewide vote.

Lower number in cell is the difference between the percent of seats won and the mean district vote.

Heavy horizontal line between entries for 1970 election and those for 1972 indicates redistricting took place. The size of the Senate remained constant at 36, but the House was reduced from 177 seats to 151 seats.

These reversals in 1970 convinced the Connecticut Republican leadership that if they were not the victims of partisan manipulation in the 1965 districting for the state legislature, they were certainly victims of a political demography that stacked the cards in favor of Democrats. With two of their own judges in control of the districting board and an eminent political scientist advising them, they crafted a “scientific” districting plan designed to award a party with a majority of the votes, statewide, with a majority of the seats. They appealed the trial Court’s decision to the U.S. Supreme Court and that court noted probable jurisdiction. For this phase of the litigation they engaged the services of Professor Robert G. Dixon, Jr., the influential political scientist and lawyer we met in Chapter 1 in discussing the major-party theory of representation. Presumably working with James Collins, he produced a study of the six plans at issue in *Gaffney* in which the 1966, 1968, 1970, and 1972 votes for the Connecticut House were re-aggregated according to the boundaries of the State Board Plan, the four alternative plans proposed by the Cummings Plaintiffs and the 144-district plan drawn by the trial Court’s special master. Table 37.4 summarizes what he discovered.

If the 1966 election were held again, but under the district boundaries reported in Columns (2)-(7), we note the Democrats would not have done as well under any of these plans as they did under the actual plan of that time (see Columns 6 and 7 of Table 37.2). They would have received between 92 and 96 seats to 52 to 59 for the Republicans. If the 1968 election were held again, but under the district boundaries reported as above, the Democrats, again, would not have done as well under any of these plans as they did under the actual plan of that time. They would have received between 81 and 94 seats to 57 to 70 for the Republicans—still a comfortable majority. Turning to 1970 we see a dramatic change: Republicans, with a 50.10 percent majority of the statewide vote, win a 77- to 74-seat majority under the State Board plan but continue to lose under the Plaintiffs’ and Master’s plans. Finally, in 1972, with their

Table 37.4  
 Connecticut Lower House Elections: 1966 - 1972  
 Projected Outcomes (Seats Won) Under State Plan and Alternate Plans Presented Before  
 the Court in *Cummings V. Meskill*

	Projected Outcomes											
	(2) State Board Plan		(3) Plaintiffs' Exhibit 23		(4) Plaintiffs' Exhibit 22		(5) Plaintiffs' Exhibit 21		(6) Plaintiffs' Exhibit 20		(7) Master's Plan	
	Repb.	Demo.	Repb.	Demo.	Repb.	Demo.	Repb.	Demo.	Repb.	Demo.	Repb.	Demo.
1966 Election	59	92	56	95	57	94	55	96	57	94	52	92
1968 Election	70	81	60	91	57	94	60	91	58	93	58	86
1970 Election	77	74	72	79	70	81	73	78	72	79	64	80
1972 Election	93	58	92	59	91	60	91	60	90	61	85	59

bigger (53.14 percent) statewide vote majority, they win seat majorities under all of the plans. Particularly noteworthy is the fact that the 1972 results under the four Plaintiffs' plans are nearly identical to the actual outcomes under the board plan.

*The "Political Fairness" Principle*

Professor Dixon and his Republican clients were in a position to remedy the injustices they perceived in the 1966-70 legislative districting plan and that remedy was the plans crafted by George Saden and James Collins. They made no bones about the fact that too many Democrats had been elected under the plan of 1966-70; that the Democrats winning a majority of the seats in both chambers in 1970 with a minority of the statewide vote was an outrage; and that application of the "political fairness" principle meant that more "Republican" districts had to be created. Saden made it clear what he meant by "fairness."

"Fairness is a plan that will meet the one man-one vote test and will reflect the vote on the Senate and House lines in the elections in this relatively same proportion, both in control of those houses as they reflect the plurality of the vote on the total Senate and House lines in the state and not the great discrepancies that you have under the reapportionment plan [of 1966-1970]."<sup>10</sup>

Saden's equating "fairness" with major-party proportional representation is further evidenced in this excerpt from his deposition:

“The [1966-70] reapportionment plan...is completely lopsided...when you get the kind of representation in both houses that you have had in ‘66 and ‘68 and ‘70 which are way out of whack compared to the actual plurality of the vote in favor of the party in control in those three elections;”<sup>11</sup>

In his deposition Collins recounted how he and Saden had discussed an opportunity to eliminate town cuts in Killingly, Watertown and Bloomfield. Collins had advised Saden not to eliminate those cuts:

“Because of the fact that we wanted a balance. We wanted a political balance in the sense he wanted a plan which if the Republican Party carried the state on the house level that the Republican Party would have a chance to carry the House, and if the Democratic Party carried the state on a house level that the Democratic Party would carry the House and in my best judgment in order to do this these [cuts] were necessary.”<sup>12</sup>

When asked by Plaintiffs’ counsel Robert Satter whether the Saden house plan had been “submitted for bargaining purposes with the Democrats” with the expectation that “there would be some changes made in order to achieve a fair balance from a political alignment” Collins said:

“My advice to Judge Saden was that the plan as drawn was the only fair plan that could be drawn politically and that any changes whatsoever that he made that would be made by Judge Parskey would take the plan out of the fair category and make the plan a Democratic oriented plan.”<sup>13</sup>

At the conclusion of his deposition Collins was asked by Satter if he would identify in the Senate and House plans which districts were safe Republican, safe Democrat and “swing” Collins had apparently made notations of this nature on a document he did not have with him, but that presented no obstacle. In response to Defendants’ counsel Francis McCarthy he recited without hesitation the number of each of the Board plan’s 36 senate districts with its partisan character: “guaranteed Democratic,” “probably Republican,” “swing, probably Democratic,” “solid Democrat,” “swing, Republican,” etc. Calling this “a formidable performance,” McCarthy said “I

truly hesitate to tax your competency in asking for a duplicate performance with respect to the House.”<sup>14</sup> Satter asked Collins whether he wanted a map. Collins acknowledged it would be easier and then proceeded to recite each house district’s number with its corresponding political character. Table 7.5 summarizes Collins’ assessment of the partisan character of the *Gaffney* plans. Note how it shows a nearly perfect split between “Democratic” districts and “Republican” districts for each of the plans.

Table 37.5  
James Collins' Assessment of Partisan Character of *Gaffney* Plans

House Plan		Senate Plan	
Guaranteed or Solid Demo.	14	Guaranteed or Solid Demo.	16
Democrat	60	Democrat	
Swing Democrat	1	Swing Democat	2
Swing	2	Swing	2
Swing Republican	12	Swing Republican	3
Probable Republican	61	Probable Republican	1
Solid Republican	1	Solid Republican	12
Total Number of Districts:	151	Total Number of Districts:	36

By the time the Supreme Court justices were ready to decide *Gaffney* the 1972 general election had taken place. So now it would be possible to assess the “fairness” of the *Gaffney* plans by actual election results rather than self-serving guesswork. As we know from earlier perusal of Tables 37.2 and 37.3, the Republicans garnered an 8.45 percent partisan advantage in the House elections and a 9.7 percent partisan advantage in the Senate elections. It is fascinating how each side cites the same statistics and puts its own “spin” on those statistics to buttress its argument. Satter recites the seats/votes figures that yield the 8.45 and 9.7 percent partisan advantages in 1972 for Republicans and then compares the Republicans’ 9.7 percent advantage in the 1972 senate election to the 3.62 percent partisan advantage enjoyed by Democrats in the 1970 senate election conducted under the previous plan.<sup>15</sup>

Dixon responds in his final reply brief saying “Raising the question of the 1972 election and its relation to past elections boomerangs for plaintiffs.”<sup>16</sup> First, he draws upon the Collins study excerpted in Table 37.4 to show that the 1972 Republican seat gain “would have been substantially the same under the four plans favored by the plaintiffs.”<sup>17</sup> Second, he shows that the “bonus seats”

effect enjoyed by Republicans in 1972 was actually less than that enjoyed by Democrats in 1966 and 1968. Third, he shows that the aborted masters' plan "prepared...with conscious lack of consideration of political fairness turns out to be more unfair than plaintiffs' plans or the Board plan when applied to the lower house elections since 1966."<sup>18</sup> Fourth, he demonstrates that only the Board plan would have averted the 1970 fiasco in which the party with a minority<sup>19</sup> of the votes wins seat majorities in both chambers. Dixon is particularly incensed over this 1970 outcome.

He says:

Particularly incredible in the light of the above demonstration of the fairness of the State plan is plaintiffs' invitation to compare the State plan's operation in 1972 not with plaintiffs' own plans but with the 1970 results under the old plan.

...Plaintiffs find a smaller percentage discrepancy between popular vote and seat gain for the senate in 1970 than for the assembly in 1972—3.6 percent v. 9.0 percent. But this 3.6 percent figure in that year was a burglary figure. With a minority popular vote of 49.15 percent the Democrats captured 52.77 percent of the seats! And on the lower house side in 1970 the old plan likewise converted a Democratic popular vote minority (once uncontested districts are taken into account) into a comfortable 21 seat margin.<sup>20</sup>

It was now up to the U.S. Supreme Court to decide who was right.

### *The Supreme Court's Decision and Dissent*

On June 18, 1973 the High Court reversed the Connecticut District court in a 6-3 decision delivered by Justice White. His 20-page opinion contained three parts. The 5-page Part I was a statement of the facts of the case. The 10-page Part II was the majority's argument for adopting a de minimis threshold for population equality in state legislative districting—a deviation small enough to not require justification by the State. Justice Brennan, writing for the minority, devoted the entire ten pages of his dissent to refuting the majority's arguments on the de minimis

controversy and dealt with no other issue. That left the final five pages to Part III, a statement that for the first time in the Court's history addressed the issue of non-racial political gerrymandering. It was a statement acknowledging that partisan gerrymandering was a justiciable issue but it went largely unnoticed at the time probably because in 1973 there were no cases in the pipeline in which gerrymander allegations were central to the plaintiffs' case. Justice White had signaled his concern for this issue, however, five years earlier in another case in which he had referred to gerrymandering as being "a far greater threat to equality of representation..."<sup>21</sup> than small population deviations between districts. In his *Gaffney* opinion he began by saying:

State legislative districts may be equal...in population and still be vulnerable under the Fourteenth Amendment. A districting statute otherwise acceptable may be invalid because it fences out a racial group...[or] may create multi-member districts...invidiously discriminatory because they are employed...to minimize or cancel out the voting strength of racial or political elements of the voting population.'<sup>22</sup>

Therefore, wrote White, we must "respond to appellees' claims...that even if acceptable population wise, the...Board's plan was invidiously discriminatory because a 'political fairness principle' was followed in making up the districts."<sup>23</sup> White noted that:

"The record abounds with evidence, and it is frankly admitted by those who prepared the plan, that virtually every Senate and House district line was drawn with the conscious intent to create a districting plan that would achieve a rough approximation of the statewide political strengths of the Democratic and Republican Parties... Appellant insists that the spirit of 'political fairness' underlying this plan is not only permissible, but a desirable consideration in laying out districts... Appellees, on the other hand, label the plan as nothing less than a gigantic political gerrymander..."<sup>24</sup>

White then comes down on the side of the *Gaffney* appellants saying:

“We are quite unconvinced that the...plan offered by the...Board violated the Fourteenth Amendment because it attempted to reflect the relative strength of the parties in locating and defining election districts. It would be idle, we think, to contend that any political consideration taken into account in fashioning a reapportionment plan is sufficient to invalidate it. Our cases indicate quite the contrary.

As we observed in our review of the neutrality principle case law in Chapter 30, by giving an answer to the question of whether the *Gaffney* plans violated the Fourteenth Amendment—even a negative answer—the Court was, albeit backhandedly, conceding that the issue was justiciable.

White went on to say:

The very essence of districting is to produce a different—a more “politically fair—result than would be reached with elections at large, in which the winning party would take 100 percent of the legislative seats.”<sup>25</sup>

This last sentence betrays a false premise in White’s argument: that the only alternative to discretionary districting is at-large elections with a bed sheet ballot and a winner-take-all outcome. We know that not to be true. Chapters 24-25 make abundantly clear the existence of another alternative to discretionary districting: non-discretionary districting. Then comes the major false statement of the opinion:

“Politics and political considerations are inseparable from districting and apportionment.”<sup>26</sup>

This statement is repeated in a slightly different form a page later:

“...we have not...attempted the impossible task of extirpating politics from what are the essentially political processes of the sovereign states.”<sup>27</sup>

Chapters 24-25 tell us that these are also false statements. But we are not out of the woods yet.

While it may be true that Professor Dixon and Justice White litigated and decided *Gaffney* five



years before the first impartial districting proposal surfaced in a state legislature.<sup>28</sup> We doubt they would have abandoned their “political fairness principle” of districting performed by a bipartisan-board-with-tiebreaker in favor of a mechanistic procedure that precludes human discretion even for salutary purposes. The next-to-final paragraph in White’s opinion, in major part, says:

“It may be suggested that those who redistrict...should work with census, not political, data and achieve population equality without regard for political impact. But this politically mindless approach may produce, whether intended or not, the most grossly gerrymandered results...”<sup>29</sup>

This statement assumes that another alternative to at-large elections and to discretionary

districting by a “political fairness” principle would be discretionary districting by a group of supposedly disinterested technicians. White rejects this approach because even if the technicians were truly impartial their blind adherence to supposedly neutral formal criteria, it could result in a plan that conferred a significant advantage on one of the major parties—an unintentional partisan gerrymander. So even if White had been aware of the alternative of impartial districting procedures he might have rejected it for the same reason that, as here, he rejects engaging disinterested technicians using the formal criteria.

Dixon would likewise have rejected nondiscretionary districting procedures. The final section of his reply brief is captioned “The Political Fairness Principle Is the Only State Law Principle...Which Can Harmonize...with the Federal Requirement of Population Equality and Prevent Intentional or Unwitting Gerrymanders.” He says:

“*Gaffney v. Cummings* is not a gerrymandering case. It is a case arising from an attempt to build into the reapportionment process effective safeguards *against* gerrymandering, i.e., invidious districting, both in purpose and result. The mechanism

is a bipartisan board with tiebreaker. ...The political fairness principle is the basis for the plaintiffs' wild, unsupported allegations of gerrymandering.

Such allegations...rest on a...lack of appreciation of...the central role of districting in providing the basis through which voting power may be fairly expressed or diluted.<sup>30</sup>

“Obviously we do not know whether we have achieved politically gerrymandered or politically fair districts until we consult political data.<sup>31</sup> “Because they...could not [prove unfair benefit to one party at the expense of the other] ‘plaintiffs’ offer a novel definition [of gerrymandering] in which mere consideration of political factors becomes gerrymandering per se.” “What then is the role of a political fairness principle, and a corollary consideration of political data. It is simply one anti-gerrymandering standard, analogous to our former guidelines such as compactness and preserving local subdivision lines.”<sup>32</sup>

“To condemn the operation of the Connecticut bipartisan Apportionment Board would be to create a per se rule against good faith political awareness. The consequence of such a holding would be to proscribe the most effective safeguard against partisan gerrymandering.”<sup>33</sup>

Justice White, in the final paragraph of his opinion, reveals how fully he has been persuaded by Professor Dixon:

“...judicial interest should be at its lowest ebb when a state purports fairly to allocate political power to the parties in accordance with their voting strength and, within quite tolerable limits, succeeds in doing so. ...But neither we nor the district courts have a constitutional warrant to invalidate a state plan, otherwise within tolerable population limits, because it undertakes not to minimize or eliminate the political strength of any group or party, but to recognize it and,

through districting, provide a rough sort of proportional representation in the legislative halls of the State.”<sup>34</sup>

The Defendants’ smashing victory must have been due in no small part to Collins’ 1966-72 Projected House Election Outcomes under the six plans at issue in the litigation. That study enabled Dixon to compare the Board plan favorably to the previous State plan, the four Plaintiffs’ plans and the 1972 Master’s plan. With none of these alternative plans having both a tighter population spread and fewer town cuts than the Board plan the Cummings plaintiffs were playing a weak hand. They got no help from the 1972 election outcome because Dixon skillfully showed how the pro-Republican seats/votes discrepancies in the 1972 House elections were less than the corresponding pro-Democrat discrepancies in 1966 and 1968. Our position that the way to get rid of gerrymandering was to remove discretion from districting did not look very strong at this point. A diametrically opposed policy had gained credibility and support. The Supreme Court had ruled but the game wasn’t over.

### *1980 Retrospective*

The bottom four lines of Tables 37.2 and 37.3 show how the “political fairness principle” fared in Connecticut in the remaining elections of the 1970s. The “Watergate” election of 1974 produced a 60-seat gain for the Democrats in the Assembly and a 16-seat Democratic gain in the Senate. That gave Democrats a 20.57 percent partisan advantage in the House and a 22.32 percent partisan advantage in the Senate. The Republicans recovered somewhat in 1976 and 1978, but in the latter year still suffered a 13.47 percent partisan disadvantage in the House and a 16.58 percent partisan disadvantage in the Senate. The crowning humiliation, however, occurred in the 1980 House races where Democrats received a 49.03 percent minority of the aggregate statewide vote, yet racked up 54.97 percent of the House seats for an 83-to-68 majority.

It would be difficult to find a more dramatic example of discretionary districting failing to live up to its billing. The footnotes to Table 37.5 tell how far off Collins was in his projections. Of

the 61 house districts he projected to be “Republican” 14 voted for the Democratic house candidate in at least four of the five next elections. Dixon died in 1980 and it is unlikely that he ever was aware of how the districting plan he went to bat for in a landmark Supreme Court case turned out to have precisely the same failing as its predecessor: in the final election of its tenure it produced a majority of seats for the party receiving a minority of the vote. We don’t claim to know the reason(s) for the *Gaffney* plan’s signal failure. Connecticut voters are notoriously independent, having elected during the last two decades both an independent governor and an independent U.S. Senator.

But are they more independent than voters in other states? We made a frequency distribution that may be interesting. For each of the 151 house districts we calculated the magnitude of its “swing” over its five-election tenure. At one end of the distribution were four districts that varied less than 5 percent in the share of their vote given to the Democratic candidate (two strongly “Democratic;” two strongly “Republican”); at the other end were six districts that varied 34 percent to 35 percent in the share of their vote given to that candidate. The bi-modal histogram has a 12-district mode at 11-12 percent and another 12-district mode at 19- 20 percent. We cannot draw many conclusions from this distribution without similar studies from other states to serve for comparison. All we can say is creating a “scientific” districting that will produce “a rough sort of proportional representation” in the state of Connecticut in the late twentieth century is a problematic endeavor.

### *Other Gaffney Research*

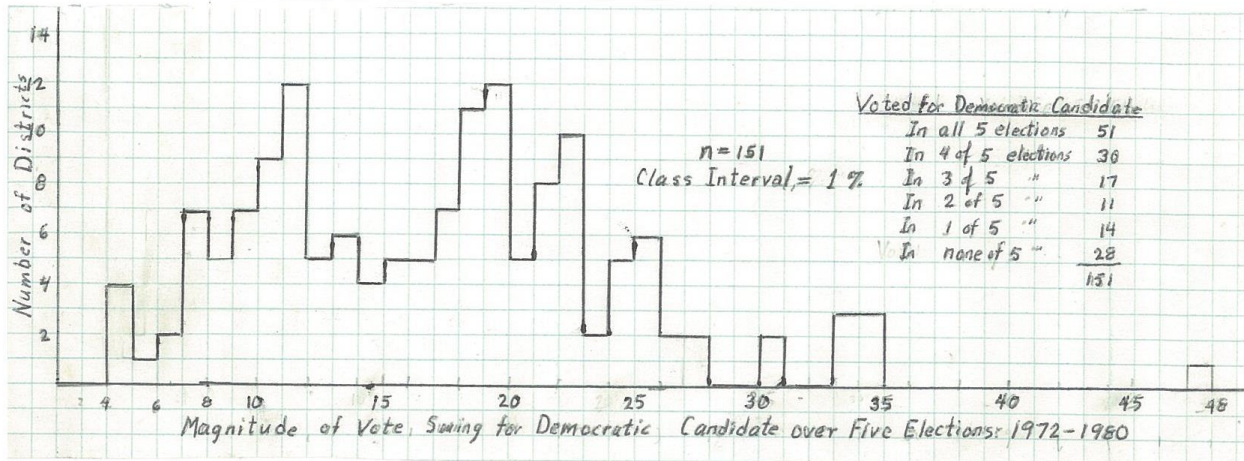
In 1982, nine years after the High Court’s ruling on *Gaffney*, Howard Scarrow published the only study of this episode to appear in an academic journal that we are aware of. The question he addressed was whether the boundary manipulation frankly conceded by its perpetrators was “invidious” or “benevolent.” He had not only the advantage of knowing how the *Gaffney* plans performed in the remaining four elections of the 1970s but also the benefit of academic research

and thinking on the districting issue that occurred since 1973. Most significant was the development of the “bias” concept to mean not the discrepancy between seat percentage and vote percentage between 1973 and 1982 but the difference between the parties in seat payoff at given percentages of the vote. Scarrow wrote:

“Starting with the actual vote/seat outcome in a given year—e.g., Connecticut Democrats winning 38.4 percent of the seats with 47.0 percent of the vote in 1972—the analyst projects what the seat percentage would have been if, in each district, the Democratic share of the vote had increased by one percentage point,

Figure 37.1

MAGNITUDE OF SWING IN VOTE FOR DEMOCRATIC CANDIDATES  
CONNECTICUT HOUSE OF REPRESENTATIVES, 1972-1980



For each HD, tabulate the percentage of the vote received by the Democratic candidate in each of the five elections. Subtract the smallest percentage he received in any of these elections from the largest percentage he received in any of these elections. Tabulate the resulting variates in a frequency distribution with class intervals of one percent.

two percentage points, and so forth—the Republican share thereby decreasing by that amount—or if the Democratic share of the vote had decreased by one percentage point, two percentage points, and so forth—the Republican share thereby increasing by that amount.<sup>35</sup>

Scarrow then asks what would have been the outcome if Dixon or the Cummings plaintiffs had subjected the 1966-1972 Connecticut election results to this sort of analysis, defining a fair share as one that produced no bias. Table 37.6 shows what Scarrow discovered. The projections for 1970 and 1972 would have strengthened Dixon's case. Dixon would not have been troubled by the 1972 projection which shows Republicans winning 61.6 percent of the seats with 54 percent of the statewide vote because that same projection shows Democrats getting 62.9 percent of the seats for that same vote. That amounts to a 1.3 percent pro-Democrat bias (Row 10). The projections based upon a 1970 distribution of the vote (Column 2) shows a heavier pro-Democrat bias, such bias being evident at all points in the 45-55 percent range. Finally, Dixon could have pointed to a higher swing-ratio beginning in 1972. Scarrow then observes:

“On the other hand, Dixon's opponents likewise could have put the projections to good use. By concentrating their attack on whether or not the Board's scheme produced political fairness, they could have shown that the scheme produced in its first try (1972) an anti-Democratic bias at most points in the 45 to 55 percent range, and especially around the 50 percent point. Indeed, the projections would have shown that had the Democrats in 1972 won 50-plus percent of the vote they would *not* have won a majority of the seats; Dixon's own standard of fairness would have been violated.”<sup>36</sup>

Scarrow then turned to the post-1972 performance of the *Gaffney* plans and made the same observations we made in contemplating the bottom four rows of Tables 37.2 and 37.3.

Projections based on the 1974-1980 election results, one of which, that for 1974, is shown in the fourth column in Table 37.6, show how “the districting scheme had become inherently biased in favor of the Democrats.” Scarrow asks “What happened? Why did the Board's plan so poorly predict seat/vote ratios after 1972?”<sup>37</sup> He offers two answers to his question: First, analysis of the two types of “wasted” votes shows that most of the Republican waste was of the

Table 37.6  
Collins' Assessment of Partisan Character of *Gaffney* Plans

House Plan		Senate Plan	
Partisan Character	Number of Districts	Partisan Character	Number of Districts
"Solid Democrat"	14	"Solid Democrat"	16
"Democrat"	60		
"Swing Democrat"	1	"Swing Democrat"	2
"Swing"	2	"Swing"	2
"Swing Republican"	12	"Swing Republican"	3
"Republican"	61*	"Probable Republican"	1
"Solid Republican"	1	"Solid Republican"	12
Total:	151	Total:	36

\* 6 of these districts voted for the Democratic candidate in 3 out of 5 elections during the 1970s  
12 of these districts voted for the Democratic candidate in 4 out of 5 elections during the 1970s  
2 of these districts voted for the Democratic candidate in all 5 elections during the 1970s

Type 1 variety occurring in “losing” districts. They sustained relatively little Type 2 (“overkill”) vote wastage. Mayhew<sup>38</sup> has observed that parties in control of districting sometimes get “too greedy” and spread their supporters too thinly over too many districts. If, in one of the next few elections, here is an unexpectedly strong electoral tide in favor of the opposing party, the party that drew the districts might suffer extraordinary losses. This happened in New York in 1961-64 and cost the Republicans control of the State Assembly in the post-Watergate election of 1974, a control they have not regained since.

