

9 Advantages of conflictual redistricting

ANDREW GELMAN AND GARY KING¹

9.1 Introduction

This article describes the results of an analysis we did of state legislative elections in the United States, where each state is required to redraw the boundaries of its state legislative districts every ten years. In the United States, redistrictings are sometimes controlled by the Democrats, sometimes by Republicans, and sometimes by bipartisan committees, but never by neutral boundary commissions. Our goal was to study the consequences of redistricting; at the conclusion of this article, we discuss how our findings might be relevant to British elections.

9.2 Redistricting in the United States

From George Washington's first presidential veto to the present day, redistricting issues have been extremely controversial at every level of government. Most redistrictings are contested in state and federal court cases heard so late that there is insufficient time to follow the usual rules of discovery, evidence, or due process. In total, legislative redistricting is one of the most conflictual forms of regular politics in the United States short of violence.

While partisan and bipartisan redistricting plans can protect incumbents, they only protect some of those who survive the redistricting process, and many do not survive. Indeed, most incumbent politicians would give an awful lot to avoid redistricting altogether. After all, they are fighting over the fundamental rules of the game (fights that might well

¹ This Chapter is adapted from Gelman and King 1994. Figures, tables, and more details appear in the original article.

have been concluded at the founding of the republic) and for their own political survival. As a result, redistricting creates enormous levels of uncertainty, an extremely undesirable situation for any sitting politician. Indeed, because the costs of the political fight frequently outweigh the benefits of government service during redistricting, incumbents disproportionately choose to retire at this time.

Some scholars assume that those who draw the district lines are motivated by incumbent protection, whereas others believe the motivation is partisan advantage, but even the briefest discussion with participants in the process indicates that redistricters are concerned with both. Indeed, these are often competing goals: incumbents are often forced to give up votes, and hence electoral safety, in order to increase the number of legislative seats their party is likely to capture. The tension between the goals of individual and partisan advantage creates yet additional uncertainty about the outcome of a redistricting. Since political party gain is the most predictable common ground for otherwise competing incumbents, party advantage will often take precedence over individual incumbents' advantage in the ultimate political compromise represented by a redistricting plan.

Moreover, not only do redistricters attempt to maximize the competing goals of incumbency protection and partisan advantage, but incumbency protection is itself composed of competing goals: winning the general election and winning (or avoiding) the primary election. These goals conflict because adding too many of a legislator's political party members to his or her district, and hence piling up expected votes in the general election, might leave the incumbent vulnerable to a now larger opposition faction within his or her party primary.

In addition to the high levels of political conflict and uncertainty, and the conflicting goals of those who draw the district lines, the entire process includes several severe legal and political constraints. These include the requirements of equal population, contiguity, compactness, minority representation, maintaining communities of interest, not splitting local subdivisions, and especially protecting some incumbents, all within the context of complicated local geography. Other constraints are much less widely recognized, but no less important to incumbents, such as drawing districts to include or exclude the right political contributors or prospective challengers, or to try to ensure that each favoured incumbent's several district offices are not drawn out of their district.

In our paper we evaluate and resolve two important scholarly disagreements about the effects of legislative redistricting on two features of American democratic electoral systems: electoral responsiveness and partisan bias. Our empirical results have important counterintuitive policy implications since, in total, they imply that the existence of legislative redistricting, and even partisan-controlled gerrymandering, has beneficial effects on American electoral systems, increasing electoral responsiveness and reducing partisan bias.

Electoral responsiveness is the degree to which the partisan composition of the legislature responds to changes in voter preferences. Although closely related concepts exist—including the competitiveness of the electoral system, the probability that an incumbent will lose a re-election bid, the frequency of marginal seats, and the swing ratio—we find electoral responsiveness to be the most direct representation of the relevant theoretical concept of interest. For US state legislatures, we estimate electoral responsiveness to be typically between 1.0 and 3.0; that is, a 1% change in the share of the state-wide vote received by a political party results, on average, in a 1% to 3% change in the party's share of the seats in the legislature. Our empirical results indicate that redistricting (whether partisan or bipartisan) tends, on average, to increase electoral responsiveness. Redistricting does this by shaking up the political system and creating high levels of uncertainty for all participants. Moreover, when redistricters draw lines by jointly maximizing the advantages to their party and their incumbents, they create additional uncertainty, and also produce a direct increase in responsiveness by attempting to gain partisan advantage by creating more districts with smaller likely victory margins.

Partisan bias is the degree to which an electoral system unfairly favours one political party in the translation of state-wide (or nation-wide) votes into the partisan division of the legislature. For US state legislatures, we estimate electoral partisan bias to be typically between -5% and 5%; that is, given a 50% share of the state-wide vote, a party typically receives, on average, between 45% and 55% of the seats in the legislature. Politicians, journalists, some judges, and many political scientists believe that political parties in control of redistricting produce sizeable effects on the degree of partisan bias in the electoral system, resulting in important political consequences. But this bias tends to be smaller than what would be expected if there were no redistricting at all.

