

Reformers, politicians, and the courts: a preliminary look at US redistricting in the 1980s

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ABSTRACT. This paper reviews a variety of criteria which have been proposed for legislative and congressional redistricting in the US and discusses the political and legal factors which have shaped 1980s redistricting. Particular attention is paid to the conflicts of interest between incumbents (seeking re-election), party organizations (seeking aggregate partisan advantage), minority interests (seeking proportional minority representation or at least enhanced minority influence), liberal reformers (seeking to take the 'politics' out of the redistricting process), and courts (seeking largely to implement 'one person, one vote' guidelines by minimizing deviation from population equality across districts but also concerned with avoiding dilutions of minority voting strength). It calls attention to three phenomena which have made redistricting in the 1980s different from that of earlier decades: (1) the striking role of the Justice Department in using the pre-clearance provision of the Voting Rights Act to assure greater minority voting strength and to eliminate discriminatory use of multi-member districting schemes; (2) the increased political and legal sophistication of minority groups; and (3) the role of the computer in making available a plethora of districting plans, all of which satisfy court equipopulation guidelines but which differ dramatically from each other in their substantive implications for the representation of political, racial, linguistic, and socio-economic groupings, and in their implications for the likely political fate of incumbent politicians and their potential challengers.

Introduction

Legislative and congressional redistricting in the US is a very complex game with a multiplicity of actors and a multiplicity of decision forks. Moreover, much of interest occurs in the form of bargaining behind the scenes. Among the key actors are incumbents, state political party leaders of the two parties, the Civil Rights Division of the US Justice Department, organizations representing minority groups, and federal and (to a lesser extent) state courts. Also, thanks largely to 'good government' reformers such as the League of Women Voters, in a dozen or so states there exist redistricting commissions, ostensibly aloof from the rough and tumble of partisan and candidate machinations, whose task it is to fashion

legislative and/or congressional districting plans for their state (in some cases only after the state legislature has shown itself unable to act).

The sets of actors identified above differ in their power to affect outcomes, with some actors (e.g. courts) coming into prominence only if certain other actors have failed to resolve their differences, and the relative power of the various actors varies from state to state. The multiplicity of actors and motives makes redistricting far more complex than the zero-sum game of partisan advantage it is sometimes portrayed as. Since this paper is intended as a brief preliminary survey, for ease of exposition we shall feel free to simplify the technical complexities of redistricting procedures (which often vary significantly across states) and to offer generalizations about the motivations of the various actors in the reapportionment game which leave out certain subtleties and gloss over the sizable idiosyncratic differences that actually exist among the actors we have lumped together in a common class.

What is a gerrymander?

It is sometimes claimed that, for single-member elections involving two-party contests, 'a chance pattern will, over the long haul, operate in such a way as to make the percentage of the population and the percentage of representation more or less equal' (Wells, 1979: 529), and this claim has been used by some good government spokespersons as an argument for 'blind' districting. However, except under very special circumstances, unlikely ever to be achieved in practice, random districting will not yield proportionality between a group's vote percentage and the percentage of seats it wins (Gudgin and Taylor, 1979; Grofman, 1982b). Thus, districting done without regard to its political consequences is extremely unlikely to yield proportionality of group representation. Such blind districting is, moreover, somewhat counterintuitively also unlikely to be free from partisan (or other) bias.

To show this we must first indicate precisely what we mean by (partisan) bias. Our definition of bias follows that of Niemi and Deegan (1978). If in a two-party competition for legislative or committee seats the seat share S earned by party I for a given vote share V (say 50 per cent) is the same as the seat share earned by party II for that identical vote share, then the election outcomes shall be said to be *unbiased* for that value of V . If an election system is unbiased for all values of V , we shall refer to it as *completely unbiased*. We propose to measure bias as follows: Let $S_I(V)$ be the seat share for party I corresponding to a vote share of V and similarly define $S_{II}(V)$ for party II. We shall define the *amount of bias* as equal to

$$\int_{0.5}^V S_I(V) - S_{II}(V).$$

This technique for measuring bias, we have recently learned, was apparently first proposed by Soper and Ryden (1958). It is also a natural generalization of the measure of bias offered in Tufte (1973) (see Grofman, 1981b, for further details).