Scarrow’s second answer is that in order to design “a permanently fair districting scheme,” one has to assume uniform partisan swing. Without that assumption “attempts to design a scheme of seat/vote fairness for future elections became mere guesswork. In Connecticut that assumption became increasingly invalid during the 1970s.”<sup>39</sup> Scarrow concludes by conceding that Connecticut’s attempt to incorporate “political fairness” into a geographical districting plan “is discouraging.” but he refuses to let go of his hope that “plaintiffs can still argue before the courts that there is an objective test for detection of an invidious partisan gerrymander...”<sup>40</sup>

*King and Gelman.* The other scholars who have analyzed the *Gaffney* plans and published their findings are King and Gelman. We examined those findings in the context of assessing their methodologies in Chapter 26. We noted that they came up with three sets of answers in three separate studies over a five-year period and that these answers appeared to be inconsistent with—

in some instances contradictory to—each other. We might assume, because it is—by five years—the most recent version of their methodology that Method C (i.e. JudgeIt) controls. We might further assume that a minus sign indicate pro-Republican bias and that no sign indicates pro-Democrat bias. If that is so, then the only two elections in which the *Gaffney* House plan displayed pro-Republican bias were 1972 and 1974. This would agree with Scarrow’s symmetry analysis in the case of 1972, but certainly not in the case of 1974!

### *Gaffney Wrap-up*

Returning to the second paragraph at the beginning of this chapter, it may be seen that this case began with an assortment of charges brought by Democrats<sup>41</sup> who were looking for some way to overturn a plan they had failed to derail in either the legislature, the Commission or the Board. At trial they did not press their partisan gerrymandering claim and the trial court did not rule on it. But it picked up on another of their claims, ruling in their favor that the population deviations were large enough to require justification and that such justification was not forthcoming. On appeal the *Gaffney* defendants focused on refuting the population deviation and partisan gerrymandering claims. The High Court ruled in favor on each. It said, in effect, that the deviations were not large enough to require justification; but if they did require justification the crafting of a plan purporting to provide major-party proportional representation was ample justification for deviations on the order of those of the *Gaffney* plans. Left unanswered was the question of how close must a districting plan have to come to achieving PR in order for it to meet Justice White’s standard? Do the courts just have to take the defendants’ word for it that their plan will yield a PR outcome? Or is there some non-arbitrary standard to which the courts can compare a challenged plan to judge whether it has attained PR? In our discussion of the next-to-final paragraph in Justice White’s opinion, we observed that even if White had been aware of impartial districting procedures he—and certainly Dixon—would have rejected that remedy because such procedures cannot guarantee a PR outcome. White (and Dixon) appear to believe



that if a plan was crafted by a board or commission on which both major parties are represented, that plan will be deemed as providing PR regardless of its actual partisan character and regardless of the fact that a partisan Board majority may have steamrolled it over the Board minority.

In their advocacy of bipartisan districting commissions as the remedy, Dixon and Justice White, who apparently bought the Dixon argument, not only ignore the reality that such commissions can behave as *partisan* commissions—as alleged in *Gaffney*—but seem even more oblivious to a second possibility: the major-party leaders, who appoint such commissions, can engage in a collusive, bi-partisan gerrymander—as alleged in *Miller v. Ohio*. As we observed in the previous chapter, *Gaffney* was a shield behind which the Ohio Defendants carried out their dirty work. We, therefore, return to the question that is the subject of this chapter: is *Gaffney* relevant to the issue of collusive, bi-partisan gerrymandering? If not, it presents no problem and can be sidestepped. However, if it is relevant, then like *Plessy v. Ferguson*, it must be squarely confronted and overturned. Which is it?

Our answer is: a little of each. In support of a “no” answer are the facts of the case—brought out in this chapter: that it was Democrats who brought the suit; that their charge was partisan gerrymandering; that they tried to prove it by pointing to seats/votes discrepancies that favored Republicans.

But supporting a “yes” answer is Justice White’s comment about “a politically mindless approach” that may produce, whether intended or not, the most grossly gerrymandered results.” This comment, while not directly making *Gaffney* relevant to claims of collusive, bi-partisan gerrymandering, does so indirectly by attacking the only workable remedy for it: removing discretion from the process—or instituting a “politically mindless approach.” What do we say to Justice White?

We say that his condemnation of “politically blind” districting is based upon an unstated assumption that is simply false: that by discretionary districting human beings can craft a plan of geographical districts that will yield major-party proportional representation over a duration of five biennial elections. He is assuming that one type of electoral system can be made to do the work of another. Not true.

The *Gaffney* plans are Exhibit A in support of our contention that discretionary districting by a bipartisan board or commission is a non-solution to the gerrymandering problem. We will not pursue that argument further at the moment because we need next to examine another judicial roadblock to attainment of impartial non-discretionary districting: an “incumbency protection” principle that has taken root in our constitutional jurisprudence.

#### Notes

<sup>1</sup> *Plessy v. Ferguson* 163 U.S. 537 (1896).

<sup>2</sup> *Gaffney v. Cummings*. Deposition of Judge George A. Saden. February 14, 1972. pg. 21.

<sup>3</sup> *Ibid*, pg. 22.

<sup>4</sup> *Ibid*, pg. 26.

<sup>5</sup> No. 71-1476. Plaintiffs’ Complaint ¶ 11 (pg. 8).

<sup>6</sup> *Ibid*, ¶ 12 (pp. 8-9).

<sup>7</sup> We think that this assertion of constitutional harm needs to be examined, but not just now.

<sup>8</sup> *Gaffney v. Cummings*. No. 71-1476. Plaintiffs’ Complaint ¶ 14 (pg. 10).

<sup>9</sup> Democrats did not point out at the time (they did not have Daniel Lowenstein working for them) that if mean district vote is employed as the “votes” measure, the vote for their 1970 House candidates rises to 51.98 percent and the vote for their Senate candidates rises to 50.78 percent. So it can be argued that they were the majority party in those elections

<sup>10</sup> Saden deposition. Op. cit. Note 1, pg. 38.

<sup>11</sup> *Ibid*, pg. 45.

<sup>12</sup> *Gaffney v. Cummings*. No. 71-1476. Collins deposition, February 1972. pp. 93-94.

<sup>13</sup> *Ibid*, pg. 106.

<sup>14</sup> *Ibid*, pg. 126.

<sup>15</sup> *Gaffney v. Cummings*. No. 71-1476. Brief for Appellees pp. 36-37.

<sup>16</sup> *Gaffney v. Cummings*. No. 71-1476 Reply Brief for Appellant, pg. 17.

<sup>17</sup> *Ibid*.

<sup>18</sup> *Ibid*.

<sup>19</sup> Lowenstein and other advocates of mean district vote would dispute this characterization.

<sup>20</sup> Reply Brief for Appellant, pp. 20-21.

<sup>21</sup> *Wells v. Rockefeller* 394 U.S. 542, 555 (1969).

<sup>22</sup> *Gaffney v. Cummings* 412 U.S. 735, 751.

<sup>23</sup> *Ibid*, pp. 751-752.

<sup>24</sup> *Ibid*, p. 752.

<sup>25</sup> *Ibid*, pp. 752-753.

<sup>26</sup> *Ibid*, p. 753.

<sup>27</sup> *Ibid*, p. 754.

<sup>28</sup> We believe that proposal was H.J.R. 90 introduced in the Ohio House on September 15, 1978.

<sup>29</sup> *Gaffney v. Cummings* 412 U.S. 735, 753 Appellees T112th General Assembly September.

<sup>30</sup> No. 71-1496, Reply to Brief for Appellant, p. 21.

<sup>31</sup> *Ibid*, pg. 22.

<sup>32</sup> *Ibid*, pg. 23.

<sup>33</sup> *Ibid*, pg. 24.

<sup>34</sup> *Gaffney v. Cummings*. 412 U.S. 735, 754.

<sup>35</sup> Scarrow, Howard A and Bernard Grofman, *Current Issues in Reapportionment* (California: School of Social Sciences at Irvine, 1982): 816.

<sup>36</sup> *Ibid*, p. 817.

<sup>37</sup> *Ibid*, p. 819.

<sup>38</sup> Mayhew, David, "Congressional Elections: The Case of the Vanishing Marginals" *Polity*, Vol. 6 No. 3 (1972): 277.

<sup>39</sup> Scarrow, *Op. cit.* Note 35 p. 820.

<sup>40</sup> *Ibid*, p. 821.

<sup>41</sup> Of the 14 named plaintiffs, 11 (including a lead plaintiff Cummings, a state representative from 1975-1979) have been identified as Democrats and a twelfth as "unaffiliated." The status of the remaining two is uncertain. None have been identified as Republican.

## Chapter 38

### “Incumbency Protection”

Contrary to the thrust of the case law we cited in Chapter 30, defendants in *Miller v Ohio* and other gerrymandering cases have asserted an exception to the electoral neutrality principle. In *Miller* the Defendants said that “protecting the seats of incumbents [has] long been [a] legitimate goal of redistricting.”<sup>1</sup> How has this novel doctrine insinuated itself into our jurisprudence?

#### *As the Framers Saw It*

The writer of *The Federalist* No. 53 addressed the issue of whether the proposed two-year term of office for members of Congress is sufficiently brief to protect the Republic from the “tyranny” that might ensue were congresspersons able to perpetuate themselves in office. He begins the essay by quoting a “current observation ‘that where annual elections end tyranny begins.’” This evidenced a widespread feeling at that time, a mood that manifested itself in the fact that only one of the 13 colonies allowed its legislators to have terms of office exceeding one year—two of them permitting their legislators terms of only six months.

Much of No. 53 is devoted to reassuring the skeptical reader that the proposed “term limit” is sufficiently brief, and biennial elections sufficiently frequent, to prevent entrenchment and consequently, “tyranny.” The writer naively believed that the prophylactic was frequent elections. Little could he have foreseen how, in the next two centuries, congresspersons would find ways to entrench themselves despite frequent elections.

The constitutional question here is what was the intent of those who wrote the Constitution concerning the issue of incumbent protection? Would the framers, had they foreseen that states could enhance the re-election prospects of congresspersons by manipulating the boundaries of their districts, have authorized this practice? The answer is obviously, and

emphatically “no.” The concept of incumbent protection was antithetical to their philosophy of government.

### *A Troublesome Footnote*

*Burns*. For 176 years the High Court said nothing that could be construed as authorizing states to pass electoral laws favoring incumbents over challengers. Then, in 1965, the Court considered an appeal from a district court ruling voiding an interim plan for the Hawaii senate that consisted of multi-member districts.<sup>2</sup> Since the unchallenged plan for the Hawaii House was also comprised of multi-member districts the district court, believing that at least one house of a bicameral legislature must consist of single-member districts, refused to allow the senate plan. The Supreme Court vacated that ruling and upheld the multi-member senate plan as an interim measure.

The island of Oahu was divided into four 4-member senate districts and one 3-member SD. One of the State’s reasons for not dividing these districts into single-member districts is that it would cause difficulties for incumbents and might force some to run against each other. Pointing out that multi-member districts are constitutional if they do not “operate to minimize or cancel out the voting strength of racial or political elements of the voting population”<sup>3</sup> the Court, in a footnote, went on to say:

We reject the suggestion that the districts are arbitrarily or invidiously defined.

The fact that district boundaries may have been drawn in a way that minimizes the number of contests between present incumbents does not in and of itself establish invidiousness.<sup>4</sup>

Viewed in context, all this passage says is that a state is not forced to abolish otherwise constitutional multi-member districts just because they have the incidental effect of being convenient for incumbent legislators. We agree.

*Weiser*. Eight years later the High Court sustained a lower court in voiding a Texas congressional districting plan (with 4.13 percent total deviation) on equal population grounds.<sup>5</sup> At issue was which of two alternative plans proffered by plaintiffs should be adopted in its stead: Plan S which followed the configuration of the voided plan, but split 18 more counties in reducing the total deviation to 0.149 percent; Plan C which “substantially disregarded the configuration of the districts in” the voided plan, was “significantly more compact than” the voided plan or Plan S, achieving a total deviation of 0.284 percent. The district court, in opting for Plan C, articulated no rationale but to say, “Plan C best effectuates the principle of ‘one man, one vote’ . . .”

The High Court reversed the lower court as to its selection of Plan C, ordering implementation of Plan S, instead. It gave as its primary reason the fact that the district configurations of Plan S more closely followed “the policies and preferences of the State” than did Plan C and that federal courts should defer to these “policies and preferences” “whenever adherence” to them “does not detract from the requirements of the Federal Constitution . . .”<sup>6</sup> In addition, the Court noted, “Plan S achieved the goal of population equality to a greater extent than did Plan C.”

Salient among these state “policies and preferences” is the promotion of: ‘constituency-representative relations,’ a policy frankly aimed at maintaining existing relationships between incumbent congressmen and their constituents and preserving the seniority the members of the State’s delegation have achieved in the U.S. House of Representatives. We do not disparage this Interest.<sup>7</sup>

Justice White, writing for the Court, then quoted the passage from Note 16 of *Burns v. Richardson* we quoted above. In the foregoing passage from *Weiser* the Court seems to edge closer to affirming that “protection” of congressional incumbents from challengers is a

legitimate state interest that justifies an exception to the electoral neutrality principle.

“Promoting constituency-representative relations” implies ensuring that incumbents receive high population carryover from their old districts whenever redistricting becomes necessary. Such carryover is the first priority in crafting an incumbent-protecting gerrymander.

*Gaffney*. The day the Supreme Court handed down *Weiser* was also the day it issued *Gaffney*. The authors of the *Gaffney* plans acknowledged they had drawn districts to facilitate the re-election of some incumbents. The trial court had noted:

In one or more House and one or more Senate districts some accommodation was also made in the interest of retaining in office a particular incumbent.<sup>8</sup>

Because the High Court concluded the *Gaffney* plans were constitutional some now cite this sentence as proof that it sanctioned incumbent-protecting gerrymandering. This fact had little, if anything, to do with the outcome of the case, either at trial court level or on appeal. The trial court struck down the plan on grounds of population inequality. The High Court upheld the plan because (1) it concluded the population deviations were not large enough to require justification, and (2) concluded the plan was not a partisan gerrymander. The issue of “protecting” incumbents was discussed neither in the opinion of the Court nor in the 11-page dissent which, as we noted earlier, dealt entirely with the issue of population equality. The word “incumbent” appears only once in the decision and then, not in the context of incumbent “protection.”<sup>9</sup>

The fundamental unity of *Gaffney*, *Bandemer*, and *Badham* is that in each case members of a major party alleged harm to them, as a group, claiming under one guise or another deprivation of “fair and proportionate representation.”<sup>10</sup> In dismissing an allegation of violation of group rights in *Gaffney* the High Court did not affirm that “protection” of incumbents was a legitimate state interest that would justify an exception to the electoral neutrality principle.

*Karcher*. Ten years after *Gaffney* and *Weiser* the High Court again spoke words that have been construed as endorsing the “protection” of incumbents. In listing four examples of legislative policies that might justify population deviations from the ideal Justice Brennan included two that can be construed as sanctioning favoritism towards incumbents: (3) “preserving the cores of prior districts;” (4) “avoiding contests between incumbent representatives.”<sup>11</sup> Footnote 16 from *Burns* is cited in support of the latter. “Cores of prior districts” is too vague a term to be a criterion for districting. It implies maximizing population carryover of prior districts when redistricting becomes necessary. As noted in our discussion of *Weiser*, high carryover is the most important component of an incumbent-protecting plan. It suggests that even if the “prior” district were a contrivance of grotesque shape, crafted to advantage a particular candidate, preservation of its “core” serves a legitimate state interest.

“Avoiding contests between incumbent representatives” also suggests a lack of evenhandedness in application of the law, because there is no symmetrical policy of “avoiding contests between challengers.” However, such a policy is substantively meaningless. Plans can be drawn that would “avoid contests between” incumbents, yet subject them to considerable risk of defeat. On the other hand, plans can be drawn that will set up contests between incumbents by “pairing” them in the same districts, yet still “protect” them. “Protecting” an incumbent requires not so much avoiding being paired with another incumbent as it means having a geographically proximate district that (1) contains a high carryover, (2) has a favorable partisan index, (3) does not contain wholly within it the districts of state legislators who are potential challengers, and (4) does contain within it office buildings and corporate headquarters which may provide sources of campaign contributions.

Consequently, “avoiding contests between” and “protecting” are not congruent terms. Defendants in districting litigation use them interchangeably and would like very much for the High Court to do the same. Until 1996, neither the High Court nor any lower court employed



the word “protect” in the context desired by these defendants. Even though *Karcher* policies (3) and (4) smack of incumbent protection, this suggestion is undercut by the next sentence, which speaks of “nondiscriminatory criteria.” Plaintiffs in gerrymander litigation will urge the High Court to resolve the ambiguity in favor of “nondiscriminatory.”

*Anne Arundel*. In the 1990s redistricting cycle two lower courts, in decisions summarily affirmed by the High Court, employed language, which can be interpreted as endorsing incumbent protection as an exception to the electoral neutrality principle. *Anne Arundel County v. State Administrative Board*<sup>12</sup> involved a *Karcher* challenge to the State’s new congressional districting plan, which had a total deviation of ten (10) persons. However, an alternative plan demonstrated that the spread could be reduced to nine (9) persons. The three-judge panel concluded that this one-person differential required justification by the State. The State proffered three justifications, all of which were accepted by the panel:

- (1) keeping intact the three major regions that surround the center of the state
- (2) creating a minority voting district, and
- (3) recognizing incumbent representation, with its attendant seniority, in the [U.S.] House of Representatives

In making justification (3) the State cited the same passage from *Weiser* we quoted in our discussion of that case above. The incumbent congressman whose seniority had to be “preserved” was understood to be Steny Hoyer. This Court summarily affirmed, with Justice Stevens noting probable jurisdiction.<sup>13</sup> Such affirmation could mean (a) that the deviation did not require justification, or (b) that it did require justification and that one or more of the three proffered justifications was accepted. If (b) was what was meant, was Justification (3) accepted? Only the Court can answer that question.

*Arizonans*. The second case in the 1990s cycle containing language which can be construed to “endorse incumbent protection” is *Arizonans for Fair Representation vs.*

*Symington*.<sup>14</sup> This is a case where the legislature deadlocked over redistricting and a court had to resolve the impasse. Essentially, it chose one of the five plans offered by contending parties, and made a few modifications to it. Before making that choice, however, it formulated a list of criteria that it said would govern its choice. These criteria included three “neutral principles of redistricting:” (1) preserving communities of interest, (2) compact and contiguous districts, and (3) avoiding unnecessary or invidious out districting of incumbents.<sup>15</sup> In amplifying its rationale for the third principle the panel said:

the maintenance of incumbents provides the electorate with some continuity. The voting population within a particular district is able to maintain its relationship with its particular representative and avoids accusations of political gerrymandering.<sup>16</sup>

After examining all the plans, the panel chose the Indian Compromise Plan as best meeting the court’s criteria, modified it, and adopted it. Hispanic interests, who had favored one of the other plans, appealed to the High Court, but the panel’s actions were summarily affirmed.<sup>17</sup>

We have no quarrel with a districting criterion that calls for “avoiding unnecessary or *invidious* out districting of incumbents” (emphasis added). There is no reason the Court should not have approved a district court-ordered plan under the circumstances here described. The passage from the panel’s opinion, quoted above, calling for “maintenance of incumbents” does suggest approval of incumbent protection. But the High Court’s affirmation of that decision does not imply any more endorsement of incumbent protection than can be inferred from *Weiser*. *Arizonans*, therefore, adds little or nothing to the case law bearing on the neutrality principle and incumbent protection.

*Bush v. Vera*. In 1996 the High Court inched closer to affirming that the “protection” of incumbent representatives is a legitimate state interest when it ruled in *Bush v. Vera*. Speaking for the Court, Justice O'Connor wrote:

“And we have recognized incumbency protection, at least in the limited form of ‘avoiding contests between incumbent[s],’ as a legitimate state goal.”<sup>18</sup>

This marked the first time the words “incumbent” and “protection” appeared adjacent to each other in a pronouncement of the Supreme Court. But note how Justice O’Connor was careful to insert the qualifying words “at least in the limited form of...” The question now is will the High Court take the final step of dropping O’Connor’s qualifying words and write “incumbent protection” into the Constitution? Or will an electoral neutrality principle be recognized first? And will it trump “incumbency protection?”

### *Conclusion*

After close scrutiny of the seven foregoing cases, we see that only one of them even comes close to approving of discriminatory districting to help incumbents defeat challengers: *White v. Weiser*. What the passage we quoted from *Weiser* overlooks is that within every district there is a minority, ranging from about 15 to 49 percent, that does not wish to “maintain its relationship” with the incumbent and would welcome a serious prospect of having someone else as their representative. This maintaining-existing-relationships-preserving-seniority policy says that those constituents who want to keep the incumbent have greater rights than do those who want to get rid of the incumbent.

But four pages further on in *Weiser* is language which qualifies a state’s “adherence” to such a policy—language we emphasized in first quoting it: “*whenever adherence to state policy does not detract from the requirements of the Federal Constitution...*” Plaintiffs in some future case should ask the High Court to consider whether the Constitution’s electoral neutrality principle is not “detracted from” when a state engages in “redistricting legislation...extremely irregular on its face...without regard for traditional districting principles...”<sup>19</sup> for the purpose of “maintaining existing relationships” and “preserving seniority” that facilitates the re-election of incumbents to Congress. For the moment we are saddled with a new constitutional principle of

incumbent “Protection” that has evolved in just 31 years through the process of “interpretation creep.” A reference in *Burns* to minimizing “the number of contests between present incumbents” is cited in *Weiser* to sanction a “state policy” of promoting “constituency-representative relations.” The same reference is cited again in *Karcher* to legitimize a state legislative policy of “avoiding contests between incumbent representatives.” Then in *Bush* the *Karcher* passage is cited in support of “incumbency protection.” It all happens subtly and among the responsible jurists are many who would recoil at being labeled “judicial activists.”

### Notes

<sup>1</sup> *Miller v. Ohio Defendants’ Motion to Dismiss*: 26.

<sup>2</sup> *Burns v. Richardson* 384 U.S. 73.

<sup>3</sup> *Fortson v. Dorsey* 379 U.S. 433, 439 (1965).

<sup>4</sup> *Burns v. Richardson* 384 U.S. at 79 note 16.

<sup>5</sup> *White v. Weiser* 412 U.S. 783 (1973).

<sup>6</sup> *White v. Weiser* 412 U.S. at 795 [emphasis added].

<sup>7</sup> *White v. Weiser* 412 U.S. at 791.

<sup>8</sup> *Cummings v. Meskill* 341 F. Supp. 139, 147 (1972).

<sup>9</sup> “Redistricting may pit incumbents against each other or make very difficult the election of the most experienced legislator.” 412 U.S. at 753.

<sup>10</sup> *Cummings v. Meskill* U.S. District Court (D. Conn.) Civil Action No. 14,736 Allegation No. 16.

<sup>11</sup> *Gaffney v. Weiser* 462 U.S. at 740.

<sup>12</sup> *Anne Arundel County v. State Administrative Board* 781 F.Supp. 394 (D.Md. 1991).

<sup>13</sup> 112 S.C. 2269 (1992).

<sup>14</sup> *Arizonians for Fair Representation v. Symington* 828 F.Supp. 684 (O.Ariz. 1992).

<sup>15</sup> *Arizonians for Fair Representation v. Symington* 828 F.Supp. at 688.

<sup>16</sup> *Ibid.*

<sup>17</sup> *Ward v. Gulf Stream Aerospace Corp.* 113 S.Ct. 1573 (1995).

<sup>18</sup> U.S. , . (1996); 135LEd2d248, 260-261 (quoting *Karcher v. Daggett* 462 U.S. at 740).

<sup>19</sup> *Shaw v. Reno* 113 S.Ct. 2816, 2826.

# Part VIII.

## Conclusion

## Chapter 39

### Remedy Alternatives

In Chapters 23-25 we proposed a remedy for the problems presented by discriminatory districting. Other remedies have also been proposed; some of them have been put into operation; so we obviously need to examine them. Remedies fall into three broad categories: (1) non-discretionary procedures; (2) discretionary procedures; and (3) alternative electoral systems. We consider each category in turn.