9.3 Data and discussion

Our data include every individual-level district election from every state legislative lower house in the United States that elected its members from solely single-member districts in any election from 1968 to 1988. These data span 30 state legislatures, 60 redistrictings (with one, two, or three per state), 267 state-wide elections, and 29,679 district-level elections, providing a much wider and more detailed base for comparative empirical analysis than has been previously brought to bear on these problems.

To avoid problems with existing measures, we conducted an in-depth study of each redistricting process in every state. We mailed a questionnaire to every state legislature, requesting the names and party affiliations of all individuals who participated in the redistricting process, the official and unofficial rules of the apportionment and districting process, copies of the final redistricting bills, and certain district maps. We then interviewed state election officials, state court justices, commission members, attorneys, academics, legislators, and political party officials, as well as looking at many state newspapers and scholarly literature. Throughout, the goal was to gauge the intention, rather than the perceived effect, or publicly stated goal, of a particular redistricting plan. From this information, we identified 60 redistrictings and classified each as Democratic-controlled, Republican-controlled, or bipartisan.

We found that, on average, redistricting makes the typical state's electoral system fairer than it would be if redistricting had not occurred. Thus, no matter how fair or biased the electoral system is to begin with, the typical redistricting plan, whether Democratic, Republican, or bipartisan-controlled, will produce a fairer electoral system. This result is consistent with evidence from individual cases in which the largest effects of redistricting change an existing huge bias in favour of one party to a small bias in favour of the other.

Partisan-controlled redistricting plans produce electoral systems that favour the party in control more than the opposition party. However, the range of possible outcomes that any redistricter is able to produce, given the complicated constraints and uncertainties, is usually in the neighbourhood near zero bias. The differences within this neighbourhood are still highly significant to the partisans, but the overall existence of

redistricting constrains bias to within this small and comparatively fair range.

Finally, when we analysed the total effect of redistricting on the division of seats in the legislature between the parties, we found that even though redistricting makes the electoral system substantially fairer overall than if there were no redistricting, the difference between Democratic and Republican control over the drawing of district maps is still one that politicians are rightfully concerned about.

When we studied the effect of redistricting using different variables, we found that the difference in seats between a Democratic- and Republican-controlled redistricting plan is, on average, a substantial 6% of seats. The causal mechanism by which this effect works is probably as follows. A partisan redistricting produces additional districts that the party in control of redistricting is likely to win. As a result, this party finds it easier to field better candidates, which, in turn, produces more votes for those candidates.

Our empirical results are consistent with the conflictual and uncertain process of legislative redistricting and the competing goals of redistricters. They also help resolve two important controversies in American politics over the consequences of legislative redistricting for partisan bias and electoral responsiveness. For one, our results demonstrate that, contrary to the findings of previous researchers, redistricting in state legislatures has substantially increased electoral responsiveness and kept it higher than it would be otherwise for about half of all elections in each state. The effects of any one redistricting are not permanent, but the decennial redistricting process repeatedly injects the political system with a healthy dose of increased responsiveness. Our results indicate that partisan and bipartisan redistricting plans reduce bias overall, leading to fairer electoral systems than if there had been no redistricting, but the difference between Democratic, bipartisan, and Republican-controlled redistricting plans within this smaller and comparatively fairer region are still politically significant.

We now briefly organize these results from two perspectives. First, individual legislators involved in redistricting can be seen as simultaneously attempting to maximize three partly inconsistent goals: they try to increase the probability of winning or avoiding a primary, winning the general election (conditional on winning the primary), and helping their party win a majority of seats in the legislature. Those

responsible for drawing the district lines, whether partisan or bipartisan, always operate in a highly constrained and uncertain environment. The final redistricting plan is usually the result of the process of achieving consensus among incumbents and others, subject to formal and informal constraints; this process usually produces a plan that weights party advantage heavily.

When incumbents give up votes in order to increase the probability of being in the majority party, responsiveness increases. It also increases when other incumbents retire to avoid the political fight altogether, and due merely to changes in district lines and to wholesale increases in uncertainty. Giving up votes in this way also means that Democratic-controlled redistricting plans usually favour the Democrats more than those controlled by the Republicans. However, in order to retain their seats, they do not go too far in trying to achieve this goal and, hence, partisan bias does not favour their party as much as it could. These constraints on partisan bias during redistricting are much more substantial than during the rest of the decade, when changes in demographics, turnout, and the configuration of candidates can cause comparatively larger changes in bias and responsiveness.

