Johnston, R., Pattie, C., Rossiter, D., Dorling, D., MacAllister, I. and Tunstall, H. (1999), New Labour landslide and electoral bias: an exploration of differences between the 1997 UK general election result and the previous thirteen, in J. Fisher et al. (eds) British Elections and Parties Review, Volume 9, London: Frank Cass.

# New Labour's Landslide and Electoral Bias: An Exploration of Differences between the 1997 UK Election Result and the Previous Thirteen

Ron Johnston, Charles Pattie, David Rossiter, Danny Dorling, Iain MacAllister and Helena Tunstall

The deficiencies of the first-past-the-post electoral system with regard to proportional representation are well-known and have been detailed in a range of studies (e.g. Rae, 1971; Taagepera and Shugart, 1989; Lijphart, 1994; Dunleavy and Margetts, 1997). Parties with large percentages of the votes cast tend to win even larger percentages of the Parliamentary seats, and the party with most votes usually gets a majority of the seats even though it may not get much more than 40 per cent of the votes. Consequently, small parties (other than those whose support is concentrated in relatively few constituencies) are proportionally under-represented. The 1997 British general election was no different in this respect from the 13 previous contests held under the same system for defining constituencies (the series began with the 1950 general election: Rossiter, Johnston and Pattie, 1999), but it did differ from them in other ways. Labour got a much larger share of the seats than either it or its main rival had previously achieved with either Labour's 1997 or any larger share of the votes, and the Conservatives got a much smaller share of the seats than either party had done previously with that share of the votes.

Why was this? Why was 1997 so different? In this article we explore the reasons for the distinctiveness of the 1997 result, focusing on visual presentations of data to develop the argument.

### Disproportionality, Seats: Votes Ratios, and Bias

A variety of measures of the disproportionality of an election result has been suggested. Among the most popular is the Loosemore-Hanby index (equivalent to the index of dissimilarity: Loosemore and Hanby, 1971), which has been championed recently by Dunleavy and Margetts as a

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on result has Hanby index anby, 1971), largetts as a readily-interpreted measure of the overall differences between parties' shares of the votes cast and seats allocated (Dunleavy and Margetts, 1997). On this, Great Britain has one of the most disproportional electoral systems among western liberal democracies, and 1997 was little different from the previous six elections. As Figure 1a shows, the level of disproportionality more than doubled between the 1970 and 1974 (February) elections: the Liberals, the SNP and Plaid Cymru substantially increased their vote shares between those two contests without commensurate increases in their allocations of seats (especially so in the case of the Liberals). Since then, the index has remained much higher than it was in the 1950s and 1960s because of the continued relative popularity of those third parties in terms of votes but their inability to win a similar share of the Parliamentary seats. The 1997 election outcome was typical of this situation, but no more: it was slightly more disproportional than 1992, but less than 1983.

If there was no significant change in the overall disproportionality of the 1997 general election result, there certainly was in the treatment of the separate parties. This is indicated in Figure 1b, which shows the seats:votes ratios for the Conservative, Labour and Liberal parties over the period 1950-97. For much of that time, the ratios for the first two parties followed similar trajectories. Most were above 1.0, indicating that both parties received higher percentages of the seats than of the votes (the exceptions were 1951, 1955 and 1959 for Labour and 1966 - just - for the Conservatives). In addition, until 1983 the two parties' ratios were not very dissimilar (with exceptions in 1959, when the Conservative ratio was much higher than Labour's, and 1966, when the converse held). The Conservative victories in 1983 and 1987 treated that party much better than Labour on this index, however, though even then Labour's ratio was close to 1.2, indicating that it won nearly 20 per cent more of the seats than of the votes. The two ratios converged on 1.2 in 1992, and then diverged very widely in 1997, with Labour's ratio being over 1.4 while the Conservatives' fell below 1.0 for only the second time (with 31.5 per cent of the votes but only 25 per cent of the seats). At the same time, the Liberal Democrats' ratio doubled: its vote share fell slightly between 1992 and 1997 but its number of seats more than doubled.

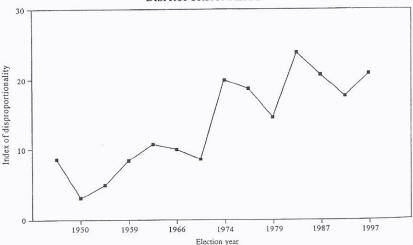
In terms of seats:votes ratios, therefore, the 1997 election result was very different from what went before: although the overall measure of disproportionality was similar to that of previous elections, the treatment of the separate parties was not – a feature of the 1997 result not brought out by the Loosemore-Hanby index. This distinctness of the 1997 result is further illustrated by another index, that of *electoral bias*. Devised by Brookes (1959, 1960), this index portrays the differences between two parties in their seat-winning performances with similar percentages of the vote share. We

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use it here to compare how many seats the Conservative and Labour parties would have won if they had achieved parity in their vote shares. Assuming a uniform shift in their performance across all constituencies, so that overall each wins the same percentage of the votes, the bias measure is simply the difference in the number of seats that the two parties would have won: a positive index indicates a bias towards Labour whereas a negative one indicates a pro-Conservative bias.

As Norris (1997) showed, such a uniform shift of the two 1997 vote distributions, so that each party had 37.9 per cent of the votes cast overall, would have seen the Labour Party with an 82-seat lead over the Conservatives – seats:votes ratios of 1.38 and 1.08 respectively. This was by far the largest bias produced by the electoral system over the 14 post-1945 elections (Figure 1c). It was also the only large pro-Labour bias. The 1997 general election once again stands out from its predecessors because of its differential treatment of the two main parties.