#### *California: A.C.T.I.O.N.*

Regarding non-discretionary procedures, we observed in Chapter 23 that discretion is removed either by specifying which units must be added to which other units, in what order, to make a district or by specifying the desired end result and leaving it to the plan drawers to combine units in whatever way they can to best achieve it. The first approach is followed by Hardy and Heslop in a procedure described in their monograph “Redistricting Reform: An A.C.T.I.O.N. Program.”<sup>1</sup> They developed this procedure at the Rose Institute at Claremont-McKenna College in southern California in the late 1980s. It has three key elements:

- “1. Establishment of binding Units of Redistricting (URs) to limit the ability of bureaucratic technicians to elongate districts and develop gerrymanders.
2. Systematic sequencing of compact, contiguous community-oriented URs to limit human discretion in the creation of districts; and
3. Use of a variable beginning point to neutralize the political impact by a chance selection of the sequence’s beginning and direction.”<sup>2</sup>

Though this procedure could be used anywhere in the country, it was developed by persons whose experience was in California and reflects their response to the demography and politics of that state. They propose a total of 180 URs, with a minimum of one for each of the State’s 58 counties. The 22 largest counties contain 144 URs, Los Angeles County having 32.

The 36 smallest counties have one UR each. In terms of the 1980 census the mean UR population is 131,500. Since drawing a district consists essentially of adding together the populations of component building blocks until a given threshold is reached, Hardy/Heslop conclude that the principal entry points for discretion are in the selection of a starting point and in the initial direction to go in cumulating additional population. They propose to remove discretion by arbitrarily specifying a sequence in which district building blocks must be added together, determining the starting point by a lottery in which any of the 180 URs has an equal chance of being selected, and deciding the initial direction of accumulation by the flip of a coin.

Figure 39.1 shows a hypothetical example of how the process would work, given the sequence shown by the heavy line, a starting point in Mariposa County, and a clockwise movement. Let's say we want a congressional district—call it CD 17—of population 525,953 with a permissible deviation of  $\pm 1$  percent, or  $\pm 5,260$ . Starting with UR 150 (Mariposa Co. population 11,108), add UR 149 (Merced Co. population 134,560) and add UR 148 (Madera Co.: 63,116). Adding UR 147 (of Fresno Co.: 113,265) brings our total to 322,049. We now need 198,644 to reach the minimum population of 520,693; 203,904 to reach the ideal population of 525,953. If we add all of UR 146 (population 401,356) we will exceed the maximum permissible CD population of 531,213. Therefore, we must split UR 146. Adding the portion of the city of Fresno contained in UR 146 will still leave us short of the 520,693 minimum. Therefore, we must add census tracts from UR 146 “in numerical sequence”<sup>3</sup> to finish out CD 17. UR 146 is made up of 79 census tracts. If we transfer these tracts sequentially to CD 17, when we reach CT 64.2 we will have brought CD 17's population to 524,807, just 1,146 short of the ideal. If we add CT 64.02 we will have 528,167 which exceeds the ideal by 2,214. Not adding CT 64.02 yields the smaller deviation so we finalize CD 17 at 524,807 with the addition of CT 64.01. If we were required to achieve a smaller deviation we would split CT 64.02 into its component block groups and blocks, and add them in numerical sequence until we reached the

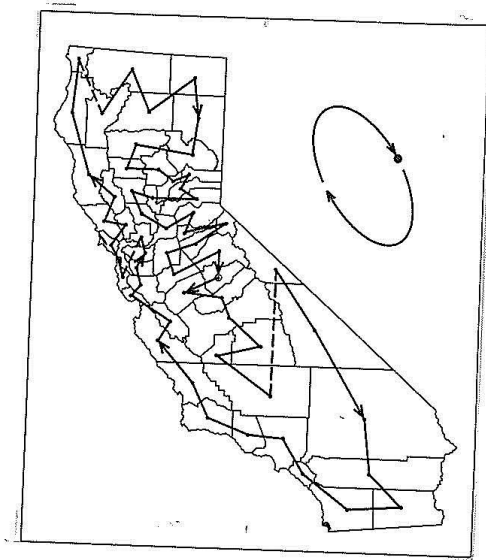


Figure 39.1

A.C.T.I.O.N. Sequencing  
 A County to the East of the Coastal Range (Mariposa) is Drawn by Lottery  
 The Coin Flip Requires Movement Clockwise

desired threshold. We would begin the next district (Le's call it CD 18.) with the 198,598 persons in UR 146 not used in making CD 17. Then we would proceed to UR 145 in Tulare County, and so forth. The authors have made numerous refinements to their procedure in response to problems that cropped up in applying it to the actual geography of 1980s California; but they did achieve a workable, non-discretionary procedure and that is the point we want to make.

*New York: S.6166*

The second non-discretionary districting procedure that has come to our attention is associated with long-time redistricting reformer/activist David I. Wells, for many years Associate Political Director of the International Ladies Garment Workers Union and plaintiff in *Wells v. Rockefeller*.<sup>4</sup> It was drafted into legislation and introduced in the 1981-82 regular session of the New York Senate by twelve Democratic senators led by Sen. Flynn. This legislation was a proposed statutory change—not a proposed revision of the state constitution. It did not attempt to change the personnel in charge of redistricting: new districts would continue, as before, to be



drawn by passage of a bill in both chambers of the legislature and having it signed by the governor. However, S. 6166 would impose severe statutory restraints on the ability of the legislature to do as it pleased in crafting districts for the new decade. The major constraints would be as follows:

1. “Districts shall consist of contiguous territory.” Then follows language defining “contiguous” as requiring that waterways traversing a district have to have bridges or tunnels so that all parts of the district are internally accessible.
2. “No city block shall be divided in the formation of districts.”
3. “Districts shall be equal in population...” Allowable deviation for state assembly and senate districts would be  $\pm 5$  percent; that for CDs would be  $\pm 1$  percent.
4. “The number of counties whose territory is divided among more than one district shall be as small as possible and, within counties so divided the number of towns and cities divided...shall be as small as possible.”
5. “If...necessary...to divide the territory of any county, city or town among more than one district, such county, city or town shall be divided among as few districts as possible.”

Then follow five provisions mandating that more populous counties, cities and towns be divided in preference to less populous ones; mandating that when a jurisdiction is divided between two districts a large-as-possible fraction of it be placed in one of the districts; prohibiting unnecessary division of villages; and mandating division of as few city wards as possible. The final rule is intended to maximize compactness of districts:

11. “...the aggregate length of all district boundaries shall be as short as possible.”

Following the list of the eleven foregoing rules is a provision that resolves possible conflicts among them by stating they must “be applied in the order in which they are set forth.” For example, suppose a proposed congressional districting plan of 29 districts—call it Plan “A”—splits 15 of New York's 62 counties, one of which is divided among five CDs; and another proposed plan—call it Plan “B”—splits 13 counties, one of which is divided among seven CDs.

Rule 4 would mandate adoption of Plan B because it splits two fewer (13) counties than does Plan A (15). Rule 5 would mandate adoption of Plan A because the highest number of fragments from any single county in that plan is five; whereas Plan B has a county split among seven CDs. To resolve this conflict in the rules we resort to the provision which says they must “be applied in the order...set forth” and that means Rule 4 “trumps” Rule 5 and, therefore, Plan B must be chosen.

S. 6166 is similar to the Ohio Anti-Gerrymander Amendment in that it specifies what end result is desired: minimum fragmentation and maximum compactness. It differs in requiring legal action to force adoption of a better plan if the plan crafted by the legislature fails to achieve the smallest number of divided counties “possible,” the smallest number of fragments from a single county “possible,” and the shortest aggregate length of district boundaries that is “possible.” If taken literally, these provisions add up to a discretion-less procedure that would take power out of the hands of the most powerful of New York’s state legislators. It is hardly surprising that, like the Ohio reform measure, it has gone nowhere.

We next consider a category of reform measures that has gotten somewhere, so far as success in getting adopted is concerned: procedures which to a varying degree confer discretionary power on people other than the members of a state legislature. The model for this group of measures is the bipartisan commission-with-tiebreaker whose most influential advocate was Robert G. Dixon, Jr. Dixon did a lot of consulting for states forced to revise their political districts in the aftermath of *Baker/Wesberry/Reynolds* and this brought him in contact with many people who were coping with the same general problems. One person, in particular impressed Dixon: Chief Judge William J. Campbell of the Northern District of Illinois who utilized “imaginatively and successfully”<sup>5</sup> the device of off-the-record pre-trial conferences before a single judge to bring together the principals in a districting controversy and work out their differences. Campbell’s “astuteness and reputation for fairness”<sup>6</sup> enabled him to take leadership in the Illinois situation at that time and his “pre-trial technique... may be one model for the nation, at least in those states where there is no formal and effective provision for a bipartisan

commission with a tiebreaker as recently created in New Jersey.”<sup>7</sup> We should, therefore, look at New Jersey and also at two or three other states which subsequently adopted bipartisan districting commissions, or their equivalent, and are pointed to as examples which other states should follow.

### *New Jersey*

Within weeks of the 1962 *Baker v. Carr* thunderbolt, a suit captioned *Jackman v. Bodine* was filed in the New Jersey courts challenging the State’s constitutional provisions covering legislative districting. By November 1964 the New Jersey Supreme Court had ruled in favor of Plaintiffs mandating an interim-districting plan for the New Jersey General Assembly and Senate and a permanent revision of the districting provisions in the state constitution in time for the 1967 general election. A constitutional convention meeting in the spring of 1966 proposed a series of amendments to the constitution, which were approved by the voters in November.

These amendments, as subsequently modified by judicial interpretation, authorized an 80-member General Assembly elected two from each of 40 legislative districts for 2-year terms. A 40-member Senate was to be elected from the same districts. The districts were to be drawn, with discretion, by a 10-member bipartisan commission chosen by the state chairpersons of the two major parties. If this equally divided commission cannot agree on a plan by February 1, the chief justice of the state Supreme Court is to appoint a tie-breaking eleventh member and the expanded commission is given another month to complete the job.

In 1981 the necessary census data was not available until March 1 and the ten partisan commissioners spent the following four weeks in negotiations that failed to produce an overall agreement. As time grew short, Chief Justice Robert N. Wilentz of the New Jersey Supreme Court asked Donald E. Stokes, Dean of the Woodrow Wilson School of Public and International Affairs at Princeton University, to join the commission as its eleventh, tie-breaking member. Stokes did not see his role as providing the sixth vote for one or the other of two partisan districting plans. Rather, like Judge Campbell, he set out to play a mediator’s role by encouraging the partisan delegations to work out the issues between them, and crafting his own plan as a

possible compromise if deadlock persisted. It did, and Stokes presented his plan asking each partisan delegation to draw up another plan of its own and saying that he would supply the sixth vote for whichever of those plans came closest to his. The result was that each party drew a plan closely resembling Stokes'. The Democrats' plan "was marginally closer" so he voted for that plan observing "that it would have made not a particle of difference...which of the three virtually identical final plans was chosen."<sup>8</sup>

A decade later, the (1990) census data arrived on time but the political situation was ominous for Democrats; they felt they were in a very weak bargaining position and dragged their feet in negotiations over the new districting plan. The upshot was that, with time running out, the Chief Justice again had to call upon Dean Stokes to serve as the commission's eleventh member. Stokes found himself in a radically different situation than he had been in ten years before. He told the two delegations he "would keep out of their way for the first of the four weeks that remained" before the deadline. When that move produced no progress Stokes realized that any agreement "would need to emerge from the parallel bargaining of the public member with the two party delegations."<sup>9</sup> He therefore "set out a plan [he] thought was fair between the parties" which, in order to accommodate population shifts during the preceding decade, basically transferred a district from the northern half of the state to the southern half. This move tended to favor Republicans and this time it was the Republicans who supplied the five additional votes needed to make Stokes' plan the official one.

When it was time to draw the first legislative districting plan for the 21st century the major parties again could not reach agreement and the Chief Justice again had to appoint the commission's eleventh member. That person was political science Professor Larry M. Bartels of Princeton University. Bartels saw his job much as did his predecessor Donald Stokes: to take an active role in bringing the partisan commissioners into agreement and failing that, to have his own plan ready. He "made it clear that he would choose whichever legal plan best complied with" his three criteria: partisan "fairness," responsiveness, and accountability.<sup>10</sup> Bartels recognized a particularly dense concentration of minority voters in the area around Newark,

which, if the formal criteria were optimized, would probably divide into three districts and be “unfair” to Democrats. He, therefore, deliberately “spread” these voters among four districts and by so doing arrived at a statewide map that “not only avoided a substantial partisan skew but also led to the election of record numbers of African-Americans, Latinos, and Asian-Americans to the New Jersey legislature in November, 2001.”<sup>11</sup>

The bipartisan commission-with-tiebreaker has been the vehicle for legislative districting in New Jersey for over four decades and has functioned virtually without controversy. In fact, it was adopted for the State’s congressional districting, as well, in the 1980s following the controversy over the legislature-drawn plan that was subject of a U.S. Supreme Court ruling in *Karcher v. Daggett*. However, with this commission the tiebreaking member has been “largely irrelevant because both sides were content with a sweetheart deal that would leave undisturbed a seven-to-six Democratic majority in the State’s congressional delegation.”<sup>12</sup> With respect to the legislature, it is certainly possible that sometime in the future the major parties could decide they were better off drawing a map to lock-in the incumbents of both parties than taking the risks of a competitive system. Table 39.1 shows only the seats/votes outcomes of legislative elections since 1999, but even this small sample reveals discrepancies from the politically “fair” plan the proponents of discretionary districting say will result from the labors of a bipartisan commission. Look at the 2003 assembly election in which Democrats with a 49.74 percent minority of the aggregate statewide vote garner a 58.75 percent majority of Assembly seats. Similarly, the 2003 senate elections show Democrats capturing a 55 percent seat majority with a 48.09 percent vote minority.

### *Iowa*

Iowa’s current districting procedure grew out of the political situation in early 1980 when Republicans, in control of the governorship and both houses of the legislature, feared a Democratic resurgence in November would put that party in control of the statehouse just when redistricting had to be done. Republicans, therefore, used the window of opportunity still open to

them to institute a unique process for crafting Iowa’s legislative and congressional districts. This process, embodied in what is known as House File 707, assigns the key role to the state’s Legislative Services Bureau (LSB), a nonpartisan agency that “serves the legislature, writing bills and conducting research, and enjoys a cherished reputation for probity.”<sup>13</sup>

Table 39.1  
New Jersey: Electoral Outcomes Under 1991 and 2001 Legislative Districting Plans

(1) Election Year	(2) Democrat Votes	(3) Republican Votes	(4) Aggregate Statewide Vote, % Demo.	(5) Mean District Vote, % Demo.	General Assembly		(8)* Discre pancy	Uncontested by	
					Seats Won by†			(9)‡ Demo.	(10)‡ Repub
					(6) Demo.	(7) Repub.			
1999	1,210,442	1,279,983	48.60	52.32	35 43.75	45 56.25	- 4.85 - 8.57	3 1, 1	1 0, 1
2001	2,137,546	1,957,759	52.20	54.69	44 55.00	36 45.00	+ 2.80 + 0.31	0	5 2, 1
2003	1,392,058	1,406,338	49.74	52.90	47 58.75	33 41.25	+ 9.01 + 5.85	3 0, 3	0
2005	2,261,323	1,861,891	54.84	57.88	49 61.25	31 38.75	+ 6.41 + 3.37	0	6 3, 0
2007	1,481,860	1,365,286	52.05	55.20	48 60	32 45	+ 7.95 + 4.80	0	7 3, 1
2009	1,930,986	2,160,604	47.19	51.69	47 58.75	33 41.25	+ 9.01 + 5.85	1 0, 1	2 1, 0
Senate									
2001	1,054,875	1,039,624	50.36	52.65	20 50	20 50	- 0.36 - 2.65	1	3
2003	689,612	744,291	48.09	51.45	22 55	18 45	+ 6.91 + 3.55	2	1
2007	731,931	712,781	50.66	55.08	23 57.5	17 42.5	+ 6.84 + 2.42	0	4

\*Upper number in cell is the difference between the percent of seats won and the aggregate statewide vote.

Lower number in cell is the difference between the percent of seats won and the mean district vote.

†Upper number in cell is the number of seats won by each party. Lower number in cell is the percentage of seats it won, statewide.

‡Upper number in cell is the number of seats the party did not contest (out of a total of 80). Lower number in cell preceding the comma is the number of (2-member) districts where the party failed to run even one candidate.

Lower number in cell following the comma is the number of (2-member) districts where the party ran one candidate.

The LSB prepares an initial set of house, senate and congressional districting plans following the formal criteria and disregarding “political” factors. The plans are submitted to the legislature, which must—after a series of well-publicized public hearings—either accept them or reject them. If the initial set is rejected, the LSB prepares a second set that is, likewise, submitted to the legislature for either acceptance or rejection. If the legislature rejects the second set of plans, the LSB prepares and submits a third set which can be amended or replaced, as well as accepted *in toto*. If the third set is rejected, the matter is turned over to the Iowa Supreme Court.

The new procedure received its first test in 1981, which saw Republicans unexpectedly retaining control of both chambers of the legislature and of the governorship. They had to follow their new districting procedure or risk being charged with political hypocrisy. They followed the procedure. The initial LSB congressional districting plan paired two Republican incumbents and its legislative districting plans paired 52 incumbents, most of whom were Republicans. The initial plans were rejected on a 21-29 party-line vote in the Iowa Senate and the LSB drew up a second set of plans. The second congressional districting plan featured no incumbent pairings, but 56 state legislators were in the same districts as colleagues. The Iowa Senate rejected the second set of LSB plans 24-26. The Republican leadership prepared its own set of plans to be ready in case they found they would have to reject the third and final LSB set of plans. The third LSB submission featured a congressional plan that paired incumbent Democratic congressmen Tom Harkin and Neal Smith and a legislative plan that paired only 42 incumbents. Rather than pass their own set of plans and suffer the attendant political flak, the Republicans opted to go with the third LSB set of plans.

The electoral consequences of the 1981 maps were different for congressional candidates than for legislative candidates. No congressional incumbent was defeated for re-election. The three turnovers that did occur were all in connection with retirements. If proportional representation (PR) is the yardstick of “fairness,” then, over the course of the decade, the LSB plans were “unfair” to Democratic congressional candidates and were “unfair” to Republican

legislative candidates. With respect to the former, Democratic candidates received about half the congressional vote (48.1 percent to 52.7 percent) from 1982-1988, yet they won half of the seats (3 of 6) only in 1982. From 1984-1988, with about half of the congressional vote they won only one-third (2 of 6) of Iowa's congressional seats. With respect to the latter, Republican house and senate candidates received about 47 percent of the votes (44.2-49.0 percent) cast for house and senate candidates from 1984-1988; yet they won only about 40 percent of the legislative seats.

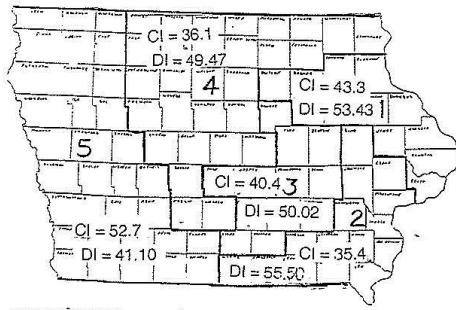
Following the 1990 census, Iowa's congressional delegation was reduced from six seats to five.

Iowa's small number (5) of congressional districts, combined with its large number of counties (99), make congressional districting in that state a "slam dunk." We took advantage of this fact to apply the methodology of the Ohio Anti-Gerrymander Amendment to draw and evaluate alternative congressional districting plans for the 2001-2010 decade. We were able to meet a one-percent population deviation requirement using counties as building blocks. All we needed was a map showing the outlines of the State's 99 counties and a list of their populations. Iowa's 2000 population of 2,926,324 when divided by five yields an ideal district population of 585,265. If the allowable deviation is, 1 percent, then the districts can range from a minimum of 579,412 to a maximum of 591,118. As recounted in Chapter 25, the Amendment's primary optimizer is to minimize the number of county fragments without violating an additional constraint, which says no district can have compactness Index (C.I.) less than 37.8.

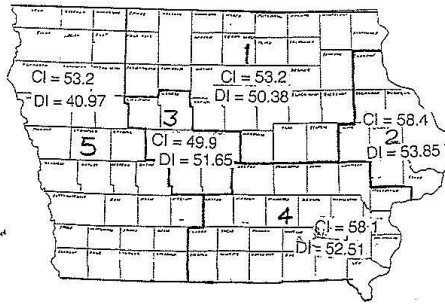
The population and compactness constraints can both be satisfied without splitting any counties, so the competition reduces to one of finding out which plan meeting the constraints is the most compact. In an attempt to identify this "best" plan two maps were drawn by the senior author and three by Larry G. Holderly, and compactness measurements performed on them—as well as on the 2001 State of Iowa (LSB) plan. These plans are all shown in Figure 39.2.

Compactness measurements for the LSB plan are given in Column (3) of Table 39.2 and those for Holderly Plan C in Column (3) of Table 39.3. To save space we do not show tables for the

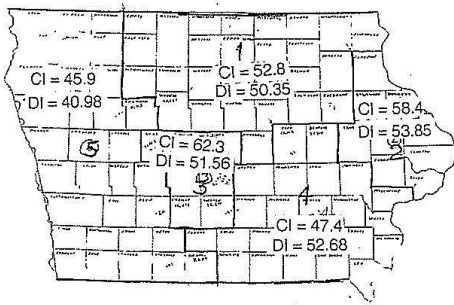




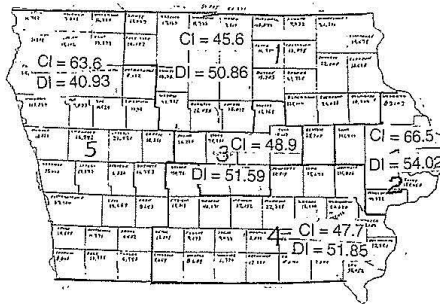
IOWA LEGISLATIVE SERVICES BUREAU (OFFICIAL) PLAN



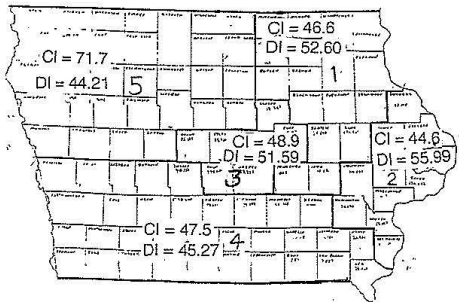
HOLDERLY PLAN "C"



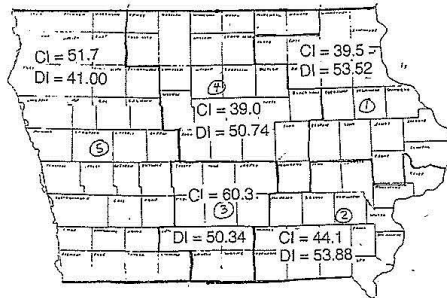
HOLDERLY PLAN "A"



HORN PLAN "B"



HORN PLAN "A"



HOLDERLY PLAN "B"

Figure 39.2

2001 Iowa Congressional Districts

Table 39.2  
2001 Iowa Legislative Services Bureau (LSB) Congressional Districting Plan: Summary

(1) CD	(2) Population	(3) C.I.	(4) "Demo." Vote	(5) "Repub." Vote	(6) Demo. %	(7) 2002, Actual	(8) Difference
1	585,302	43.3	141,339	117,710	53.43	42.73	- 10.7
2	585,241	35.4*	149,448	114,239	55.50	46.71	- 8.8
3	585,305	40.4	138,028	132,171	50.02	54.25	+ 4.2
4	585,305	36.1*	135,316	132,511	49.47	44.02	- 5.45
5	585,171	52.7	103,760	143,473	41.10	37.81	- 3.3
Total:	2,926,324		667,891	640,104	Mean:	45.10	

\*Fails to meet minimum Compactness Index of 37.8 specified in the Ohio Anti-Gerrymander Amendment

Table 39.3  
2001 Holderly Plan C Iowa Congressional Districting Plan: Summary

(1) CD	(2) Population	(3) C.R.	(4) C.I.	(5) "Demo." Vote	(6) "Repub." Vote	(7) Demo. %
1	587,467	0.042	53.2	136,723	129,041	50.38
2	585,447	0.046	58.4	147,036	120,342	53.85
3	583,272	0.040	49.9	140,672	126,034	51.65
4	588,770	0.046	58.1	140,403	121,434	52.51
5	581,368	0.042	53.2	103,057	143,253	40.97
Total:	2,926,324			667,891	640,104	

other four plans but simply report that their least compact districts had C.I.s of 45.9,45.6, 44.6.and 39.0. Since the least compact district of Holderly Plan C (CD 3) has a C.1. of 49.9, this plan is the one chosen.

*Unintentional Partisan Bias.* As we know from Justice White's pronouncements in *Gaffney*, the major concern about impartial districting procedures is that by ignoring political considerations—to be specific, the geographic distribution of the supporters of the two major parties—such procedures might result in districting plans that confer a significant advantage on one or the other of those parties. To prevent such an outcome it is argued that some impartial person or agency should be given discretion to draw a state's districting plan(s). The Iowa LSB is thought to be such an agency and the Iowa procedure is seen by some as a model that should be emulated by other states. We, therefore, perform a political analysis of the LSB Plan, and of the

Horn and Holderly plans, to see how much (unintended) partisan bias is present in these plans, and if they differ significantly in this respect.