If the distribution of party vote strength across constituencies is not symmetrically distributed, or, more generally, if the mean and the median of the distribution do not coincide, then one party can be expected to be more successful than the other in translating its vote strength into seat strength (see Gudgin and Taylor, 1979); i.e. there will be a partisan bias as we have defined that term. If the two parties are of roughly equal strength, then the more concentrated group is at a disadvantage; it

will win fewer constituencies but garner larger margins in the constituencies that it does win than will be true for the opposing party. On the other hand, if the two parties are disproportionate in size, then it may be advantageous for the smaller one to have its voting strength concentrated, since that way it will at least probably pick up some seats in the geographic area or areas of its greatest strength (see Gudgin and Taylor, 1979; Wildgen and Engstrom, 1980; Grofman, 1982b; for more detailed discussion and some caveats to these generalizations).

Note that the bias we are referring to above is not 'intentional'; it occurs because of the pre-existing *spatial* features of the distribution of political party voting strength. The magnitude of the bias will be also affected by the size of the constituency units relative to the size of the 'clusters' of party/group voting strength (see Gudgin and Taylor, 1979, for further details). This bias, which we may somewhat misleadingly refer to as 'natural bias', since it is a product of features of socio-economic relationships which probably did not arise out of conscious intent to affect group/party representation, may be contrasted with bias generated by decisions as to where to locate jurisdictional lines. In most (but still far from all) states in the US, this natural bias favors Republicans.

As Taylor (1982) points out, in two-party single-member district competitions (and more widely in a range of electoral systems), the translation of a group's voting strength into aggregate seat strength depends on (a) where its voters are and (b) where constituency lines are drawn. Following Soper and Rydon (1958) we may partition the causes of bias into (i) differences in the spatial dispersion of group voting strength across constituencies, (ii) differential registration and turnout, and (iii) differences in the sizes of the various constituencies. These three factors also affect the proportionality of the seats-votes relationship.

The first factor, differences in spatial dispersion, may in turn be partitioned into 'natural' and 'districting' elements. Not all of what we are referring to as the 'districting' elements affecting the allocation of groups' voting strength across constituencies, however, are what we would ordinarily think of as the product of intentional gerrymandering. Electoral rules, for example, such as those which constrain mapmakers to draw constituency lines to avoid crossing political subunit boundaries (e.g. counties and cities in the US or boroughs in the UK; see Johnston, 1982), will in general affect the expected translation of a group's voting strength into seats as compared with what might be expected if no such constraints existed. The magnitude of such effects can be estimated by techniques of Monte Carlo simulation (Johnston and Rossiter, 1981). In New York City redistricting, the Federal District Court took charge of legislative and congressional districting for the state because of legislative deadlock. The special master, whom it appointed, sought to use as his constituency building blocs in New York City, the city's community planning districts. This simplified the available redistricting options, and may well have had important consequences for enhanced representation of minority groups within the city, since the community planning districts tend to be relatively homogeneous in socio-economic and racial terms.

Having distinguished factors which may significantly affect the proportionality and bias in seats-votes relationships which we would wish to distinguish from intentional gerrymandering, it would now seem appropriate for us to turn to a definition of what we take gerrymandering to be. First, as is well known to political geographers and most (but alas not all political scientists), contrary to popular belief, one cannot recognize a gerrymander by its shape. Gerrymandering may take

