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Historical Precedent and British Electoral Prospects*

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This article develops a crude but robust method for creating plausible future general election results on the basis of previous changes in the vote—that is, counterfactual future results. By matching constituencies from two elections according to the relative electoral performance of all the significant political parties, many of the practical problems of projecting previous changes in the distribution of votes can be overcome. The method is demonstrated using the example of recent general elections in Great Britain to create a number of projected outcomes for a fictional general election in 1996. The implication of these results is that, barring some strictly unprecedented transformation in the electorate, the parties, or the electoral system, no party other than the Conservatives can form a majority government at the next election. We can say this with some confidence, because testing the method using all the British general elections in the period of 1970 to 1992 shows it to produce a range of scenarios that have never been awry by more than eight seats.

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Introduction

What goes around, comes around.
[American popular saying]

What do we mean when we say that a given election is similar to, or reminiscent of, a previous election? What commentators are usually saying is little more than that some version of the national change in the votes for each party (or the 'swing' between parties) is of a similar value to that recorded at previous elections. Less often, they suggest that a particular regional pattern of change in the distribution of the vote, or even the distribution of the vote in an individual seat, is similar. What these commentators are doing is loosely comparing some measure of the relative performance of the major parties between previous successive elections with that between the election on which they are now commentating and its predecessor. In this article we attempt the same task in a more systematic manner, consistently comparing election results over time.

Once we can compare elections over time consistently, it becomes possible to project previous changes in the pattern of votes on to known election results to generate a range of 'precedented' future election results. There will be a general election in Britain before April 1997, most probably some time in 1996. That election will almost certainly be fought in substantially the 'same' seats as previous post-war elections and by substantially the 'same' parties. In this article various methods are developed to project plausible results for that election on the basis of the last eleven general elections of the post-war period 1955–1992.[1]

Recent British Electoral History and the Electoral Triangle

The period since 1955 has seen many changes of government and the rise of the third party within a relatively stable electoral structure (Stevenson, 1993). Figure 1 shows the distribution of votes by seat for the three main parties at each election using the standard electoral triangle (Upton, 1976; 1994; Miller, 1977). Readers who are unfamiliar with the electoral triangle may need some guidance in interpreting Figure 1. In the electoral triangle the share of the vote gained by each of the three main parties in each constituency is displayed graphically by a dot. A dot falling in the upper subsection of the triangle represents a seat won by the third party (Liberal Party, Liberal/SDP Alliance, or Liberal Democrats). A dot in the bottom right-hand subsection represents a seat won by the Conservative Party. Similarly, a dot in the bottom left-hand subsection represents a seat won by the Labour Party. The closer the dots are to the boundaries between the subsections, the more marginal are the seats that they represent. The histogram on the base of the triangle represents the distribution of votes in seats in which there was no third-party candidate (hence, the histogram disappears after 1979). Seats where the main parties did not stand (i.e., Northern Ireland after 1970 or where the Speaker declared himself to be independent) are shown as dots to the right of the main triangle. The pattern formed by the dots shows the 'shape' of the vote at each general election. The change in that shape over time shows, in outline, the evolution of British electoral competition.[2] (Figure 1 can be compared with Table 1 which shows the number of seats won by the main parties at each election in a more familiar manner.)

The electoral triangle is not restricted to showing the results of a single election. The change in the relative performance of any three parties can be displayed by

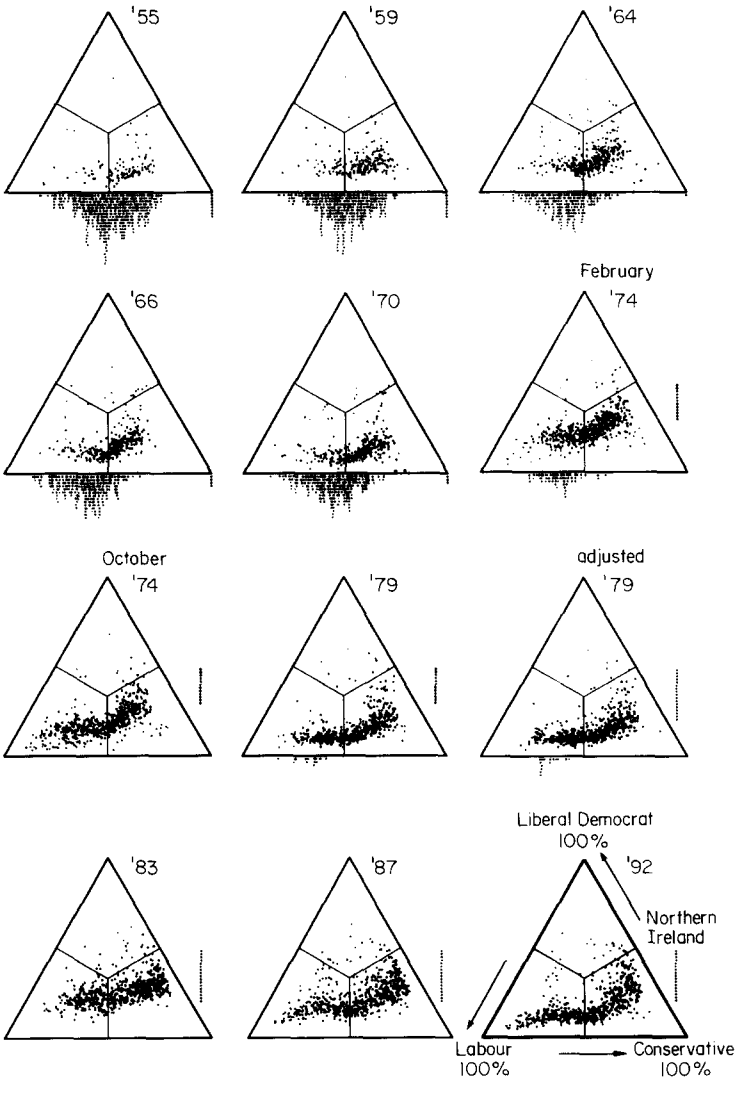

FIG. 1. General election results 1955–92 shown using the standard electoral triangle

plotting the share of the vote given to each party at two, usually successive, elections are two dots. An arrow joining the two dots (and with its head pointing to the later of the two elections) represents the change in the relative percentage share of the vote of the three parties. This is shown in Figure 2 using the example of change between the general elections of 1983 and 1987 in a single seat, Greenwich. The length of the arrow, and the angle which it makes with some given reference line, provides a visual representation of the direction and magnitude of electoral change. This technique is used in Figure 3 where the change in the relative percentage share of the vote in every constituency in mainland Britain between the 1987 and 1992 general elections is shown by arrows superimposed on an equal population cartogram with the axes of the triangles omitted to clarify the figure.