*Index of Partisan Character.* We dwelt at length in earlier chapters on how to measure the partisan character of districting plans and went to considerable trouble to come up with what we think is the best measure. Here we just want to use something fast and simple, but still credible to most people. Sam Hirsch makes a strong case for using the 2000 presidential vote as the best measure of the partisan character of 2001-02 congressional districts<sup>14</sup> and we shall follow his recommendation. The needed data are readily available and since the districts we need to examine are all comprised of whole counties we have only 99 building blocks to aggregate in each plan. We make two modifications of Hirsch's methodology. First, assume a 2000 Ralph Nader voter, given a choice between Democratic and Republican congressional candidates, would very likely vote for the Democrat; and that a 2000 Pat Buchanan voter, given the same choice, would probably vote for the Republican. Therefore, in each county the Gore and Nader votes are added to get the number of "Democrats" and the Bush and Buchanan votes are added to get the number of "Republicans." The second modification recognizes that in 2000 Gore got 50.16 percent of Iowa's major party presidential vote, Nader got 2.25 percent of the four-party vote, and Buchanan got 0.43 percent of the four-party vote. If the minor-party votes are counted as proposed, we end up with a "Democratic" statewide vote of 51.06 percent. The most useful analysis is based on the hypothetical situation of an even split in the statewide vote. Therefore, we should modify the "raw" Democratic percentage in each county or CD by a factor of  $50.1/51.06$ , or  $0.979198$ ,<sup>15</sup> to arrive at the "Democratic Index" for that jurisdiction.

*Statewide Distribution of Major-Party Supporters.* When the requisite calculations are performed for each county and plotted on a map showing county boundaries we see that, unlike Wonder bread, the State of Iowa is not politically isotropic or homogeneous. Johnson County, home of Iowa State University, is 64.29 percent "Democratic." Sioux County, bordering the Missouri River in the far northwest, is 15.42 percent "Democratic." Eleven other counties have Democratic Indices of less than 40 percent and ten of them are in the western quarter of the state.

“Democrats” predominate in the eastern quarter of the state—nine of ten counties on the Mississippi River being “Democratic.” Perhaps of greatest significance is the fact that 56 of Iowa’s 99 counties have Democratic Indices in the marginal “45-55” range and 26 of them are in the critically-marginal “47.5-52.5” range.

When the “Democrat” and “Republican” votes are aggregated among the districts in the six plans (Columns 4 and 5 of Table 39.2; Columns 5 and 6 of Table 39.3) significant discoveries are made. All six plans have at least three (out of five) “Democratic” districts and four of them have four “Democratic” districts. This supports a conclusion that in Iowa Republicans are more concentrated than Democrats—not what the conventional wisdom usually says. Republicans win the westernmost district (CD 5) in the five plans having such a district by a nearly “wasteful” 59 percent; but they lose the three or four easternmost districts by much narrower margins ranging from 44 to 49 percent. Note that 22 of the 30 districts in these presumably impartially drawn plans are in the “45-55” range and that 12 of them (40 percent) are in the critically-marginal “47.5-52.5” range. Finally, we note no dramatic difference in the overall political character of their districts, either between the Iowa LSB plan and the “winning” Holderly Plan C; or between Holderly Plan C and the other Horn and Holderly plans.

*Incumbency Advantage.* If impartially-drawn plans—whether drawn at the discretion of the Iowa LSB or to best satisfy objective criteria—tend to produce mostly marginal, or critically-marginal, districts with a slight pro-Democrat bias, how is it then, that the first two elections under the 2001 plan sent four Republicans and one Democrat to Congress? The obvious answer is that the political index of a district is a much less reliable predictor of which party will win that district than is incumbency status. In 2002 only four of 397 incumbent congresspersons seeking re-election were defeated by general election challengers.<sup>16</sup> Gelman and King estimated an incumbent advantage that varied from election to election between 6 percent and 12 percent for U.S. congressional elections over the period 1966-1986.<sup>17</sup>

If we look at Table 39.2 again and compare Columns (7) and (8), we note the following: In CD 1 sixth-term Republican incumbent Jim Nussle’s Democratic challenger got 42.7 percent in a

district with a Democratic Index of 53.4—a 10.7 percent challenger disadvantage. In CD 2 thirteenth-term Republican incumbent Jim Leach’s Democratic challenger got 46.7 percent in a district with a Democratic Index of 55.5—showing an 8.8 percent incumbent advantage. In CD 3 third-term Democratic incumbent Leonard Boswell got 54.2 percent in a district with a— PQDemocratic Index of 50.0—showing a 4.2 percent incumbent advantage. In CD 4 fourth-term Republican Tom Latham’s Democratic challenger got 44.0 percent in a district with a Democratic Index of 49.5—showing a 5.5 percent incumbent advantage. In open CD 5 the Democratic candidate got 37.8 percent where the Democratic Index was 41.1—a deficit of 3.3 percent, which is smaller than the deficits in any of the districts in which incumbents ran. In all cases the incumbent ran ahead of the index of his district and the smallest gap between the candidate’s performance and the district’s index occurred in the open district. These observations are very consistent with the incumbent advantage reported by Gelman and King.

To return to the original question, how much unintended partisan bias is present in the plan drawn to best satisfy the criteria of the Ohio Anti-Gerrymander Amendment (Holderly Plan C), as compared to the LSB plan, we concluded above that it was a “wash.” Both the State’s plan and “Holderly C” have one safe Republican, two critically marginal, and two marginally Democratic districts. However, Republicans held four of these seats in the first two elections held under the LSB plan, instead of just one or two. We attributed this inconsistency to incumbent advantage, but the fact remains that in 2002 and 2004 Democratic congressional candidates, with 45.1 percent of the major-party vote, won only one, or 20 percent of the seats on the Iowa delegation.

The argument for districting by a supposedly impartial bipartisan commission, rather than by an impartial procedure, is that the commissioners can manipulate boundaries in a benign manner to achieve a “rough sort of proportional representation” in the makeup of the delegation. We see here, however, that—probably because of incumbent advantage—they failed to do so. What, then is the justification for permitting discretion in drawing these districts?

## *Washington*

A third state in the last forty years to substitute a bureau, or commission-with discretion, for the legislature as its districting agency is Washington. The 1980 election, like those in many other states, produced a Republican landslide and 1981 found the state under total Republican control. The Party took the opportunity to craft districting plans “favorable to long-term Republican aspirations” and “the process was classically partisan.”<sup>18</sup> In fact it was so partisan that the Republican governor would not sign the congressional districting bill and it had to be revised. The public outcry was strong enough to force the Republican-controlled legislature to act upon districting reform legislation. In 1982 it proposed, and the voters approved, a constitutional amendment, effective in 1991, that put legislative and congressional districting in the hands of a five-member bipartisan commission with only four voting members.

The four voting members were appointed one by each party’s caucus for each house. These four select a non-voting “facilitating” chair. The final plan must have the approval of three of the four “partisan” members, and therefore, of both parties. The commission must submit one plan to the legislature, which can make limited modifications of the plan provided that such modifications receive a two-thirds affirmative vote. Should the commission fail to agree upon a set of plans by midnight of January 1 of years ending in two, the task is turned over to the State Supreme Court. The new commission had its first real test in 1991-92 and, after working through all of New Year’s Day, managed to agree on its congressional plan 45 minutes before the midnight deadline. For the next redistricting, scheduled for 2001-02, the commission had to meet a deadline set for midnight, Saturday December 15. They did not agree on their legislative districting plan until 4:30 A. M. Sunday, December 16, so the mess was dumped into the lap of the State Supreme Court.

## *Arizona*

In 2000 a coalition of Democrats and good government groups placed upon the statewide ballot a proposed constitutional amendment (Proposition 106) that sought to remove districting

from the purview of the legislature and put it in the hands of an “independent” redistricting commission. The commission would be granted wide discretion in drawing the State’s congressional and legislative districts, subject only to the following loosely worded constraints:

- A. Districts shall comply with the U.S Constitution and the U.S. Voting Rights Act.
- B. Congressional Districts shall have equal population to the extent practicable, and state legislative districts shall have equal population to the extent practicable.
- C. Districts shall be geographically compact and contiguous to the extent practicable.
- D. District boundaries shall respect communities of interest to the extent practicable.
- E. To the extent practicable, district lines shall use visible geographic features, city, town and county boundaries, and undivided census tracts.
- F. To the extent practicable, competitive districts should be favored where to do so would create no significant detriment to the other goals.<sup>19</sup>

Leading the forces campaigning for a “yes” vote was state Democratic chairman Jim Pederson who put over \$600,000 of his own money into the effort. The mostly Republican opposition included the Arizona Chamber of Commerce and all five of the state’s Republican congressmen. On November 7, 2000 Proposition 106 received a 56 percent affirmative vote and 2001 witnessed the unfolding of a unique districting procedure in the state.

In this procedure the ultimate power is held by the State’s Commission on Appellate Court Appointments (CACA). The five members of the “independent” districting commission are chosen from a “short list” of 25 candidates that the CACA winnows from applications submitted by the public. In late 2000, the CACA received applications from 311 individuals: 143 Republicans, 124 Democrats, 6 Libertarians, one Green and 37 independents. From this pool it winnowed 10 Democrats, 10 Republicans, and five independents. From the ten “winnowed” Republicans the Republican leaders in the Arizona house and senate chose two commissioners. From the ten “winnowed” Democrats the Democratic leaders choose two commissioners. The

four commissioners thus chosen met in February 2001 and chose from the CACA's short list of five independents the fifth commissioner.

With a budget of \$6,000,000 with which it rented office space, hired lawyers and consultants, and purchased maps and computers the commission went to work. On August 8 it made public its first draft of the new congressional and legislative districting plans. They were the work of the commission's consultant, National Demographics Corp.<sup>20</sup> Under these plans minority-majority congressional districts would go from one-of-six to two-of-eight.<sup>21</sup> For election of state legislators the state is divided into 30 generic districts from which both senators and representatives are chosen: one senator and two representatives from each district—the latter by at-large plurality voting. The proposed legislative districting plan would increase the number of minority-majority districts from 7 to 10.<sup>22</sup> Democrats were not pleased with these plans, but the plans would now be subjected to public scrutiny at a series of 17 hearings around the state over the next two months.

At the conclusion of the hearings the Commission modified the plans to reduce the minority-majority legislative districts from ten to nine. But it refused to transfer voters from heavily minority districts, where they constituted “overkill” for Democrats, to Republican-leaning districts that their presence might render competitive. Democrats estimated that 16 of the 30 legislative districts were safe Republican; 10 were safe Democrat; and only four were competitive—down from five in the previous plan. They had been shooting for eight competitive districts in the new plan. They decided their only hope lay in the courts. The provision in the new districting procedure they could best hang their hats on was Sec. § 1 (14)(F) which said in part “...competitive districts should be favored...”

With the litigation wheels in motion, the Democrats could shift their focus to the fast approaching 2002 elections. They did not expect to do well and Tables 39.4-39.6 show they did not. With respect to state representative elections, Republicans enjoyed a partisan advantage ranging from 8.9 to 11.9 percent, depending on which measure of “statewide vote” is employed. Regarding state senate elections, Republicans enjoyed a smaller, but still significant, partisan



advantage of 6.7 percent—if mean district vote is the measure. In congressional elections Democrats elected only 25 percent of the delegation despite getting 41-44 percent of the votes. In the 2004 elections a similar pattern obtained: Democrats won one additional house seat but one fewer senate seats with about the same share of the vote. The Republican partisan advantage was similar to that of 2002 in all three categories of seats. In 2006 Democrats made a significant gain (Le. 5) in house seats with about a 3 percent increase in their house vote. A comparable increase in their vote for state senator yielded them only one additional seat. In congressional voting they had a notable success: with about a 7 percent increase in that vote they gained two seats, thereby achieving parity on the delegation and PR in terms of the vote.

Table 39.4  
Arizona Legislature: Electoral Outcomes Under 2001 House Districting Plan

(1) Election Year	(2) Democrat Votes	(3) Republican Votes	(4) Aggregate Statewide Vote, % Demo.	(5) Mean District Vote, % Demo.	Seats Won by†		(8)* Discre pancy	Uncontested by	
					(6) Demo.	(7) Repub.		(9)‡ Demo.	(10)‡ Repub
2002	900,312	2,052,034	43.87	46.93	21	39	- 8.87 - 11.93	15	12
					35	65		4, 7	4 4
2004	1,345,717	1,809,580	42.65	46.50	22	38	- 5.98 - 9.83	17	13
					36.67	63.33		6, 5	5, 3
2006	1,199,319	1,372,394	46.64	49.22	27	33	- 1.64 - 4.22	18	9
					45	55		4, 10	1, 7
2008	1,830,527	1,963,106	48.25	52.74	25	35	- 6.56 - 11.07	12	11
					41.67	58.33		0, 12	3, 5

‡Upper number in cell is the number of seats the party did not contest (out of a total of 60). Lower number in cell preceding the comma is the number of (2-member) districts where the party failed to run even one candidate. Lower number in cell following the comma is the number of (2-member) districts where the party ran one candidate

Table 39.5  
Arizona Legislature: Electoral Outcomes Under 2001 Senate Districting Plan

(1) Election Year	(2) Democrat Votes	(3) Republican Votes	(4) Aggregate Statewide Vote, % Demo.	(5) Mean District Vote, % Demo.	Seats Won by†		(8)* Discre pancy	Uncontested by	
					(6) Demo.	(7) Repub		(9) Demo.	(10) Repub
2002	521,183	640,053	44.88	50.01	13	17	- 1.55 - 6.68	7	11
					43.33	56.67			
2004	793,740	1,068,222	42.63	47.18	12	18	- 2.63 - 7.18	9	7
					40	60			
2006	693,063	774,310	47.23	50.55	13	17	- 3.90 - 7.22	3	5
					43.33	56.67			
2008	1,003,762	1,238,126	44.77	51.16	12	18	- 3.90 - 7.83	4	6
					40	60			

Table 39.6  
Arizona Congressional: Electoral Outcomes Under 2001 Congressional Districting Plan

(1) Election Year	(2) Democrat Votes	(3) Republican Votes	(4) Aggregate Statewide Vote, % Demo.	(5) Mean District Vote, % Demo.	Seats Won by†		(8)* Discrep ancy	Uncontested by	
					(6) Demo.	(7) Repub		(9) Dem o.	(10) Repub
2002	472,135	681,922	40.91	44.185	2 25	6 75	- 15.91 - 19.18	0	0
2004	725,290	1,127,591	39.14	42.78	2 25	6 75	- 14.14 - 17.78	2	0
2006	677,993	771,246	46.78	49.58	4 50	4 50	+ 3.22 + 0.42	1	0
2008	1,055,305	1,021,798	50.81	53.83	5 62.5	3 37.5	+ 11.65 + 8.67	0	0

\*Upper number in cell is the difference between the percent of seats won and the aggregate statewide vote. Lower number in cell is the difference between the percent of seats won and the mean district vote.  
†Upper number in cell is the number of seats won by each party. Lower number in cell is the percentage of seats it won, statewide.

The foregoing observations can be verified by study of Tables 39.4-39.6. The commission-drawn plans fell short of achieving PR in the seats/votes relationship, but that failure was not spectacular—as in Connecticut’s *Gaffney* plans. What should get the reader’s attention are the numbers appearing in Columns (9) and (10) which show a very high fraction of uncontested seats in the legislative elections: a majority of the state’s 30 senate seats was not contested by one or the other of the major parties in 2002 (18) or in 2004 (16); and exactly half (i.e., 30) of Arizona’s 60 house seats lacked major-party competition in 2004. In the other two elections for state representative almost half of the seats (i.e., 27) were contested by only one of the major parties. One might have expected that the commissioners would, by deliberately creating more “competitive” seats, have come up with a plan that gave people a bigger incentive to run for the legislature and, therefore, one that contained very few uncontested seats. One is also struck by the State’s choice of an at-large-plurality electoral system with relatively large districts (approximately 170,000 population) for choosing its state representatives. If it wishes to have a

legislature that better reflects the diversity of its citizens, it could simply increase the size of its lower house—say, to 180 seats—and make all of its house districts single-member. That would result in House districts with populations of about 28,000 that would have the added advantage of being much cheaper to run in.

By passing Proposition 106, Arizonans did not solve their districting problems. They merely took arbitrary power away from the governor and about 90 legislators and gave it to five ordinary citizens picked by what amounts to a lottery. They did not achieve proportional representation in the makeup of their legislature. They did not achieve districts that attracted a full slate of major-party candidates. They did not avoid heated controversy and the protracted litigation that invariably goes with it.<sup>23</sup>

### *Alternative Electoral Systems*

The third category of remedies involves going outside the geographical theory of representation and considering electoral systems based on other theories of representation. Among such theories those having the most support among scholars and reformers are the party theory of representation and the permissive theory of representation, both of which we described in Chapter One. The party theory of representation can be best implemented by either of the two major types of a proportional representation (PR) electoral system: (1) Party List and (2) Single Transferable Vote (STV). As we stated in Chapter 1, the permissive theory of representation can be implemented only by the STV form of PR.

PR advocate Douglas Amy states “PR encompasses several different major forms, each with their own permutations,” and narrows “the field of systems under consideration”<sup>24</sup> to two forms of PR that have been most favored by election commissions and electoral reform groups in other countries: STV and the Additional Member System (AMS). As its name implies, under STV each person has one vote which can be transferred from the voter’s first-choice candidate to lower-ranked preferences in event that vote (or all of it) is not required to elect that candidate; or—in the alternative—if that candidate has too little support to stand any chance of being

elected. If a multi-member body, such as a school board or village council, is being elected all the candidates are listed on the ballot and the voter ranks them from first-choice as far down as he has preferences. A threshold number of votes required for election is computed by dividing the total number of votes by one more than the number of positions to be filled. The ballots are sorted according to their first choice candidates and any such candidate with more than the threshold number of first choice votes is declared elected. His/her “surplus” votes are then transferred to the remaining candidates, and if this transfer puts any of them “over the top” they are also declared elected. If the transfer fails to elect sufficient candidates to fill all the positions, then the candidate with the smallest number of first-choice votes is eliminated and his ballots transferred to their next-ranked preference. By iteration of this process of surplus transfer and elimination the requisite number of seats in the body are filled.

PR-STV was employed by a number of U.S. cities during the first half of the twentieth century to elect their city councils,<sup>25</sup> but for various reasons was discontinued so that today Cambridge, Massachusetts is the only polity in the country employing this electoral system. To work as intended, the voter has to know enough about enough of the candidates to be able to rank them and by so doing cast an informed vote. If he or she is confronted by a (“bed sheet”) ballot for choosing a large group of leaders such as a state assembly, a state senate or a congressional delegation, it is unlikely he/she will be casting an informed vote. It is asking enough of a voter to make an informed choice between two candidates, let alone to rank-order a list of candidates that could exceed a hundred. Recognizing this problem, PR advocates usually will recommend dividing a large polity—such as a state—to elect an assembly or senate, among multi-member districts electing 5 to 9 members from each district by STV. However, by doing this we give up a major part of the benefit of a PR system: making it possible to elect representatives of minority groups and/or minor parties. To get elected in a five-member district, for example, would require a minority party or group to get 17 percent of the vote. This threshold would not be attained by either of America’s current minor parties, the Libertarians and the Greens—who typically get from one to five percent of the vote in the contests they enter. The other major problem of going to multi-member districts to elect state legislators—or

congresspersons—is seen by those concerned about the problem of campaign financing: the larger the district the greater the need for big money to finance a credible campaign. In 2006 a credible race for the Ohio House required at least \$100,000 in a district with a population of 110,000. If it were a 5 member district of 550,000 population, television advertising would be urgently necessary and the money required would rise exponentially. Increasing the cost of running for political office favors the candidate or party that can most easily raise large sums of money. Do we want that?

Other problems with the STV-MMD proposal are that it requires voters to know about ten candidates in a 5-member district in order to cast an informed vote. That isn't as bad as having to be informed about 200 candidates running statewide, but it still requires more effort than most people are likely to make. Finally, going to MMDs does not erase the problem of how to delineate the boundaries of the districts. Although it would be more difficult to gerrymander MMDs than SMDs, it is still possible to do so<sup>26</sup> and the problems discussed in this book would still be with us. Let's now take a look at what the Germans did.

AMS is a hybrid form, which first gained attention when it was adopted by West Germany, in the aftermath of World War 2, as the means of electing its new 496-member<sup>27</sup> Bundestag. Half of the membership was elected from 248 SMDs by plurality voting. The second half was elected by party-list PR whereby each Party's percentage of the statewide vote is computed and that percentage is applied to determine its entitlement to seats. The number of seats each party won in the SMD election is subtracted from its nationwide entitlement and candidates from its list are assigned to fill out that entitlement. Each party's list is in rank order so, if the Christian Democrats get 45 percent of the vote, entitling them to 295 seats, and they elected 264 of their candidates in the SMD election, the 31 top-ranked candidates on their list are added to their delegation. If the Green Party gets five percent of the vote, entitling it to 33 seats, and it has won no seats in the SMD election, then the first 33 candidates on its list are declared elected. The mechanism by which the rank order of candidates on each party's list is determined is obviously critical. If that mechanism is undemocratic, then PR could be just a facade.

It would be easiest to implement AMS in electing members of the lower house of a state legislature. The membership of state houses of representation currently ranges from 40 (Alaska) to 400 (New Hampshire). Clearly, there is no ironclad rule or principle that dictates the proper size of one of these bodies. If we take 400 as our upper limit, New Hampshire could elect 200 House members from SMDs (mean district population: 3,300) and use the other 200 seats to fill out each party's quota of seats to achieve PR by party. Other states would have to increase the size of their lower houses, but this is something they should do anyway—if for no other reason than to reform campaign financing by making districts small enough that a person could run for a seat without having money for TV advertising.

## Notes

<sup>1</sup> The acronym stands for A Constructive Technique In Organizing Neutralization.

<sup>2</sup> Hardy, Leroy and Alan Heslop, *Redistricting Reform: An Action Program*, (Rose Institute of State and Local Government, 1990): 32.

<sup>3</sup> Hardy and Heslop, Op. cit. n. 2: pg. 80.

<sup>4</sup> *Wells v. Rockefeller* 394 U.S. 542 (1969).

<sup>5</sup> Dixon, Robert, "Democratic Representation: Reapportionment in Law and Politics", *Midwest Journal of Political Science*, Vol. 14 No. 1, (1968): 291.

<sup>6</sup> *Ibid.*, pp. 310-311.

<sup>7</sup> *Ibid.* p. 313.

<sup>8</sup> Stokes, Donald, "Is there a better way to Redistrict?" in *Race and Redistricting in the 1990's*, ed. Bernard Grofman (New York : Agathon, 1992): 348-349.

<sup>9</sup> *Ibid.*, pg. 350.

<sup>10</sup> Hirsch, Op. cit. note 7: 214.

<sup>11</sup> *Ibid.*

<sup>12</sup> *Ibid.*

<sup>13</sup> Honey and Jones, "Ethical Espace from the Political Thicket" 1993: 97.

<sup>14</sup> Hirsch, Sam. "The United States House of Unrepresentatives: What Went Wrong in the Latest Round of Congressional Redistricting" *Election Law Journal* Vol. 2 (2003): 184-185.

<sup>15</sup> Some call this adjustment "normalization."

<sup>16</sup> Hirsch, Sam, op. cite. pp. 182-183 and Table 1.

<sup>17</sup> Gelman, Andrew and Gary King. "Estimating Incumbent Advantage without Bias." *American Journal of Political Science*, Vol. 34 (1990): 1158.

<sup>18</sup> Morrill, 1993: pg. 259.

<sup>19</sup> Arizona Constitution, Article 4, Part 2 § 1 (14).

<sup>20</sup> *The Arizona Republic* August 9, 2001: pg. A8.

<sup>21</sup> Following the 2000 census, Arizona's congressional delegation increased from 6 to 8.

<sup>22</sup> In 2000 Arizona's ethnic breakdown was approximately 64 percent Anglo, 25 percent Hispanic, 5 percent Native American, 3 percent African American, and 2 percent Asian.

<sup>23</sup> A Democrat-oriented group, the Minority Coalition for Fair Districting, brought suit and in January 2004 a Superior Court judge ruled in their favor voiding the Commission plan. The Commission was ordered to come up with a new legislative districting plan. It complied under protest. The new plan increased the number of "competitive" districts from 4 to 7. The new plan was accepted by the judge in April 2004, but the State Defendants indicated they would appeal to the Arizona Supreme Court.

<sup>24</sup> Amy, pg. 183.

<sup>25</sup> *Davis v. Bandamere*.

<sup>26</sup> See letter from David L. Horn to Douglas J. Amy dated \_ ~ 1994 and \_\_\_\_\_.

<sup>27</sup> This membership was expanded to 656 in 1989 following re-unification.

