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Fifty Years of Bias in the UK's Electoral System*

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There is general agreement that first-past-the-post in single-member constituencies is one of the most disproportional of electoral systems. The reasons for this are well understood. Much less discussed and understood, however, is the degree to which that system treats political parties differentially, creating bias.

Such bias is well-illustrated by recent UK general elections. In 1979, the Conservative party won 43.9 per cent of the votes cast and 53.4 per cent of the seats. Four years later, it won 42.4 per cent of the votes but 61.1 per cent of the seats. In 1987, its shares of the votes and seats were 43.4 and 57.8 per cent respectively, and then in 1992 its vote share fell slightly, to 42.3 per cent, but its share of the seats fell more sharply – to 51.6 per cent. Labour won in 1997, with 43.3 per cent of the votes and 63.6 per cent of the seats. Thus over five elections, whereas the leading party's share of the votes only ranged between 42.3 and 43.9 per cent its share of the seats varied more, from 51.6 to 63.6 per cent. With virtually the same share of the votes at four successive elections the Conservatives won very different shares of the seats, and then when Labour won with the same vote percentage its share of the seats was larger than the Conservatives ever achieved.

The reasons for this differential treatment are found in the 'classic' abuses of constituency-definition – malapportionment and gerrymandering. These – as Gudgin and Taylor (1979) conclusively demonstrated – operate even when the redistribution process (the UK term for redistricting) is undertaken by non-partisan, independent bodies (in the UK, the Boundary Commissions, which operate under an Act of Parliament with specified rules – albeit ambiguous and contradictory, as shown in a recent detailed study: Rossiter, Johnston and Pattie, 1999).

Our recent research has quantified and investigated the reasons for this equivalent of gerrymandering and malapportionment at all UK general elections since 1950, the first fought in constituencies defined by the Boundary Commissions. The amount of bias increased substantially over the fourteen elections, and also increasingly favored Labour.

Measuring Bias

Our measurement of bias uses an approach developed by a New Zealand political scientist (Brookes, 1959, 1960), but little used since.[1] Brookes argued that the degree to which parties are differentially treated is best evaluated by comparing what share of the seats they would obtain with the same share of the votes. We do this by comparing

* This article summarises the authors' recent work on the UK electoral system, forthcoming in their book *From Votes to Seats: The Operation of the UK Electoral System since 1945*. (Manchester University Press, Manchester, 2001).

their performance with equal shares of the votes cast, which involves reducing the vote share of the winning party in a dominantly two-party system and increasing the share of its main competitor: the number of votes for other parties and of abstentions is unchanged. Thus in 1997 Labour got 43.3 per cent of the votes cast and the Conservatives 30.7. Reducing the Labour share by 6.3 percentage points in every constituency and increasing the Conservative share by the same amount makes them equal, with 37.0 per cent each. But with those equal shares, Labour would have won 82 more seats than the Conservatives – a very clear bias in its favor (the total number of seats was 659).

This pro-Labour bias was the culmination (so far!) of a trend which increasingly favored it over its main rival, shown in Figure 1 (pro-Conservative bias is shown by a negative and pro-Labour bias by a positive sign). The first four elections produced a pro-Conservative bias of 40-60 seats. Over the next eight contests the amount ranged between c.±20, favoring Labour on only three occasions, and then at the last two there was a very strong pro-Labour bias. The system has stayed largely the same, but the beneficiary has not.

The Origins of Bias

Bias, like disproportionality, is produced by the equivalent of malapportionment and gerrymandering – within the rules that govern how the Boundary Commissions define constituencies.

Malapportionment occurs in two ways. *Deliberate malapportionment* reflects the legal guarantee of a minimum number of seats for Scotland and Wales: in 1995 the most recent review of constituencies gave Scotland one seat to every 54,569 voters and Wales one per 55,559, but Northern Ireland had one per 64,082 and England 68,626. The second source is *creeping malapportionment*. Within each country, the Boundary Commissions are required to make constituencies as equal as practicable in their electorates. This they have increasingly done over the five reviews conducted – but populations shift (usually from urban to rural areas) and constituency-size variations increase. In England, for example, in 1982, immediately before new constituencies were introduced, 30 constituencies deviated by more than 30 per cent from the electoral quota, and a further 22 by 20-29 per cent; only five of the new constituencies did.