FIGURE 1a
TRENDS IN THE OUTCOMES OF BRITISH GENERAL ELECTIONS, 1950–97:
DISPROPORTIONALITY



The Brookes bias measure has two advantages over other indices of such differential treatment of parties in the operation of the electoral system: it uses a readily-appreciated metric (the number of seats difference between the two parties' performances); and it can be decomposed into component parts, reflecting the operation of various factors. Six such factors have been identified in our recent use of this index (Rossiter, Johnston and Pattie, 1997b; Johnston, Rossiter and Pattie, 1999; Rossiter *et al.*, 1999; Johnston *et al.*, 1998a, 1998b):

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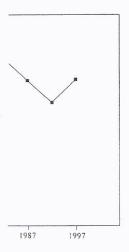


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FIGURE 1b TRENDS IN THE OUTCOMES OF BRITISH GENERAL ELECTIONS, 1950–97: SEATS: VOTES RATIOS

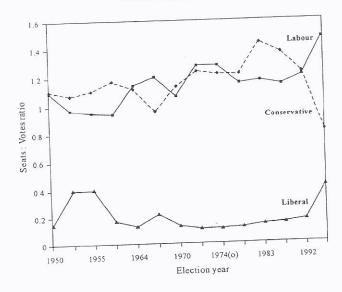
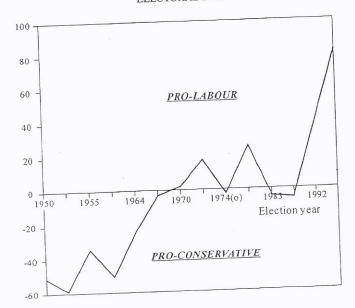


FIGURE 1c TRENDS IN THE OUTCOMES OF BRITISH GENERAL ELECTIONS, 1950–97: ELECTORAL BIAS



- Differences between countries (England, Scotland and Wales) in the
- average size of their constituency electorates;
  Differences within each country in the average size of their constituency electorates;
- Differences between constituencies in the average percentage of abstentions;
- Differences between constituencies in the average percentage of the votes won by other parties;
- Differences in the characteristics of constituencies won by other parties; and
- Differences between the parties in the efficiency of their vote distributions.

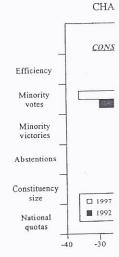
If any of these differences favour one of the two parties being compared over the other, then they contribute to the overall bias. For example, a party which is strong in a part of the country with relatively small constituencies is likely to win more seats per 100,000 votes than one whose strength is concentrated in areas with relatively large constituencies: the former party gets a better return for its votes than the latter (and as a consequence gets both a larger seats:votes ratio and a biased outcome in its favour).

In an earlier paper we traced the size of each of these components of the bias measure over the period 1950-97 and showed that all but one (the fourth) increasingly favoured Labour (Johnston et al., 1999). We also showed that the major change between 1992 and 1997 was in the sixth component - the efficiency of the vote distribution (Figure 2). Until 1997, with the single exception of the February 1974 general election, the efficiency component had favoured the Conservatives, on a number of occasions by 20 seats or more. But in 1997 not only did it favour Labour, but it did so to an extent (42 seats) never experienced by either party since 1950. The implication is clear: until 1997 the Labour Party's support was not as efficiently distributed across the constituencies as was the Conservatives'. In benefit:cost terms, the Conservatives' votes were located so that they won the party a better return, in terms of seats, than did Labour's, too many of which were in the 'wrong places'. So why was 1997 different? Why did the two geographies of support produce such a different outcome, as illustrated by our seats:votes ratios and bias index?

### **Types of Votes**

It is part of the 'conventional wisdom' of British psephology that Labour has been substantially disadvantaged in the operation of the electoral system because too many of its votes have had no impact on election outcomes: it has had too many 'safe seats', relative to the Conservatives, with large

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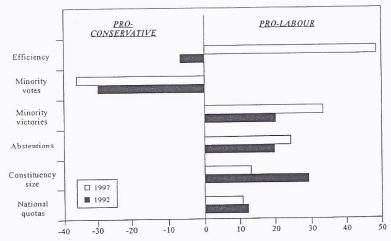
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majorities where many votes have been 'wasted' because they make no contribution to the party's seat-winning goals. In part this is undoubtedly true, though Labour's safe seats provided an important bulwark when its vote share dropped substantially in 1983 but its seats:votes ratio remained relatively high (well above 1.0). This clearly did not happen for the Conservatives in 1997. When its vote share fell by more than 10 percentage points, its seats share fell much more, producing a seats:votes ratio of only 0.8: the Conservatives didn't have enough safe seats and 'wasted votes' in 1992 to provide the protection of their seats:votes ratio which the geography of Labour's support provided in the 1980s.

So does the explanation for what happened in 1997 lie in the changing geographies of the two parties' vote-winning? To explore this, we use a threefold classification of each party's votes:

- Effective: those which are instrumental in winning a seat;
- Surplus: those which are additional to the number needed to win a seat; and
- Wasted: those that are won in constituencies that the party loses, and so play no part in the winning of seats.

Thus in a constituency where 50,000 votes are cast -28,000 for party A and 22,000 for party B - then the distribution of the vote types is:

	Party A	Party B
Effective	22,001	0
Surplus	5,999	0
Wasted	0	22,000

Of party A's 28,000 votes, 22,001 are effective – they are needed to defeat party B – and the remaining 5,999 are surplus. All of party B's votes are wasted.

### Overall trends

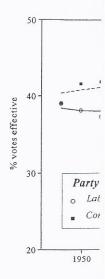
Figure 3 shows the trends in the percentage of votes won by the two main parties in each of those three categories. Over the full period, the Conservative Party has won many more effective votes, even when it has lost the contest, than has Labour (Figure 3a: in this and all subsequent figures we portray the general trend in the relevant statistics using the moving average, with each point on the trend being the average of the 50 per cent of all observed values closest to it). In 1950 and 1964, when the parties were very close, they got almost the same percentages of their votes in the effective category; and in 1966, when Labour won a large majority of the seats, its effective percentage was several points higher than the Conservatives'. This was not repeated at Labour's 1974 victories, however, and the period from 1970 until 1992 was marked by a divergence between the two, with Labour's effective percentage falling to only 30 in 1987 while for the Conservatives it was over 45 in both 1983 and 1987.

The 1997 election saw a massive turn-round, however, which the moving average trend dampens down. Labour achieved its second highest effective percentage ever (though still less than the Conservative figure for any previous election except 1966 and lower than its own achievement then) whereas the Conservative percentage fell to the lowest experienced by either party, including the Labour performances of 1983 and 1987, when it obtained lower vote percentages than the Tories did in 1997.