## Chapter 40

### The Real Issue:

### Power

#### *The Road Ahead*

In general, there are three ways to get rid of discriminatory districting. All require amending state constitutions to change the wording of the parts that prescribe how districts are to be drawn: (1) through voluntary action of state legislatures proposing new constitutional language removing discretion from districting; (2) through grass roots action in the 24 states that provide for amending their constitutions through use of the initiative/referendum; (3) through litigation. All have been tried during the past half-century. All have failed. But each attempt has had its own unique circumstances and what failed in one state in one year does not necessarily have to fail in another state in another year. The situation with the judiciary appears particularly unstable. In 1946 the Supreme Court upheld a district court ruling<sup>1</sup> which dismissed a suit attempting to reduce scandalous population inequalities among Illinois' 26 congressional districts (District populations ranged from 112,000 in the most under-populated district to 914,000 in the most over-populated district.) Today, it may seem odd that such an egregious inequality would receive straight-faced intellectual defense, but in 1946 a 4-to-3 majority of the High Court held for the defendants/ appellees. It took another sixteen years before public and judicial attitudes changed sufficiently to impel the Court to rule for what is now the conventional wisdom: one person-one vote.

We may be in a similar situation today with respect to discriminatory districting. Constitutional law Professor Jamin Raskin saw the elephant standing in the living room when, in August 1994, pictures of the Texas districts at issue in *Vera v. Richards* appeared in the print media. His devastating comment, partly reproduced in Figure 40.1, (courtesy of *The Nation*) leaves nothing to puzzle over concerning the merits of the issue. What we need to puzzle over is

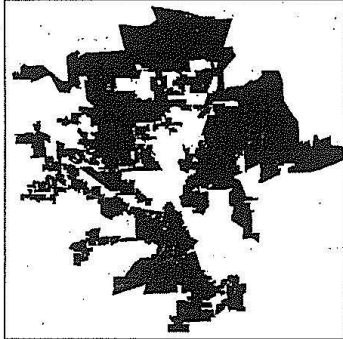
a legal strategy to get us from today's equivalent of *Colegrove v. Green* to today's equivalent of *Baker v. Carr*.

Figure 40.1

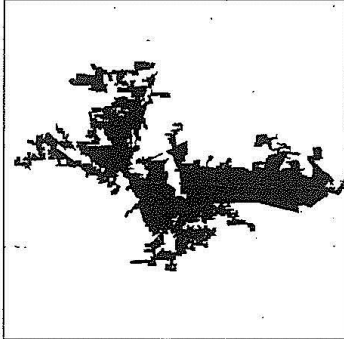
Raskin Commentary on 1990s Texas Congressional Districts

**THE NEW CONSTITUTIONAL RORSCHACH TEST**

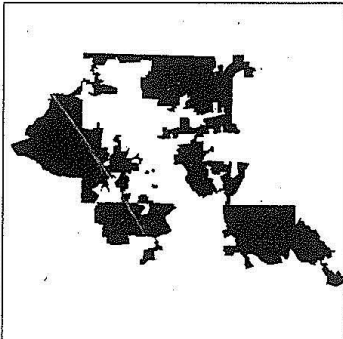
**Q.** Which of the following four Congressional districts in Texas are unconstitutional gerrymanders, according to a district court decision implementing the Supreme Court's holding in *Shaw v. Reno*?



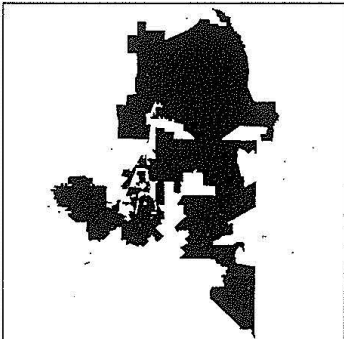
DISTRICT 18



DISTRICT 29



DISTRICT 6



DISTRICT 3

**A.** On August 17, 1994, a three-judge panel of the U.S. District Court in the Southern District of Texas struck down district 18, which is 50.9 percent African-American and 15.3 percent Latino, and also struck down district 29, which is 60.6 percent Latino and 10.2 percent African-American. In the same decision, it upheld district 6, which is 90.9 percent white, and district 3, which is 89.3 percent white.





*The Fruitless Search for a Judicially Manageable Standard of Partisan Gerrymandering*

We have witnessed over two decades' effort by members of the academic and legal communities to come up with a judicially discoverable and manageable standard embodied in a test for partisan gerrymandering that would command the votes of five justices of the U.S. Supreme Court. In the course of researching and writing this book we gained a look at these tests and observed their strengths and weaknesses. We noted certain assumptions and problems that were common to more than one of them. It would be well to summarize those assumptions and problems one more time:

*The dichotomous/idealized electorate.* To perform most tests for partisan gerrymandering we have to assume that everybody is either a Democrat or a Republican—even though we know many voters are independents; and even elected officials and rank-and-file members of the major parties exhibit a diversity of opinion on questions of public policy. As Kleinman pointed out in Chapter 23, even if the 1913 Ohio and 1981 Indiana congressional districting plans had achieved perfect PR in their seats/votes ratios that would not prove the resulting delegations were “representative” when judged by the more credible theories of representation. Yet some scholars seem up tight over perceived “unfairness” to one or the other of those major parties.<sup>2</sup>

*Aggregate statewide versus mean district vote.* We said in Chapter 8 that whether aggregate statewide vote or mean district vote was the “correct” measure of a party’s “statewide” vote was “simply an un-resolvable conflict that hinges on philosophical assumptions rather than fact or logic.” We examined the implications of this controversy in some states in Chapter 27, but failed to reach any conclusion as to which side was “right.” We observed that, in the states we have looked at, the difference between these two measures in some cases could exceed two percent—a difference sufficient to affect the verdict rendered by some tests in a partisan gerrymander controversy.

*The definitional election on which to base seats-votes curves.* To construct an hypothetical seats-votes curve we must have either (1) an historical election for legislative or congressional representatives in the state in question or (2) a statewide election, or combination of elections, in that state which reliably reflects the geographical distribution of supporters of the two major parties. In Chapter 12 and Appendix H we took a close look at the seats/votes curve constructed by Professor Richard Niemi for the 1982 (*Karcher*) congressional election in New Jersey. In that election Democratic candidates received 56.9 percent of the aggregate statewide vote and 58.7 percent of the mean district vote. If that was the definitional election, then the “curve” tells us that, so long as the Democratic statewide vote did not drop below 43.8 percent in some other election under the same districting plan, the Democrats would still get 57.1 percent of the seats.

Since all of the elections under the “Karcher” plan have now taken place, we are able to see how well the 1982 election fared as the definitional election. According to the “curve,” with either 50.63 percent of the aggregate statewide vote or 52.29 percent of the mean district vote Democrats should win 57.14 percent of the congressional seats from that state. Table 40.1 shows that in 1984 the Democrats did, indeed, win 57.14 percent of the congressional seats from New Jersey. In 1986 the curve predicted 57.14 percent of the seats by either votes measure—51.55 percent or 53.09 percent—and 57.14 percent of the seats is what they got. In 1988 the curve predicted 57.14 percent of the seats by either votes measure and again that is what they got. Finally, in 1990 the curve again predicted 57.14 percent of the seats by either the 46.77 percent aggregate statewide vote or the 50.56 percent mean district vote. In sum, Niemi’s New Jersey seats-votes curve “got it right” for every election that took place during the tenure of the “Karcher” congressional districting plans.

The other state where we are able to compare the seats-votes outcomes predicted by the seats-votes curve with those that actually occurred is California. As recounted in Chapter 20, we constructed such curves for the two Burton plans using the elections of 1982 and 1984 as our

Table 40.1  
New Jersey: Electoral Outcomes Under 1981 ("Karcher")  
Congressional Districting Plans

(1) Election Year	(2) Democrat Votes	(3) Republican Votes	(4) Aggregate Statewide Vote, % Demo.	(5) Mean District Vote, % Demo.	Seats Won by†		(8)* Discre pancy	Uncontested by	
					(6) Demo.	(7) Repub.		(9) Demo.	(10) Repub
1982	1,206,415	915,470	56.86	58.68	9 64.29	5 35.71	+ 7.43 + 5.61	0	0
1984	1,508,320	1,470,836	50.63	52.29	8 57.14	6 42.86	+ 6.51 + 4.85	0	0
1986	802,762	754,456	51.55	53.09	8 57.14	6 42.86	+ 5.59 + 4.05	0	1
1988	1,336,325	1,443,852	48.07	51.49	8 57.14	6 42.86	+ 9.07 + 5.65	0	1
1990	841,950	958,071	46.77	50.56	8 57.14	6 42.86	+ 10.37 + 6.58	0	2

\*Upper number in cell is the difference between the percent of seats won and the aggregate statewide vote.  
Lower number in cell is the difference between the percent of seats won and the mean district vote.  
†Upper number in cell is the number of seats won by each party. Lower number in cell is the percentage of seats it won, statewide.

seats

definitional elections. Figure 20.2 is the curve for Burton 2 drawn from the 1984 election results. How well did it predict election outcomes in 1986, 1988, and 1990? From the curve we see that with either 52.68 percent of the aggregate statewide vote or 54.60 percent of the mean district vote Democrats should win 60.00 percent of California's congressional seats. Table 17.7 shows that in 1986 the Democrats did win 60.00 percent of the congressional seats in California. In 1988 the curve again predicted 60.00 percent of the seats with an aggregate statewide vote of 53.57 percent—and 60.00 percent of the seats is what they got. However, when mean district vote (55.83 percent) is the measure the curve predicts 62.2 percent of the seats for the Democrats. That misses the mark because Table 17.7 shows that in 1988 Democrats still won only 60.00 percent of the seats. Finally, in 1990 the curve again predicted 60.00 percent of the seats by either the 52.36 percent aggregate statewide vote or the 54.55 percent mean district vote—but Table 17.1 shows they won only 57.78 percent of the seats. Summarizing, our Burton 2 seats-votes curve correctly forecasted the Democrat seats won in three out of six instances.

We see from the foregoing data that the definitional election is a problematic concept. To have much confidence in it as a predictor of electoral behavior we have to wait until an election

has occurred under the districting plan in question so we can use that election as the definitional one. But even when we do that we may be led astray—as we just were in the preceding example of Burton 2’s failure to accurately predict 1988 and 1990 election outcomes under that plan.

*Bipartisan Symmetry in the seats/votes relationship.* In Chapter 23 we learned that in *LULAC v. Perry* several Supreme Court justices gave serious attention to the symmetry test for partisan gerrymandering proposed in the amicus brief submitted by Bernard Grofman and Gary King. Citing the 1965 plan for the Ohio House, we pointed out that symmetry is too closely tied to responsiveness to stand alone as a reliable test for unconstitutional partisan gerrymandering. Justice Kennedy, author of the plurality opinion in *LULAC*, raised the obvious question of “how much partisan dominance is too much” and voiced a conclusion similar to ours that “asymmetry alone” is not the silver bullet gerrymander opponents are looking for:

In our view amici’s proposed standard does not compensate for appellants’ failure to provide a reliable measure of fairness. The existence or degree of asymmetry may in large part depend on conjecture about where possible vote-switchers will reside. Even assuming that a court could choose reliably among different models of shifting voter preferences, we are wary of adopting a constitutional standard that invalidates a map based on unfair results that would occur in a hypothetical state of affairs. . . . More fundamentally, the counterfactual plaintiff would face the same problem as the present, actual appellants: providing a standard for deciding how much partisan dominance is too much. Without altogether discounting its utility in redistricting planning and litigation, we conclude asymmetry alone is not a reliable measure of unconstitutional partisanship.<sup>3</sup>

As we may have observed in Chapter 23, the scholars carefully avoid expressing an opinion on how much asymmetry is necessary to strike down a districting plan, but they consider five “ways in which courts might address the issue of setting a prima facie legal threshold . . . to distinguish egregious and unconstitutional gerrymandering from politics as usual.”<sup>4</sup>

1. Require plans with as little partisan bias as practicable
2. Disqualify plans with partisan bias that deviate from symmetry by at least one seat
3. Disqualify only those plans with egregious levels of partisan bias (defined in terms of a specified percentage point threshold)
4. Disqualify only those plans that (can be expected to) translate a minority of the votes into a majority of the seats
5. Disqualify only those plans whose partisan bias is both severe and greater than that in the plan being replaced

The scholars are also helpful in giving us, “for purposes of empirical calibration” a summary of “studies of past partisan gerrymanders” that concludes:

“most gerrymanders have a partisan bias of 1-3 percentage points in favor of the party controlling the redistricting. ... Occasionally, the difference is greater than 5 percentage points, and only in rare cases does a gerrymander result in a difference of over 10 percentage points.”<sup>5</sup>

Measurements of partisan bias on the plans we have studied tend to run higher. As shown in Table H.2, our test of the *Karcher* plan shows a pro-Democrat bias of 14.3 percent, a magnitude that Grofman and King have found only in “rare cases.” As shown in Table 12.1, our test of the *Bandemer* house plan showed a pro-Republican bias of 14.0 percent based on its performance in the election of 1982. The corresponding House plan of 1972 also had a pro- Republican bias of 14.0 percent—based on its performance in the election of 1980. Figure 20.1 shows a pro-Democrat bias of 20.0 percent for the Burton-1 congressional districting plan based on 1982 election results, and Figure 20.2 shows a pro-Democrat bias of 15.6 percent for the Burton-2 congressional plan based upon 1984 election results. Finally, in Chapter 23, we reported for the Ohio House plan of 1965 a pro-Republican bias of 27.2 percent in contrast to the Gelman/King figure of 7.0 percent. In comparing our observations to those of Grofman and King it should be kept in mind, first, that the magnitude of partisan bias is different at different points on the

“votes” scale. We take a single reading at the 50 percent marker but Grofman/King may be taking their readings somewhere else and may be reporting an average of two or more readings.

Secondly, the scholars use a highly complex statistical procedure embodied in their JudgeIt computer program that may yield different answers than the simple but sound formulas of Niemi and Kleinman.

In Chapter 23 we quoted Daniel Lowenstein’s pithy comment in 1985 that the symmetry criterion depends on knowing something that cannot be known: what would have happened if what did not happen had happened. Twenty-two years later that comment applies with equal, if not greater, force.

*The Remedy Problem.* If the courts finally strike down a districting plan on grounds of its being a partisan gerrymander they will have four alternatives in the way of a remedy: (1) give the state legislature involved an opportunity to correct the constitutional deficiency by passage of a new districting plan; (2) choose a new plan from among the alternative plans proffered by the plaintiffs, *amici* or other interested parties; (3) appoint a master and draw its own plan; (4) hold elections at-large. Alternative (4) is obviously unsatisfactory: a statewide “bedsheet” ballot with possibly 200 candidates running for 100 seats. Alternatives (2) and (3) subject the courts to charges of favoritism because no districting plan is “neutral;” any plan will benefit certain candidates while disadvantaging others. They can pass an alternative plan that differs only slightly from the plan that was struck down. Months (or years) pass while new litigation determines whether the alternative plan will pass muster. All the while the original plan remains in effect. It is possible to see how redistricting defendants could “run out the clock” on their plaintiff adversaries and the decade could end before the legislature passed an acceptable remedial plan.

The foregoing assumptions and problems continue to render gerrymander analysis—so far as “proving” a districting plan is an unconstitutional partisan gerrymander is concerned—a dubious endeavor.

*The World of Robert G. Dixon, Jr.*

In the concluding section of his final brief to the Supreme Court in *Gaffney* Robert G. Dixon, Jr. stated an overview of the districting issue that revealed the assumptions, which led him to a public policy recommendation diametrically opposed to ours. Like us, Professor Dixon is opposed to “gerrymandering.” As we quoted him in Chapter 37, he saw Gaffney “not [as] a gerrymandering others. Alternative (1) may present the State defendants with an opportunity to play a case. [but]...an attempt to build into the apportionment process effective safeguards against gerrymandering.

Dixon saw discretionary districting as an essential tool in the democratic process. In the hands of a board or commission led by a Judge William Campbell or a Professor Donald Stokes creative line drawing could insure that the legislative chamber or congressional delegation is truly representative—not only in having a roughly proportional makeup of Democrats and Republicans, but also insuring that the various interest groups and constituencies within the major parties find expression. Dixon seems oblivious to the fact that his Democrat adversaries in *Gaffney* felt Judge Saden had steamrolled them. It did not occur to him that James Collins, staff counsel to the Republican House caucus, was hardly the proper person to decide whether Democrats were receiving fair treatment. By all accounts Dixon was an honorable man and a top drawer scholar; but his promotion of a bipartisan commission-with-discretion as the best remedy for “gerrymandering” brings to mind a monarchist’s policy recommendation that we be ruled by kings: we might get a King Solomon—or a Donald Stokes or Larry Bartels as our tiebreaker. But we might also get bipartisan collusion, as New Jersey did in its congressional districting commission, or as New Yorkers experience with their permanently Democratic Assembly and their permanently Republican Senate.



### *The “Perfect” Electoral System*

It should be no surprise to the reader for us to say that of the theories of representation described in Chapter 1, the one we subscribe to is the permissive theory: the theory that permits people to be represented on any basis they choose—geography, race, religion...party, ideology. The only electoral system that enables such representation is proportional representation (PR) using single transferable vote (STV). Kleinman has said proportional representation is a tautology: that representation isn't representation unless it is proportional. We agree.

But—as we just pointed out in the preceding chapter—to implement PR-STV in the real world we face crippling practical problems borne of the fact that the voter must rank several to many candidates in order of preference. Such is feasible if the polity is small and the voters well informed. But if the polity is large and the electorate poorly informed PR could produce a governing body that is very *unrepresentative*. The reality of 21st century United States of America is an electorate that is large and poorly informed. Given that reality, we must craft an electoral system that, to function properly, doesn't depend upon having a well-informed, sophisticated electorate. We would prefer a system based on a large number of geographically small districts. That would maximize the chances of the voters having direct personal knowledge of their representatives—and of their electoral opponents. Small-sized districts are cheaper to run in and this would mitigate—to some extent—the horrendous campaign-financing problem. And, as we have argued throughout this book, those districts must be crafted by a procedure that permits no human discretion. *If that districting plan is significantly biased in favor of or against the candidates of one of the major parties, then the proper remedy is to go to an Additional Member System (AMS).*

### *Achieving “Fairness:” Official State Plans Versus Citizen Plans*

Impartial districting procedures have not come under direct attack by proponents of discretionary districting in any specific case for the simple reason that no such procedure is in use

in the U.S.A. today. What we have, instead, are statements by some of the country's leading scholars of the districting issue that attack the general notion of impartial districting procedures—statements like those quoted in Figure 34.1. The reader will notice that, except for the one by Kimball Brace, none of these statements refers to any specific districting plan that was drawn to best satisfy objective, measurable criteria. In the case of the Michigan plan referred to by Brace we would have to first establish that this plan best satisfies agreed-upon objective criteria. If it were shown to do so, then it would have to be shown to carry more partisan bias than other plans Brace might point to—and we would have to agree on which test is the definitive measure of such bias.

We didn't have the resources to conduct the thorough study of 1980s Michigan legislative districting required to confirm or contradict Brace's assertion, but we did have the resources to do so in Ohio and Indiana. It should be clear from all that has been said previously that when proponents of discretionary districting talk about "political fairness" they mean major party proportional representation. Table 40.2 summarizes the comparisons we made of districting plans in the four states where we have both plans drawn with discretion and plans drawn to best satisfy objective criteria. Consider first Indiana.

*Indiana House, 1981.* Table 10.1 shows that when we applied the Backstrom/Robins/ Eller test to the three citizen plans for the Indiana House we found them all in agreement that Democrats would win 43 or 44 seats to 56 or 57 seats for the Republicans. For the Democrats that is 6 or 7 seats short of the 50 required for PR. But the same analysis shows that under the *Bandemer* plan they would most likely get only 36 seats with half the statewide vote. (In actuality, they got 43 seats with 51.64 percent of the vote).

*Indiana Senate, 1981.* Table 10.4 shows that when we applied Backstrom/Robins/Eller to the four citizen drawn plans for the Indiana Senate we found them all in agreement that Democrats California Congressional, 1981 and 1983: Table 18.3 shows that when we applied the Backstrom/ Robins/Eller test to the five Morrill plans listed therein we found them in complete

agreement that Democrats would win 22 or 23 seats for an even split with the Republicans, That is as close as one can get to PR. The same analysis shows that under Burton 1 Democrats would most likely get 28 seats with half the statewide vote. (In actuality, in 1982 they got 28 seats with 50.82 percent of the aggregate statewide vote.) Under Burton 2 Democrats would most likely get 29 seats would win 21 or 22 seats to 28 or 29 seats for the Republicans. For the Democrats that is 3 or 4 seats short of the 25 required for PR. But the same analysis shows that under the *Bandemer* plan they would most likely get only 19 seats with half the statewide vote. (In actuality, they got 20 [or 40 percent] of the seats with about 48.5 percent of the vote).

It seems fair to say that if Indiana mandated an impartial procedure for drawing its legislative districts, Democrats would face a structural bias under which they would have to receive more than half of the statewide vote to win half of the seats in either the Indiana House or Senate. However, this bias is about half the bias they will encounter in the Republican-drawn plans they will face in future decades if the present discretionary system is continued and Indiana remains a “Republican” state with half the statewide vote. (In actuality, in 1984 they got 27 seats with 50.00 percent of the aggregate statewide vote.)

*Pennsylvania Congressional, 2002.* Table 29.3 shows that when we applied Backstrom/Robins/Eller to the Horn, Holderly and three Plaintiffs’ plans we found that, in four out of five cases, we obtained the same 11 Republican-to 8 Democrat split we get under Act 1—the alleged Republican gerrymander litigated in *Vieth*. (In actuality, in 2002 Democrats got 7 [or 37 percent] of the seats with about 46 percent of the mean district vote).

*Ohio House, 1981.* Table 40.1 shows findings from research in Ohio so far unreported in this volume. In Ohio legislative districts are drawn by a state Apportionment Board that is guaranteed to have a partisan majority.<sup>7</sup> Democrats were in control of this board in 1981 when it was time to redistrict and crafted a plan that Republicans (and others) alleged was a

Table 40.2

## Achieving Proportional Representation: Discretionary v. Non-Discretionary Districting

(1) State, Year	(2) Plan	Projected Number of Seats Won by Democrats				(7) Comment
		(3) Under Official (State) Plan	(4) Under "Best" Citizen Plan	(5) Under PR	(6) In Next Election (Actual)	
Indiana, 1981	<i>Bandemer</i> House	36/100	44/100	50/100	43/100 (51.64)*(1982)	6 or 7 seats short of PR
Indiana, 1981	<i>Bandemer</i> Senate	19/50	21/50	25/50	20/50 (1982 + 1984)	staggered 4-year terms
California, 1981	Burton1 Congressional	28/45	22 or 23/45	22 or 23/45	28/45 (1982)	
California, 1983	Burton 2 Congressional	29/45	22 or 23/45	22 or 23/45	27/45(1984)	
Pennsylvania 2001	Act 1 ( <i>Vieth</i> ) Congressional	8/19	8/19	9 or 10/19	7/19 ‡(46.08)	
Ohio, 1981	Apportionment Board (House)	50/99	42/99	49 or 50/99	62/99 †(57.04)	
Ohio, 1981	Apportionment Board (Senate)	17/33	15/33	16 or 17/33	15/33	staggered 4-year terms
Ohio, 1982	State of Ohio Congressional	10/21	10/21	10 or 11/21	10/21 (1982)	
Ohio, 1992	State of Ohio Congressional ( <i>Miller v. Ohio</i> )	7 or 8/19	9 or 10/19	9 or 10/19	10/19 (1992)	

\*Aggregate statewide vote share for Democrat House candidates in Indiana in 1982

†Mean district vote for Democrat House candidates in Ohio in 1982

‡Mean district vote for Democrat congressional candidates in Pennsylvania in 2002

partisan gerrymander. In 1990 the Center for Research into Governmental Processes (CRGP) conducted a public competition similar to those by Norman Primus in Indiana in 1985 and 1990. The plan that best satisfied the criteria of the Ohio Anti-Gerrymander Amendment for Ohio House districts (the “best” citizen plan) was subjected to a political analysis similar to those reported for Indiana, California and Pennsylvania in earlier chapters. The results of this analysis were compared with those from the same analysis of the official State plan promulgated by the Apportionment Board. Under the State’s plan Line 6 of Table 40.1 shows the Democrats getting 49 or 50 seats with 50 percent of the statewide vote—an almost perfect PR outcome. The “best” citizen plan, on the other hand, shows the Democrats getting only 42 seats. What happened in the first election conducted under this plan? That was the election of 1982 in which Democratic Ohio House candidates garnered 57.04 percent of the mean district vote. They won 62 districts.