TABLE 1. British election results, 1955–92

Election year	Con.	Lab.	Lib.	Nat.	Other
1955	344	277	6		3
1959	365	258	6		1
1964	304	317	9		
1966	253	363	12		2
1970	330	287	6	1	6
1974Feb.	297	301	14	9	14
1974Oct.	277	319	13	14	12
1979	339	269	11	4	12
1983	397	209	23	4	17
1987	376	229	22	6	17
1992	336	271	20	7	17

Note: Includes Northern Ireland. Lib. = Liberal Party 1945–79, Liberal/SDP Alliance 1983–7, Liberal Democrat Party 1992. Nat. = combined SNP and Plaid Cymru.
Source: King *et al.*, 1993: 249; COI, 1991.

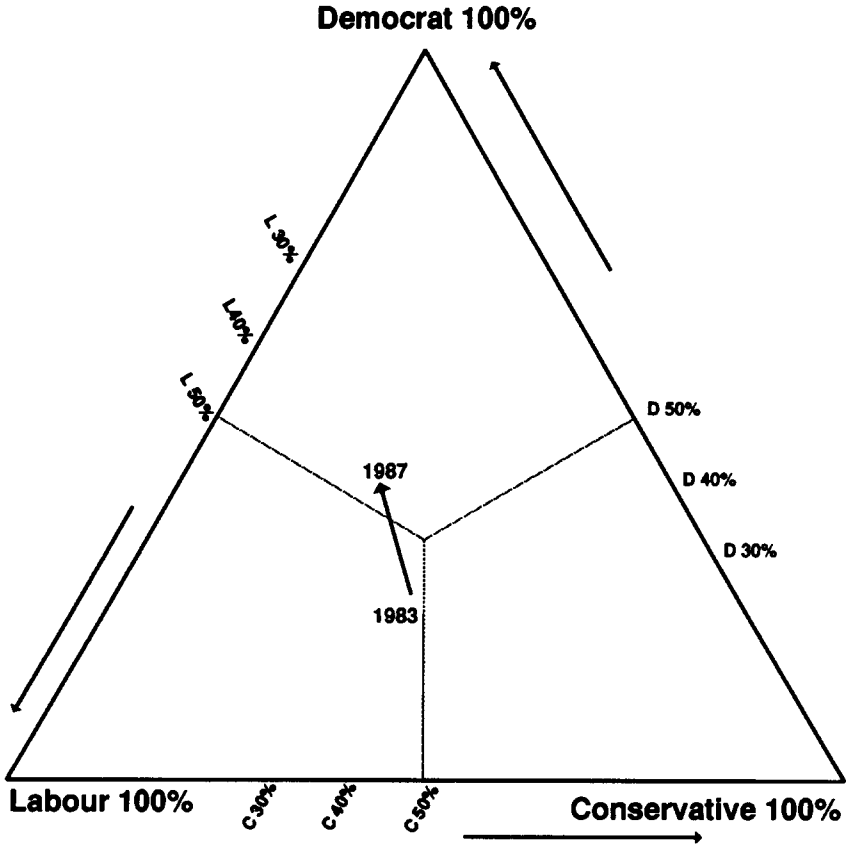

FIG. 2. Representing electoral change for a single seat using the electoral triangle

FIG. 3. Change in the relative share of the vote for the three 'main' parties, 1987–92

The cartogram is shown here to illustrate the extent of variation in change in the vote between individual constituencies (Dorling, 1992).[3]

What to Project?

How many times have we heard commentators on election night suggesting that the results represent a repetition of '1964' or of '1970'? How often have they asserted that a given electoral result is 'unprecedented'? How often is it suggested that a victory for a given party is 'of historic proportions'? As William Miller and his co-authors (1990, p. 1) have pointed out, professional electoral commentators 'always measure events against expectations'. When they are surprised by an election result, then, it is either because the result really is surprising or because the expectations were over- or under-inflated. Ivor Crewe, writing before the 1992 election (1991, p.23) suggested that

> the three election defeats of the past decade have left Labour so far behind the Conservatives in the popular vote that the electoral turnaround needed to restore Labour to office at the next election will have to be extraordinary by historical standards.

What we need to establish, then, is exactly what those 'historical standards' are: what *would* happen *if* history were to repeat itself? The rest of this article is, therefore, concerned with establishing reliable benchmarks—'counterfactual' results for a future '1996' election based on previous general elections against which such comparisons can be made. The analysis, then, is of the 'what if' variety: concerned with *what* would happen *if* history were to repeat itself. But how are we to establish reasonable expectations of the outcome?

Academic psephologists seem to have developed a small industry dedicated to the task of *predicting* the outcome of British general elections on the basis of such data as poll results (Whiteley, 1979), local election results (Curtice and Payne, 1991), geographically referenced socio-economic data (such as house prices and unemployment—Spencer, Beange, and Curtice, 1992), studies of individual voting histories (such as can be drawn from the British Election Panel Studies to create a 'flow of the vote matrix'—see Johnston, Pattie, and Allsopp, 1988) or the early results on election night (Brown and Payne, 1975). For an overview of statistical methods for electoral forecasting see Payne (1992).

Each of these methods raises significant problems. Most directly, methods which use information which is taken to indicate *current* voting intention (e.g., voting behaviour in local elections, current socio-economic data or responses to opinion polls) may have some utility in answering questions about what would happen if there were a general election *tomorrow* (the standard opinion poll question), but that answer may have little relevance to the outcome of a general election three or four years hence. A second problem is raised by the context in which such data is gathered—answering an opinion poll is, as the last British general election demonstrated, not at all the same as actually voting at the polling station. Even polls taken only a few hours before the vote can be unreliable (Moon, 1992, p.159). Likewise, local elections cannot be taken as a proxy for general elections, just as complex correlations between socio-economic variables and party-preference cannot be automatically assumed to be stable. To project general elections, we would argue, the primary requirement is general election data. Finally, while the British Election Studies panel surveys do provide a good source of information, the size of the sample means that constructing a flow-of-the-vote matrix can only be done at a regional scale (see Johnston and Pattie, 1993), while a real general election will, of course, be fought in some 651 plus constituencies.