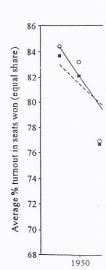
The other two graphs in Figure 3 enlarge on these findings. With regard to wasted votes, the moving average trend lines show little difference between the two until 1970, with the winning party losing the smaller of the two percentages (Figure 3b). In the 1980s, the average Conservative wasted percentage fell to less than 30 while Labour's increased to the high 40s, with the gap between the two then closing slightly in 1992. And then in 1997 not only did the position of the two parties reverse but they recorded both the highest (over 60: Conservative) and lowest (21: Labour) percentages of wasted votes over the full period. To complete, Figure 3c shows the trends in the percentages of votes that were surplus. With the exceptions of 1966 and 1983, the gap between the two parties was not very wide until 1997: this last election was very different, however, with Labour recording the highest percentage (42) and Conservative the lowest (11) of surplus votes.

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FIGURE 3a TRENDS IN TYPES OF VOTES WON BY THE CONSERVATIVE AND LABOUR PARTIES, 1950–97: PERCENTAGE OF VOTES THAT WERE EFFECTIVE

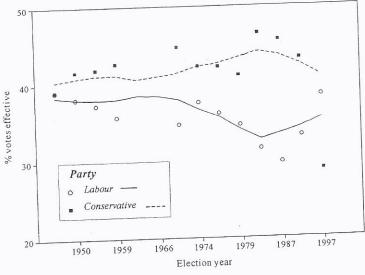
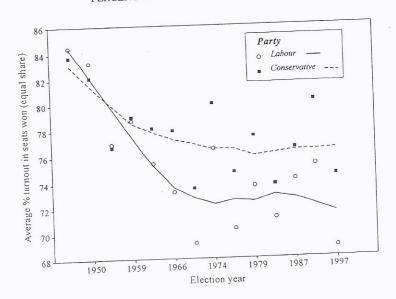
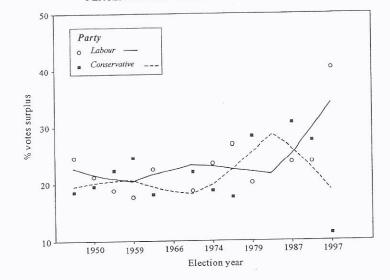


FIGURE 3b
TRENDS IN THE TYPES OF VOTES WON BY THE CONSERVATIVE AND LABOUR PARTIES, 1950–97:
PERCENTAGE OF VOTES THAT WERE WASTED



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FIGURE 3c TRENDS IN THE TYPES OF VOTES WON BY THE CONSRVATIVE AND LABOUR PARTIES, 1950–97: PERCENTAGE OF VOTES THAT WERE SURPLUS

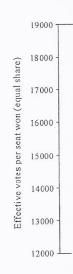


### Ratios of vote types to seats

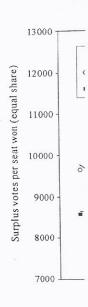
The trends shown in Figure 3 provide further evidence of how different the 1997 general election was from the 13 preceding general elections in terms of the translation of votes into seats. One of the disadvantages of looking simply at the percentages of votes won in each category, however, is that it takes no account of the overall result. Thus Figure 4 presents the data in a slightly different way: the number of votes in each category is expressed in a ratio to the number of seats won (for effective and surplus votes) or lost (for wasted votes) where the parties have equal vote shares (i.e. the simulated election results used to calculate the bias coefficients).

Regarding effective votes per seats won, Figure 4a shows that after 1959 the trends for the two parties diverged: on average by the end of the period it took the Conservatives some 17,000 votes to win a seat whereas for Labour the figure was only about 13,500. The 1997 election does not stand out as a residual from this trend, however, nor does it with the pattern for surplus votes per seat won (Figure 4b). The Labour Party obtained more of such votes (i.e. had a larger average majority per seat won) than the Conservatives at every election except 1970 and from then on,<sup>2</sup> with the exception of 1979, many more than its opponent. 1997 saw the gap close somewhat, when Labour's average number of surplus votes fell back from its peaks in 1987 and 1992 to its 1979 and 1983 levels.

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FIGURE 4a TRENDS IN THE RATIOS OF VOTES WON, AT THE EQUAL SHARE POSITION: EFFECTIVE VOTES PER SEAT WON

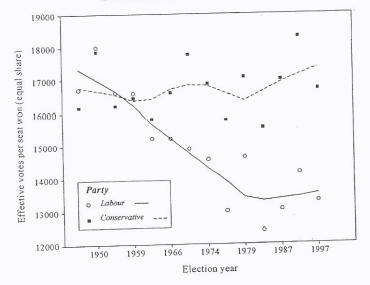
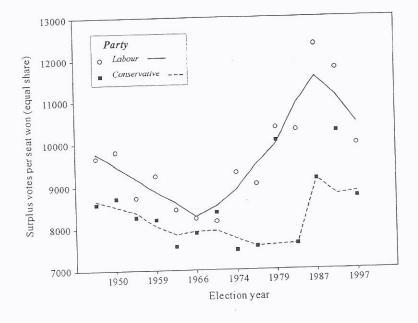


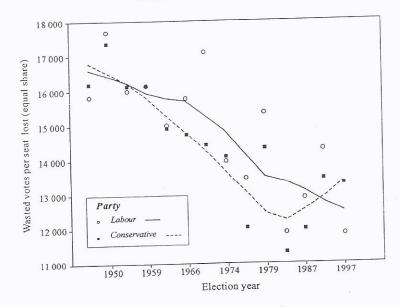
FIGURE 4b TRENDS IN THE RATIOS OF VOTES WON, AT THE EQUAL SHARE POSITION: SURPLUS VOTES PER SEAT WON



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FIGURE 4c trends in the ratios of votes won, at the equal share position: wasted votes per seat lost



It was only in the pattern of wasted votes per seats lost that 1997 produced a major shift (Figure 4c). For the first five elections, the two parties differed very little indeed in how many votes they wasted in the seats that they lost - between 15,000 and 17,500 each. From then until 1992 (with the exception of February 1974) there was often a wide gap between the two parties which operated to Labour's disadvantage: in 1970, for example, it wasted over 2,000 more votes per seat lost than did the Conservatives - in part because the election was fought in very old constituencies (see Note 2), with Labour wasting a lot of votes in the large suburban constituencies where the Conservatives won. Although the gap remained at 1,000 votes or more from October 1974 on, the trends for the two parties converged after 1983, because on average the Labour ratio fell while that for the Conservatives rose. And in 1997 their relative positions were altered: the Labour Party wasted on average about 1,500 fewer votes in the seats that it lost than did the Conservatives - a major difference to which we return below. (If we contrast the two 'extreme elections', in 1970 Labour performed reasonably well in many of the constituencies where it lost, thus piling up a lot of wasted votes: in 1997, however, it did relatively badly in the seats where it lost, wasting more than 5,000 fewer votes per constituency on average than it did 27 years previously.)