Constituency-size variations only generate electoral bias if one party is stronger in the smaller constituencies and the other predominates in the larger ones. This was increasingly the case, with Labour the strongest party in Scotland and Wales and in the urban areas which lose population between reviews. In 1997, of the 82-seat pro-Labour bias, 11 of those seats were due to differences between countries in average electorates and 13 due to constituency-size variations within countries. (The 1997 election was fought in new constituencies. Those used in 1992 had been defined using 1976 electoral data, and the bias was worth 29 seats to Labour.) Labour's advantage from being strongest on average in the smallest constituencies means that it gets a better return on its votes than does its opponent, an advantage that increases as constituencies 'age' and constituency-size variations increase.

Gerrymandering results from constituency boundaries being drawn to benefit one party over another – which can occur under non-partisan procedures. There are two main types. In a stacked gerrymander one party's votes are concentrated in constituencies won by large majorities: it amasses a large number of surplus votes (additional to the number needed to win the seat) whereas its opponent wastes relatively few in the seats that it loses. A cracked gerrymander occurs when a party wins as many constituencies as possible by small majorities, amassing few surplus votes while its opponent gets a large number of wasted votes.

The geography of support for the two main parties in the UK produces both types of gerrymander. This is accentuated by the Boundary Commissions' procedures, which allocate constituencies to the main local government areas. Labour's support is geographically more concentrated than the Conservatives', and the areas where it is strong are characterized by stacked gerrymanders, with large numbers of surplus votes per seat that it wins and relatively small numbers of wasted votes per seat lost for the Conservatives. In areas of Conservative strength, on the other hand, cracked-gerrymander equivalents have been the norm: compared to the situation in the Labour strongholds, the Conservative party amasses relatively few surplus votes per seats won and Labour many more wasted votes per seat lost. Overall, therefore, at most elections the Conservatives have achieved a much better return for their votes (a better seats:votes ratio with equal vote shares) from this bias source than their opponent.

There is a third source of bias, which we term reactive malapportionment. It comes about in three ways. First is the impact of abstentions. The lower the turnout in a constituency, the smaller the number of votes need to win there, so a party that is strongest in the areas of low turnout gets a better return for its votes. This has been Labour since 1955; it is strongest in the inner city areas where turnout tends to be lowest – and benefits from this form of malapportionment, by 24 seats in 1997. The second is the impact of minor parties. The more votes these get in a constituency, the lower the number needed for victory by one of the two main parties (assuming that a minor party doesn't win). This is another form of malapportionment, which favors a party that is strongest where the minor parties perform best – the Conservatives in the UK: this source was worth 36 seats to it in the 1997 bias calculations. Finally, when a minor party wins, it denies victory to one of the two main parties. Most of these victories have been at the Conservatives' expense, and were worth 33 seat to Labour in 1997.

The Pattern of Bias

Summing all seven of these components, irrespective of sign, gives an overall impression of the volume of bias. Figure 2 shows that it increased very substantially.[2] For much of the period the bias favoring each of the parties cancelled out, producing a net bias close to zero between 1966 and 1987: before that the Conservatives were the favored party; after that, Labour.

Labour's increased benefit is clarified in Figure 3. In the 1950s, there was virtually no advantage to Labour at all. By 1970, however, the two parties were equally advantaged by different bias components, a situation that lasted until 1987 and produced the small net biases (Figure 2). And then in the 1990s, the pro-Labour bias

doubled whereas that for the Conservatives remained at the stable level it had been throughout the fifty years.

Why Labour?

Why has Labour increasingly benefited? In the 1960s and 1970s this was largely because of the malapportionment components plus abstentions. In the 1990s gerrymandering, abstentions and minor party influences all played a part.

Three reasons generated this change in Labour's fortunes – given that its geography of support remained very much the same across the 14 elections and the Boundary Commission procedures did not change markedly.

1. The negative impact of the cracked gerrymander. A cracked gerrymander is risky for the benefiting party: constituencies with small majorities are vulnerable if its opponent performs well at an election. Labour benefited from its large vote share increase in 1997 (allied with the Conservatives' lowest share), winning many constituencies in the usually pro-Conservative cracked gerrymander areas. The gerrymander bias component was worth 48 seats to Labour as a consequence.

2. Labour's focused campaigns in 1992 and 1997. Labour paid relatively little attention to its safe seats at these two contests, knowing it would almost certainly win them all – especially in 1997. In the absence of intensive local campaigns, turnout was generally low, increasing Labour's advantage from the abstentions component (from 10 seats in 1987 to 20 in 1992 and 33 in 1997) without it losing any seats.

