Notes and Comments

Marginality and Turnout in General Elections in the 1970s

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In an article published some time ago, we analysed in a systematic way the relationship between constituency marginality and turnout in British general elections between 1955 and 1970.¹ Previous considerations of marginality had concentrated on its effect upon *change* in turnout from one election to the next, but we were concerned with the relationship between the absolute level of turnout in constituencies in one election and their marginality at the previous election ('previous marginality').² We found that there was a consistent, significant, positive relationship between previous constituency marginality and turnout.

This conclusion was derived, in the first place, from the calculation of simple correlation coefficients showing the strength of the relationship between previous marginality and turnout. We went on, however, to examine this relationship more rigorously by constructing a series of multiple regression equations with constituency turnout as the dependent variable and a variety of social and political variables which might be supposed to affect turnout as 'predictors'. When the 'best' equation for each election was obtained, we then added the previous marginality variable in order to measure the extent to which it increased the predictive power of the equations. In each case marginality significantly increased the percentage of turnout variation explained by the regression equations. Even when other important variables were taken into account, then, marginality was found to be an important influence upon turnout.

The purpose of the present note is to extend this analysis into the 1970s. That decade was, of course, one of considerable turbulence in British electoral politics and it is reasonable to presume that some of the developments of this period had important implications for turnout. Firstly, there was a sharp decline in the strength of party identification among electors.³ Strength of partisan attachment has regularly been found to correlate strongly with propensity to vote⁴ and so a major stabilizing influence upon turnout was being steadily eroded. Secondly, voters were found to be increasingly sophisticated in their judgements about which party to support, in terms both of

* Department of Politics, University of Lancaster. We are grateful to the referees of this Note who made a number of valuable suggestions for improvement.

¹ D. T. Denver and H. T. G. Hands, 'Marginality and Turnout in British General Elections', *British Journal of Political Science*, 1V (1974), 17–35.

² The marginality score for each constituency is defined as 100 minus the winning party's percentage majority over the second-placed candidate.

³ See Bo Särlvik and Ivor Crewe, *Decade of Dealignment* (Cambridge: Cambridge University Press, 1983), pp. 333–6.

⁴ See Ivor Crewe, Anthony Fox and James Alt, 'Non-Voting in British General Elections 1966–October 1974', in Colin Crouch, ed., *British Political Sociology Yearbook*, Vol. 3 (London: Croom Helm, 1977), pp. 38–110.

the local tactical situation and of the relationship between party preference and issue opinions.⁵ By extension, it is possible that electors were also becoming more sophisticated in their understanding of the electoral system and more discriminating in their decisions about whether or not to vote. It seems likely, too, that the parties were becoming more sophisticated in this respect, increasingly concentrating their local campaign efforts upon 'critical' seats. Thirdly, the success of the Liberals and of the Nationalists in Scotland and Wales created more complex patterns of party competition at constituency level than before. This too might have affected turnout as the marginality of some seats changed dramatically and third and fourth parties gave electors the opportunity to 'protest' against the major parties without abstaining. Finally, election campaigns in the 1970s became more media-dominated and therefore more centrally focused than before and this may have served to override the forces operating at constituency level. All of these changes seem likely to have had some impact on turnout and they may also have affected the relationship between turnout and marginality. Because they would work in different directions, however, it is difficult to predict what the overall effect would be. It is our object here to explore how this relationship might have changed in the 1970s.

There was a major revision of constituency boundaries between the elections of 1970 and February 1974 and this led to many substantially new constituencies being created. It follows that the concept of previous marginality cannot sensibly be applied to voting in the February 1974 election, and so our analysis concentrates on the elections of October 1974 and 1979 (although of course, marginality as shown by the result in February 1974 is used in the analysis of turnout in October). We have, as before, excluded constituencies in Northern Ireland and we have also omitted the Cardiff West constituency, since the Speaker was not opposed by a Conservative in that seat in 1979. This leaves a total of 622 constituencies upon which the analysis is based.

1959	1964	1966	1970	Oct. 1974	1979
0.33	0.23	0.46	0.44	0∙48	0.21

Notes: For 1959-70 N = 615; for 1974-79, N = 622. This applies also to all subsequent tables.