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## From Vote Types to Bias

The general picture provided by Figures 3 and 4 suggests that over the full period 1950–97 there has been a general trend in the geography of support which has increasingly favoured the Labour Party, with 1997 either an accentuation of that trend or – notably in the pattern of wasted votes – a deviant case. In this section we briefly explore this long-term trend, followed by more detailed consideration of the apparently 'special case' of 1997.

### The long-term trends

Our previous analyses of the changing biases over the period 1950–1997 have suggested that most of the six components have increasingly favoured Labour (Rossitor *et al.*, 1999). The reasons for this can be summarized by three characteristics of the constituencies that would have been won by the two main parties with equal vote shares: their size (number of electors); their average turnout; and the performance of other parties.

Figure 5a shows that after the 1959 election there was a divergence between the two parties in the average size of the seats that they won, with the gap widening to almost 10,000 electors by the 1992 contest. The reasons for this are well known: the removal of the pro-rural bias by the Boundary Commissions after 1955; Labour's growing strength in Scotland and Wales, where seats are on average much smaller than in England, from the 1960s on (the difference was some 15,000 voters by 1997); and Labour's concentration of support in all three countries in the older urban and industrial areas, which have experienced population decline (Johnston *et al.*, 1998b). The last of these is especially noteworthy as the constituencies 'age': the gaps between the two parties shown in Figure 5a are smaller at the first election after each of the last three Boundary Commission Reviews

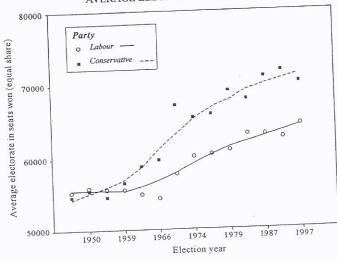
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(in 1974, 1983 and 1992) than at subsequent contests, because those exercises always result in a reduction in the inter-constituency variation in electorates (Rossiter, Johnston and Pattie, 1999).

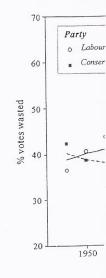
The second trend that also shows a divergence between the two parties after 1959 is in the average turnout in the seats that the two parties would have won (Figure 5b). Turnout has fallen substantially at British general elections since the 1950s, with 1997 producing the lowest figure at just over 71 per cent.<sup>3</sup> It has fallen most in Labour-won seats, as the two moving-average trend lines show, and the gap between the two parties in 1992 and 1997 was particularly large. Labour thus benefits – in terms of its seats:votes ratio and bias coefficient – from low turnouts in the seats that it wins: more votes for it there would be very unlikely to gain it further Parliamentary representation.

Finally, what of the performance of the 'third parties' (the Liberal Democrats and their predecessors over the full period, the Scottish Nationalists and Plaid Cymru since 1970, and others which have had small successes, such as the Greens and, in 1997, the Referendum Party)? Figure 5c shows that, with one exception (October 1974), these parties have always performed better in the seats won by the Conservatives, which has been to that party's advantage since the number of votes needed for victory in close three- and four-party contests is usually smaller than the position where the 'third parties' perform badly: 1997 was no different from the general trend.

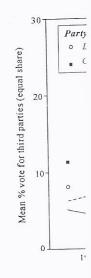
FIGURE 5a
TRENDS IN THE CHARACTERISTICS OF SEATS THAT WOULD HAVE BEEN WON BY
LABOUR AND CONSERVATIVE PARTIES, 1950–1997:
AVERAGE ELECTORATE IN SEATS WON



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FIGURE 5b TRENDS IN CHARACTERISTICS OF SEATS THAT WOULD HAVE BEEN WON BY LABOUR AND CONSERVATIVE PARTIES, 1950–1997: AVERAGE TURNOUT IN SEATS WON

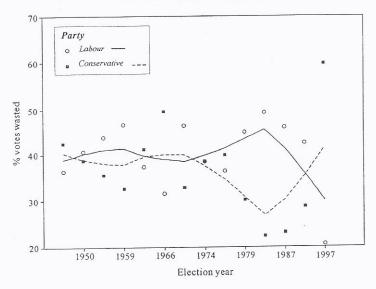
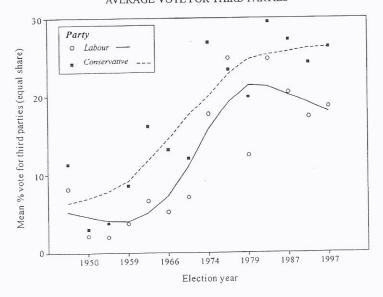


FIGURE 5c
TRENDS IN THE CHARACTERISTICS OF SEATS THAT WOULD HAVE BEEN WON BY
LABOUR AND CONSERVATIVE PARTIES, 1950–1997:
AVERAGE VOTE FOR THIRD PARTIES

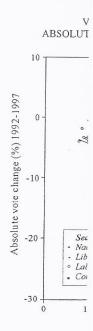


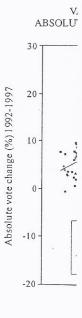
And 1997?

Of the three long-term trends in constituency characteristics explored above, therefore, two favoured the Labour Party but only one – the fall in turnout – appears to account for the major shifts in seats:votes ratio and bias coefficient that occurred in 1997.<sup>4</sup> So what was particular about 1997?