3. Tactical voting (the British term for strategic voting). In 1992 and, especially 1997, the volume of tactical voting in Conservative-held seats increased substantially, as an increasingly sophisticated electorate (many of them determined to unseat the Conservative candidates) responded to cues provided by the parties and other interest groups to support the opposition party best-placed to achieve that. In general, the second-placed party in Conservative-held seats increased its vote share by more than the average amount whereas the third-placed party's share fell (often absolutely). As a result, many of the second-placed parties won – increasing the number of minor party victories – whereas the number of wasted votes per seat lost by third-placed parties fell. (On tactical voting see Johnston et al, 1997, and Evans et al 1999.)

Together, all three strategies meant that Labour substantially reduced both its number of surplus votes per seats won and number of wasted votes per seat lost (which for the first time fell below the Conservative level). Not only did it increase its vote share substantially between 1992 and 1997, therefore, it also increased the efficiency of its vote share: it got a much better return on its votes (a higher seats:votes ratio) than ever before.

Conclusions

Malapportionment and gerrymandering, and also reactive malapportionment, are geographical strategies. The translation of votes into seats in single-member constituency electoral systems involves the interaction of two geographies – the geography of support for the individual political parties; and the geography of the territorial constituencies laid across those maps. This can result in biased election outcomes, even if the production of the second set of maps is vouchsafed to an independent body, whereas the geography of election campaigning can produce the reactive malapportionment we identified as a major feature of recent British elections.

The generation of such biases is clearly not peculiar to the UK, but it has only been studied there and in New Zealand (Johnston, 1977). Further research on this important interface between political science and geography in different arenas will complement our understanding of disproportionality in election results by appreciation of the nature and extent of bias, and how it can be influenced by the various actors in the political process.

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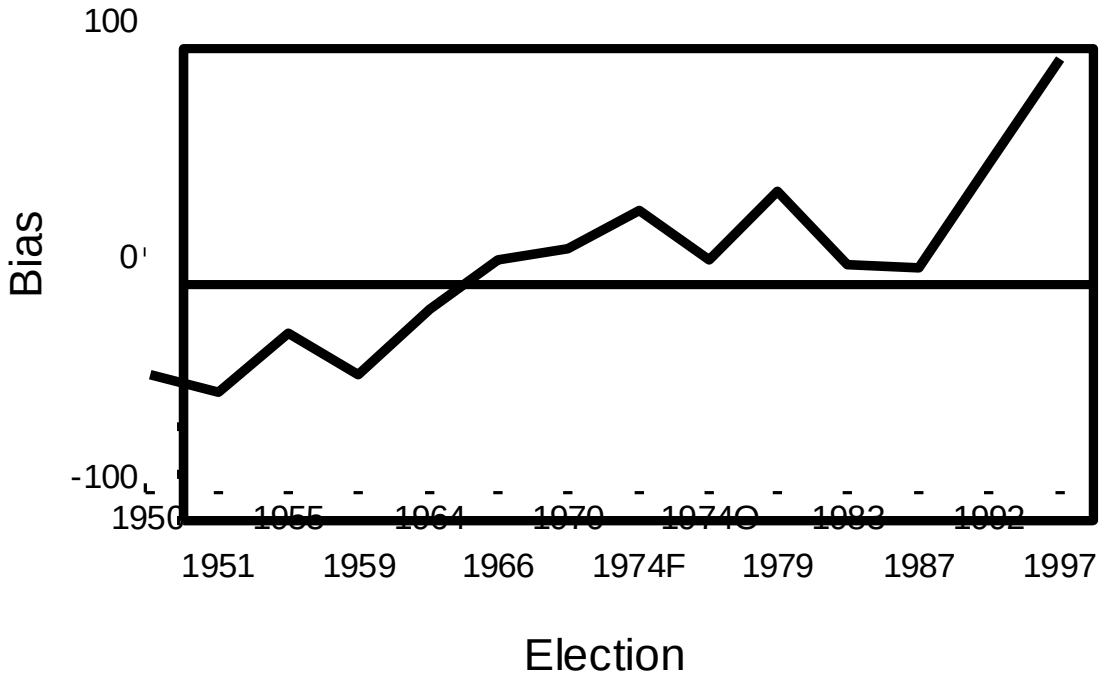

Figure 1. Bias at UK general elections with equal vote shares, 1950-1997. (A positive bias is pro-Labour'; a negative bias is pro-Conservative.)