In order to operate at the constituency level, in the interests of geographical realism, one is forced to abandon using a flow-of-the-vote matrix and settle instead for the less satisfactory 'change in the percentage share of the vote'. This, of course, raises significant problems. Firstly, it is voters, not constituencies, which vote. Thus, to create a realistic flow-of-the-vote matrix one would require information on migration between constituencies, data on individual deaths and data on individuals reaching the age of minority. As we have little hope of constructing such a matrix at the constituency level, we are forced back to using aggregate constituency-level voting data, and thus the change-in-the-percentage-vote-share measure of change. However, we thus confront a major 'problem of proportionate swing' (McLean, 1973)—the fact that a small *change* in the percentage of the

vote share of a party with a *large* established percentage share of the vote is going to be much larger than a *change* in the percentage of the vote share of a party with a small established percentage share of the vote. By projecting historical change in the percentage of the vote share from a situation in which a given party had a small established vote on to a situation in which that party has a large established percentage of the vote, we risk creating absurd results. This issue is, however, addressed below.

A New Method for Projection

How then are we to project previous changes in the percentage share of the vote on to known results? The general problem has been well described by Budge and Farlie (1977, p.450):

> At the start of any attempt to estimate the next set of [election] results we have to decide whether the next election will replicate the last set (in which case we simply use the previous figures) or whether it will differ (and if so, in what way and to what extent).

Having already decided on using constituency-level general election data, the next task is that of deciding which general elections to use. In this article, elections results have been drawn from the period 'within living memory' of much of the population. Although there have been significant social, political, and demographic changes over the four decades covered, many of those people who voted in 1955 will still be registered to vote in 1996 and hence these are not entirely discrete eras (despite a 'decade of dealignment', party identification is still seen as strong throughout the lifecourse, and beyond it through the political socialization of children). Moreover, in spite of major political changes, the actual electoral system—plurality voting within some 600 plus mainland seats[4]—remains virtually identical save for a few innocuous boundary changes.

How should 'what if' projections be generated? This can be expressed more formally as a question of how to gain a counterfactual result for election q by projecting from the vote for a given party at a known election p on the basis of the change in the relative percentage share of the vote for a set of parties between previous elections a and b. For example, we may want to project the future '1996' election (q) from the 1992 results (p) on the basis of the change in the vote from the 1959 election (a) to the 1964 election (b)—in short, what would be the result of an identically large rise in the Labour vote? Alternatively, we may want to project from 1992 (p) to a prospective 1996 (q) on the basis of the most recent pair of elections, 1987 (a) to 1992 (b), (i.e., with p equal to b)—in short, would 'one more heave', exactly the same as the last one, be enough for Labour to win a working majority?

The traditional method involves taking a simple measure of 'uniform swing' and applying that swing to the distribution of votes in each seat at the last election to generate a projection for the next election (as in Harrop and Shaw, 1989). Such an approach, while simple to execute (in terms of the electoral triangle the same displacement would apply to every dot), suffers from the weakness of totally ignoring geographical variation in the change in the vote. Given the increasing geographical variation in swings in recent years (Johnston, Pattie, and Allsopp, 1988), this fact may lead to doubts about accepting the implications of such a calculation.

Acknowledging geographical variations in the change in the vote, a more sophisticated approach might be to model each constituency separately (Harrop and Shaw, 1989; Budge and Farlie, 1977). In terms of the electoral triangle we would simply displace the dot representing a given constituency by the same values as those generated by the change in the relative percentage share of the vote in that constituency between our two 'base' elections (*a* and *b*). However, such an approach only replaces the geographical oversimplification of applying a uniform national change in the vote with a geographical fetishism—it ignores the fact that seats change over time, in effect treating space (constituencies) as a neutral reference rather than as a dynamic and constructed social entity (Pred, 1988). For example, a Tory seat, which was 'safe' in 1983 and which swung dramatically towards Labour in 1987, would not necessarily swing at the same rate and in the same direction in 1992 because it would have become a marginal seat. Further, this method suffers from the 'problem of proportionate swing' (McLean, 1973) or, using the electoral triangle, proportionate change-in-the-vote (a 5 percent increase in the Conservative vote in a seat in which the Conservatives' prior share of the vote was 20 percent, is not comparable to a 5 percent increase in the Conservative share of the vote in a seat where the prior Conservative vote is 60 percent (a little of a little is a little, while a little or a lot is rather more!). Further, if voters' decisions and party strategies are increasingly shaped by the prior electoral balance in a given seat (voters vote tactically, parties target marginals), then *maintaining geographical constancy risks ignoring the electoral context.*[5]

What is required, then, is a method which can match constituencies according to some indication of similarity in the electoral context; only then is it possible to project the change in the vote in the first constituency of a pair of earlier elections on to the known result of some later election. The next problem is how to match pairs of constituencies in a way that is both rigorous and plausible. That is to say, which *a* constituency should we use to model the change in the vote from a given *p* constituency? The obvious answer—comparing the same constituency at each election—is, as we have argued, problematic.

What is required is a comparison of the relative performance of parties in 'politically' similar places. Such a concept could, of course, be very complex. 'Political' similarity could be defined in a number of ways. For example, one may wish to compare places which have had similar levels of unemployment, ethnic diversity, professional workers, and so on.

Whatever definition is chosen for the relevant indices of similarity, the quantitative procedure is much the same. We would try to match each constituency with the most similar constituency *according to the indices.* Thus, if the index was the ratio of the Registrar General's social classes I, II, and IIIN, to classes IIIM, IV, and V, then a seat where this ratio was roughly 1 : 1 at the first election of the base pair (*a*) would be paired with the seat closest to having an identical ratio at the election from which we are projecting (*p*). In short, rather than saying something about the relative performance of parties in constituency *x* at two elections, we could say something about the relative performance of parties in a constituency of *type z* at two elections. Each constituency at a given election (*p*) can then be compared with the constituency which most nearly approximates to it in terms of the chosen index at the earlier of the two previous elections (*a*).

Because our interest is in the future electoral performance of the main parties in Britain, the index on which we have sought to match pairs of constituencies

in this article is the pattern of votes for those parties in the previous election (this approach also has the advantage of being parsimonious with the data—we only require a table of general election results). Thus, for example, in order to project a result for the '1996' (*q*) election from the 1992 (*p*) election based on the change in the vote between the 1987 (*a*) and 1992 (*b*) elections, seats are matched in terms of the relative positions of the parties in the preceding elections, 1992 (*p*) and 1987 (*a*) respectively. Hence, a constituency which had election results of Conservative 42.8 percent of the vote, Labour 46.1 percent and Liberal Democrats 9.9 per cent in 1992 would be paired with a constituency which had election results of Conservative 42.8 percent, Labour 46.1 percent, Alliance 9.9 percent in 1987, or with the 'nearest' constituency to that result. That is to say, we would match constituencies according to the smallest distance between their co-ordinates within the electoral triangle (see Figure 1).[6] This gives a full set of 'matched pairs' of constituencies (although it is possible for a number of the *p* constituencies to be modelled from a single *a* constituency). The percentage changes in the vote between the base pairs of elections, *a* and *b*, in the first constituency of the pair is then used to generate a hypothetical result for the election *q* projecting from the previous election *p* in the second constituency of the pair.[7]