Table I shows the results obtained when simple correlation coefficients are computed for previous marginality and turnout in these constituencies in the 1970s together with the results previously obtained for earlier elections. In our original article we noted that the coefficients for 1966 and 1970 were rather higher than those for 1959 and 1964 and suggested that this supported the argument that electors or parties, or both, were becoming more sophisticated in their behaviour. The figures for the 1970s suggest that this trend is continuing since the correlations between marginality and turnout in October 1974 and 1979 are the strongest of the series.

In our earlier examination of the 1959–70 period, analysis of residuals showed that in two groups of constituencies turnout deviated particularly sharply from what would be expected given their marginality scores. On the one hand, turnout was high in mining seats despite their being very safe; on the other, turnout was very low in seats

⁵ On issue voting see Särlvik and Crewe, *Decade of Dealignment*, Chap. 11. On tactical voting see Michael Steed, 'The Results Analysed', in David Butler and Dennis Kavanagh, *The British General Election of February 1974* (London: Macmillan, 1974).

in English conurbations irrespective of their marginality. Analysis of residuals for the later period, which we do not report in detail here, shows that these two groups continued to deviate in the 1970s, but the deviance of mining seats was not as marked as previously since turnout in them has tended to decline. This is one factor helping to explain the increased size of the correlations between marginality and turnout in the 1970s.

As we noted above, however, the calculation of simple correlation coefficients is only a first step in the analysis. The correlations might be spurious or might overestimate the effects of marginality. In order to test the latter more rigorously, we must try to take account of other variables which might importantly affect turnout. Accordingly, we incorporated into our analysis seven social and political variables which might be expected to be related to turnout. The seven variables are, for each constituency, percentage of economically active and retired persons in professional and managerial occupations, percentage of economically active and retired persons in non-manual occupations, percentage of owner-occupier households, percentage of council tenant households, percentage share of vote obtained by minor parties, percentage change in the size of the electorate between 1974 and 1979 and the percentage of the population living in urban areas.⁶ (For precise definitions of these variables and the rationale for the inclusion of each see our original article.)

Table 2 shows the correlations between each of these variables and turnout at each of the elections considered here. Throughout the period, the occupation variables show only modest relationships with turnout. This is because the relationship between class and turnout is modified by the interdependence of class and marginality. A large proportion of either middle-class or working-class electors will tend to make a seat very safe for either the Conservatives or Labour. The effect is that these seats will have lower turnout than seats in which the balance of classes leads to a more marginal political situation. (See our original article (pp. 21-2) for an elaboration of this point and some supporting data on the relationship between class and turnout in different types of seat.)⁷

⁶ The occupation and housing variables are derived from the 1971 census. Figures for individual constituencies are given in Butler and Kavanagh, *The British General Election of February 1974*, and David Butler and Dennis Kavanagh, *The British General Election of October* 1974 (London: Macmillan, 1975). The percentage urban in each constituency was calculated directly from the 1971 census. Electorate figures were taken from House of Commons papers 478 of Session 1974/1975 and 374 of Session 1979/1980, published by HMSO.

⁷ The 1959–70 data confirmed the logic of this argument. Negative correlations were found between turnout and the percentage professional and managerial and the percentage non-manual in consistently Conservative seats. On the other hand, the correlations in consistently Labour seats were positive. These relationships continued to hold in the 1970s as the figures in Table FI show.

	% Prof. & Man.	% Non-Man.	N
Conheld seats			
Oct. 1974	-0.22	-0.33	297
1979	0.14	-0.22	279
Labheld seats			
Oct. 1974	0.26	0.50	300
1979	0.61	0.58	317

TABLE FI Correlations Between Turnout and Occupational Variables

	1959	1964	1966	1970	Oct. 1974	1979
% Prof. & Managerial	0.12	0.29	0.38	0.29	0.36	0.32
% Non-manual	0.02	0.17	0.29	0.13	0.17	0.50
% Owner Occupiers	0.48	0.56	0.59	0.53	0.57	0.28
% Council Tenants	0.03	-0.05	-0.11	-0.02	-0.13	-0.17
% Minor Party	0.13	0.31	0.27	0.37	0.29	0.18
% Change in Electorate	0.40	0.49	0.57	0.52	0.62	0.28
% Urban	-0.12	-0.33	-0.32	-0.45	-0.42	-0.42