*Ohio Senate, 1981.* Line 7 of Table 40.1 shows what happened under the Apportionment Board’s 1981 Senate plan. The political analysis showed Democrats winning 17 (of 33) seats

with 50 percent of the statewide vote—again, a perfect outcome from a PR standpoint. Under the “best” citizen plan—the winner of the “compactness threshold” division of the CRGP competition conducted in 1990—the Democrats stand to win only 15 seats.

*Ohio Congressional, 1982.* Line 8 of Table 40.1 shows the result of our political analysis of the congressional districting plan crafted by the Ohio legislature in 1982/85. Under it the Democrats would be expected to win 10 seats with half of the statewide vote. The best citizen plan to compare it to is the winner of the compactness threshold division in the congressional districting competition conducted by the CRGP in 1989 and reported on in a paper we presented at the APSA meeting that year.<sup>8</sup> Under that plan we would likewise expect Democrats to win 10 of the plan’s 21 districts.

*Ohio Congressional, 1992.* Line 9 of Table 40.1 shows the result of our political analysis of the 1992 congressional districting plan litigated in *Miller v. Ohio*. Under it the Democrats would be expected to win 7 or 8 of 19 seats with half of the statewide vote. The best citizen plan to compare it to is Horn “Plan B,” a plan drawn to best satisfy the criteria of the Ohio Anti--Gerrymander Amendment and to be offered as a demonstration plan in event *Miller v. Ohio* went to trial. Under that plan we would expect Democrats to win 9 or 10 of the plan’s 19 districts—which is as close to PR as one can get in a 19-district plan.

*Conclusions.* The foregoing nine cases fall into five categories. In the first category are the two California cases and the 1992 Ohio citizen congressional plan where the citizen plan achieved PR—or got as close to it as one can get—and the official state plan did not. In the second category are the 1982 Ohio congressional plans where both the citizen plan and the official state plan (arguably) achieved PR. In the third category are the 1981 Indiana house and senate where the citizen plans failed to achieve PR but came much closer to it than did the State’s plans. In the fourth category is Pennsylvania where both the official State plan and the citizen plan equally failed to achieve PR. We see from this that plans drawn to best satisfy objective criteria, while not at all times achieving major party PR, do come as close to it as do the official state plans and in

some cases—*i.e.*, Indiana and California—come a lot closer. In the case of the 1981 Ohio House and Senate plans, where the official State plan came closer to achieving PR than did the citizen plan, there was no statewide race that was really good for use in a political index and we had to settle for an amalgam of two races both of which were more fraught with idiosyncratic factors than we would have liked.

We are thus led to conclude that in three-fourths of the cases cited above the impartially drawn plans come as close, or closer, to achieving PR than the corresponding plans promulgated by the respective state agencies. We would expect that if impartial districting procedures became mandatory by some future action(s) of the High Court, the resulting plans would not differ radically, in the partisan breakdown of their component seat-fractions, than what we have at present. The biggest change to be anticipated would be a marked increase in the fraction of marginal districts they would contain. But once the initial election had been held in those districts, and new incumbents established in them, those districts would quickly become safe districts for those incumbents, regardless of what their political indices might say. But note a significant difference: those districts would be “safe” for just the remainder of the decade. At the end of that decade might come a shake-up that would put those districts in play for another election or two—that, instead of a redistricting that would probably lock-in the incumbents for another decade.

Impartial districting will not yield major-party PR in the make-up of state houses of representatives, state senates, or state congressional delegations; only get us a little closer to that objective than we are at present. If we want to attain that objective, the road to follow is not that of creating bipartisan commissions empowered to engage in discretionary districting. Rather, as suggested in the previous chapter, have states pass laws instituting PR where it can be done most easily. The form of PR that would work best is the hybrid called the Additional Member System (AMS) employed in Germany. It would involve doubling the size of most state legislative chambers. That obstacle is primarily psychological and could be surmounted once it becomes

known that the size of the lower house of state legislatures in the U.S. today ranges from 40 (Alaska) to 400 (New Hampshire). Obviously, there is nothing sacred about the sizes of these chambers. New Hampshire could simply elect half of its lower house from 200 SMDs and the other 200 members by party-list PR.

### *The Real Issue*

Richard Niemi has written: “The relationship between votes and seats” is “the ultimate question in political gerrymandering.”<sup>9</sup> With all due respect for Professor Niemi’s scholarly efforts we would have to assert that the “ultimate question” reaches far deeper than analysis of major party seat and vote comparisons. As a careful reader may have noticed while contemplating the seats/votes analyses presented in this volume, such analyses assume an idealized, dichotomous electorate in which every voter is either a “Democrat” or a “Republican.” In Chapter 8 we drew attention to this assumption and promised to address it in this chapter. We now do so. We know the real electorate is far more complex than the idealized/dichotomous electorate assumed in our analyses. In 1988 the Times Mirror Company published a study which divided the American electorate into eleven political groupings on the basis of their underlying attitudes on questions of public policy concluding “the conventional labels of Democrat and Republican, liberal and conservative, no longer have much power.”<sup>10</sup> Two decades later, as George W. Bush concludes his second term as President, a comparable survey might show a more polarized electorate; but that does not dissipate the shadow of skepticism hanging over any seats/votes analysis grounded in the assumption of an idealized electorate—as all of ours have been.

So, even if by discretionary districting, we were able to craft plans that reliably yielded major party PR we would not necessarily achieve legislative chambers that were truly representative, and therefore truly democratic. As Kleinman commented in Note 45 of Chapter 23, it isn’t because they didn’t work that we should reject the discretionary congressional districting

plans cited in that chapter. It is because (1) they are being judged by analyses that assume a dichotomous electorate when we know from the Times/Mirror survey and our own life experience that the American electorate isn't dichotomous, and (2) because they are the outcome of a process in which a small number of powerful individuals have been permitted to virtually impose their judgment on the rest of us concerning who represents us. It is a process in which governors, house speakers and senate presidents have votes "worth multiples of the votes of any other person cast in a congressional election,"<sup>11</sup> as David Stivison wrote in *Miller v. Ohio*.

At the conclusion of Chapter 1 we summarized the argument of the proponents of discretionary districting as: the legislative body in question must be "representative." It will be representative if it achieves symmetry in the major party seats-votes relationship. To ensure that the plan achieves partisan symmetry discretion must be given to persons chosen by major-party leaders who will know how to employ political and demographic data to craft a plan that achieves such symmetry.

The answer to this argument should now be obvious: where is the plan that has done this?

There have been many bi-partisan districting commissions; many plans have been promulgated by such commissions and many elections have been conducted under those plans. To our knowledge not one of those plans has featured, at one time during its tenure, an election under which Party A received x percent of the vote and won y percent of the seats; and then at *another* time during its tenure another election in which Party B received x percent of the vote and won y percent of the seats. So, in turning districting over to bipartisan commissions and charging them to do what no one knows how to do is simply to award those commissioners a grant of arbitrary power. On the wall of the Ohio State University College of Law building are these eight words of Edmund Burke:

"Law and Arbitrary Power Are in Eternal Enmity"



Human history may be seen as a long struggle—measured in centuries—of common people for power to make the decisions that affect their lives. That struggle has always involved taking power away from elites as monarchy gave way to aristocracy, and aristocracy in turn has given way to democracy. The vehicle for this devolution of power has been the institution of law: rules, unwritten or written, which limit the exercise of power by elites; which curb arbitrary power. The struggle to remove discretion from districting is one small part of that larger struggle.

#### Notes

<sup>1</sup> *Colegrove v. Green* 328 U.S. 549 (1946).

<sup>2</sup> See, e.g. Butler and Cain (1995).

<sup>3</sup> *LULAC, v. Perry*, 126 S.Ct. 2594, 26 (2006) .

<sup>4</sup> Gelman, Andrew and Gary King. "Estimating Incumbent Advantage without Bias." *American Journal of Political Science*, Vol. 34 (1990): 5-6; 21-24.

<sup>5</sup> *Ibid*, pg. 25.

<sup>6</sup> See Chapter 22. Note 6.

<sup>7</sup> Control of this board is determined by which party wins a majority of the following three statewide offices in the election next preceding years ending in one: Governor, Auditor of State, Secretary of State.

<sup>8</sup> Horn, et al., 1989.

<sup>9</sup> Niemi, Richard G., et al. "Measuring Compactness and the Role of a Compactness Standard in a Test for Partisan and Racial Gerrymandering" *Journal of Politics*, 52 (1990): 185.

<sup>10</sup> Norman Ornstein, Andrew Kohut and Larry McCarthy: *The People, the Press & Politics*, back cover.

<sup>11</sup> Chapter 36 page 4.

# Addix B - 1

## INDIANA, OHIO, AND NATIONAL PARTISAN SWING

(1) Year	U.S. Conness <sup>1,2</sup>		Ohio House <sup>3</sup>			Indiana House		
	(2) Demo. Percent	(3) Percent Swing	(4) Demo. Percent	(5) Percent Swing	(6) Adjustmt from 1978 Base of 52.67	(7) Raw	(8) Adjustect <sup>7</sup>	(9) Adjustmt from 1980 Base of 43.51
1954	52.5	- 1.5 R	<sup>1</sup> U.S. Congress, 1954-76: Richard Niemi, <i>Legislative Studies Quarterly</i> XI No.1 (Feb. 1986) pg. 85 <sup>2</sup> U.S. Congress, 1976-90: <i>Statistical Abstract of U.S. "Vote Cast for U.S. Representatives, by Political Parties--States"</i> (a) 1979 edition (b) 1981 edition (c) 1984 edition (d) 1989 edition (e) 1991 edition <sup>3</sup> Ohio House: Unpublished data, David L. Horn <sup>4</sup> Adjusted by averaging vote in multi-member districts and deleting votes for 12 unopposed Rep1. bUcans in single-member districts <sup>5</sup> Indiana House, 1970-80: Richard Niemi, Table 13.1 in Bernard Grofman, ed. <i>Political Gerrymandering and the Courts</i> <sup>6</sup> Indiana House, 1982-90: Calculated by David L. Horn from State of Indiana, 1962-1990 Election Reports <sup>7</sup> Calculated by averaging the vote in the 13 2-member and 7 3-member districts for 1980; in the 9 2-member and 7 3-member districts for 1982-1990 <i>Congressional Quarterly</i> February 23, 1991 "487" 487					
1956	51.0	+ 5.10						
1958	56.1	- 1.1 R						
1960	55.0	- 2.4 R						
1962	52.6	+ 4.90						
1964	57.5	- 6.2 R	53.94	- 7.6 R				
1966	51.3	- 0.4 R	46.3	- 1.4 R				
1968	50.9	+ 3.30	44.91	+ 5.60				
1970	54.2	- 1.5 R	50.52	+ 1.10		52.25		
1972	52.7	+ 5.90	51.64	+ 4.00		44.4		
1974	58.6	- 1.4 R	55.57	+ 12.0		54.7		
1976	57.2/56.3a	- 2.6 R	56.82	- 2.9 R		53.2		
1978	53.7b	- 3.3 R	53.86	- 2.1 R		49.9		
1980	50.4c	+ 4.90	51.79	+ 4.40	+ 3.48	46.7	46.52	+ 8.13
1982	55.3c	- 3.0 R	56.15	- 5.2 R	- 1.69	51.56	51.64	+ 0.89
1984	52.3d	+ 2.30	50.98	+ 4.40	+ 2.69	43.3	44.40	+ 7.26
1986	54.6d	- 1.2 R	55.36	- 0.8 R	+ 1.96	46.9	50.77	+ 6.09
1988	53.4e	+ 0.70	54.63	- 0.9 R	+ 1.07	47.0	49.60	+ 7.36
1990	54.18		53.68			48.0	50.87	

Appendix B-'L

Ohio and Indiana Legislatures: Aggregate Vote Share vs. Mean District Vote: 1966-2006

Year	Democratic Aggregate Vote Share (.II)	Democratic Mean District Vote (v)	Difference	Turnout Ratio	Democratic Aggregate Vote Share (II)	Democratic Mean District Vote (v)	Difference	Turnout Ratio
Ohio					Indiana			
Senate								
1966	45.57	46.65	1.08					
House								
1966	46.82.	47.90•	1.08	5.38				
1968	46.10•	48.10•	2.00	7.18				
1970	50.52	52.68.	2.16	6.35	52.2			
1972	51.64	53.01•	1.37	2.71	44.4			
1974	55.57	57.13•	1.56	3.90	54.7			
1976	56.82	57.99•	1.17	5.68	53.2			
1978	53.86	55.02•	1.16	4.84	49.91	50.86	0.95	
1980	51.79	53.29•	1.50	6.87	46.26	48.07	1.81	
1982	56.15	57.04t	0.89	2.08	50.85	50.48	- 0.37	
1984	50.98	53.27'	2.29	2.87	45.90	45.52	- 0.38	
1986	53.37'	54.95•	1.59	3.11	50.63	50.05	- 0.58	
1988	52.63.	54.61.	1.98	3.07	49.48	50.68	1.20	
1990	53.68	55.85.	2.17	3.89	50.90	50.95	0.05	2.70
1992	52.57'	54.01•	1.44	2.60				
1994	45.97'	48.06.	2.09	3.15				
1996	46.98.	49.02t	2.04	2.80				
1998	47.07'	49.30•	2.23	3.13				
2000	47.75•	49.59•	1.84	3.54				
2002	45.47'	47.38.	1.91	2.44				
2004	48.46.	49.81•	1.35	1.88				
2006	52.22	54.35	2.13	3.06				

\*Adjusted to assume that major party which did not contest a district would have received 25% of the vote in that district had it run a candidate.

tEach major party had the same number of uncontested districts, so uncontested seat effect was cancelled.

Appendix B-<3'

Ohio and Indiana Legislatures: Aggregate Vote Share vs. Mean District Vote: 1966-20/0

Year	Democratic	Democratic	Difference	Turnout	Democratic	Democratic	Difference	Turnout	
	Aggregate- Vote Share (l)		Ratio	Aggregate Vote Share (l)	Mean District Vc (v)		Ratio		
Ohio					Indiana				
Senate									
1966	45.57	46.65	1.08						
House									
1966	46.82*	47.90*	1.08	5.38					
1968	46.10	48.10	2.00	7.18					
1970	50.52	52.68*	2.16	6.35	52.2				
1972	51.64	53.01*	1.37	2.71	44.4				
1974	55.57	57.13*	1.56	3.90	54.7				
1976	56.82	57.99*	1.17	5.68	53.2				
1978	53.86	55.02*	1.16	4.84	49.91	50.86	0.95		
1980	51.79	53.29*	1.50	6.87	46.26	48.07	1.81		
1982	56.15	57.04t	0.89	2.08	50.85	50.48	-0.37		
1984	50.98	53.27*	2.29	2.87	45.90	45.52	-0.38		
1986	53.37*	54.96*	1.59	3.11	50.63	50.05	-0.58		
1988	52.63*	54.61*	1.98	3.07	49.48	50.68	1.20		
1990	53.68	55.85*	2.17	3.89	50.90	50.95	0.05	2.70	
1992	52.57*	54.01*	1.44	2.60					
1994	45.97*	48.06*	2.09	3.15					
1996	46.98*	49.02t	2.04	2.80					
1998	47.07*	49.30*	2.23	3.13					
2000	47.75*	49.59*	1.84	3.54					
2002	45.47*	47.38*	1.91	2.44					
2004	48.46*	49.81*	1.35	1.88					
2006	52.22	54.35	2.13	-014					

\*Adjusted to assume that major party which did not contest a district would have received 25% of the vote in that district had it run a candidate.

tEach major party had the same number of uncontested districts, so uncontested seat effect was cancelled.

2010	5 f. 2.5" Lf-S.03	5" 3.132 46,82	2.07 1,79	... 2. r., 1					
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# Appendix J)

W..CXSTRaV'RClBINS&LLER J.W.LISISI AL'UJU.U.TIVE INDWIA HOUSE PL.A.NS

1982 Republican				1985 Minimum l'rag.			1990 B. ll.		1990 Ho•tod			1982 Cre.vford		
Dist.	SP1"	••J.	uo %	Dist.	.ld l.	....%	.ldJ•	Btu111%	SP! S	.ldi•	....%	SP! S	J.d.i.	Bue %
				2	37.20	• J0.7	36.38	•						53.7
							52.1	54.69				36.5	60.2	
2	60.2	■ SJ.							23.1	66.34	•	19-5	68.1	61.6
		■							29.9	42.99				
		■							J.8.2	26.03				
		■							58.5	51.45				
		■							4.6	29.13				
		■							-2.08	7.51				
		■							8.2	17.63				
									48.5	49.97				
									1.4.	60.07				
1	62.6	..0.5	56.,	1	27.90	-6.49 21.4	29,56	-6.49	59.7	59.55				
									51.6'	64.85	-6;49	59,9	62.6	-6.49 56.1
									62.2	62.65				
									46.3	63.66				
			61.6	J	58,60				53.0	60.25				
									50.9	60.53				
									24.4	55.60				
4	68.2			4	45,99				43.0	59.75				62.7
			7						53.8	62.51				
			62.7			39,5			49.7	71.69	■	45.0	69.2	
									54.1	58.40				
									t5.0	58.43				
									53.5	67.43				
									56.1	63.17				
									52.5	59.47	•	22.6		
5	53.2		46.7	5	65.27	• 58.8	41.10	•	fi4.9	52.83	■		53.2	• 46.7
									54.5	03.39				
									36.3	41.17				
									56.0	4J.BO				
				6	67.J.2	• 60.9	4.41		56.7	52.01		1.02	60.4	53.9
									64.2	54.78				
									52.0	62.16				
									57.9	60.93		11.1	32.85	26.4
6	60.4	•	53.9	7	59.01	52.5	14.67	•	52.2	68.20				
	39.0	■	2.5						53.7	64.86				8.J
		■							54.5	62.31		43,5	56.2	49.7
		■		8	25.5	18.9	55.03		J.8.6	41.52	■			
		■							51.6	58.52		53,1	53.00	46.5
		■							49.0	71.35				
		■							46.8	64.53				
									55.3	66.04				
									52.2	81.52				
8	56.2								51.2	67.88				
									J.8.5	54.96		53.6		
									57.0	57.59				
			49.7	9	4.67	1.82	50.54		J.B.7	58.67				
									55.4	61.81				
									57.0	63.88				
									55.6	43.71				
									61.0	58.06				
									J.8.2	55.09				
									57.8	64.06				
									64.9	66.86				
									55.0	62.48				
									73.4	55.55				
									69.4	78. -				60.8
									64.7	66.57				
						35.88			55.3	59.17		56.2	67.30	
									55.8	60.04				
									51.8	64.17				
			56.5	12	68.20	• 61.7	68.65		63.7	60.00				
									59.6	51.05				
									59.9	48.62				
									45.4	56.49				
9	57.0		50.5	10	58.12	51.6	58.12		37.7	55.75		58.4	61.87	• 55.J;
									5.8	64.68				
									17.9	56.72				
10	6).0								46.J	55.30	•	53.8	52.88	46.4
									47.8	66.78				
									55.8	68.67				
									60.5	68.88				
									59.6	52.49				
									53.6	38. ...				
									57.7	58.93				
									53.5	52.49				
				11					52.7	53.29				
									42.0	49.60				
									45.1	45.61	•	57.2	58.95	52.5
					52.SJ	• 46.3	52.83	•	53.7	49.56				
									55.3	52.57				
									46.7	57.49				
									52.5	50.76				
									61.1	53.74				
									1.4.S	65.21.				
									39.7	46.46				
									47.1	J.8.1.4	•	54.0	20.52	14.0
11	J.8.1		41.6	14	59.47	46.6	57.37		42.9	45.19		49.1	66.4	59.9
					53.06	30.3	30.93		47.2	61.07				
						1	49.48		51.0	51.32				47.8
									1.2.5	49.71				
									45.5	52;19				
									43.2	67.88				
									1.2.0	J.S.60				
									40.2	67.15				
									45.5	64.03				
									36.8	66.32				
									4E..1	4U.U9				
									52.4	14.37				
									31.4	52.37				
									50.5	18.62				
									41.J	50.24				

	52.9	46.4	18	59.62	46.4	60.33		58.0	50.3	64.0
14	14.4	7.9	19	62.18	55.7	56.15		65.2	44.75	38.3
15	65.7	59.2	21	61.83	55.3	71.45		51.9	58.4	51.9
			20	69.33	62.8	60.55		51.9	51.87	45.4
			21	65.07	58.6	59.99				
1U	66.4	59.9	21	62.73	56.2	62.59		61.7	60.3	
11	54.3	47.8	24	62.64	56.2	59.03		53.0	56.7	57.1
										52.2
										55.7
				72.13				46.3	63.1	
11	62.1	55.6	-26	54.82	18.3	61.02		56.9	64.2	57.7
1	70.5	64.0	27	55.09				34.7	62.2	
			28	58.07				37.3	64.0	
					65.6	71.35		48.3	56.1	56.6
					18.6	42.77				57.5
					51.6	62.50				49.6
									64.6	58.1
20	66.0	59.5	29	55.92	49.4	65.16		45.5		
			30	64.81	56.3	70.72				
			31	63.27	56.8	58.51		55.7	21.94	15.45
21				65.73	59.2	64.36		54.4	56.7	50.2
11										
		53.8	14	56.00	49.5	60.20				
	58.4	51.9	32		57.4					
			31							

	55.0																			
			52.2	J5	63.67	•	57.2	61.0J												
2::	63.6		57.,		63.91			58.66					61.7							
"_	60.1 58.7												58.8	44.4		37.9				
25	63.1	•			63.51	•	57.0						35.0	61.7	■	55.2				
!!			56.6	36				55.09												
”		■						55.44					64.9	67.7	■	61.2				
	64.2	•		)7	62.41	•	55.9	58.06	•				52.0	50.4						
	62.2		55.7	38	60.03															
				J9			53.8	53.25												43.9
”			57.7																	
	64.0	•	57.5		60.28	•							58.0	76.7	•	70.2				
,1	64.6	•	59.61		59.99	•	49.3	58.87	•				59.6	68.1	•	61.6				
JC	60.2												75.0	65.1	■	58.6				
	56.1																			
		■	53.7	1.2	61.81	•	55.3	57.68	•				61.4	51.1	•	44.6				
				1.4	56.79	■	50.3	63.45					51.1	58.7		52.2				
:2	56.7	•	50.2		59.92		53.4	54.98	•				J.8.5	47.7	•	41.2				
																				37.7
		■											52.2	1.4.2						
;	61.5	•	55.0	45	51.95	•	45.5	55.23	•											
	1.4.4	•	37.3'		60.84	•	54.4	61.93												49.5
		■																		
35	65.4	■	58.9	46 7	60.35	•	53.9	63.51					55.3	56.0	•	60.9				8.8
													37.2	15.10						
			55.2		58.67	•														
36	61.7	■						52.2	62.12											
		■																		
37	50.4		43.9		60.04	•	53.6	67.11.	•				51.6	18.99		12.5				
	67.7		61.2	5	58.92		52.4	54.70	•				J.8.6	65.11		58.6				
	76.7			51				64.29	•				57.6	66.55						
			61.6		59.31	•	52.8	71.36												6-0.1
	68.1																			
			70.2		53.90		47.4						60.4	59.51		53.0				
39																				
40																				
41	65.1	■	58.6	51	68.1.4	•	62.0	61.45					56.0	67.4	•	60.9				
42	51.j		1.4.6	54	67.34	•	60.9	79.92	•											

			• 49.,	60.1	• 53.6							
	47.7	• 41.2		54.70	• 1.8.2	75.85			• 71.7	58.4	• 51.9	
.43		■ 37.7	57	51.90	■	61.75	•		• 52.7	60.7	■ 54.2	
	58.7	• 52.2	56	47.28	• 1.11.8	71.19	•					
		■							• 60.i	59.6	53.1	
		49.5		50.64								
44						45.4			• 53.6	66.3	■	
45	44.0					1.4.2	62.33		■			
4<	67.2	• 60.7	59	62.43	• 55.9	58.27	•		57.7	62.2	59.B	55.7
4'	67.1	• 60.6	60	55.14	J.B.7	70.16	•		• 53.5			
				70.33	63.8	66.111	•			60.7		
		•	•						• 1.2.1	55.0	• 1.8.5	
4'	67.1	• 60.6	6i	67.12	60.6	66.05	•					54.2
			■						• 1.4.6	51.3	• 1.1.1	
				80.96	• 74.5	44, 18	•					
		■	•									43.7
				76.91	• 70.4\	12,JO	•		• 49.3	J.B.,	• 41.6	
49	61.0		54.5	63	65.43	• 58.9	51.88	•	• 50.0	50.2		
				65					■			
		57.,	66	58.67	• 52.2	21..YT	•		• 58.2	59.3	• 52.B	
		!	68	65.81	• 59.3	54.32			• 50.2	50.6	• 1.4.1	
									• 60.3	49.9	• 43.4	
				67	55.34	• 1.8.9	52.74	•				
50	63.6								J.S.8	52.8	• 46.J	
									62.2			
51	21.1	• 14.6	69	50.59	1.4.,	62.26	•		•			
				43.32	• 36.8	66.97			• 62.4	51.5	• 45.0	
				70					•		• 41.5	
									■			
									■			
				71	10.87	•						
									46.0		• 1.2.7	
									■	49.2	■	
						4.4	66.06					