This method, then, has several major advantages. First, the problems of a shifting geography are overcome by the matching of seats on the grounds of electoral similarity rather than geographical continuity. Second, the problems raised by parties failing to contest seats at one or other of the three known elections are eliminated because seats are matched on their relative electoral performance. Third, impossible or illogical results (such as a party increasing its vote until it exceeds the total electorate) are virtually abolished. Fourth, and importantly, only movements within the electoral triangle which have actually happened in the past are projected into the future: if changes in the percentage share of the vote did not result in the defeat of a candidate then, they will hardly ever do so in our projection. The problem of using proportionate movements within the electoral triangle is dramatically reduced by matching seats according to similar positions. Finally, the method is frugal in its data requirements so that the day after the '1996' election, the model can be re-run after entering only the new constituency results to produce a plausible set of counterfactual results for an election in 2001 (assuming five-year terms and no major changes in the structure of electoral politics).

Most importantly, this method is particularly appropriate to the present electoral climate. By matching marginal seats with marginal seats, and seats in which tactical voting can determine the result with similar seats, we would argue that this method can more realistically model future outcomes for the 1990s on the basis of past performance than simple extrapolation of swings. For example, a seat which has become a Tory–Labour marginal from being a 'safe' Conservative seat is more likely to see its third-party vote squeezed as a result of tactical voting and deliberate targeting of that seat by both the Conservative and Labour parties, rather than continuing its migration across the electoral triangle to become a 'safe' Labour seat. In terms of the electoral triangle, then, the seat is more likely to 'move' vertically downwards rather than to continue moving horizontally leftwards (as would be implied by its geographical or national change in the vote models). People increasingly vote according to the existing electoral balance in their constituency (the

evidence of this can be seen in the evolution of the 'shape' of the vote in Figure 1); hence, a simple method of projection which takes this into account can claim some theoretical validity. A formal exposition of the new method is given in a brief appendix.

The key question, however, is how does the method perform in practice?

Testing the Method Using Known Results from 1974 to 1992

We can now use the method to show *what would have happened at previous elections if the change in the relative percentage share of the vote for the various parties in the matched seats had replicated those of earlier elections.* These calculations for every general election from February 1974 to April 1992, using the general elections from 1955 to 1987 as the base pairs, are shown in Table 2. Some help may be required in reading the table. For example, the five figures in the top left hand corner of the table represent the counterfactual result, in terms of seats won, of projecting from the actual results of the 1970 general election on the basis of the new method (using change between the general elections of 1955 and 1959) to show the mix of seats going to the four identified parties (Conservative, Labour, Liberal, and grouped Nationalists) in a counterfactual '1974' result repeating those changes. The lowest group of figures in each column thus represents the actual result of the second of the two elections indicated at the top of the column (in all cases only mainland seats are shown).

From this table, then, we can compare our counterfactual results with the known results for mainland seats and thus identify those electoral performances which were unprecedentedly good or bad. In short, what the table tells us is that:

— The Conservative Party did unprecedentedly well in 1979 getting five more seats than in any of the six projected counterfactuals.
— The Labour Party did unprecedentedly well at the polls in 1992, getting eight more seats than any of the nine projected counterfactuals would have suggested.
— The Liberals did unprecedentedly well in February 1974, getting three more seats than any of the four projected counterfactuals, as did the Alliance in 1983, when the margin was just one seat.
— The combined Nationalist parties did unprecedentedly well by two seats in February 1974 and unprecedentedly badly by three seats in 1979.

Unprecedented events are, then, not unlikely. Nevertheless, *the simple fact that the method has never produced a range that has been exceeded by more than eight seats suggests that it is robust.* There is one further point to make here. Intuitively, we might expect unprecedented outcomes to diminish with time as we add further counterfactual results. What appears to be happening, however, is the opposite with the larger unprecedented results emerging later in the electoral series (for example, the Conservative's five seats in 1979 and Labour's very impressive eight seats in 1992).

A final, if perhaps unfair, test is to compare our results with those which would be produced if the simple two-party 'Butler' swings had been used to generate the projections. To do this, for each seat, the votes of only the parties which were first and second (at election *a*) are presumed to change in proportion to the Butler swing between them at the base pair of previous elections. Doing this obviously does not allow for the third-placed party at election *a* to influence the outcome.

TABLE 2. Historical counterfactual results for all elections from February 1974 to 1992

Replicating the swing between given years	Projecting from the election of the first date to the election of the second date					
	1970 1974f	1974f 1974o	1974o 1979	1979a 1983	1983 1987	1987 1992
55–59						
Con	335	314	269	369	442	373
Lab	273	270	311	251	183	232
Lib	6	26	18	–	23	20
Nat	2	11	23	6	5	–
Tot	618	623	623	633	633	633
59–64						
Con	226	251	214	296	348	331
Lab	379	322	343	313	205	249
Lib	11	44	59	22	78	51
Nat	1	6	7	2	2	2
Tot	618	623	623	633	633	633
64–66						
Con	250	245	202	318	332	330
Lab	357	347	379	297	263	263
Lib	8	20	24	11	31	31
Nat	2	11	17	6	7	9
Tot	618	623	623	633	633	633
66–70						
Con	363	370	334	422	450	434
Lab	242	226	259	201	144	176
Lib	3	12	8	3	30	11
Nat	7	11	18	–	9	10
Tot	618	623	623	633	633	633
70–74f						
Con	**285**	246	224	343	352	342
Lab	**308**	261	306	252	143	207
Lib	**14**	91	56	18	127	72
Nat	**9**	23	37	20	1	12
Tot	**618**	623	623	633	633	633
74f–74o						
Con		**277**	255	342	364	355
Lab		**319**	333	273	239	248
Lib		**13**	13	–	20	22
Nat		**14**	22	11	10	8
Tot		**623**	623	633	633	633
74o–79						
Con			**339**	419	466	437
Lab			**269**	207	140	176
Lib			**11**	4	23	17
Nat			**4**	2	4	3
Tot			**623**	633	633	633
79–83						
Con				**397**	368	393
Lab				**209**	116	149
Lib				**23**	121	80
Nat				**4**	5	6
Tot				**633**	633	633
83–87						
Con					**376**	382
Lab					**229**	227
Lib					**22**	18
Nat					**6**	6
Tot					**633**	633
87–92						
Con						**335**
Lab						**271**
Lib						**20**
Nat						**7**
Tot						**633**

Note: The bold figures show the actual results (mainland seats only). For instance, the 1970–74 change applied to the 1970 result produces the 1974 result. Results not in bold represent counterfactual projections from the first election indicated at the top of the column, based on precedented change indicated by the row titles, calculated using the method given in the appendix.