It is widely accepted that one of the main features of the 1997 contest was not only the professionalism of the campaigns run by Labour and the Liberal Democrats (especially the former) but also their geographical specificity. Although the 'conventional wisdom' of psephologists and other commentators has been that constituency campaigning is almost irrelevant to the election outcome there, and that only the national campaign matters, an increasing volume of research evidence using a range of indicators has shown otherwise: the greater the intensity of a party's campaign in a constituency, all other things being held equal, the better its relative performance (Denver and Hands, 1997). In 1997, Labour built on its appreciation that this was the case with a very focused and targeted campaign, which concentrated on 100 constituencies in the two years preceding the election (Denver et al., 1998) and was followed by high levels of spending during the six weeks of the 'campaign proper' (Johnston, Pattie and MacAllister, 1999): together with a similar, though less extensive, spatially-focused campaign by the Liberal Democrats, this contributed substantially to the challengers' success then.5

The success of these campaigns is shown by the geography of the outcome (Figure 6). The Conservative share fell by an average of 11.4 percentage points between 1992 and 1997: it fell by much less in those seats where its 1992 overall share was relatively small, however (Figure 6a).6 As a consequence, not only did it increase its tally of wasted votes by losing a large number of seats to its challengers but also its number of wasted votes did not fall substantially in many of the constituencies it failed to win in 1992. This accounts for not only the substantial increase in its percentage of votes wasted (Figure 3b) but also in its average number of wasted votes per seat lost (Figure 4c). Linton and Southcott's (1998) data for selected constituencies suggest that this is a continuation of a trend that increasingly distinguishes the Conservative and Labour parties: whereas Labour's vote percentage has declined very substantially over the period in those seats now 'hopeless' for the party, from over 40 per cent on average in 1951 to around 10 per cent in 1997 (they cite the Isle of Wight, Wiltshire North, Cheltenham, and Newbury as exemplars), the Conservatives have retained a similar percentage of the vote in their 'hopeless seats' throughout the period (the example cited is Hemsworth, where the party gained 18 per cent in both 1951 and 1997).7





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FIGURE 62 VARIATIONS IN PARTY PERFORMANCE, 1992–97: ABSOLUTE CHANGE IN SHARE OF VOTES CAST: CONSERVATIVE

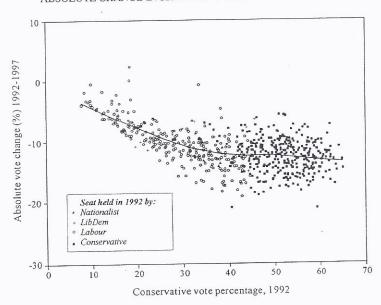


FIGURE 6b VARIATIONS IN PARTY PERFORMANCE, 1992–97: ABSOLUTE CHANGE IN SHARE OF THE VOTES CAST: LABOUR

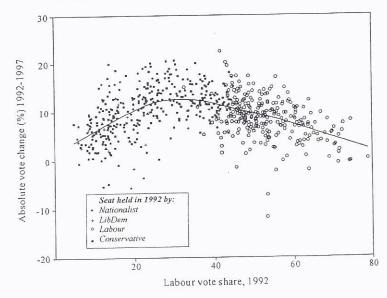


FIGURE 6c VARIATIONS IN PARTY PERFORMANCE, 1992–97: ABSOLUTE CHANGE IN SHARE OF THE VOTES CAST: LIBERAL DEMOCRAT

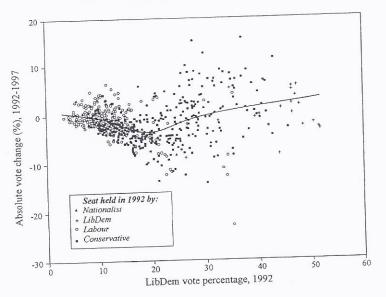
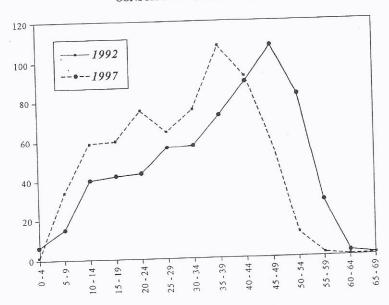


FIGURE 7 FREQUENCY BY DISTRIBUTIONS OF THE CONSERVATIVE VOTE SHARE, BY CONSTITUENCY, 1992 AND 1997



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92–97: BERAL DEMOCRAT



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The consequence of this is shown by the frequency distributions for the Conservative vote share at the two elections (Figure 7). Between 1992 and 1997 the distribution shifted leftwards, as expected given the reduction in the Conservative vote share overall; the mode moved down two categories (from 45-49 per cent of the votes cast to 35-39) and the right-hand portion of the distribution appears to have shifted en bloc. But on the left-hand side there is a second mode, at 20-24 per cent of the vote share, which is much more pronounced than that at 25-29 per cent five years previously. The Conservatives' relative success at retaining support in constituencies where they had no significant chance of winning in 1997 - presumably in part at least because Labour and the Liberal Democrats did not campaign hard there (as shown in Johnston, Pattie and MacAllister, 1999) - meant that the party won many more wasted votes than Labour had done at previous contests: where Labour lost in 1997 it lost badly, with benefits shown in its seats:votes ratio, but where the Tories lost they did relatively well, and got no Parliamentary return for the extra votes!

Whereas the Conservatives piled up more wasted votes in 1997, however, Labour and the Liberal Democrats did not. Labour's share of the poll increased by 9.6 percentage points overall between 1992 and 1997, but with very considerable variation about this average (Figure 6b). In its safe seats and also those where its chances of victory were slight it performed at well below its national average, thus winning most votes in the centre of the distribution (i.e. the constituencies which it held by relatively small margins plus those where it occupied a close second place before the 1997 poll). Labour neither 'piled up' excessive numbers of surplus votes in its safe seats nor worked hard to get more wasted votes where it had no chance of victory: it garnered votes where they mattered most, hence the very large increase in its effective percentage (Figure 3) and the substantial fall in both its number of wasted votes per seat lost and surplus votes per seat won (Figure 4).

For the Liberal Democrats, too, the result of the campaign was that it performed best where it was most important to do so. Their overall share fell slightly between 1992 and 1997, but they performed better than that in the small number of constituencies that they were defending (Figure 6c) and also in many of the others where their 1992 share was above 30 per cent and they had a chance of victory.