 TABLE 2
 Correlations Between Social/Political Variables and Turnout

The correlations between housing tenure and turnout are more difficult to explain. Those for percentage council tenants are weakly negative (and barely significant) while those for percentage owner occupiers are consistently strongly positive. The latter can, however, be more easily understood if we refer to the third major category of housing tenure, privately rented housing. At the individual level, living in privately rented accommodation is one of the few social variables which is strongly related to non-voting.⁸ People living in such accommodation are likely to include a high proportion who are transient, mobile and young rather than settled members of a community. Unsurprisingly, at the aggregate level there is a strong negative correlation between turnout and percentage privately renting (-0.60 in October 1974 and)-0.57 in 1979). Omitting Scotland, where the pattern of housing tenure is very different from the rest of the country, percentage privately renting is strongly negatively related to percentage owner occupiers (-0.54, N=551) but only weakly negatively related to percentage council tenants (-0.28, N = 551). This suggests that the overall positive relationship between percentage owner occupiers and turnout reflects higher turnout in more stable communities and lower turnouts in those characterized by larger transient populations; while the absence of a strong relationship between percentage council tenants and turnout reflects the fact that the level of council housing does not vary significantly with the stability of communities.

The share of the vote received by minor parties relates to turnout in an erratic way. It is perhaps noteworthy, however, that during the 1970s when the number of minor party candidates in elections grew substantially, the effect upon turnout appears to have steadily diminished.

Finally, two variables – percentage change in size of electorate and percentage living in urban areas – both show increasingly strong relationships with turnout. In both cases the figures reflect low and declining turnouts in areas of rapidly declining population, most notably the centres of the large cities and conurbations.

Using these seven variables, we computed multiple regression equations for each election with turnout as the dependent variable. Using 'backward elimination' we successively removed non-significant variables until we had equations in which all variables were statistically significant. We then added the previous marginality variable in order to discover the extent to which this increased the predictive power of the equations. The results of this process are summarized in Table 3.

It can been seen that in every case, previous marginality noticeably increases the predictive power of the regression equations. Moreover, the increase in variation

⁸ Crewe, Fox and Alt, 'Non-voting'.

	1959	1964	1966	1970	Oct. 1974	1979
% Variance explained by first equation	42.9	55.2	53.9	54.8	63.2	60.6
% Variance explained by first equation plus marginality	50.0	60· 1	63·0	60-2	72.8	67.8
Increase due to previous marginality	7·1	4.9	9.1	5.4	9·6	7.2

TABLE 3Percentage of Variance in Turnout Accounted for by Previous
Marginality

explained is greatest in October 1974 while the figure for 1979 is larger than that for three of the four elections in the 1959–70 period. On the basis of these figures, together with the correlations shown in Table 1, we conclude that in the 1970s marginality increased in importance as a factor explaining variations in constituency turnouts.

It is possible, however, that the effect of constituency marginality is mediated by electors' perceptions of the likely outcome of elections in national terms. It might be suggested, in the first place, that where an election is thought likely to be very close, voters in more marginal seats will make even greater efforts to vote than normal and parties will campaign even harder since by doing so they may affect not only the constituency outcome but also the national result. In such cases the correlation between marginality and turnout would be stronger. The data do not give direct support to this hypothesis, however. The 1964 election, widely expected to be closely fought, produced the lowest correlation coefficient of the series while the figure for 1979 when an easy Conservative victory was anticipated, is the highest (see Table 1).

On the other hand, there is some evidence that electors' or parties' perceptions of the national scene may affect decisions about whether or not to vote. Table 3 shows that the proportion of extra variance explained by marginality was highest in 1966 (9·1 per cent) and October 1974 (9·6 per cent). Both of these elections followed quickly after previous elections which produced very close national results. In contrast, the additional variation explained in 1964 (4·9 per cent) and 1970 (5·4 per cent) is low and both of these followed elections with decisive results. It is plausible to suggest, then, that knowledge of the previous national result might influence electors' perceptions of the marginality of individual constituencies and hence their propensity to vote or abstain.