place even though districts are perfectly regular in appearance. Following with some slight adaptation Grofman and Scarrow (1982), we shall assert that *what defines a gerrymander* is the fact that some group or groups (e.g. a given political party or a given racial/linguistic group) is discriminated against compared to one or more other groups in that a greater number of votes is needed for the former to achieve a given proportion of legislative seats than is true for the latter, and this bias is *not* one which can be attributed solely to the differing degree of geographic concentration between groups or to the effect of statutory provisions which define constituency building blocs or which impose other formal districting requirements such as compactness or contiguity. In our view, then, the appropriate way to test for gerrymandering (where the impact of a districting scheme or election rule can be projected, or judged in retrospect, with a high degree of certainty) is to look at a Monte Carlo simulation or some other technique for generating a random sample of all legally permissible redistricting plans, and then to use standard statistical tests to estimate whether the anticipated effects of the scheme under scrutiny could reasonably have been expected to have occurred, by chance alone. An earlier presentation of this view is Grofman (1982b); similar views have been set forth by Backstrom *et al.* (1978), Engstrom and Wildgen (1977), and Gudgin and Taylor (1979).

It is important to stress that the view we have taken of gerrymandering is that its effects are to be seen in the *aggregate* seats–votes relationship rather than on a district-by-district basis and that we prefer to define a gerrymander by its effects and not its intent. In the popular press, the term gerrymandering is commonly used to also refer to drawing of *particular* district lines so as to favor or disfavor particular candidates (or parties). Such a usage corresponds to a broader definition of gerrymandering as any drawing of district lines which intends (or sometimes, even more broadly, which has the *consequence* of) favoring/disfavoring particular individuals/groups. Since, in the US, courts have on various occasions made explicit that neither incumbents nor challengers possess any rights to have district lines drawn to their liking, and since we believe it makes most sense to assess the partisan/group representation fairness of a districting plan in terms of its overall *impact* on (expected) seats, we shall opt for the narrow rather than the broad definition of gerrymandering, but for a definition couched in terms of effects rather than intent.

Key actors in redistricting

In this section of the paper we shall consider the motivations and roles of seven key actors in the redistricting game: (1) incumbent legislators, (2) state party leaders, (3) the Civil Rights Division of the Justice Department, (4) minority group organizations, (5) ‘good government’ reformers concerned with taking the ‘politics’ out of the redistricting process, (6) bipartisan redistricting commissions, and (7) federal courts.

Conflicts between incumbent legislators and state party leaders: partisan vs. bipartisan gerrymandering

While it is still common to see the US legislative and congressional redistricting process characterized as one in which state politicians (key legislators and the

governor) completely control the redistricting process and customarily use that control to maximize the partisan advantage of the party in power by combining concentration and dispersal gerrymandering techniques, a more recent vein of research (e.g. Tufte, 1973; cf. Ferejohn, 1977) has stressed the increased importance of what is known as 'bipartisan gerrymandering', i.e. a concern for incumbency preservation, independent of party. A very preliminary look at redistricting in the 1980s suggests that, in those states characterized by one-party control of both houses of the legislature and of the governorship, the concern for *increasing* partisan advantage is greatest for congressional redistricting (see, for example, California and Indiana) and considerably less in legislative redistricting where 'sweetheart deals' across party lines within a given house of the legislature are not uncommon. In those states characterized by divided party control of the two houses of the legislature or between the legislature and the governor (e.g. Colorado, Delaware, Illinois, New York, Ohio), redistricting (especially congressional redistricting) has tended to be deadlocked, often forcing court-ordered redistricting, as happened in New York, and in Colorado and Illinois for congressional districting (a reapportionment commission was responsible for legislative redistricting in those two states, and in each the commission's plans passed court muster).

The prevalence of bipartisan gerrymandering is sometimes accounted for by the assumption that legislators, especially those of long tenure, prefer working with 'enemies' whom they've known a long time rather than with unknown 'friends' who might be brought in if present incumbents of the opposite party are displaced. This brings to mind the classic quote that two legislators, one of whom is a socialist and one of whom is not, have more in common than two socialists, one of whom is a legislator and one of whom is not. Far more important, however, in my view, than any 'clubbiness' of incumbent legislators cutting across party lines is the simple fact that to give an incumbent of the opposite party a seat which is less safe than it presently is will almost invariably require that the seat of an incumbent of the other party be made less safe. Since no incumbent, no matter what his electoral margin, ever feels that his district is safe *enough* (I exaggerate slightly, but *only* slightly), it logically follows that even when there is one-party control of a legislature, if its redistricting is left entirely to the legislative incumbents of the majority party the consequences will be a *form of districting which strongly resembles bipartisan gerrymandering*, since the process of trying to maximize the safety of the seats of the majority party incumbents will have as a likely by-product the safeguarding of most, if not all, of the seats of incumbents of the opposite party.