This fact weakens the performance of such an approach in practice. For instance, projecting the 1979 general election, on the basis of the Butler swings between all the elections since 1955 produces projected results which, at best, still underproject the Conservative result by 16 seats (twice as large an error as the worst projection made using the new method developed here). Indeed, even if the Butler swings between two elections and the results of the first election of that pair are known, the results of the second election cannot be generated correctly.

Projecting a Prospective 1996 Election

As with historical comparison of events in general, the most interesting application of this method is in generating hypothetical election results for *future* elections. What the method presented above allows us to do is use the change in the vote between previous pairs of elections to generate some 'projected outcomes' for the next election based on previous change in the vote (see Table 3). Once again we must stress that these should not be taken as predictions of what the actual outcome of the next election will be. We have already shown how unreliable they would be by using previous results to project the known results for subsequent elections.[8] Rather, they are useful in giving some plausible indication of the potential range of precedented outcomes, thus giving us a formal method for determining what is an 'unprecedented result'.[9]

First, however, we need to introduce some caveats. One problem, which we have already noted, is that of the election from which we are projecting. A particularly strong result in that election, coupled with a historically strong result from a previous pair of elections, will produce an implausibly good result (and vice versa). There is also the danger of projecting many seats from a very few bases. For example, few seats prior to the 1974 February elections will have suitably large Liberal votes for them to match with 1992 seats. Projection of a '1996' election on the basis of 1955 or 1970 will, therefore, match many of the 1992 seats with only

TABLE 3. Projecting from 1992 on the basis of the change in the vote in the last ten pairs of general elections: constituencies matched by electoral position

Base elections	*Con.*	*Lab.*	*LD.*	*Nat.*	*Oth.*	*Result*
1955-59	353	253	19	7	1	Con.majority
1959-64	**272**	**320**	38	3	**0**	Lab.minority
1964-66	295	306	26	4	2	Lab.minority
1966-70	**400**	207	**9**	**14**	3	Con.majority
1970-74Feb	309	270	39	**14**	1	Con.minority
1974Feb-74Oct	316	290	14	12	1	Con.minority
1974Oct-79	390	225	15	**2**	1	Con.majority
1979adj-83	367	**201**	**55**	6	**4**	Con.majority
1983-87	340	265	17	11	**0**	Con.majority
1987-92	295	310	16	10	2	Lab.minority
1992 result	335	271	20	7	0	Con.majority

Note: Mainland seats only are included in the projections and in the '1992 Result' to enable comparisons. We have not attempted to model the 17 Northern Ireland seats. The two 1992 Milton Keynes seats have been combined. Best and worst results for each party are shown in bold.

a handful of 1955 or 1970 seats, although we would argue that these are the only past data which provide a reasonable basis for projection.

Furthermore, there is the problem of national incumbency: the best matches are likely to be where the defending government is the same party at both elections *a* and *p*. Finally, we have the problem of the timing of elections within the economic cycle—here the best matches are likely to be between two elections held during similar economic conditions (for example, at the height of a boom or the trough of a recession). In general, then, we should be very wary of taking our results too seriously without firmly contextualizing them first. In spite of these problems, we do now have a method for projecting a future election result on the basis of previous electoral change, which neither ignores nor fetishizes electoral geography, which can cope relatively easily with boundary changes, and which, from past experience at least, appears to produce a plausible range of results.

What does this tell us? The historical precedent, on the basis of five out of the last ten pairs of general elections, is that the Conservatives are the only party which will be able to rule alone after the next election. In just two cases, both replicating swings from the 1960s, the Liberal Democrats and Labour would be able to form a joint administration. In the remaining three cases parliament would be precariously hung. Most interestingly, in the event of an exact re-run of the last election (at which, we should remember, the Labour Party won an unprecedentedly large number of additional seats), no two parties combined would be able to form an administration which could command a working majority of one or more votes in the House of Commons (given the role of the Speaker and ignoring the near impossibility of a Con-Lab 'national' government).

Repetition of all the Conservative victories, apart from the last one, result in Conservative overall majority of between 15 and 75. Repetition of Labour's victories in 1964 or 1966, when brought forward to 1996, would enable a joint Labour/Liberal Democrat administration to operate with absolute parliamentary majorities of 33 and 7 respectively. (There is, of course, no guarantee that the Liberal Democrats would choose to ally themselves with Labour or vice versa.) A repeat of the February 1974 election would leave Labour and the Liberal Democrats combined with exactly the same number of seats as the Conservatives (309). The Conservatives, even with the Ulster Unionists, would still not have an absolute majority, so there would, presumably, be a second election soon after (following the historical precedent). A squeeze on the third party, identical to that which occurred between February and October 1974 would, ironically, enable the Conservatives to form a government with Ulster Unionist support.

The most interesting result, as stressed above, would be a repetition of the last general election. In that event, Labour and the Liberal Democrats combined would have an overall majority of precisely one seat.[10] In such a situation, the vagueness of the constitutional position of the Speaker and Deputy Speaker, and the role of the Nationalist and Unionist parties, would be highlighted. We should, however, bear in mind that in all the above speculation the potential effects of the forthcoming Boundary Commission deliberations have not been included.

Problems and Refinements

Some problems with the method have already been identified above. It may, for example, be argued that the method of one-to-one matching of seats cannot be

expected to give good projections for individual seats, ignoring as it does many of the particular conditions in each seat. We can feel reasonably assured that such conditions will cancel each other out across a large number of seats. In this section, therefore, we want to highlight a number of the more fundamental issues which must be taken into account in developing the model. First, using the actual vote (i.e., prior party strength) as the index on which seats are matched has been chosen here as the simplest and most robust solution. It may not, however, be the best indicator of similarity between seats. It may make more sense to use socio-economic and demographic data instead of, or in addition to, electoral data in order to match seats. For example, we could use a basket of variables such as social class composition, household tenure, rate of unemployment, industrial structure, incumbency, candidate gender, etc. to create or refine the matching of constituencies. Such data is becoming easier to come by at the constituency level (e.g., from the 1991 Census of Population), but determining which variables should be in the basket, and with what weighting, is still a major problem. Similarly, matching could be constrained to seats in the same geographical region, but this merely raises the problem of determining what are the appropriate (i.e., politically significant) regions.[11]

There is a second point which must also be considered. As applied in this article, the model is static. We might match two different seats, x and y, both of which have exactly identical electoral results in a given year, but which are moving in different political directions over time. For example, one seat may have once been a strong Labour seat that has moved towards the Liberal Democrats (due, perhaps, to gentrification) while another seat may have once been a solid Tory seat which is moving towards Labour (due, perhaps, to an influx of unionized public sector employees). Both have the same result at a given moment in time but are moving in different political directions. To remedy this defect, we would need to match our seats, not on the basis of a static result as we have done above, but rather on some measure of the magnitude and direction of recent change. More generally, any temporal autocorrelation of changes in the vote could be exploited to enhance this method. This is one possible direction for future research.