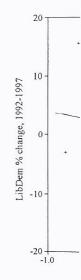
Tactical voting and campaign intensity

These graphical analyses provide strong evidence that the changing performance of the Conservative and Labour parties in 1997 relative to previous elections was a result of not only the overall shift in support from

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the former to the latter but also a geography to that shift which saw Labour perform best where it most needed votes: its much improved seats:votes ratio in 1997 reflected a more efficient vote distribution, consequent on its lack of attention to winning-over more support where the additional votes would be either wasted or surplus. The Conservatives, on the other hand, not only lost vote share overall but lost it most where it mattered most, to a greater extent (it is assumed here) than ever before: its very low seats:votes ratio in 1997, and the shift in the efficiency component of the bias index between 1992 and 1997 reflects that, and especially on the Tories' much greater harvest of wasted votes per seat lost.

Circumstantial evidence suggests that these changed geographies were strongly influenced by the spatially-focused nature of the Labour and Liberal Democrat campaigns at the 1997 election. One aspect of their campaigning which has attracted much attention since is the volume of tactical voting, and whether this led to many more Conservative defeats than might otherwise have been the case because there were substantial switches to the second-placed party, not only from former Conservative supporters and those who did not vote in 1992 but also between the two main challengers (Labour and Liberal Democrat). Several attempts have been made to measure the volume of such tactical voting (e.g. Berrington, 1997; Johnston *et al.*, 1997; McAllister, 1997; Evans *et al.*, 1998), with the latter group concluding that 'in 1997 more people voted tactically in order to try to defeat their local Conservative candidate than did so in 1992' (p.77).

Figure 8 illustrates the consequence of this in Conservative-held seats. The ratio of the two challenger parties' 1992 vote share is the independent variable (transformed to a logarithmic scale) and the relevant party's changed vote share between the two elections is the dependent. Labour's vote share clearly increased much more where it was better placed to contest Conservative incumbency (i.e. a log ratio greater than 0.0), with the exceptions of a small number of constituencies where it was in third place (i.e. a log ratio below 0.0) but performed better than its opponent (Figure 8a). The Liberal Democrats' share increased much more, on average, where they were in second place (a ratio of less than 0.0 on the independent variable), with a number of very substantial increases (Figure 8b). Their performance was poorest in those seats where Labour's 1992 share was only slightly larger than their own (log ratios around 0.0): where Labour had a very strong second place (i.e. a ratio of 0.5 or more) the Liberal Democrat performance was somewhat better (another piece of evidence that Labour did not build up large blocks of surplus votes).

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FIGURE 8a THE EVIDENCE FOR TACTICAL VOTING: CHANGE IN LABOUR SHARE OF THE VOTE 1992-97, ACCORDING TO THE (LOG OF) THE RATIO OF THEIR VOTE SHARES IN 1992

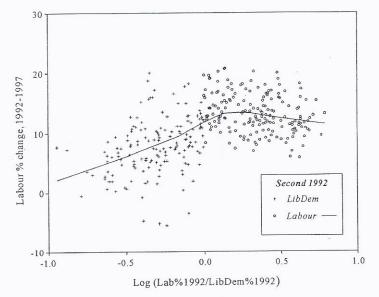
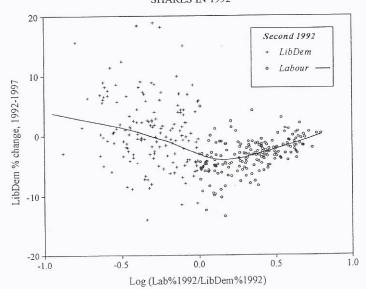
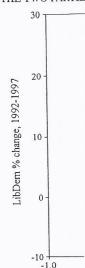


FIGURE 8b
THE EVIDENCE FOR TACTICAL VOTING: CHANGE IN LIBERAL DEMOCRAT SHARE OF THE VOTE, 1992–97, ACCORDING TO THE (LOG OF) THE RATIO OF THEIR VOTE SHARES IN 1992



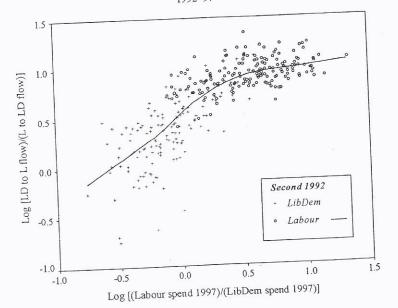
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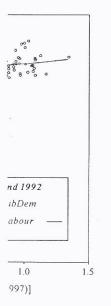
Further evidence of the important role of tactical voting is provided by our estimates of the flow-of-the-vote between the two parties between 1992 and 1997. (The estimation of flow-of-the-vote matrices follows procedures detailed elsewhere: Johnston et al., 1988.) For each constituency, we have an estimate of the flow of support from Labour to Liberal Democrat between 1992 and 1997, and also of the flow in the other direction: the ratio of these indicates the magnitude and direction of tactical voting - a ratio exceeding 1.0 indicates a net flow to Labour whereas a ratio below 1.0 indicates a net flow to the Liberal Democrats. Graphs (not reproduced here) show that where Labour was in second place (or a close third) the net flow was towards it, whereas the Liberal Democrats were the main beneficiaries where they were lying second. To relate this to campaign intensity, our independent variable is the ratio of the amount spent on the campaign, as a percentage of the maximum, by the two parties. (Again, this is using standard methods: Johnston, Pattie and MacAllister, 1999.) The two ratios are logged and regressed in Figure 9 (for Conservative-held seats only), which provides strong circumstantial evidence that tactical voting which favoured one party rather than another increased the more that the former party outspent its opponent.