In a state under one-party control, if the state party leadership is in control of the redistricting process and has sufficient vision to look beyond the fate of present incumbents to consider aggregate partisan advantage over the course of the succeeding decade, then we might anticipate something closer to the classic partisan gerrymander where opposition votes are packed in such a way as to give them control over as few districts as possible and the remaining districts are made winnable by the majority party, but by low margins. This was close to what occurred in New York's Republican- (and Rockefeller-) controlled state legislative redistricting in the 1970s. The danger with such old-style partisan redistricting is that, in an age of increased voter volatility and split-ticket voting where the power of partisan identification as a predictor of voting choice is declining and where an increasing number of voters declare themselves independents, a party seeking to gerrymander for its own partisan advantage will cut margins too thin and will

discover (as did New York Republicans post-1974) that districts which were once safe no longer remained so. Indeed, as Scarrow (1981) has shown, for New York's legislative elections despite continued Republican control of the New York Senate, by the mid-1970s districts in both houses looked more to be the products of a Democratic gerrymander than a Republican one if we look at the relative ease with which each party translated its statewide voting strength into legislative seats.

Owen and Grofman (1981) have looked at the problem of optimal partisan gerrymandering in a world of electoral uncertainty and have shown that, whether the party's objective is to maximize its long-run expected seats or to maximize its expected long-run probability of controlling a majority of the seats, the resulting partisan redistricting will be bimodal, even though the optimum distribution will, in general, be somewhat different for the two different objective functions. None the less, in one-party-controlled states wherever there is a strong party organization and leadership independent of the legislative leadership, and where the districting process is under control of the party leadership (either directly via the legislature, or indirectly via a reapportionment commission the majority of whose members are majority party nominees—and who in most cases retain their allegiance to party dictate despite whatever may be on paper as to their independence), we would expect a less extremely bimodal distribution and a greater number of competitive districts than in situations where the districting is entirely in the hands of the party's *legislative* leadership.

As suggested above, the interest of a party's incumbents and that of the party as a whole may well diverge, with potential conflicts thus arising between a party's legislative or congressional incumbents and the state party organization. In Colorado, for example, the second-ranked congressional districting plan offered to the Federal District Court by the state Republican Party (as a fall-back if the Court rejected their most preferred plan) put a Republican and a Democrat incumbent together in one district. This was a district which the Republicans expected to win, but no incumbent relishes the thought of facing another incumbent, especially in a district which would have included both incumbents' major bases of strength. In Hawaii, the state Republican organization sued to block implementation of the legislative redistricting plan issued by the state's reapportionment commission. The commission's plans would have guaranteed a decade-long perpetuation of the minority status of the Republican Party statewide, while at the same time guaranteeing the re-election of the handful of current Republican incumbents. The commission's legislative plans made use of a mix of single- and multi-member districts which cleverly fostered Democratic gerrymandering efforts (Grofman, 1982a). The Republicans' state party urged the court to replace these plans with ones based on single-member districts—a position ultimately accepted by the Federal District Court. (The proposed commission plans, however, were rejected on grounds other than political gerrymandering. They involved gross discrepancies from the equipopulation standard and the impermissible use of an apportionment mechanism based on registered voters.)