A second way to organize these results is to review what they say about the benefits and costs of redistricting for states' representative democracies. The purpose of reapportionment and redistricting is to guarantee that the number of citizens in each district is roughly the same, at least at the start of each decade. Redistricting obviously accomplishes this minimal goal. However, as most political scientists recognize, population equality guarantees almost no form of fairness beyond the numerical equality of population. Even aside from issues raised by counting citizens rather than voting-age Americans or voters, or by representing ethnic minorities fairly, or attempting to ensure that each citizen has an equal say in the policy outcome (which may be impossible to achieve, given internal legislative rules such as seniority on committees), there are the questions of what redistricting does intentionally or unintentionally to the features of our representative democracy that we have discussed here. Allowing state legislators to redistrict opens up the possibility of partisan gerrymanders, incumbent protection plans, and other apparently insidious consequences of the simple task of drawing district lines around equal sized groups of Americans.

The vast majority of American political scientists have adopted the normative position that healthy representative democracies have low levels of partisan bias and high levels of electoral responsiveness. Our empirical results should make those who support this dominant position yearn for the next redistricting period. The political turmoil created by legislative redistricting creates political renewal. Many of the goals sought by proponents of term limitations are solved by legislative redistricting. Even the reputation of the 'egregious' partisan gerrymander has been somewhat rehabilitated: not only does redistricting perform the simple task of getting the numbers right, but redistricting has tended to reduce partisan bias and increase electoral responsiveness.

It is true that bipartisan redistricting produces as high levels of responsiveness and lower levels of partisan bias than partisan-controlled redistricting plans. Moreover, Democratic- and Republican-controlled plans have very different consequences for the parties. One can also still find specific examples of substantial partisan gerrymanders that produce much more partisan bias. These results provide good reason to support a proposal to require bipartisan control of all redistricting processes. If a legislature is incapable of forging a bipartisan agreement, then alternating, or randomly assigned, control of redistricting would also accomplish many of the same benefits. Our results demonstrate that earlier objections to this proposal based on the belief that it will usually create incumbent protection plans, and hence unresponsive electoral systems, are unfounded.

Finally, our results bear directly on the role the courts might choose in resolving partisan gerrymandering claims. The US Supreme Court declared partisan gerrymandering to be justiciable in *Davis v. Bandemer* (1986), but it has not yet made clear whether the standards of fairness will be set so that a plaintiff would have a chance of meeting them. On the basis of its recent decisions (e.g., *Voinovich v. Quilter*, 1993), it seems clear that the Supreme Court would probably prefer to not be involved in partisan redistricting matters, and our results provide them with a clear public policy justification. Individual state redistricting plans sometimes do produce very unfair electoral systems, but, on average, recent state redistrictings, even when unattended by the courts, have reduced partisan bias and increased responsiveness. Far from being a scourge on the political system in need of major reforms, legislative redistricting has invigorated American representative democracy.

9.4 Relation to British elections

The British electoral system differs from the American in many ways, including: (1) a different relationship between national and local elections; (2) three major parties; (3) the advantage of incumbency is believed to be lower than in the United States; (4) redistricting controlled by non-partisan commissions and only indirectly influenced by the parties; (5) in redistricting, a preference for preserving traditional boundaries instead of population equality. We discuss each of these in turn.

1. The focus of study on the House of Commons means that it will never be possible to study the effects of redistricting in Britain with the precision that we have achieved for the United States—in statistical terms, our ‘sample size’ of 60 state legislative redistrictings is unattainable—unless local as well as Parliamentary elections are analysed. The effects of individual redistrictings vary quite a bit (see Gelman and King 1994, Figures 4 and 6). However, it should be possible for political scientists (and redistricters) to use our method of analysing elections—a generalization of Butler’s method of ‘uniform partisan swing’—on British electoral data and thus to estimate the consequences of past and proposed future redistrictings.
2. The three-party system makes the concept of ‘partisan bias’, as defined as departure from symmetry, less clear, since the three parties do not have symmetric roles in the British system. It is doubtful that redistricting tends to bring bias towards ‘zero’, as in the United States, since it is not clear what zero bias means. (For example, even a definition of bias in terms of the two major parties—as the expected difference between Conservative and Labour seats if they were to receive equal shares of the vote—would be questionable, since the Liberals function as an anti-Conservative party in some parts of Britain and as an anti-Labour party elsewhere). To put it another way, the goal of zero partisan bias in an asymmetric three-party system with winner-take-all districts such as Britain’s is essentially unattainable and thus normatively questionable. It is thus perhaps necessary to replace absolute standards of fairness with relative standards, comparing the expected seats won by the parties under different redistricting plans.

(This is, in fact, how redistricting plans in Britain are often compared, as is discussed elsewhere in this volume).