A further point relates to the matching of seats according to the *relative* numbers of votes cast for each main party and a combined group of 'Other' parties. To return to the electoral triangle for a moment, it may make more sense to match seats in terms of their *ordinal* electoral position within the triangle. Thus, for example, the 'safest' Conservative seat at election a would be matched with the safest Conservative seat at election p. That is to say, in terms of the electoral triangle, the seat nearest to the bottom right hand corner at election a would be matched with the seat that is closest to that point at election p. We also currently ignore turnout/abstentions for the purpose of matching seats. This could be incorporated in a refinement of the method but is considerably less important in general elections than in by-elections.

Finally, the implicit assumption of the model is that the parties are constants—that the Labour Party is the same party in the 1990s as it was in the 1950s and that the same is true of the Conservatives. This is, of course, not very plausible. Even less plausibly, we have regarded the Liberal Party, the Liberal/SDP Alliance, the Social and Liberal Democrats and the Liberal Democrats as the same party.[12] This would, of course, be a problem if we did want to *predict* the results. However, we are interested here in what a historian would call the *counterfactual* case: what would happen *if* the parties were regarded as constants. The implication is that our

results—for example, the electoral success of the Labour Party compared with our projections for 1992—can suggest something about the impact of the actual changes in the parties, their policies, and their campaigning. This article will, therefore, be worth returning to after the results of the next general election are known—irrespective of the actual outcome.

Implications of the Model: Two Tory Generations?

In spite of all these caveats, we now have a range of fairly plausible outcomes for the next election which we can use as benchmarks against which it can be decided whether the actual result, when it comes, is 'unprecedented'. The clear implication of the results of our calculations is that, while there is a precedent for the Conservative Party to lose its overall majority, and even for it to cease to be the largest single party in the House of Commons, there is no recent precedent for the Labour Party to win a majority of the 633[13] mainland seats (see Table 3). Even projecting on their best previous performance (1959-64), Labour only manage to gain 320 seats[14]—still six short of an overall Commons majority when we bear in mind the 17 seats in Northern Ireland. Further, we should take into account the fact that Labour will probably also suffer from the results of the re-drawing of electoral boundaries (although this is by no means assured).[15] Modelling on the effects of the 1979-83 re-districting, we estimate that these changes could benefit the Tories by some 13 seats and deprive Labour of nine and the Liberal Democrats of five (cf. Pattie, 1990, p.23; Rooker, 1989). Perhaps most depressing of all for Labour supporters is the fact that not one of the projections gives Labour more votes (as opposed to seats) than the Conservatives (the full results, including the projected share of the vote, are shown in Cornford, Dorling, and Tether (1993)). The future, then, looks grim for the Labour Party.[16]

Things look, if anything, even worse for the Liberal Democrats in the short term. Even on the basis of the best post-war performance of third parties (that of the Liberal/SDP Alliance in 1983), Liberal Democrats would still fail to get more than 55 seats, in spite of getting a projected 900,000 or so more votes than Labour! In the event of a repeat of 1983, large numbers of Liberal Democrat votes and seats would be won at the expense of Labour, leading to a Tory landslide (and thus depriving the Liberal Democrats of the power which could accrue to them in a hung parliament). Only if the Liberal Democrats can take an unprecedentedly large share of votes from the Conservatives would they contribute to a change of government. If the Liberal Democrats are to have some bargaining power in the process of choosing a government, it is perhaps more important for that party to ensure a balance between the other two main parties—even at the expense of its own total number of seats.

The essence of the situation is that the British electoral system cannot cope with a split opposition. The Tories, with a regular 42-43 percent of the vote (or around a third of the entire electorate) can rely on the other two main parties to split the anti-Conservative vote leading to the establishment of a—surely politically undesirable—predominant-party system (Lord Hailsham's famous 'elective dictatorship'). Using the historically precedented electoral changes in the vote superimposed upon this pattern of prior party support suggests very strongly that the Conservative Party—alone or with others—will form the next government. In such an event, two whole generations will have come of age under the Tories.

But will history conform to such precedent? Does 'unprecedented' equal 'impossible' or even 'unlikely'? Clearly, we can imagine an *unprecedented* sea-change in the future of British electoral politics. Such a change could originate in any of one or more of the following: the electoral system; the electorate; or the parties. Any significant change in the electoral system (such as the replacement of plurality voting in single member constituencies) is highly unlikely before the next general election (although more likely in the longer term). We will, therefore, ignore that possibility. A major change in the voting behaviour of the electorate is always possible, triggered by some political or economic event (say, a further recession or a major corruption scandal). By far the most likely source of some unprecedented interruption to British politics, however, is change in the parties themselves and in their relationships to each other. Very crudely, we can divide the significant possibilities into two: either there is a re-alignment among the opposition parties; or there is a major upheaval within the Conservative Party.

The most widely debated (although not necessarily the most likely) unprecedented change on the opposition side is the various proposals for a Labour-Liberal Democrat electoral pact *before* the next election (Dent, 1993). On the dubious assumptions that all Labour voters deprived of a Labour candidate would vote for the Liberal Democrat, and that a majority of Liberal Democrat voters (at least) would vote for a Labour candidate where the Liberal Democrats stood down, the strategy could just succeed in removing the Tories. The similarity in some elements of the party programmes also helps. A clear commitment to introducing proportional representation might clinch the deal (and, if successful, prevent the need for such a pre-election pact in the future). The problems with such a strategy are, however, legion and the benefits to the opposition far from overwhelming (i.e., on Dent's extremely optimistic forecast, 55 extra seats for Labour and 10 extra seats for the Liberal Democrats from the 1992 result). Such a pact would also give further credence to the Tory claim that a 'vote for the Liberal Democrats is a vote for Labour'. The national opposition parties may well, therefore, prefer to denounce pacts nationally while turning a blind eye to local 'arrangements' (Crewe, 1993).

There is, however, another possibility for a change of government—admittedly one that is even less historically precedented than a Lib-Lab electoral pact—a split in the Conservative Party. While this may sound rather fanciful, the proposal is perhaps more plausible now than it has been in recent history. For example, Peter Mair (1992, p.95) has suggested that 'the possibility of a fragmentation of the right of the British political spectrum. . . cannot be discounted, particularly in the light of the successful mobilization of extreme right parties in Belgium, France and Germany, and the conservative *Lega* in northern Italy.'