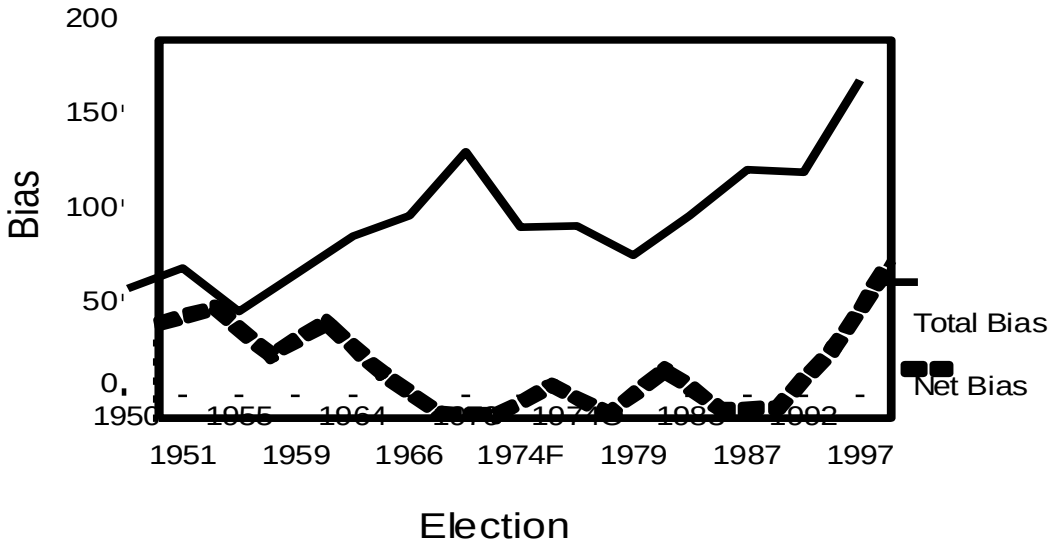

Figure 2. Total and net bias at UK general elections with equal vote shares, 1950-1997.

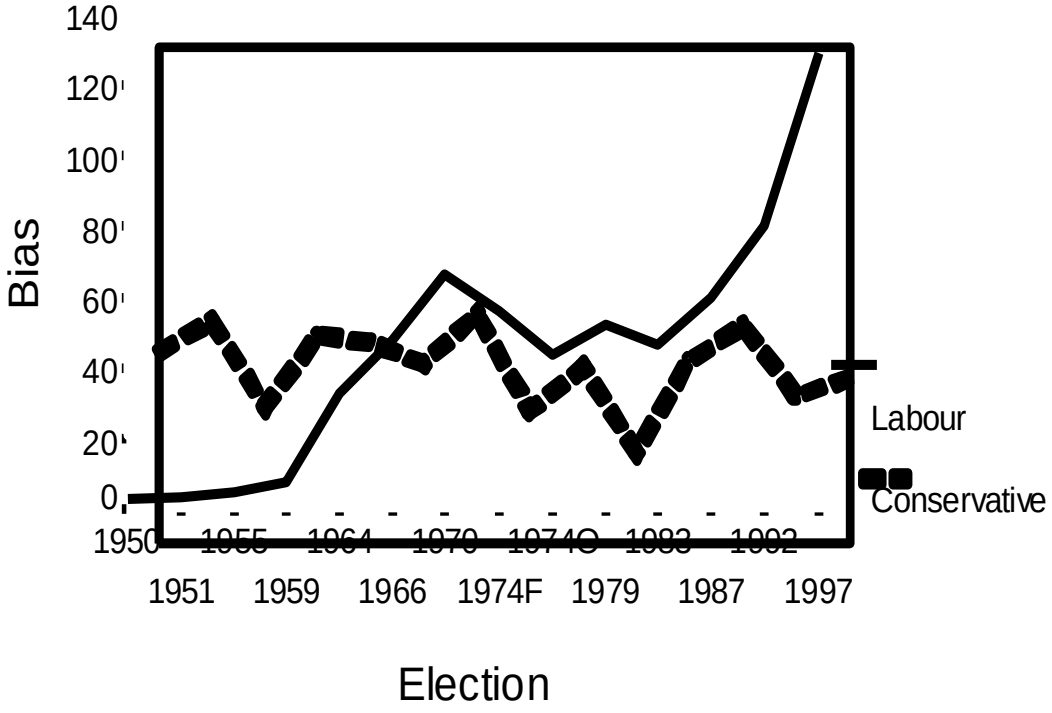

Figure 3. Trends in the total bias for the Conservative and Labour parties with equal vote shares, 1950-1997.

[1] Brookes gives the full algebra, as does Johnston (1977). The formulae, as adapted for the current study, are in Johnston et al (2001)

[2] This excludes the interactions involving various combinations of the seven components.