‘Electoral responsiveness’ still has the same meaning: the expected change in seats for a party per change in vote. In general, the three parties can have different values of responsiveness. It seems reasonable to expect that redistricting would still cause responsiveness to increase in a three-party system as much as in a two-party system: in either case, the cause of the increased responsiveness is the shuffling and breaking up of a relatively stable system due to the constraints in the redistricting process.

3. A lower incumbency advantage implies fewer safe seats and a higher responsiveness in general—the responsiveness for the major parties in the House of Commons is about 2.5, compared to about two in US legislatures—and also implies less disturbance in elections when incumbents retire or are forced out of safe districts. Thus, one of the important effects of redistricting on responsiveness—the shake-up of incumbents (see Gelman and King 1994, Figure 3) is diminished in importance. Because of this, we expect that the increase in responsiveness due to redistricting should not be as large in Britain as in the United States.
4. Based on the comparison of partisan to bipartisan redistrictings in the United States (similar effects on responsiveness, with partisan redistrictings benefiting the party by about 3% of the seats), we see no general reason to expect ill consequences from Britain’s system of boundary commissions. On the other hand, as other papers in this volume discuss, there may well be particular flaws with any given redistricting, even if it is non-partisan, and there is no reason to expect these flaws to cancel out (once again, consider the variability in Gelman and King 1994, Figures 4 and 6).
5. The rules for British redistrictings differ from those in the United States. Obviously, at the level of individual districts the different rules have important effects, but in both countries they serve as strong constraints on boundary-drawers, meaning that the general upsetting (and responsiveness-increasing) effects of redistricting should still occur.

In conclusion, we expect our qualitative results to apply in Britain as well as the United States, but the effect of increasing responsiveness may be weaker and the effects on bias must be interpreted as effects on relative seats obtained by the parties. With only one redistricting for the whole country, there is no reason to expect advantages to the different parties to cancel out. In the future, it may be possible to estimate the effects of different redistricting plans before the election in a more formal way than is done now using our methods of statistical analysis adapted to a three-party system.

9.5 Possible policy reforms

In Britain, enormous efforts are spent arguing about the merits of redistricting plans, both proposed and implemented. Because only the arguments that ignore the political consequences of redistricting seem to have much effect on the Boundary Commission or the courts, public debate centres around such benign issues as maintaining communities of interest or eliminating large population disparities. But few participants in these apparently non-partisan discussions believe these are without partisan consequence.

For example, the parliamentary Boundary Commissions aggregate local government wards, defined in England by the Local Government Commission and in Scotland and Wales directly by partisan legislation, in drawing boundaries for House of Commons constituencies. This is a reasonable administrative procedure for drawing boundaries, but it is not necessarily without political consequence. Indeed, this process thus ties together the two levels of elections, so that the detailed decisions made for the relatively unimportant local elections, in response to specific local conditions relevant to these elections, have profound influence on the boundaries for the more consequential House of Commons constituencies.

Using local wards as building blocks, along with the numerous other apparently non-partisan criteria, can have substantial political consequence. At the least, we have no reason to think that they in any sense cancel out and are in the end fair to the two parties or other groups. Indeed, ignoring these consequences may result in a far worse outcome

than if the issue were confronted head on. We consider two possibilities for reform that we believe should be studied further.

First, in the US case, partisan conflict, and attempts to compromise, over the prizes of redistricting have some significant benefits, benefits that are lost in the present British system. Conflictual redistricting (whether partisan-controlled or the result of a compromise between parties) refreshes the political system, injecting new blood, encouraging some representatives to retire, and creates more competitive elections: the responsiveness of the partisan composition of the legislature to changes in voter preferences is enhanced. The conflict also seems to reduce the overall degree of bias in favour of one party or the other, as compared to a system without any redistricting.

Although the US system also has obvious costs, some features of it, without these costs, might be worth considering in the UK. For example, the Boundary Commissioners could encourage the parties (or other groups) to submit their own competing maps. Maps of certain regions that were endorsed by all the parties could then be given more weight in the boundary commissioner's ultimate deliberations. This allows the entire electoral system to achieve the possibly substantial side benefits of the parties attempting to see if they can battle it out with each other to forge a compromise.

Another possibility, whether or not the parties are consulted explicitly, is to give the Boundary Commissioners a set of specific normative standards concerning fairness to the political parties to try to maximize, along with their other criteria. Electoral responsiveness and the absence of partisan bias, which we discuss, are two possible standards. In order to measure these or other concepts precisely, extensions of our methodology would need to be made to accommodate the special features of the British electoral system. Indeed, the concepts themselves might be modified for this purpose. But precise normative standards, along with the statistical procedures to provide accurate measurements of them, might allow these important criteria to be used by the Boundary Commissioners.