Virtually all party splits in Britain have been sparked by territorial politics—the issues of Home Rule, Ireland, the Empire, and Europe. The Conservatives, whatever their mystique of unity, seem currently to have a major Achilles heel—the European Union. Both Labour and Liberal Democrat leaderships are now unambiguously pro-European, including acceptance of the 'Social Chapter' of the Maastrict Treaty. Already, the opposition have managed, by allying themselves with the so-called Tory Euro-sceptics, to defeat a government with a clear overall majority. As three recent commentators (Baker, Gamble, and Ludlam, 1993, p.164) have pointed out:

> A considerable part of the unparalleled electoral success of the modern Conservative Party rests on its image as a united and loyal organisation whose defence of the British state and of British interests abroad is not destabilised by intra-party fractures. This image is becoming badly dented.

British electoral politics is now extremely difficult to interpret. Even experienced academic commentators seem unable to decide whether the 1992 election provided 'a solid platform for a Labour government . . . following one further swing of the pendulum in 1996/97' (Crewe, Norris, and Waller, 1992, p.xxxiii) or if it confirmed 'that in the late twentieth century Britain has moved to a "dominant party" system in which the Conservatives are the natural party of government' (*ibid*, xxxiv). The historical precedent suggests that the next election will result in either a Conservative working majority or a precariously hung parliament. However, history, as has already been pointed out, does not always pay much attention to precedent—especially when historical actors become aware of that precedent. What remains to be seen is how those actors—electorate and politicians alike—respond to the situation which we hope to have helped clarify.

Appendix: A New Electoral Projection Method

To calculate the vote for party n in seat x at election q, projecting from election p, on the basis of the change in the vote in seat y (the 'closest' seat politically—see below) between elections a and b, the formula is:

$$n_{xq} = n_{xp} (1 + (n_{yb} - n_{ya}) / n_{ya})$$

where n_{xq} is the number of votes for party n in seat x at election q, etc.

Seat y is chosen from all the seats which existed in both election a and election b by minimizing the distance between a point representing the relative electoral performance of each of five categories of parties and its counterpart for election p. It is calculated using the standard formula of Pythagorus applied to a four dimension analogue of the electoral triangle (for further details see Cornford, Dorling, and Tether (1993)).

This simple formula matches seats such that when the change in the vote for one seat is applied to another, implausible results are hardly ever produced because the two matched seats are so similar in electoral terms.

Notes

1. This period was chosen because the election of 1955 was the first in which the constituency system (and the structure of party competition) was adequately close to that in place today. Some may argue that the 1950s and 1960s are too far back in time for their elections to be comparable with those of the 1990s. While the degree of similarity in terms of issues, parties, and electorate obviously does diminish over time, a number of reasons can be given for studying such a long period. The elections of 1959 and 1964 provided examples of swings that can occur after a long Conservative rule, similar in length to that of today. Indeed, the 1960s give us two of the only three clear Labour victories of this period so we need to look back this far in time to find recent examples of non-Conservative opposition victories. Finally, since it is not too difficult to study this number of elections, it can be argued that the more historical the perspective that we can muster, the better. The new data set used in this study (containing the linked individual constituency result of all these general elections) is available from the ESRC Data Archive at the University of Essex.

2. The advantage of the graphic triangle over more traditional statistical measures is that the relative fortunes of three parties can be shown. In most cases in Britain this is adequate. However, in situations where there is a significant fourth party (such as the nationalist parties in Scotland and Wales) nationalist seats will be incorrectly represented as having been won by one of the three main parties, but the relative share between the three main parties will still be correctly represented. In our numerical analysis, we have in fact used a four dimenstional space (which cannot, of course, be correctly represented on paper) to include the Scottish and Welsh nationalist parties (grouped together) and grouped votes for 'other' candidates. Between 1955 and 1992 there were two geographical re-districtings of seats. Cornford, Dorling, and Tether (1993) discuss how these were dealt with and give the data sources. In 1955 and 1959 the Conservative Party did not stand in a handful of seats won by the Liberal Party. The seats thus lie on the Liberal–Labour axis and are hence obscured on Figure 1.
3. The cartogram used here is an equal electorate area cartogram in which every constituency is represented by an arrow which is placed within an area proportionate to the electorate of that constituency. The constituencies are arranged spatially such that, so far as is possible, each is neighbouring those constituencies with which it is geographically contiguous. This approach allows complex spatial patterns of three-party change to be represented visually.
4. In line with other researchers in this field, we have omitted the (currently 17) seats in the province of Northern Ireland from our projections because the dramatic change which occurred after 1970 altered the electoral politics in the province beyond recognition.
5. Both the uniform national displacement and the constant constituency methods are illustrated in Cornford, Dorling, and Tether (1993).
6. The use of the electoral triangle is purely expository. The method is not restricted to three-party elections, and in the calculations shown in Figure 4 and 5 we have used a four-dimensional space and have taken into account the Scottish and Welsh nationalists and grouped 'Other parties', as well as incorporating Labour, the Liberals/Alliance/Liberal Democrats and the Conservatives. For further detail see Cornford, Dorling, and Tether (1993).
7. Given that both the results are available, it would be perfectly possible to generate a hypothetical result for an earlier election based on a later swing: that is, provide an answer to the question: What would have happened at an earlier election if the swing had been exactly the same as that at a later election? We might call this 'ante-jection' rather than pro-jection.
8. A salutary reminder of the dangers of claiming too much for the *predictive* ability of a method is provided by Budge and Farlie (1977, p.494). Attempting to predict a prospective 1977 election, they argued that 'our *a priori* specification of a close-result thus in no way determines the outcome of the simulation for 1977 other than safeguarding against an obviously unrealistic victory by 60 seats or more'. In the event, admittedly delayed by two years, the Conservatives had a majority of 70 seats over Labour at the 1979 election!
9. A random element could be introduced to the projections to show how robust each individual projection is. However, 11 individual sets of results show a great deal of uncertainty and so we have not chosen to embellish the table further.
10. Although, to be precise, because we are combining the two Milton Keynes seats, both of which would return Conservatives, we are back to the position of identical numbers of seats going to a Labour/Lib Dem group and the Tories (see note 13).
11. This has, in effect, been achieved for Scotland and Wales where the presence of nationalist parties will prevent English seats being matched to Scottish or Welsh ones and vice versa.
12. To heap caveat upon caveat, it is worth noting again that 'precedented' should not necessarily imply likely. For example, on the basis of the last four elections, it would be unprecedented for the third major party to fight the next election under a name which they have used before! This does not mean, however, that the Liberal Democrats are likely to change their name before the next election, but not to do so would be, as we say, 'unprecedented' in recent electoral history. The recent election results in Canada also suggest that real voters do not necessarily respect precedent.