FIGURE 9
THE RELATIONSHIP BETWEEN SPENDING AND TACTICAL VOTING FLOWS, 1992–97



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AL VOTING FLOWS,



Finally we turn to an issue which has intrigued a number of commentators. Although the Labour Party concentrated much of its effort on its 100 key seats, most of which the Conservatives held by a margin of ten percentage points or less, it actually increased its share of the vote more in the seats where it was 10-20 points behind than it did in the key seats (Curtice and Steed, 1997). This led to doubts that Labour's focused campaign really worked, and suggestions that other factors must have been more influential (Crewe, 1997). Our explanation for this apparent anomaly is that it reflects the relative intensity of the challengers' campaigns in the individual constituencies. Labour outspent the Liberal Democrats in most of the constituencies that the Conservatives held by a margin of more than 10 percentage points, and the greater the degree of outspending (i.e. a log ratio in excess of 0.0) the larger the increase in Labour's vote share and the greater the probability that Labour defeated the Conservative who was defending the seat (Figure 10a). In effect, Labour did so well in those seats where the gap between it and the Conservatives was wide because it outcampaigned the third-placed party. The Liberal Democrats lost support in the great majority of those seats (Figure 10b) but increased their vote share very significantly (by 10 percentage points or more) in a small number of those where they outspent Labour - and they won in 16 of those contests.

FIGURE 10a CHANGES IN VOTE SHARE, 1992–97, FOR LABOUR IN CONSERVATIVE-HELD SEATS BY A MARGIN OF 10 PERCENTAGE POINTS OR MORE, ACCORDING TO THE RATIO OF THE TWO PARTIES' SPENDING ON THE 1997 CAMPAIGN AND VICTORY IN 1997

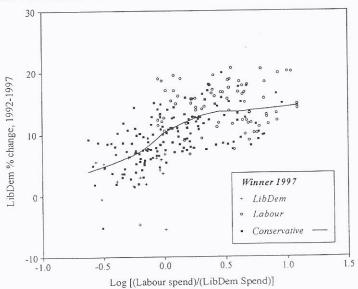
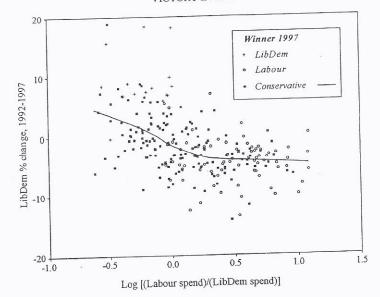


FIGURE 10b CHANGES IN VOTE SHARE, 1992–97, FOR LIBERAL DEMOCRAT IN CONSERVATIVE-HELD SEATS BY A MARGIN OF 10 PERCENTAGE POINTS OR MORE, ACCORDING TO THE RATIO OF THE TWO PARTIES' SPENDING ON THE 1997 CAMPAIGN AND VICTORY IN 1997



The message is clear: tactical voting, and its relationship to constituency campaign intensity, not only contributed to the overall Conservative defeat but also was a contributor to Labour's much more efficient vote distribution in 1997. In Conservative-held seats where one of the challengers had a good chance of victory, the flow of tactical votes to it increased its chances of success, and thus its store of effective votes, whereas for the other challenger it reduced its possible accumulation of wasted votes. Labour's substantially increased seats:votes ratio in 1997 reflects this: where it was third, it came an even worse third than it would have done without tactical voting and got relatively few wasted votes; where it was second, tactical voting increased its chances of success, which meant more effective votes (and, again, fewer wasted ones). The corollary of this was that the Liberal Democrats, too, achieved a substantial increase in their seats:votes ratio for the same reason (Figure 1b).

The mechanism underpinning this remains unclear, however. In part, the volume of tactical voting undoubtedly reflects the individual decisions made by an increasingly sophisticated electorate. But the clear link between not only the flow of tactical votes within constituencies and the intensity of local campaigns suggests that the parties mobilize some of this either

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### Conclusions

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owever. In part, the idividual decisions clear link between and the intensity of ome of this either through their direct contacts with electors or simply by the impact of their advertising and other activities locally. The 1997 BES cross-section survey data show no difference between those who reported voting tactically (as analysed by Evans *et al.*, 1998) and those who did not in the probability of their being contacted by canvassers, either at their home or by phone. Voters, it seems, 'go with the flow' in their local milieux: the stronger the evidence that one of the challenger parties is campaigning hard (evidenced, for example, by the number of posters they have displayed in the constituency), the greater the shift of voter support in their favour.<sup>8</sup>

### Conclusions

The 1997 general election result produced a landslide for Labour in terms of Parliamentary representation, though its share of the votes cast was not extraordinary, and it saw the Conservatives lose an incommensurate proportion of the seats relative to their vote share (which even so was their lowest ever over the last 50 years). These features are obscured by a summary measure of disproportionality, such as the Loosemore-Hanby index. Two other measures – the seats:votes ratio for each party and the Brookes index of electoral bias – make very clear just how different the 1997 result was from those that preceded it, however.

In this article we have explored the reasons why the 1997 result should have been so different in the allocation of seats relative to votes, using a division of votes won into three categories - effective, surplus and wasted. With these, we have shown both long-term trends that have increasingly favoured Labour over the Conservatives, because of differences between the two in the average size of the constituencies that they have won and in the average turnout there. But these were insufficient to account for the major changes between 1992 and 1997. These were consequences of significant shifts in the geography of vote-winning, which were consistent with the spatially-focused constituency campaigns conducted by the challenger parties in 1997 and accentuated by tactical voting, which meant that the Conservatives substantially increased their number of wasted votes per seat lost whereas Labour very significantly reduced its ratios of both surplus votes to seats won and wasted votes per seat lost. Labour's landslide was a geographical phenomenon, and the parties' performances at the next election will reflect the degree to which they and the British electorate have all learned this lesson.

#### NOTES

 Throughout this article we deal only with Great Britain, excluding Northern Ireland with its separate party system.

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- 2. The 1970 election was fought in constituencies defined in the mid-1950s, because of Labour's decision not to implement the 1969 Reviews of constituencies reported by the Boundary Commissions. This meant that there were many small, inner city constituencies in 1970, the vast majority of which were won by Labour with relatively few votes even though in percentage terms many of the majorities were large (see Rossiter, Johnston and Pattie, 1900)
- 3. As the evidence presented to the Home Affairs Select Committee (1998) on this issue shows, turnout has been especially low at elections where the likely outcome is very clear beforehand. The exact figures are very difficult, if not impossible, to calculate because of difficulties regarding electoral registration which that report also demonstrates.

 Although the performance of 'third parties' in seats that it won favoured the Conservatives, their increased electoral success told against them, especially in 1997 when they more or less negated the general advantage (Johnston et al. 1998b, 1999).