In our original article we argued that the effect of marginality upon turnout should not be explained simply by reference to the perceptions and behaviour of electors in individual constituencies. We suggested that the perceptions and activities of the parties were probably more important. Having identified marginal seats, parties would concentrate their campaign effort on them and, in a broad way, campaign effort would be proportional to marginality. Thus electors in different constituencies would experience varying levels of local stimuli and this, more than their own perceptions of constituency marginality, would explain the relationship between marginality and turnout. To test this hypothesis we used the amount of money spent in each constituency by the parties during the campaign as a surrogate for a measure of

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campaign effort.⁹ Campaign expenditure is, of course, a very imperfect measure of party effort, although it is difficult even to specify in a systematic way how campaign effort might be measured directly. Arguably expenditure has become even less satisfactory in the 1970s as spending limits have become lower in real terms. None the less, any alternative measure – such as the subjective assessments of party officials – is also open to objections and it does not seem unreasonable to suggest that a party's expenditure in a constituency campaign will be roughly proportional to the effort put in by party workers.

				Oct.	
1959	1964	1966	1970	1974	1979
0.66	0.52	0.70	0.64	0.72	0.64

TABLE 4Correlations Between Previous Marginality and Campaign
Expenditure

If our hypothesis were true, one would expect a positive relationship between campaign expenditure and previous marginality. As Table 4 shows, this expectation is amply fulfilled for October 1974 and 1979 as it was between 1959 and 1970. The strong correlations found suggest that the parties do put more campaign effort into more marginal seats.

As a second step, however, we would expect campaign expenditure to be more strongly related to turnout than marginality is, and also to contribute more powerfully to accounting for turnout variation when incorporated in regression analysis. These expectations were fulfilled in our original analysis for the period 1955 to 1970 but they are not in the case of the 1974 and 1979 elections. The details are reported in Table 5.

	1959	1964	1966	1970	Oct. 1974	1979
Correlation with			-			
turnout: Marginality	0.22	0.23	0.46	0.44	0.48	0.51
Expenditure	0·33 0·41	0·41	0.40	0·44 0·45	0.43	0·51 0·30
Additional variation explained:						
Marginality	7.1	4.9	9.1	5.4	9.6	7.2
Expenditure	7.5	5.7	10.1	9.5	6.6	6.0

TABLE 5Comparisons of the Effect of Marginality and Campaign
Expenditure on Turnout

At each election up to 1970 expenditure was more strongly correlated with turnout than was marginality. Similarly, up to 1970, when expenditure was incorporated into

⁹ Details of campaign expenditure in individual constituencies are given in the House of Commons papers referred to in footnote 6. The precise measure used for the 1974 and 1979 elections – percentage of legal maximum spent by the top two candidates – differs slightly from our original measure – percentage of expenditure allowed above the flat-rate allowance spent by the two leading candidates – but the two measures yield almost identical results. regression equations (in the manner described above in the case of marginality) the proportion of variation explained increased by more than the increment obtained when marginality was added. In 1974 and 1979, however, the position is reversed. On both tests expenditure is more weakly related to turnout than is marginality.

Although this might be explained by the weakness of campaign expenditure as an indicator of party effort, we suggest that a genuine change has probably occurred. In the days of strong party identification voters responded to the stimulus provided by the local party campaign and higher levels of party effort in marginal seats were rewarded by higher turnout. As party identification has weakened, however, the efforts of the party machines count for less; voters respond less to the stimulus of the party campaigns and more to their own independent assessments of the likelihood of seats changing hands.

This is a consequence of partisan dealignment that has hitherto been rather overlooked. The fact that the relationship between marginality and turnout is on the increase appears to be not a consequence of the increased sophistication of the parties but rather a reflection of the increased sophistication of the voters themselves. In an era of dealignment electors are not only more discriminating in deciding which party to support but also more 'choosy' about whether to vote at all. In the latter case the perceived marginality of the voters' local constituency is a factor which importantly affects the decision made.

	Conservative-held	Labour-held
1959	0.54 (N = 333)	0.18 (N=275)
1964	0.36 (N=351)	0.17 (N = 257)
1966	0.55 (N = 290)	0.38 (N=316)
1970	0.39 (N = 240)	0.40 (N=364)
Oct. 1974	0.38 (N=297)	0.43 (N=300)
1979	0.25 (N=279)	0.50 (N=317)

TABLE 6Correlations Between Marginality and Turnout in Conserva-
tive-held and Labour-held Constituencies, 1959–79

Note: The status of a constituency is determined by the party which won it at the general election preceding the ones for which coefficients are given.