13. In fact, 634—but we are still adding the two Milton Keynes seats together. We must, therefore, bear in mind that figures for the Conservatives should be increased by one in all cases and maybe by more when the full results of the Boundary Commission's most recent deliberations are taken into account.
14. This relatively good result for Labour may be explained by the fact that Labour saw 'slightly bigger' than average swings in the marginals in 1964 (on this point see Berrington, 1965, p.25).
15. See, for example, 'Labour beats Tories at own game in boundary review', *The Guardian*, 31 August 1993, p.3.
16. What we seem to be ruling out here is the (precedented) prospect of Labour having a useful working majority of more than 30 seats. We must be aware, however, that such concrete statements have an uncanny tendency to be proved ludicrously wrong (see note 8 above). Personally, we regard this tendency as a good reason for making such a negative prediction.

References

Baker, D., Gamble, A. and Ludlam, S. (1993) Whips or Scorpions? The Maastricht vote and the Conservative Party, *Parliamentary Affairs*, **46**(2), 151-66.

BBC/ITN (1983), *The BBC/ITN Guide to the New Parliamentary Constituencies*. Parliamentary Research Services: Chichester.

Berrington, H. (1965) The General Election of 1964, *Journal of the Royal Statistical Society, Series A*, **128**(1), 17-66.

Brown, P. and Payne, C. (1975) Election Night Forecasting, *Journal of the Royal Statistical Society, Series A*, **138**(4), 463-98.

Budge, I. and Farlie, D. (1977) *Voting and Party Competition: A Theoretical Critique and Synthesis Applied to Surveys from Ten Democracies*, John Wiley, London.

COI, *Parliamentary Elections*, (1991) HMSO, Central Office of Information, Aspects of Britain Series, London.

Cornford, J.R., Dorling, D.F.L. and Tether, B.S. (1993) Historical Precedent and British Electoral Prospects, Department of Geography Seminar Paper No. 63, Department of Geography, University of Newcastle upon Tyne.

Crewe, I. (1991) Labour Force Changes, Working Class Decline and the Labour Vote: Social and Electoral Trends in Postwar Britain in F.F. Piven (Ed.). *Labour Parties in Postindustrial Societies*, Polity Press, Cambridge 20-46.

Crewe, I. (1993) Tories could be trounced within Lib-Lab pacts, *Independent on Sunday*, 9 May.

Crewe, I., Norris, P. and Waller, R. (1992) The 1992 General Election in P. Norris *et al.* (Eds). *British Elections and Parties Yearbook 1992*, pp. xv-xxxvi. Harvester Wheatsheaf, New York.

Curtice, J. (1983) UK General Election Results 1955-1970 and Associated Information (computer file). ESRC Data Archive, Study SN:1799 Colchester.

Curtice, J. and Payne, C. (1991) Local Elections as National Referendums in Great Britain, *Electoral Studies*, **10**(1), 3-17.

Dent, M. (1993) The Case for an Electoral Pact Between Labour and the Liberal Democrats, *Political Quarterly*, **64**(2), 243-51.

Dod's Guide to the General Election 1992. Dod's Parliamentary Companion Ltd, Etchingham, East Sussex.

Dorling, D.F.L. (1991) The Visualization of Spatial Social Structure, (unpublished PhD thesis, University of Newcastle Upon Tyne.

Dorling, D.F.L. (1992) Stretching Space and Splicing Time: From Cartographic Animation to Interactive Visualisation, *Cartography and Geographical Information Systems*, **19**(4), 215-227 and 267-270.

Dorling, D.F.L., Pattie, C.J. and Johnston, R.J. (1993) Measuring Electoral Change in Three Party Systems: An Alternative to Swing, *Political Science and Politics*, 737-741.

Harrop, M. and Shaw, A. (1989) *Can Labour Win?* Unwin, London.

Johnston, R.J. and Pattie, C.J. (1993) Where the Tories Lost and Won: Geographical Variations in Voting at the 1992 British General Election, *Parliamentary Affairs*, **46**(2), 192-202.

Johnston, R.J., Pattie, C.J. and Allsopp, J.G. (1988) *A Nation Dividing? The Electoral Map of Great Britain 1979-1987*. Longman, London.

King, A. *et al.*, (1982) *Britain at the Polls 1992*. Chatham House Publishers, Chatham NJ.

Latham, J.L. (1982) *British General Elections 1955-1979* (computer file). ESRC Data Archive, Study SN:1677, Colchester.

Mair, P. (1992) The Question of Electoral Reform, *New Left Review*, No. 194, 75-97.

McLean, I. (1973) The Problem of Proportionate Swing, *Political Studies*, **21**, 57-63.

Miller, W.L. (1977) *Electoral Dynamics in Britain Since 1918*, Macmillan, London.

Miller, W.L., Clarke, H.D., Harrop, M., Leduc, L. and Whiteley, P.F. (1990) *How Voters Change: The 1987 British Election Campaign in Perspective*, Clarendon Press, Oxford.

Moon, N. (1992) Exit Polling: A Question of Sampling: in P. Norris *et al.* (Eds), *British Elections and Parties Yearbook*. Harvester Wheatsheaf, New York.

Pattie, C. (1990) 'On and On and On . . . Must the Conservatives Win? The Electoral Geography of Britain in the 1990s. Nottingham University, Department of Geography, Working Paper No. 4.

Payne, C. (1992) Statistical Methods for Electoral Forecasting in the UK, in P. Norris *et al.* (Eds), *British Elections and Parties Yearbook*, pp. 138-158 Harvester Wheatsheaf, New York.

Pred, A. (1988) Place as Historically Contingent Process: Structuration and Time-Geography of Becoming Places, *Annals of the Association of American Geographers*, **74**(2), pp. 279-297.

Rooker, J. (1989) *Beaten by the Boundaries*. Labour Campaign for Electoral Reform, Guildford.

Spencer, P., Beange, R. and Curtice, J. (1992) *The 1992 Election and the North South Divide*. Shearson Lehman Brothers, London/New York.

Stevenson, J. (1993) *Third Party Politics Since 1945: Liberals, Alliance and Liberal Democrats*, Blackwell, Oxford.

Upton, G.J.G. (1976) The Diagrammatic Representation of Three Party Contests, *Political Studies*, **24**, 448-454.

Upton, G.J.G. (1994) Picturing the 1992 General Election, *Journal of the Royal Statistical Society, Series A*.

Whiteley, P. (1979) Electoral Forecasting from Poll Data: The British Case, *British Journal of Political Science*, **9**(2), 219-236.