 So much so that in July 1998 the Labour Party decided to repeat it for the next election, by identifying the 91 seats it needed most effort to hold on to then, and initiating the 'long campaign'.

 The 1992 vote percentages for each constituency are those calculated by the procedure described in Rossiter, Johnston and Pattie (1997a).

 An alternative interpretation of some of these trends over recent (post-1979?) elections is the growth of anti-Conservative tactical voting.

 This is consistent with recent work on the role of conversations in local milieux as an influence on voting decisions (Pattie and Johnston, 1999).

#### REFERENCES

- Berrington, H. (1997) 'The Liberal Democrat Campaign', in P. Norris and N. Gavin (eds), *Britain Votes 1997*, pp.47–60. Oxford: Oxford University Press.
- Brookes, R.H. (1959) 'Electoral Distortion in New Zealand', Australian Journal of Politics and History, 5: 218-23.
- Brookes, R.H. (1960) 'The Analysis of Distorted Representation in Two-party, Single-member Elections', *Political Science*, 12: 158–67.
- Crewe, I. (1997) 'Book Review', New Statesman and Society, 12.12.1997
- Curtice, J. and M. Steed (1997) 'The Results Analysed', in D. Butler and D. Kavanagh, *The British General Election of 1997*, pp.295–325. London: Macmillan.
- Denver, D. and G. Hands (1997) Modern Constituency Electioneering: The 1992 General Election. London and Portland, OR: Frank Cass.
- Denver, D., G. Hands and S. Henig (1998) 'Triumph of Targeting? Constituency Campaigning in the 1997 General Election', in D. Denver, J. Fisher, P. Cowley and C. Pattie (eds) British Elections and Parties Review Volume 8: The 1997 General Election, pp.171–90. London and
- Portland, OR: Frank Cass.

  Dunleavy, P. and H. Margetts (1997) 'The electoral system', in P. Norris and N. Gavin (eds),

  Britain Votes 1997, pp.225-41. Oxford: Oxford University Press.
- Evans, G., J. Curtice and P. Norris (1998) 'New Labour, New Tactical Voting? The Causes and Consequences of Tactical Voting in the 1997 General Election', in D. Denver, J. Fisher, P. Cowley and C. Pattie (eds) *British Elections and Parties Review Volume 8: The 1997 General Election*, pp.65–79. London and Portland, OR: Frank Cass.
- Home Affairs Committee (1998) Fourth Report: Electoral Law and Administration. Cm 768-I, 768-II. London: HMSO
- Johnston, R.J., C.J. Pattie and G. Allsopp (1988) A Nation Dividing? The Electoral Map of Great Britain 1979–1987. London and Portland, OR: Longman.
- Johnston, R.J., C.J. Pattie and I. MacAllister (1999) 'The Funding of Constituency Party General Election Campaigns in Great Britain', Environment and Planning C: Government and Policy, 17.
- Johnston, R.J., C.J., Pattie, I. MacAllister, D.J. Rossiter, D.F.L. Dorling and H. Tunstall (1997)

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'Spatial Variations in Voter Choice: Modelling Tactical Voting at the 1997 General Election in Great Britain', *Geographical and Environmental Modelling*, 1: 153–79.

Johnston, R.J., C.J. Pattie, D.F.L. Dorling, D.J. Rossiter, H. Tunstall and I. MacAllister (1998a) 'New Labour Landslide – Same Old Electoral Geography?', in D. Denver, J. Fisher, P. Cowley and C. Pattie (eds) British Elections and Parties Review Volume 8: The 1997 General Election, pp.35–64. London and Portland, OR: Frank Cass.

Johnston, R.J., C.J. Pattie, D.J. Rossiter, D.F.L. Dorling, H. Tunstall and I. MacAllister (1998b) 'Anatomy of a Labour Landslide: The Constituency System and the 1997 General Election', Parliamentary Affairs, 51: 131–48.

Johnston, R.J., D.J. Rossiter and C.J. Pattie (1999) 'Integrating and Decomposing the Sources of Partisan Bias: Brookes' Method and the Impact of Redistricting in Great Britain', Electoral Studies, 17: 367-78.

Lijphart, A. (1994) Electoral Systems and Party Systems. Oxford: Oxford University Press.
Linton, M. and M. Southcott (1998) Making Votes Count: The Case for Electoral Reform.
London: Profile Books.

Loosemore, J. and V.J. Hanby (1971) 'The Theoretical Limits of Maximum Distortion: Some Analytic Expressions for Electoral Systems', *British Journal of Political Science*, 1: 467–77.

McAllister, I. (1997) 'Regional Voting', in P. Norris and N. Gavin (eds), Britain Votes 1997, pp.133–49. Oxford: Oxford University Press.

Norris, P. (1997) 'Anatomy of a Labour landslide', in P. Norris and N. Gavin (eds), *Britain Votes* 1997, pp.1–33. Oxford: Oxford University Press.

Pattie, C.J. and R.J. Johnston (1999) 'Context, Conversation and Conviction: Social Networks and Voting at the 1992 British General Election', *Political Studies*, 47: XXXX

Rae, D.W. (1971) The Political Consequences of Electoral Laws (second edition). New Haven CT: Yale University Press.

Rossiter, D.J., R.J. Johnston and C.J. Pattie (1997a) 'Estimating the Partisan Impact of Redistricting in Great Britain', *British Journal of Political Science*, 27: 319–31.

Rossiter, D.J., R.J. Johnston and C.J. Pattie (1997b) 'Electoral Bias and Redistricting in Great Britain', British Journal of Political Science, 27: 466-72.

Rossiter, D.J., R.J. Johnston, and C.J. Pattie, (1999) *The Boundary Commissions: Redrawing the UK's Map of Parliamentary Constituencies*. Manchester: Manchester University Press.

Rossiter, D.J., R.J. Johnston, C.J. Pattie, D.F.L. Dorling, I. MacAllister and H. Tunstall (1999) 'Changing Biases in the Operation of the United Kingdom Electoral System, 1950–1997', British Journal of Politics and International Affairs, 1: 133–64.

Taagepera, R. and M. Shugart (1989) Seats and Votes: The Effects and Determinants of Electoral Systems. New Haven CT: Yale University Press.