Minority voting rights

Two of the key factors that make 1980s redistricting significantly different from redistricting in the 1960s and 1970s are: (1) the strengthened role of the US Justice Department in exercising pre-clearance of all redistricting plans affecting

jurisdictions covered by the Voting Rights Act (whose coverage now extends in whole or in part to 25 states and whose coverage was in 1975 extended to specified linguistic groups—e.g. Hispanics—as well as blacks); and (2) the greater voting strength of minorities (especially in the south and the southwest), which has allowed black and Hispanic groups to become key actors in the redistricting game in many states. The power of these actors has been enhanced by (a) the threat of denial of Justice Department pre-clearance when minority groups file objections to proposed plans, and (b) the considerable legal sophistication and skill in data analysis possessed by organizations representing minority interests, with the relatively recently formed Mexican–American Legal Defense and Educational Fund now playing a role similar to that long played by the NAACP Legal Defense and Educational Fund on which it was modeled.

In jurisdictions covered by the Voting Rights Act, the Justice Department Civil Rights Division has in effect held that, absent compelling reasons to the contrary, state or congressional redistricting plans must draw district lines so that they create a district for any area where minority group voting strength is sufficiently concentrated that it would be possible to create a constituency which would be minority dominated [see, for example, *United Jewish Organizations of Williamsburgh v. Carey*, 430 US 144 (1977)], even if this requires creating a heavy minority population concentration to compensate for lower registration and turnout of the eligible minority population and for a minority demographic base which includes a lower proportion of adult citizens. The Justice Department has also looked with extreme disfavor on the use of a mix of single- and multi-member districts for state legislatures, since those have often been used for purposes of racial vote dilution. The Justice Department has rejected such plans in a number of southern and southwestern states—in most cases leading the state to adopt a single-member districting scheme to avoid further Justice Department objections.

Despite the recent claims of some US senators to the contrary, the Voting Rights Act has never required proportional representation of minority groups, although proportional representation is something which minority group representatives may seek to argue for in presenting objections to redistricting proposals. As is well known (see, for example, Tuftes, 1973; Backstrom *et al.*, 1978; Gudgin and Taylor, 1979; Grofman, 1982b and earlier discussion), the nature of single-member districting is such that minority group representation is apt to be considerably less than proportional unless minority population is almost completely ghettoized. In general the Hispanic population is more widely disposed both within and across states than is the black population, and in the US as a whole Hispanic representation has been less proportional to Hispanic voting strength than black representation has been to black voting strength—albeit neither group obtains anything even remotely close to proportional representation of its members in the US Congress or in state legislatures, nor, of course, given the nature of single-member districting, should it be expected to (see Grofman, 1982b).

Taking the politics out of redistricting

A central question in redistricting in the US is the issue of who shall do it. ‘Good government’ organizations such as Common Cause and the League of Women Voters have often sought to take the politics out of the redistricting process by removing it from the hands of the state legislature and putting it in the hands of a

so-called 'non-partisan' or 'bipartisan' reapportionment commission as in Hawaii, Colorado, and Alaska (in the latter two states the commission controls legislative but not congressional districting). Regardless of who does the redistricting, but especially if it remains within the purview of the legislature, 'good government' reformers have also sought to put constraints around the redistricting process intended to prevent either partisan or bipartisan gerrymandering. Common Cause (1977), for example, proposed that members of the 'non-partisan' redistricting commissions whose creation they advocate be barred from access to any sort of political data. More generally, reformers have sought to impose formal criteria such as compactness, integrity of subunit boundaries, and tight equipopulation standards so as to dramatically delimit the options open to redistrictors. An amendment to the Colorado constitution adopted in 1974, proposed by the Colorado League of Women Voters, contains just such provisions as does California's recently adopted Proposition 6. Proposition 6 bears witness to the fact, noted in our discussion of 'districting bias' in the previous section, that provisions which are superficially neutral may be other than neutral in their probable effect (or, indeed, on the intent of at least some of their sponsors). Since California's Democrats are (or at least so I believe) more concentrated than its Republicans and thus the 'natural bias' in the state would favor the Republicans, Proposition 6 should have made it harder for the Democrats (who now control the state) to gerrymander to counter (or more than counter) the state's 'natural' pro-Republican bias. Certainly I doubt that concern for this potential partisan implication was completely absent from the mind of the Republican activist who drafted Proposition 6, since he is someone quite knowledgeable about the state's partisan demographics. However, awareness of possible partisan implications was, I suspect, near nil among most of the voters who supported the proposition as a 'good government' measure.