Electors' perceptions of the marginality of constituencies may, however, be affected by perceptions of the national standing of the parties in more complex ways than those discussed above. If voters were aware – from opinion polls for instance – that one party was likely to improve its position in a forthcoming election, then seats marginally held by the likely 'losing' party would be perceived as much more 'at risk' or 'gainable' than those marginally held by the 'advancing' party. Also, seats which would seem moderately safe for the 'losing' party if the tide were running in its favour could begin to look more marginal on an adverse swing. It might be expected, then, that the relationship between turnout and marginality would be more pronounced in seats being defended by the party thought likely to lose ground in the election. This hypothesis is complex and demands a high level of sophistication on the part of the electorate, but an initial test of it is given by the data in Table 6.

Given our preceding argument, we would not expect the electorate to demonstrate sophistication of this order before the 1970s and, indeed, the most striking feature of the data up to and including 1974 is simply the increase in the strength of the correlation between marginality and turnout in Labour-held seats. As noted above, this seems likely to be the result of steadily declining turnout in safe Labour seats. In 1979, however, there is a very marked drop in the strength of the correlation in Conservative seats and the highest correlation of the series in Labour seats. This is exactly as would be predicted by the hypothesis we have outlined, since an easy Conservative victory was generally expected in 1979.

Although this is only a preliminary test of the hypothesis, it does suggest that in assessing the marginality of a constituency electors are now influenced by their expectations regarding the overall outcome of elections. Rather than being a ritual or a response to party prodding, the decision to vote seems increasingly to be affected by a realistic appraisal of local and national political circumstances.

Blocks of Voters and the Cube 'Law'

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The so-called cube 'law' has become 'part of the political folklore of Great Britain'.¹ Indeed it seems also to have passed into the general folklore of political science, having been applied to electoral systems having single-member constituencies contested by two major parties in the United States,² New Zealand,³ Canada,⁴ Australia and South Africa.⁵

A continuing mystery concerning the cube law is its provenance, and no entirely satisfactory explanation has been provided.⁶ A recent suggestion as to its origin, provided by Stanton,⁷ will be examined in more detail later, following a discussion of

* Department of Mathematics, University of Essex. I am most grateful to the referees of an earlier version for causing me to think more carefully about these results and for various pertinent suggestions.

¹ Edward R. Tufte. 'The Relationship between Seats and Votes in Two-Party Systems', *American Political Science Review*, LXVII (1973), 540-54.

² James G. March, 'Party Legislative Representation as a Function of Election Results', *Public Opinion Quarterly*, xx1 (1957–58), 521–42. Several other authors have included United States elections in a comparison of the behaviour of electoral systems in various countries. See, for example. Tufte, 'The Relationship between Seats and Votes'; W. J. Linehan and P. A. Schrodt, 'A New Test of the Cube Law', *Political Methodology*, 4 (1977), 353–67; P. A. Schrodt, 'A Statistical Study of the Cube Law in Five Electoral Systems', *Political Methodology*, 7 (1981), 31–53.

³ Ralph H. Brookes, 'Legislative Representation and Party Vote in New Zealand', *Public Opinion Quarterly*, XXIII (1959), 288–91. See also Linehan and Schrodt; Schrodt; and Tufte, as cited in footnotes 1 and 2.

⁴ Terence H. Qualter, 'Seats and Votes: An Application of the Cube Law to the Canadian Electoral System', *Canadian Journal of Political Science*, 1 (1968), 336-44. See also T. W. Casstevens and W. D. Morris, 'The Cube Law and the Decomposed System', *Canadian Journal of Political Science*, v (1972), 521-31; Linehan and Schrodt, 'A New Test of the Cube Law'.

⁵ Schrodt, 'A Statistical Study of the Cube Law'.

⁶ H. Theil, 'The Desired Political Entropy'. *American Political Science Review*, LXIII (1969), 521-5 and D. Sankoff and K. Mellos, 'The Swing Ratio and Game Theory', *American Political Science Review*, LXVI (1972), 551-4, provide theoretical justifications for a relation of this type, although their arguments were dismissed by Tufte as being unconvincing.

⁷ R. G. Stanton, 'A Result of MacMahon on Electoral Predictions', *Annals of Discrete Mathematics*, viii (1980), 163-7.