54	b4.5.	58.0	72	44.93	JB.4	60.04	31.6	46.0	39.9
			7J	33.87	27.0	64.17	46.0	43.3	
54	60.1		74	66.28	59.8	60.00	43.1	55.4	36.7
		53.6	76	64.51	58.0	J.8.J.8			62.a
51	67.4	60.1 53.1	75 78	60.36 66.08	53.9 59.6	59.17 60.19	46.8	69.32	38.0 J.8.9
		54.2							
57	58.4 59.6	51.9	77	70.J.8	64.0	51.60	39.1 43.1	41.5 69.96	35.0 63.5
	60.7		79	63.61	57.0	61.74	46.1	60.56	54.1
	66.J	59.8	80	66.98	60.5 51.5	53.23 59.00	51.0	40.31	33.8
								67.84	
58	62.2 60.7	55.7 54.2	81 82	57.96 62.04			1.4.J 47.3	62.67	61.4 56.2
					55.6	67.61			
61	51.3	1.4.8	8J	51.02		51.28	2.a	58.69	52.2
62	55.0	J.8.5	84	53.11	47.2	46.16	.W.0	54.19	47.7
63	50.2	43.7	J.B.78		1.2.J	53.54	1.2.0	67.08	60.9
		41.6				49.41		33.32	
								73.96	
64	48.0		86	48.21	41.7 55.2		JS.7 54.6		67.5 26.8
							1.4.8	27.16	
65	59.3	52.8	87	61.68		53.64			
66	50.6	1.4.0	88	1.4.99	08.5	57.49			20.7
67	52.8	46.J	89	49.41	1.2.9	49.02	43.2	33.60	27.1
					43.8		45.7	74.43	
68	49.9	43.4	90	50.32		51.95			67.9
69	51.5	45.0	91	4.8.17	41.7	49.66	61.4	65.65	59.0
70	J.8.0	41.5	92	50.41	43.9	J.8.1.4	42.1	66.56	60.1
71	49.2	1.2.7	9)	58.49		52.0	60.7	53.19	46.7
72	46.0	39.9	94	50.76	1.4.3	52.03	51.5	21.50	15.0
73	43.2	36.7	95	46.4	40.0	53.31			45.9
							52.39		
		J.8.9	98 99	53.06 50.12	46.6 44.2	37.91 57.03	7.9	70.87	64.4



	1-----'j( :!w'h-i- nd1+kJ; 197<f	-----+-----fI f'KG/lcQ11	a,nl&/219tJ.	S'm'pf
	1 SecYCFtly'1 Still,-/ Jutl/f)or af Stale	Clerk I Courf,	A fff'rH:t_ efnfr,.1 j!_poi' ter' !!_ur/j.	Pu'1/J
- ID'!	t....r<...g- 'A f- '8a' 'f'l- R''' 'A- --B f' f, M= gAJ, . Bau, ifo, f: AJ; ; 'fJd	f111.111(	AJi- &u..	In ir'
c.2..s2	3..s S&.8'tf	tg.114 -3.40	1.atl &/53	-3... 0...
</o.c	51.3FJ	t:./5'3	56.13	&1.1.d
J	c.ms.43	s1.k... t:2.1t.	" 59."	f,65
1	70.4J	l ...7.3	t9.S2.	" 1.2.
5	55..i? r	s1.S1 S/L.30	" 1fJ- S.J.72	" 1S.J.1...
l.	c.t...c.1	s1.93	..: "I	s11.1* 3
7	1/3..fS	J 9.77	Y2..2	39.2.1. 1/3.1/G
8	sll:f s	t- jJ.	51.14	" ( i.ii. sa.'lc
1	55. 2/	5/S3	53.22	" f'l.62.. 55. "
10	S'/.2'i	SO.f.	!	" ? . ? \$5.3-f
11	30:J3	j	27.3	" D 33.40
12	J7.4J	u	13.7	" D 6.3.5
13	V_L_#19	u	J/;.	" .D " .06
14	ID:81	tz	r	" D 11.19
15	5r.13	l f:1.1.J	1.	" sll:t.6 j
16	1.2.S2.	5d.tJ	1	" t..3.04. ! t
17	sq.. o	f s1.iJ	s3.06	" s11.01
15	i/.6.4	.B.2.	72.57	" f.2. f..6.4.
20	83_13	53.a	GJ.V	" c.o.s. tz.S.f
21	3.01.	V6.0	5.. JB	" 53.o s1.04
23	t:Z.10	61.1/	1/v.tff/	" c./ [J.-S.J
24	51'13	st..3	51.D1	" ss.1 S'l.14
25	(...LS	57.&	"	" S7.2. (. / .14. "
26	43_S/	" ? .d	./2.5	" 57.9 (..2.76
27	St. 1a	5,,	56.14	" 55.3 5J,315
28	so.6t.	55.2	56.N.3	" SS.O S/J.35
21	40:S'i	" 5" "	51.15	" 5C..f. l(J,t \
30	SS. 14	CI-	54.27	" isar. S/L.73
31	54' 70	S3.0	54.29	" 52.J Sf...Sj
32	51/ 10	" so.4	52.'17	" S.J.06 "
33	51/171	" S.J.1	51/S6	" 51.2. 55.t? "
34	'Z.'1J	Jf, 3	'J.J4-	" 3'1.1 12.61
35	(1/14	i:0.5	G.g.SC/	" (i.J.2. (2.'J'
37	58./1	u : SS.1.	sa.44 :	" 55.( 5J.YO "
35	'S..SS,	" ..i&1-9	./1.76	" {..J.4 'S.SO
37	If f'i,JO 1	1 Y5.2.	'17.0'!	" q3.7 1/7.2.d
J9	71..2.	" : 72.4	7s.z.1	" 7/..J 7536
70	t..ll.56	" : t:0.4	"3.IIC. !	" : (O.S t.J.If/ j.
ij/	(.5.17 1	70.0J	i.(J.5 /	" 4/..</ &Y..JJ
qz	JU, IS	V (5	<7.'12. i	" /7>'17 "
43	1/7_3q	" fJ.7	"..-2 i	" (<7.., "
43	5/SS	t'l:Z.J	!	" V.S..ll.. lJ
44	4. lli	37.S	f'o.5/ 1	" 3..5 V/..(.
45	62..<J/	j t'..8	52.51..	" S2.b/l i
46	62..<J/	j 59.0	(.7.& t	" 58.3 82./6 i
47	..f, (.	(./O	t.J.qq..	" (.0.5 &9-52. i
1	<3..<J1	60.3	i:2.9a	" S?.& 6.J."11
60	51./3/	" .SS.f;	SU,St	" SS.Z. f19.f1
61	23.30	19..	2.'3.01	" / J.. 23.f1
62	#1..f.S	53.0	5r.7	" 59.2 56.32
63	11..72.	11.0.0	6r.2.&3	" 59.2 62.'12
64	sc..l'	s.3	StJ.'fS	" st.t.o: "
65	5 J.J7	StJ.'fS	"	" 152.'f S
66	t:3.37	5/7	tz.23	" sa.J r.2.11
67	5r..0'1	sz.4	SS.'llf'	" s2.o s&.7'1.
68	G./J 1	" 57. 5	&3.'14	" 'O.O 'F1/
69	s s l/ 2.	" s1. 1	ss.22 :	" s1.!! s0aa
70	'f' " " "	5S'.3	5tJ.2.6	" 19,1.1} s&.2.4
71	5r.18	" ..	5r.18	" S'3.7f
72	5r.10	" ..	5r.10	" J f't./
73	1/3.D	" ..	1/3.D	" 1C.<
74	fJ.5,	" ..	fJ.5,	" 1/d.o
75	ss.S'S	" ..	ss.S'S	" 52.3 SS.Jo
76	1/0.76	" ..	1/0.76	" .38.2 1/7.7d
77	3.1.1	" ..	3.1.1	" 1/5.8 s2.07
78	11:..a1	" ..	11:..a1	" J 2,t
79	q7.1	" ..	q7.1	" 1/2.2.J
80	1/0.53 :	" ..	1/0.53 :	" 3.7.1 1/0.2.1/
81	58.18	" ..	58.18	" J f't./
82	1/3.D	" ..	1/3.D	" 1C.<
83	fJ.5,	" ..	fJ.5,	" 1/d.o
84	ss.S'S	" ..	ss.S'S	" 52.3 SS.Jo
85	1/0.76	" ..	1/0.76	" .38.2 1/7.7d
86	3.1.1	" ..	3.1.1	" 1/5.8 s2.07
87	11:..a1	" ..	11:..a1	" J 2,t
88	q7.1	" ..	q7.1	" 1/2.2.J
89	1/0.53 :	" ..	1/0.53 :	" 3.7.1 1/0.2.1/
90	58.18	" ..	58.18	" J f't./
91	1/3.D	" ..	1/3.D	" 1C.<
92	fJ.5,	" ..	fJ.5,	" 1/d.o
93	ss.S'S	" ..	ss.S'S	" 52.3 SS.Jo
94	1/0.76	" ..	1/0.76	" .38.2 1/7.7d
95	3.1.1	" ..	3.1.1	" 1/5.8 s2.07
96	11:..a1	" ..	11:..a1	" J 2,t
97	q7.1	" ..	q7.1	" 1/2.2.J
98	1/0.53 :	" ..	1/0.53 :	" 3.7.1 1/0.2.1/
99	58.18	" ..	58.18	" J f't./
100	1/3.D	" ..	1/3.D	" 1C.<
101	fJ.5,	" ..	fJ.5,	" 1/d.o
102	ss.S'S	" ..	ss.S'S	" 52.3 SS.Jo
103	1/0.76	" ..	1/0.76	" .38.2 1/7.7d
104	3.1.1	" ..	3.1.1	" 1/5.8 s2.07
105	11:..a1	" ..	11:..a1	" J 2,t
106	q7.1	" ..	q7.1	" 1/2.2.J
107	1/0.53 :	" ..	1/0.53 :	" 3.7.1 1/0.2.1/
108	58.18	" ..	58.18	" J f't./
109	1/3.D	" ..	1/3.D	" 1C.<
110	fJ.5,	" ..	fJ.5,	" 1/d.o
111	ss.S'S	" ..	ss.S'S	" 52.3 SS.Jo
112	1/0.76	" ..	1/0.76	" .38.2 1/7.7d
113	3.1.1	" ..	3.1.1	" 1/5.8 s2.07
114	11:..a1	" ..	11:..a1	" J 2,t
115	q7.1	" ..	q7.1	" 1/2.2.J
116	1/0.53 :	" ..	1/0.53 :	" 3.7.1 1/0.2.1/
117	58.18	" ..	58.18	" J f't./
118	1/3.D	" ..	1/3.D	" 1C.<
119	fJ.5,	" ..	fJ.5,	" 1/d.o
120	ss.S'S	" ..	ss.S'S	" 52.3 SS.Jo
121	1/0.76	" ..	1/0.76	" .38.2 1/7.7d
122	3.1.1	" ..	3.1.1	" 1/5.8 s2.07
123	11:..a1	" ..	11:..a1	" J 2,t
124	q7.1	" ..	q7.1	" 1/2.2.J
125	1/0.53 :	" ..	1/0.53 :	" 3.7.1 1/0.2.1/

/ 7/4

3S.07'	.32.2	35.81	32.4	JS',71 i "	32.2	1/7.StJ	11	'12.If	.1/b.JJ	'1.2./	1/2, 7		
1/ J,'16 .	1/1	J7.6	ij/, 72	38,3	1/11 9'L ;	36,3	1/8,72	'1	'1,3	1/8,71	f 1 Jf. J/.	39, ?	
30.p3 ,	#	3 5'.t.	Ja.4"	35.(	31.S7	3t 9	1/3.z.J	36./	1/3.z.S	/	1 J7.t.	39, ?	
1/2.715	v	3'1.1	'2.ss	JJ,6	1/2.57	'J'1.6	'1',.3	"	J?.S	fS&'2.	1 i 7. t	0	
(;2.1S		sa.a	r.o./s	"	-s1.1	:rt.s1	3.b	ss.ot	11	B-1/-	J i s-2.1	0	
7,;	1/ J,i.O	1/s.1	'8.JD	fl./8	1/S."lt.	**	JZ1/-	qs,10	'	'10-8	'9. r;1	J i '3.S	S2,(
1/1._	1/1.7!J--'	'q='+	. . . .8	l . . . . ; .	.0U_+q. a_.	1'-c_.	c-'U-1-.	'7- - -	-12"S_	Y!:"5 l_.	2_S.s	J_)	q_ q
	1<.p6.=	64	Repb. . . ,	4	epb. i;c		CFIL . . ; j:l		epb.;=	1	R " ;3	0	0
	Dit>JQ. . .	3(.,'	O . . . . ,	3i;./	. . 2	o.uuo =	:iif v		Dmo, r;}	1	d . . 37	0	0

56.46  
42.2d

Appendix F BACKSTROM/ROBINS/ELLER ANALYSIS: ALTERNATIVE INDIANA SENATE

	1972 Republican		1982 Republican		1985 Minimum Requirements		1990 Compactness Threshold		1990 Balanced Budget		1990 Fully Nested		1992 Townsend	
	SPI %	Adj.	SPI %	Adj.	SPI %	Adj.	SPI %	Adj.	SPI %	Adj.	SPI %	Adj.	SPI %	Adj.
1	31.13	-4.49	31.44	-4.49	31.61	-4.49	32.74	-4.49	32.74	-4.49	32.74	-4.49	32.60	-6.49
2	51.62		52.77		60.96		59.72		59.72		59.72		61.19	
3	4.16		13.90		23.74		15.51		22.11		22.11		8.87	
4	32.20		43.60		31.37		37.14		30.65		32.02		46.66	
5	62.30		55.89		63.87		62.70		54.21		63.66		68.23	
6	64.64		58.15		63.49		63.67		57.10		63.61		63.62	
7	61.99		55.50		61.64		56.35		49.86		54.69		60.82	
8	56.42		49.93		56.35		50.18		44.60		48.61		54.33	
9	56.79		50.30		60.96		33.96		36.95		43.44		64.80	
10	42.80		36.31		60.73		56.50		50.09		64.37		54.67	
11	56.86		59.22		65.76		60.60		54.11		60.60		42.17	
12	65.71		59.22		65.77		54.70		64.92		61.30		54.26	
13	65.44		58.95		64.61		60.23		53.74		60.23		63.92	
14	62.37		55.88		63.84		64.78		61.78		42.53		60.22	
15	63.10		56.61		62.96		49.20		49.50		53.36		66.52	
16	61.97		55.40		64.02		55.11		54.92		63.95		53.15	
17	68.76		54.27		60.53		60.17		53.66		64.66		65.16	
18	58.73		52.24		58.73		60.73		54.24		58.23		64.24	
19	56.52		50.03		53.88		57.10		53.91		64.72		59.14	
20	59.63		53.14		60.65		53.68		56.82		50.74		55.99	
21	60.17		53.60		60.16		53.32		53.30		75.15		66.65	
22	63.32		57.00		63.16		66.47		66.47		54.25		59.75	
23	66.25		59.76		62.95		53.90		53.90		60.27		60.76	
24	56.23		49.74		57.90		49.81		49.81		57.30		67.35	
25	53.14		46.65		53.04		50.87		50.87		56.56		50.63	
26	61.72		56.23		61.53		54.16		47.61		64.81		47.65	
27	62.80		56.39		63.05		48.70		43.20		43.20		55.30	
28	66.44		59.95		74.24		62.89		62.29		62.29		61.73	
29	60.23		55.99		63.89		54.73		52.90		61.70		57.86	
30	62.40		57.71		65.61		55.42		61.30		49.69		50.07	
31													67.35	
32													50.03	
33													47.65	
34													55.30	
35													61.73	
36													57.86	
37													23.29	
38													23.18	
39													46.34	
40													59.29	
41													62.53	
42													55.01	
43													67.40	
44													61.63	
45													60.46	
46													43.02	
47													46.65	
48													49.76	
49													54.18	
50													51.15	

Appeals, IS

INDIANA SENATE: 1982 REPUBLICAN PLAN

3A(1) STROM/ROBINS/ELLCR ANIYSIS USIN6 DIFFERENT STATEWIDE RACES TO DERIVE 3ASE PERCENTAGE

Dist.	Republican Candidates, 1978				Republican Candidates, 1980				Public Instr.								
	Rep.	Dem.	Ind.	Lib.	Rep.	Dem.	Ind.	Lib.									
1	1 f.22	-3.,8	15.5	?	3.40	1 p	20.10	-J.tl	1(.,s	31.,31	-s.1,	2".3	3t.J.1t	- t.05	21,?	25.5	
2	t(1,7e	"	1-1;	?	"	1-D	l/l.or,	"	{-P..?	St.4.3	"	51.3	t&..J/W	"	50.4	53.4	
3	10,01	"	1.1/	"	"	D	. )/, 13	"	7.5	J/J.9	"	8.3	1 3.'13	"	7.4	7.4	
4	Ji...or.	"	3.2.4	1	"	D	3'.SO	"	32.?	41.11/	"	J'o,g	41,13	"	35.1	:37.2	
5	5/..2%	"	52.7	1	57.4D	51/o	57.00	"	53.11-	5"1, et.	"	51.7	t/LJ'i	"	55.1)	57.0	
6	51,61	"	1 f -1	"	"	?	5J1,t.	"	51.J	t-3.1'3	"	50.1	G:J.3/	"	57,3	57.a	
7	59-t S	/	Sef..0	"	51/0?	"	s s. 7	(f.o.c9	"	s, S	c1.,1t,,	"	sc..3	t.1.58	"	55".S	55.2
8	5q,28	"	'19.?	"	52.2. /	"	!5Q;B}	51/0s	"	'19.f...'	'i 1/10	"	50ti.	5/ 71.	q,,,7	'-19.B	
9	,2.48	"	5tJ.8	"	"	58.0	7/77	"	55.2.	51/J.13	"	52.7	59,1.,3	"	53. C.	55.1	
10	:(3.2(...	"	39.?	"	"	39.6	73.30	"	39.7	38.18	"	33.0	3.8.fj9	"	32.1	3 1,7	
11	7 59.07	"	55.7	"	56.t)J/	"	5 Y."	56.66	"	SS. 3	58.&9	"	"	"	"	52. 'i	
12	1.7.25	"	(.3.87	"	6: ? .t.2	"	3.22	c,? .11	"	-3.50	G.S.'3 ;	"	s.?' .i.	"	"	59. ?6	
13	:(3.?	"	0.'3	"	t:l, B4	"	61.1//	?f.56	"	t 2.0	62.."/1	"	6f, 33	"	5B.3	58.3	
14	{.3.12	"	59.LI	"	• 3.79	"	60.4	' 23.96.	"	o. 3	&2..ol	"	(i:"3.09	"	S i.O'f	;;7,35'	
15	1.2. -	"	59.2	"	<3-0/	"	59.<	• 3.37	"	59.1J	i,0.z.g	"	• 2-19	"	£C..1	57,4	
16	/(. 1 r.3.87	"	0.2	"	C 3.71	"	(.0.3	: 6.42 ()	"	r-0.7	59.0?	"	0.??.	"	5/ .7	55.S	
17	55.8 S	"	52.2	"	56.9 2	"	§S. S	: o,l/&	"	S, 9	S1/z.2.	"	&.0.2t.	"	51/2..	53,7	
18	52.1?	"	'9.3	"	52.s1	"	'19.1	' S:/ l	"	J/7,1J	H, 33	"	5S.83	"	53	52.2	
19	"	"	"	"	"	"	"	"	"	"	"	"	"	"	7/9.8	"	
20	5/..H	"	5 3.3	"	5<-9?	"	5.3/	: 5C..88	"	53.3	>9. ?/	"	59.3<J	"	53.J	54,2	
21	1 5/5,0\$	"	S'''/	"	7.2.11	"	53.8	: 57.93	"	51/-5	58.71/	"	So.t 9	"	52,t	53. 'i	
22	"	"	6tJ.1	"	<2.99	"	59.<	6 2.1?	"	59,2,	,3, 87	"	t;z,"32	"	5t.3	56.5	
23	1 57.25	"	t,3,6	"	t b, '1t3	"	63.2	: 6? 59	"	51, p	55,9/3	"	?0.10	"	2?..1	,3, 3	
24	1 57.97	"	57.3	"	57.1S	"	50.8	: 57,75	"	"	"	"	S" 12.	"	50.0	51.1	
25	1 52.24	"	'16,?	"	52.'1/	"	1/9/)	: 51.39	"	1/7!!..	SZ. G.6	"	SS.A•	"	57.0	57.0	
26	1 r,1.2.	"	57,?	"	\$0,95	"	57.?	: <2.2a	"	s a, 7	•O.s1/-	"	t; ,70	"	55.7	55.1	
27	1 58.52	"	55.1	"	57,5	"	1/s	i 57.71	"	s, 3	c.1.63	"	57,5f	"	S. S	57.5	
28	1 73. f1	"	<9.4	"	"	"	"	"	"	"	"	"	74,t/1	"	?8."f	"	
29	1 (. 1.0\$	"	-10,4	"	"	"	"	"	"	"	"	"	S? .96	"	53.7	5/ . 'f	
30	1 1.3.92	"	0.2.	"	"	"	"	"	"	"	"	"	t;J, c;3	"	57. t	57,4	
31	1 r.o.52	"	S<.6	"	"	"	"	"	"	"	"	"	"	"	(.0.3	59.0	
32	1 29. .	"	2t.2.	"	"	"	"	"	"	"	"	"	"	"	27.3	2.;.9	
33	1 2 6.96	"	2 5.3	"	"	"	"	"	"	"	"	"	"	"	/ 8,7	!' .1	
34	1 5f, 1/7	"	56.2.	"	"	"	"	"	"	"	"	"	"	"	"	"	
35	1 59. Ot	"	55.7	"	"	"	"	"	"	"	"	"	"	"	"	59.8	
36	1 \$1. 3	"	50.9	"	"	"	"	"	"	"	"	"	"	"	"	5;0.1	
37	1 52.18	"	1/1J.5	"	"	"	"	"	"	"	"	"	"	"	"	"	
38	1 44,57	"	'0,j	"	"	"	"	"	"	"	"	"	"	"	"	"	
39	1 44,57	"	'0,j	"	"	"	"	"	"	"	"	"	"	"	"	"	
40	1 44,57	"	'0,j	"	"	"	"	"	"	"	"	"	"	"	"	"	
41	1 44,57	"	'0,j	"	"	"	"	"	"	"	"	"	"	"	"	"	
42	1 44,57	"	'0,j	"	"	"	"	"	"	"	"	"	"	"	"	"	
43	1 44,57	"	'0,j	"	"	"	"	"	"	"	"	"	"	"	"	"	
44	1 44,57	"	'0,j	"	"	"	"	"	"	"	"	"	"	"	"	"	
45	1 44,57	"	'0,j	"	"	"	"	"	"	"	"	"	"	"	"	"	
46	1 44,57	"	'0,j	"	"	"	"	"	"	"	"	"	"	"	"	"	
47	1 44,57	"	'0,j	"	"	"	"	"	"	"	"	"	"	"	"	"	
48	1 44,57	"	'0,j	"	"	"	"	"	"	"	"	"	"	"	"	"	
49	1 44,57	"	'0,j	"	"	"	"	"	"	"	"	"	"	"	"	"	
50	1 44,57	"	'0,j	"	"	"	"	"	"	"	"	"	"	"	"	"	

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# STATE OF NEW YORK

6166

1981-1982 Regular Sessions

## SENATE

1981

Introduced by Sens. FLYNN, ACKERMAN, BELLAN, BRUNO, HUNNE, CALIBER, GOODMAN, KEHOE, LEICHTER, MENDEZ, PERRY, WINKOW read twice and ordered printed, and when printed to be committed to the Committee on Government Operations.

AN ACT to amend the state law, in relation to guidelines for district apportionment.

The People of the State of New York, represented by the Senate and Assembly do enact as follows:

Section 1

- 1. The state law is amended by adding a new article read as follows:
- ARTICLE 6
- PIDISTRICT APPOINTMENT GUIDELINES
- Section 100. District apportionment.
- Section 100. District apportionment guidelines. In the establishment of assembly and senate districts based upon the federal census of 1980 and pursuant to the provisions of article 17 of the constitution of the state of New York and in the establishment of new congressional districts based upon the federal census of 1980, one of the provisions of section four of article 1 of the constitution of the United States, the legislature shall follow the rules herein enumerated:
- 1. Districts shall consist of contiguous territory; but land areas separated by waterways shall not be included in the same district unless said waters are traversed by highway bridges, tunnels regularly scheduled ferry services both termini of which are within the district, except that population permitting, islands not connected to the main land or to other islands by bridge or tunnel shall be included in the district nearest the land area with the same political subdivisions.