Of course, in practice it turned out that Proposition 6's provision provided little or no bar to sophisticated computer-aided gerrymandering by the Democrats. Given present technology, hundreds of different plans which will each satisfy the most rigid equipopulation guidelines can be generated at the flick of a switch. Even when compactness and territorial integrity of political subunits are specified in state constitutional provisions (as in California's Proposition 6), the language in which these provisions are stated has, as far as I am aware, always been sufficiently vague as to not really constrain those drawing the lines. Even Colorado, which has a constitutional requirement for its state legislature that the plans chosen be maximally compact—i.e. minimize the sum of the perimeters of the district boundaries—introduces this requirement only as one of a number of other criteria which plans must satisfy and with which the maximizing compactness criterion is potentially in conflict, thus continuing to leave scope for choice among plans.

It is my view that in most of the states where the reformers have succeeded in replacing legislatures with 'bipartisan' or so-called 'non-partisan' commissions the result has almost never been to successfully make the redistricting process an 'apolitical' one. Hawaii's reapportionment commission is a good case in point. Most of its Democratic-appointed members apparently acted in 1980s redistricting at the behest of the party leadership and merely went through the motions of public hearings, or at least so the minutes of the commission's meetings would suggest. While, in principle, court-ordered plans are apolitical, in practice politically affiliated judges may be able to rationalize their support for particular plans in terms

of 'neutral' criteria, while plans are actually being favored because of their likely partisan or incumbent-preserving consequences. The federal district court which dealt with Illinois districting may be a case in point, but of course it is impossible to ascertain 'true' motivations. Certainly, though, the further the court from the actual situations, the less likely are its judges to be influenced by 'local knowledge' and hidden political concerns. Also, in general, federal judges are less likely to be 'hidden' politicians than are those on state courts.

However, even *if* the process of redistricting could be made apolitical, *its consequences could not be*. Thus, I believe that the search for an 'apolitical' process to handle redistricting is fundamentally misguided. As the late Robert Dixon, the leading US expert on reapportionment, argued, and I would strongly agree, there are no 'neutral' choices among the great variety of available redistricting options. 'Whether the lines are drawn by a ninth-grade civics class, a board of PhDs, or a computer; every line on a map aligns partisans and interest blocs in a particular way' and election results will vary according to which lines are chosen (Dixon, 1981, posthumously published essay). It is the view of Grofman and Scarrow (1982)

. . . that we should avoid a districting process which can be characterized by either one of two extremes—the extreme of *partisan lust* or the extreme of legislative *maps drawn by blind-folded cartographers*. Rather, we should see the districting process as one in which we try to realize certain articulated values, recognizing that some of those values are mutually incompatible in whole or in part, and that tradeoffs are required.

(See also Niemi and Deegan, 1978; Grofman and Scarrow, 1982; Lijphart, 1982; for further details as to what trade-offs are feasible and an attempt to specify the relative importance of various proposed criteria.)

US court preoccupation with population equality

In *Baker v. Carr* 369 US 186 (1962), the US Supreme Court affirmed that judicial redress could be sought to compel a state to reapportion its legislature in accordance with new census data. Previously, the courts had said that reapportionment matters were 'political' and thus not subject to judicial action. In *Wesberry v. Sanders* 376 US 1 (1964), the court went much further and struck down as unconstitutional gross population disparities among Georgia's congressional districts. In *Wesberry* the court first enunciated the now famous 'one man, one vote' doctrine (376 US at 8) that '[O]ne man's vote . . . is to be worth . . . as much as another's'. In *Reynolds v. Sims* 377 US 533 (1964) and its companion cases, the court extended this doctrine to state legislatures, holding in different but equivalent language (377 US at 568) that 'An individual's right to vote for state legislators is unconstitutionally impaired when its weight is in a substantial fashion diluted when compared with votes of citizens living in other parts of the state'. In *Avery v. Midland County* 390 US 474 (1968), the court extended the 'one man, one vote' doctrine down to local governmental units with 'general responsibility'. In a series of cases in the 1960s and 1970s, the US Supreme Court gave precise numerical meaning to the 'one man, one vote' doctrine at each level of government. For the US Congress, the court has held for extremely strict (indeed, in my view, ludicrous) standards. In *Kirkpatrick v. Preisler* 394 US 526 (1969), the court rejected as unconstitutional a districting with an average deviation of as low as 0.745 per cent

from perfect equality and reiterated the *Reynolds* assertion of the need for 'honest and good faith efforts to construct districts . . . as nearly of equal population as is practicable' (my emphasis). For the state legislature, a range of deviation of 10 per cent seems to be acceptable, while local government units have been permitted even greater flexibility.

In the guidelines for lower courts laid down by Supreme Court opinions, it is clear that the overriding concern is to be for population equality. If a plan duly adopted by a legislature or districting commission meets the appropriate population equality guidelines, it is unlikely that it can be successfully challenged in federal court—even if it is a blatant political gerrymander—unless there is an issue of racial vote dilution involved. The unwillingness of federal courts to hear claims of partisan gerrymandering is demonstrated clearly in the case of California, since in that state the individual most responsible for drawing the congressional lines was taking public credit for his skill in gerrymandering (or at least, so I would interpret his statements). Courts will in general still defer to legislatures on redistricting issues as long as equipopulation standards are met and racial minorities protected. In the 1980s this license to gerrymander has by and large benefited Democrats, since Democrats control roughly twice as many state houses as do Republicans.

The 'one man, one vote' standard has moved from being a source of controversy—a constitutional amendment was seriously proposed in the mid-1960s (by the late Senator Everett Dirksen, R-Illinois) to eliminate judicial jurisdiction over reapportionment-related matters—to a position of impregnability, as American as 'mom and apple pie'. While there is nothing good to be said for the gross discrepancies in constituency size generated by legislative districts unreapportioned

TABLE 1. Overall population range in US redistricting plans completed as of April 1982

	<i>Congressional districts (%)</i>	<i>State House districts (%)</i>	<i>State Senate districts (%)</i>
Alabama	2.45	9.80	8.50
Alaska	NA	9.99	9.77
Arizona	0.08	8.40	8.40
Arkansas	0.78	9.15	9.15
California	0.08	3.60	4.60
Colorado	0.002	4.94	3.98
Connecticut	0.46	8.35	3.92
Delaware	NA	25.10	9.78
Florida		0. (a)	1.05(a)
Georgia	(b)	9.94	9.99
Hawaii	(c, f)	(c, f)	(c, f)
Idaho	0.04	5.35	5.35
Illinois	0.03	2.80	1.75
Indiana	2.96	4.45	4.04
Iowa	0.05	1.78	0.71
Kansas		9.90	6.50
Kentucky	1.39	13.47	7.52
Louisiana	0.42	9.70	8.40
Maine			
Maryland	0.35(d)	(e)	9.80

TABLE 1 (*contd*)

Massachusetts	1.09		
Michigan		(f)	(f)
Minnesota	0.007	3.93	3.41
Mississippi	(b)	4.90	4.61
Missouri	0.18	9.30	6.10
Montana			
Nebraska	0.23	Unicameral	9.70
Nevada	0.60	9.70	8.20
New Hampshire	0.24	13.74	
New Jersey	0.70	7.70	7.70
New Mexico	0.87	(c)	(c)
New York	(f)	(f)	(f)
North Carolina	1.76	9.66	9.46
North Dakota	NA	9.93	9.93
Ohio	0.68	9.67	8.88
Oklahoma	0.58	10.98	5.60
Oregon	0.15	5.34	3.73
Pennsylvania	0.24	2.82	1.93
Rhode Island	0.02	5.00	5.10
South Carolina	0.28	9.88	
South Dakota	NA	12.40	12.50
Tennessee	2.40	1.66	10.22
Texas	0.28	9.95	1.82
Utah	0.43	7.80	5.41
Vermont	NA	19.33	16.18
Virginia	1.81	5.11	10.65
Washington	1.30	5.70	5.40
West Virginia	0.50	9.94	8.96
Wisconsin	0.14		
Wyoming	NA	89.40	63.70

Note. Overall population range represents the sum of the largest deviations above and below the ideal district population. Whenever possible, percentages are rounded off to two decimal places.