EXPLANATION-Matte' in itals {underscoeci) ls neWJ-matte'l' in br'11.0k•ta:i-

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1. 2. No city block shall be divided in the formation of districts.

2 3. Districts shall be equal in population except the deviation

3 result from the application of the provisions hereinafter set forth.  
4 but

4 for any assembly and senate districts no such deviation may exceed five per

5 cent of the average population of all the assembly or senate districts.

6 and for congressional districts no such deviation may exceed one percent

7 of the average population of all the congressional districts in the

8 state.

9 4. The number of counties whose territory is divided among more than

10 one district shall be as small as possible and within counties so div-

11 ided, the number of towns or cities divided among more than one dis-

12 trict shall be as small as possible.

13 5. If it shall be necessary, in order to comply with subdivision three

14 of this section, to divide the territory of any county, city or

15 town among more than one district, such county, city or town shall be

16 divided among as few districts as possible.

17 6. If it shall be necessary, in order to comply with subdivision

18 three of this section, to divide the territory of any county or count-

19 ies among more than one district, then, geographic location permitting,

20 more populous counties shall be so divided in preference to less

21 populous ones.

22 7. If, within any county or counties whose territory is divided a-

23 mong more than one district, it shall be necessary, in order to

24 comply with subdivision three of this section, to divide the territory

25 of any cities or towns among more than one district, then, geographic

26 location permitting, more populous cities and towns shall be so divided in

27 preference

28 to less populous ones.

29 8. In dividing a county, city or town among more than one district, as

30 populous a portion as possible of such county, city or town shall

31 be placed in a district

32 or districts wholly within such county, city or

33 town, and only as small a portion of the population of such county, city

34 or town shall be separated from the rest as is necessary to comply w-

35 ith

36 subdivision three of this section or with the provisions of the consti-

37 tion of the state of New York.

38 9. Within towns whose territory is divided among more than one dis-

39 trict, no village shall be divided among more than one district un-

40 less

41 such division is necessary, in order to comply with subdivision three of

42 this section or with the constitution of the state of New York.

43 10. In the establishment of districts within cities whose territory is

44 divided into wards or similar subdivisions whose boundaries have

45 remained substantially unaltered for at least fifteen years, consistent

46 with subdivision three of this section and with the constitution of the

47 state of New York, the number of wards or similar subdivisions whose

48 territory is divided among more than one district shall be as small

49 as possible.

50 11. Consistent with the provisions of this section and with the provisions

51 of the Constitution of the state of New York, the aggregate length

52 of all district boundaries shall be as short as possible.

48 ~~In the event of any apparent conflict among the following provisions :-~~  
49 ~~of this section, the provisions shall be applied in the order in which~~  
50 ~~they are set forth. So far as is feasible within these guidelines each~~  
51 ~~district shall conform with historic, geographic and identifiable com-~~  
52 ~~munities from which the state and its subdivisions have developed.~~  
53 In case of any irreconcilable inconsistency between the Provisions of  
54 this section and the provisions of any federal statute, rule or regula-  
55 tion relating to such districts, including but not limited to the voting

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3

1 Yights act of nineteen hundred sixty-five, as amended; the latter shall  
2 control and prevail.

3 The sections setting forth the boundaries of the new assembly and  
4 sen-ate districts and the sections setting forth the boundaries of the  
5 new  
6 congressional districts may not be challenged on the grounds of  
7 the failure to comply with subdivisions one through eleven of this  
8 section after more than ninety days shall have elapsed following their

9 § 2. This act shall take effect immediately.

TEXT OF PROPOSED AMENDMENT

(Words in capital letters would be added. Words struck through would be deleted. All other words below would remain as they presently appear in the Constitution.)

Be it resolved by the people of the State of Ohio.

MUNICIPAL CORPORATION RESUC.TING WHEN A MUNICIPAL CORPORATION JS DIVIDED

ARTICLE II

Section 2. Representatives shall be elected biennially by the electors of the respective house of representatives districts; their term of office shall commence on the first day of January next thereafter and continue two years. Senators shall be elected by the electors of the respective senate districts; their terms of office shall commence on the first day of January next after their election. All terms of senators which THAT commence on the first day of January; 1969 shall be four years, and all terms which THAT commence on the first day of January; 1971 shall be four years. Thereafter, except for the filling of vacancies for unexpired terms AND TO COMPLY WITH THE REQUIREMENTS OF ARTICLE XI OF THIS CONSTITUTION, senators shall be elected to and hold office for terms of four years. No person shall hold the office of state senator for a period longer than two successive terms of four years. No person shall hold the office of state representative for a period longer than four successive terms of two years. Terms shall be considered successive unless separated by a period of four or more years. On terms beginning on or after January 1, 1993; shall be considered in determining an individual's eligibility to hold office.

ARTICLE XI

Section 1. THE FIRST ODD-NUMBERED YEAR FOLLOWING ADOPTION OF THIS ARTICLE, AND THEREAFTER IN EACH YEAR ENDING IN ONE AND ONLY AT SUCH TIME, THIS STATE SHALL BE DIVIDED INTO AS MANY CONGRESSIONAL DISTRICTS AS THERE ARE SEATS IN THE UNITED STATES HOUSE OF REPRESENTATIVES APPORTIONED TO THIS STATE, NINETY-NINE HOUSE OF REPRESENTATIVES DISTRICTS, AND THIRTY-THREE SENATE DISTRICTS. THE RESULTING DISTRICTS SHALL APPLY AT THE ELECTIONS IN THE EVEN NUMBERED YEAR IMMEDIATELY FOLLOWING THE ODD NUMBERED YEAR IN WHICH THEY ARE CREATED.

Section 2. THE WHOLE POPULATION OF THE STATE, AS DETERMINED BY THE MOST RECENT FEDERAL CENSUS, SHALL BE DIVIDED BY THE NUMBER OF UNITED STATES REPRESENTATIVES APPORTIONED TO THIS STATE PURSUANT TO THAT CENSUS, AND THE QUOTIENT SHALL BE THE RATIO OF REPRESENTATION IN THE CONGRESS FOR THE NEXT TEN YEARS.

1. THE apportionment of this state for members of the general assembly shall be made in the following manner:

THE WHOLE POPULATION OF THIS STATE SHALL BE DIVIDED BY THE NUMBER "THIRTY-THREE," AND THE QUOTIENT SHALL BE THE RATIO OF REPRESENTATION FOR THE SENATE FOR THE NEXT TEN YEARS.

THE whole population of the state, as determined by the federal decennial census, shall be divided by the number "thirty-three," and the quotient shall be the ratio of representation for the house of representatives for the next ten years next succeeding such apportionment. Such other basis as the general assembly may determine shall be used for the next thirty-three and the quotient shall be the ratio of representation for the house of representatives for the next ten years next succeeding such apportionment.

Section 3. THE POPULATION OF EACH CONGRESSIONAL DISTRICT SHALL BE AS NEARLY EQUAL AS PRACTICABLE TO THE CONGRESSIONAL RATIO OF REPRESENTATION, AS PROVIDED IN SECTION 2 OF THIS ARTICLE, AND NO SUCH DISTRICT SHALL CONTAIN A POPULATION OF LESS THAN NINETY-NINE PER CENT OR MORE THAN ONE HUNDRED ONE PER CENT OF THAT RATIO.

THE population of each SENATE OR house of representatives district shall be substantially equal to the ratio of representation in FOR the SENATE OR THE house of representatives. RESPECTIVELY, as provided in SECTION 2 of this Article, and in no event shall any house of representatives SENATE district contain a population of less than ninety-six percent nor NINETY-SIX PER CENT OR more than one hundred five percent FOUR PER CENT of the ratio of representation in the house of representatives, except where reasonable effort is made to equalize the ratio of representation for the SENATE, AND IN NO EVENT SHALL ANY HOUSE OF REPRESENTATIVES DISTRICT CONTAIN A POPULATION OF LESS THAN NINETY-FIVE PER CENT OR MORE THAN ONE HUNDRED FIVE PER CENT OF THE RATIO OF REPRESENTATION FOR THE HOUSE OF REPRESENTATIVES.

EACH SENATE DISTRICT SHALL BE COMPOSED OF THREE CONTIGUOUS HOUSE OF REPRESENTATIVES DISTRICTS. SENATE DISTRICTS SHALL BE RANKED IN ORDER OF AREA, AND THAT DISTRICT LARGEST IN AREA SHALL BE NUMBERED "ONE," AND SO FORTH, UNTIL THE SMALLEST IN AREA IS NUMBERED "THIRTY-THREE."

TERMS OF SENATORS REPRESENTING ODD NUMBERED DISTRICTS SHALL COMMENCE ON JANUARY 1, OF THE SAME YEAR IN WHICH A FULL TERM FOR GOVERNOR COMMENCES. TERMS OF SENATORS REPRESENTING EVEN NUMBERED DISTRICTS SHALL COMMENCE ON JANUARY 1 OF THE SAME YEAR IN WHICH A FULL TERM FOR PRESIDENT OF THE UNITED STATES COMMENCES.

Section 5. Each house of representatives district shall be entitled to a single representative in each GENERAL ASSEMBLY. Every EACH senate district shall be entitled to a single senator in each GENERAL ASSEMBLY.

Section 6. District boundaries established pursuant to this Article shall not be changed until the ensuing federal decennial census and the ensuing apportionment or EXCEPT as provided in SECTION 12 of this Article, the boundaries of political subdivisions or city wards within a district shall be changed during that time. District boundaries shall be established in the manner provided in this Article on the basis of the most recent federal decennial census.

Section 6. (A) AS USED IN THIS ARTICLE:

"PERIMETER SEGMENT" MEANS A PORTION OF THE PERIMETER OF THIS STATE, OF A COUNTY, TOWNSHIP, MUNICIPAL CORPORATION, CENSUS TRACT, OR BLOCK NUMBERING AREA, OR OF A UNIT OF A TOWNSHIP, MUNICIPAL CORPORATION, CENSUS TRACT, OR BLOCK NUMBERING AREA AS ESTABLISHED IN DIVISION (C) OF THIS SECTION, THAT IS SHARED WITH THE PERIMETER OF ANOTHER STATE, OR OF ANOTHER COUNTY, TOWNSHIP, MUNICIPAL CORPORATION, CENSUS TRACT, OR BLOCK NUMBERING AREA, OR OF A UNIT OF A TOWNSHIP, MUNICIPAL CORPORATION, CENSUS TRACT, OR BLOCK NUMBERING AREA.

"CENSUS TRACT" AND "BLOCK NUMBERING AREA" MEAN THE GEOGRAPHICAL UNITS DESIGNATED BY THESE TERMS IN THE MOST RECENT FEDERAL CENSUS AND INCLUDE ANY COMPARABLE GEOGRAPHICAL UNITS CALLED BY OTHER NAMES IN A FEDERAL CENSUS AFTER THE EFFECTIVE DATE OF THIS SECTION.

"COUNTY FRAGMENT" MEANS ONE OF THE PORTIONS OF A COUNTY RESULTING WHEN A COUNTY IS DIVIDED BETWEEN TWO OR MORE SENATE DISTRICTS, IN THE CASE OF A SENATE PLAN, OR BETWEEN TWO TO MORE HOUSE OF REPRESENTATIVES DISTRICTS, IN THE CASE OF A HOUSE OF REPRESENTATIVES PLAN, OR BETWEEN TWO OR MORE CONGRESSIONAL DISTRICTS, IN THE CASE OF A CONGRESSIONAL PLAN. IN EACH CASE, THE NUMBER OF FRAGMENTS SHALL EQUAL THE NUMBER OF DIFFERENT DISTRICTS WITH TERRITORY WITHIN THE COUNTY.

"MUNICIPAL FRAGMENT" MEANS ONE OF THE PORTIONS OF A

BETWEEN TWO OR MORE SENATE DISTRICTS, IN THE CASE OF A SENATE PLAN, OR BETWEEN TWO OR MORE HOUSE OF REPRESENTATIVES DISTRICTS, IN THE CASE OF A HOUSE OF REPRESENTATIVES PLAN, OR BETWEEN TWO OR MORE CONGRESSIONAL DISTRICTS, IN THE CASE OF A CONGRESSIONAL PLAN. IN EACH CASE, THE NUMBER OF FRAGMENTS SHALL EQUAL THE NUMBER OF DIFFERENT DISTRICTS WITH TERRITORY WITHIN THE MUNICIPAL CORPORATION.

ii) "CONTIGUOUS TOWNSHIP FRAGMENT" MEANS ONE OF THE PORTIONS OF A CONTIGUOUS TOWNSHIP RESULTING WHEN A CONTIGUOUS TOWNSHIP IS DIVIDED BETWEEN TWO OR MORE SENATE DISTRICTS, IN THE CASE OF A SENATE PLAN, OR BETWEEN TWO OR MORE HOUSE OF REPRESENTATIVES DISTRICTS, IN THE CASE OF A HOUSE OF REPRESENTATIVES PLAN, OR BETWEEN TWO OR MORE CONGRESSIONAL DISTRICTS, IN THE CASE OF A CONGRESSIONAL PLAN. IN EACH CASE, THE NUMBER OF FRAGMENTS SHALL EQUAL THE NUMBER OF DIFFERENT DISTRICTS WITH TERRITORY WITHIN THE CONTIGUOUS TOWNSHIP.

iii) "COMPACTNESS RATIO" MEANS THE RATIO DETERMINED BY DOING ALL OF THE FOLLOWING CALCULATIONS FOR EACH DISTRICT IN EACH PLAN SUBMITTED UNDER SECTION 7 OR 10 OF THIS ARTICLE:

- a) COMPUTING THE AREA OF EACH DISTRICT IN THE PLAN;
- b) COMPUTING THE PERIMETER OF EACH DISTRICT IN THE PLAN;
- c) COMPUTING THE COMPACTNESS RATIO OF EACH DISTRICT IN THE PLAN BY DIVIDING THE AREA OF EACH DISTRICT BY THE SQUARE OF ITS PERIMETER;

d) COMPUTING THE COMPACTNESS OF ANY DISTRICT THAT INCLUDES THE OTTAWA COUNTY TOWNSHIP OF EORTAGE OR QANBURY, ANY OF THE JAKE \_ERIE ISLANDS, OR THE MEIGS COUNTY TOWNSHIP OF UTTON, JEBANON, OR

]. ETART, AS IF THIS AREA WERE NOT CONTAINED IN THAT DISTRICT. iii) ON THE FIRST DAY OF MAY OF THE FIRST ODD-NUMBERED YEAR FOLLOWING ADOPTION OF THIS ARTICLE, AND THEREAFTER IN EACH YEAR ENDING IN ONE, THE SECRETARY OF STATE SHALL, BY PUBLIC NOTICE, INVITE ANY PERSON TO SUBMIT A PLAN FOR DIVIDING THE ENTIRE STATE INTO CONGRESSIONAL DISTRICTS, SENATE DISTRICTS, OR BOTH. ANY PERSON INTENDING TO SUBMIT A PLAN SHALL FILE A NOTICE OF INTENT WITH THE SECRETARY OF STATE BY THE FIFTEENTH DAY OF MAY, ALONG WITH A FEE IN AN AMOUNT TO BE FIXED BY LAW NOT TO EXCEED ONE HUNDRED DOLLARS FOR EACH PLAN.

iv) ON THE FIRST DAY OF JUNE OF THE FIRST ODD-NUMBERED YEAR FOLLOWING ADOPTION OF THIS ARTICLE, AND THEREAFTER IN EACH YEAR ENDING IN ONE, THE SECRETARY OF STATE SHALL PUBLISH AND DISTRIBUTE TO ANY PERSON WHO FILED A NOTICE OF INTENT TO SUBMIT A PLAN, PAPER DOCUMENTS INDICATING THE POPULATION, LENGTH OF PERIMETER SEGMENTS, AND AREA OF EACH COUNTY, TOWNSHIP, MUNICIPAL CORPORATION, CENSUS TRACT, AND BLOCK NUMBERING AREA IN THE STATE WHOSE POPULATION DOES NOT EXCEED A THRESHOLD EQUAL TO ONE PER CENT OF THE RATIO OF REPRESENTATION FOR CONGRESS OR FIVE PER CENT OF THE RATIO OF REPRESENTATION FOR THE HOUSE OF REPRESENTATIVES, WHICHEVER IS SMALLER.

v) THE SECRETARY OF STATE SHALL DIVIDE ANY TOWNSHIP, CENSUS TRACT, OR BLOCK NUMBERING AREA WHOSE POPULATION EXCEEDS THE THRESHOLD DEFINED IN DIVISION (C) OF THIS SECTION, OR THAT CONTAINS PARTS OF MORE THAN ONE MUNICIPAL CORPORATION, INTO THE FEWEST POSSIBLE UNITS OF CONTIGUOUS TERRITORY CONTAINING POPULATIONS NOT EXCEEDING THAT THRESHOLD OR CONTAINING PARTS OF MORE THAN ONE MUNICIPAL CORPORATION. WHEN IT IS POSSIBLE TO PERFORM SUCH DIVISIONS IN MORE THAN ONE WAY, THE SECRETARY OF STATE SHALL MAKE THE DIVISION RESULTING IN THE MOST COMPACT UNITS, DETERMINED ACCORDING TO THE STANDARDS SET FORTH IN DIVISIONS iii) AND iv) OF SECTION 9 OF THIS ARTICLE. THE SECRETARY OF STATE SHALL DISTRIBUTE TO ANY PERSON WHO HAS FILED A NOTICE OF INTENT TO SUBMIT A PLAN, INFORMATION INDICATING THE POPULATION, LENGTH OF PERIMETER SEGMENTS, AND AREA FOR EACH SUCH UNIT.

vi) INFORMATION PRODUCED BY THE SECRETARY OF STATE UNDER DIVISION v) OR vi) OF THIS SECTION, INCLUDING CENSUS DATA AND MEASUREMENTS MADE USING ESTABLISHED CARTOGRAPHIC TECHNIQUES, SHALL BE PRESUMED TO BE ACCURATE.

Section 6. EACH PLAN SUBMITTED PURSUANT TO AN INVITATION ISSUED UNDER SECTION 6 OF THIS ARTICLE SHALL COVER THE ENTIRE STATE AND SHALL BE SUBMITTED IN THE MANNER PRESCRIBED BY THE SECRETARY OF STATE. THE SECRETARY OF STATE SHALL REQUIRE THAT EACH PLAN INCLUDE A SUMMARY SHEET LISTING THE POPULATION AND COMPACTNESS RATIO OF EACH DISTRICT IN EACH PLAN, THE IDENTITY OF EACH COUNTY DIVIDED BY THE PLAN, THE NUMBER OF COUNTY FRAGMENTS RESULTING FROM THE PLAN, THE IDENTITY OF EACH MUNICIPAL CORPORATION DIVIDED BY THE PLAN, THE NUMBER OF MUNICIPAL FRAGMENTS RESULTING FROM THE PLAN, THE IDENTITY OF EACH CONTIGUOUS TOWNSHIP DIVIDED BY THE PLAN, AND THE NUMBER OF CONTIGUOUS TOWNSHIP FRAGMENTS RESULTING FROM THE PLAN. THE SUMMARY SHEET SHALL INCLUDE A STATEMENT, SIGNED BY THE PERSON SUBMITTING THE PLAN, ATTESTING THAT THE CRITERIA IN SECTION 8 OF THIS ARTICLE HAVE BEEN MET. ALL PLANS SHALL BE FILED WITH THE SECRETARY OF STATE NOT LATER THAN THE FIRST DAY OF JULY OF THE FIRST ODD-NUMBERED YEAR FOLLOWING ADOPTION OF THIS ARTICLE, AND THEREAFTER IN EACH YEAR ENDING IN ONE, AND SUBSEQUENT TO THAT DATE SHALL BE AVAILABLE FOR PUBLIC EXAMINATION.

Section 8. THE SECRETARY OF STATE SHALL EXAMINE THE SUMMARY SHEET OF EACH PLAN SUBMITTED UNDER SECTION 7 OF THIS ARTICLE AND DETERMINE WHETHER THE PLAN DESCRIBED IN THE SUMMARY SHEET IS A QUALIFYING PLAN BECAUSE IT APPARENTLY CONFORMS TO THE FOLLOWING CRITERIA:

(A) THE PLAN MEETS THE APPROPRIATE DISTRICT POPULATION REQUIREMENTS OF SECTION 3 OF THIS ARTICLE.

(B) EACH TOWNSHIP, MUNICIPAL CORPORATION, CENSUS TRACT, OR BLOCK NUMBERING AREA, OR UNIT OF A TOWNSHIP, MUNICIPAL CORPORATION, CENSUS TRACT, OR BLOCK NUMBERING AREA, ABOUT WHICH THE SECRETARY OF STATE PROVIDES INFORMATION UNDER DIVISION i) OR ii) SECTION 6 OF THIS ARTICLE, RETAINS ITS INTEGRITY AND IS NOT DIVIDED BETWEEN TWO OR MORE DISTRICTS.

(C) EACH DISTRICT CREATED BY THE PLAN IS COMPOSED OF CONTIGUOUS TERRITORY AND IS BOUNDED BY A SINGLE, NONINTERSECTING, CONTINUOUS LINE.

(D) NO CONGRESSIONAL OR SENATE DISTRICT CREATED BY THE PLAN HAS A COMPACTNESS RATIO OF LESS THAN THIRTY

THOUSANDTHS OR, IN THE CASE OF DISTRICTS WHOLLY OR PARTIALLY INCLUDED IN COUNTIES HAVING AT LEAST ONE CONGRESSIONAL RATIO OF REPRESENTATION, COMPACTNESS RATIO OF LESS THAN TWENTY-FOUR THOUSANDTHS.

(E) THE PLAN MEETS THE REQUIREMENTS OF THE VOTING RIGHTS ACT OF 1965, 79 STAT. 473, 42 U.S.C. § 1971 AND 1973 TO 1973bb-1, AS THEY EXISTED ON JANUARY 1, 2001.

Z.



LEGISLATIVE HISTORY OF OHIO ANTI-GERRYMANDER AMENDMENT

General Assembly	Date Introduced	Designation	Sponsors (under 11 neo1; 1.,,0-sponsors Democrats;	Disposition
112th	Sept. 15, 1978	H.J.R. 90	Dale Locker, Virginia Aveni, Gene Branstool, Sherrod Brown, Ronald James, Mike Stinziano, Dennis Woitanowski	Claire Ball Never referred to a standing committee
113th	Feb. 15, 1977	H.J.R. 15	Dale Locker, Paul Leonard, Robert Boggs, Gene Branstool, Sherrod Brown, John Segala, Ed Hughes, Ronald James, Dennis Wojtanowski	Claire Ball, John Galbraith Never referred to a standing committee
	May 17, 1979	S.J.R. 12		Sam Sgec Died in reference committee
114th	Jan. 21, 1981	H.J.R. 8	Dale Locker, Robert Boggs	Claire Ball Never referred to a standing committee
	Jan. 30, 1981	S.J.R. 5		Sam Sgeck, Paul Malia Three hearings by Senate Committee on Elections but no committee vote
115th	May 24, 1984	H.J.R. 35		Joan Lawrence, Ron Amstutz, Louis Blessing, Robert Brown, Jim Suchy, Joan Davidson, John Galbraith, Thomas Pottenger, Ben Rose, Marie Tansey Never referred to a standing committee
	May 24, 1984	H.J.R. 36		John Galbraith, Louis Blessing, Jim Suchy, William Donham, Joan Lawrence, Thomas Pottenger Never referred to a standing committee
116th	Nov. 12, 1985	H.J.R. 33		Joan Lawrence, Ron Amstutz, Louis Blessing, Jim Suchy, Joan Davidson, John Galbraith, Thomas Pottenger, Ben Rose, Marie Tansey Never referred to a standing committee
	Nov. 12, 1985	S.J.R. 30	Gene Branstool	Robert Ney, Robert Cupp, Charles Horn, Donald Luken. H. Cooper Snyder Following hearings and markup, was recommended for passage, 5-4, by Cmte. on State Govt. on May 23, 1986; but never reached floor of Senate
117th	Feb. 17, 1987	H.J.R. 7		Joan Lawrence, Ron Amstutz, Gene Byers, Joan Davidson, Tom Johnson, E.J. Thomas, Dale VanVyven, Lynn Wachtmann Never referred to a standing committee
118th	March 30, 1989	H.J.R. 7		Joan Lawrence, Ron Amstutz, William Batchelder, Louis Blessing, Gene Byers, Joan Davidson, David Johnson, Tom Johnson, Thomas Pottenger, E.J. Thomas, Dale Van Vyven, Lynn Wachtmann Never referred to a standing committee

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For their fortitude and loyalty in introducing the Anti-Gerrymander Amendment into the Ohio House of Representatives, thanks to Dale Locker, Democrat from Shelby County; Joan Lawrence, Republican from Delaware County; and Vernon Sykes, Democrat from Akron.

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