(a) Subject to state Supreme Court review.

(b) Court suit pending based on US Department of Justice objection under Voting Rights Act.

(c) Plans declared unconstitutional and must be redrawn.

(d) Congressional plan awaiting governor's signature.

(e) State House plan has three types of districts with different overall ranges: 14 single-member at 15.7 per cent; 8 two-member at 11.3 per cent; 39 three-member at 9.8 per cent.

(f) Special master(s) appointed to draw plan.

Source: *Reapportionment Information Update*, National Conference of State Legislatures and Council of State Government, 7 May 1982.

for decades which *Baker v. Carr* brought to an end, discrepancies involving in some states orders of magnitude of difference between the smallest and largest districts, a population equalization requirement of equality to within 1 per cent (as the Supreme Court has in effect commanded for congressional redistricting) carries the desire for numerical equality to absurdity. First, accuracy to within 1 per cent is illusory, given the margins of error in the census data on which population estimates are based. Second, rounding error caused by the process of apportioning an integral number of congressmen to each state in accord with state population figures gives rise to discrepancies *across* states *far* greater than those permitted within any given state—a double standard which makes no sense to me. Stringent population equalization with 1–2 per cent of the population range norm and roughly 2 per cent of the maximum population range for Congress, and 5 per cent of the population range norm and 10 per cent of the population range maximum for state house and senate seats, is, however, what we have in the 1980s, as *Table 1* makes clear. The handful of states whose population range exceeds the 10 per cent figure included several whose legislature districting schemes have not yet passed final court muster.

Though federal courts have shown no stomach to tackle the question of political gerrymandering, it is true, however, that some federal district courts which were given responsibility for drawing plans because of the failure of the legislators to act have shown themselves willing to look at redistricting criteria besides the two obvious ones of maximizing population equality across districts and avoiding racial vote dilution. The Federal District Court in Colorado sought to preserve communities of interest in the congressional plan it drew (that its definition of communities of interest also had the consequence of leaving all incumbents undisturbed may or may not have been accidental). Some federal court plans have paid deference to existing boundaries, thus in effect fostering incumbency preservation as a relevant evaluation of criteria (individual legislators cannot, however, sue to get back ‘their’ districts). US district courts did this, for example, in Illinois and Minnesota, as Backstrom (1982) has pointed out.

Discussion

In the US, redistricting schemes are expected to serve the needs of partisan representation, racial and linguistic representation, representation of socio-economic interests, and representation of geographically defined communities. Any plan can be faulted for its failure to provide fair and effective representation, since no plan based on single-member districting can be expected to provide proportional representation of all the interests and attitudes of the broader polity. At least at present (May 1982) we can find no coherent federal judicial policy regarding redistricting criteria. Federal district courts in New Jersey, Hawaii, Colorado, Texas, Illinois, and New York have written opinions which are clearly at variance with one another about issues such as the relative importance of good faith efforts to minimize population deviations vs. *de minimis* standards, the relevance of preserving communities of interest intact, the desirability of preserving the ‘core’ of former districts, and the extent to which the avoidance of racial vote dilution requires affirmative gerrymandering to concentrate minority voters. These conflicts probably will not be fully resolved by subsequent Supreme Court cases heard on appeal from those and other jurisdictions, since the nature of appellate

review is such that any case is unlikely to pose questions in such a way as to force the Supreme Court to set forth a lexicographic delineation of criteria and/or a clear specification of techniques to be used to determine the appropriate trade-offs when criteria conflict.

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