# Dimensions of House of Lords Reform, March 2007 Roll Calls, Cycling and the 'Iowa School' Research Tradition in British Political Science* 

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#### Abstract

We consider the recent British government attempts to reform the House of Lords at Westminster. We show that failures to achieve decisive change are a product of a multi-dimensional ideological space on the issue of institutional reform. In conducting our analysis we note that despite W.O. Adyelotte's pioneering efforts, roll call voting in the UK parliament remains woefully understudied. We present reasons for this lacuna and discuss resources and techniques that will hopefully bring the traditions and methods of the 'Iowa School' to the broad attention of scholars of British legislative behavior.


Keywords: - Institutional change - Scaling - UK Parliament - Adyelotte tradition -

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## 1 Introduction

From a country-comparative standpoint, the British House of Commons has essentially limitless constitutional power to embark on institutional reform: unlike the United States, for example, there is no Supreme Court nor requirement to seek the constitutent states' approval for change. Even compared with other 'Westminster' systems, such as Australia with its active Senate, the executive of the House of Commons is relatively unincumbered. It is all the more surprising then that Britain's House of Lords today looks much as it did in 1999-some eight years after a Labour government (with two further subsequent election victories) pledged to embark on democratizing reform. That is, its members are there by hereditary right (with the slight qualification that they won internal elections among their peers after 1999) or they are life appointees elevated to office by the Queen or Prime Ministers in the post-war period. None has any external, voter-based, legitimacy.

Nor can this puzzle be solved by simply asserting that the government had other distractions: following the expulsion of some (but not all) hereditary peers in 1999, the government attempted reform with a series of (relatively 'unwhipped') votes in 2003. Cycling through the options on offer with no overall winner, plans were shelved until March 2007 when the government once again consulted the Commons on its views. While the 2003 votes would have been binding, the 2007 votes were not. This indecisiveness - both in terms of aggregate voting results and the government's actions - is prima facie difficult to explain. Parliaments choose by simple majority rule ('aye' or 'nay' on a move from the status quo) and the 'positive responsiveness' (May, 1952) property of this mechanism implies that an influx of Labour partisans seeking at least some reform should have resulted in changes. Even if voting is driven by an agenda, with its attendant vagaries and potential for manipulation (e.g. Ordeshook, 1995, 271-283), we might think that consecutive votes along a single dimension (where, for example, only the percentage of peers elected varies between options) would yield a definitive legislative outcome. In this paper, we proffer and test for a multidimensional voting space theory for this lack of progress. Our contribution is to three areas that, in our view, are woefully understudied: the House of Lords, institutional reform in Westminster systems
and British roll call analysis more broadly.

Quite apart from the theoretical interest that this issue of unrequited reform holds, there are profound practical issues in exploring this area of comparative institutions. As we show, despite the Herculean efforts of William Osgood Adyelotte and his attendant 'Iowa School' of roll call research, British political methodology has lagged behind Americanist contributions. Traditionally scuppered by data availability issues, UK parliamentary voting research is further hampered by the unsuitability of various 'off-the-shelf' industry-standard (software) solutions (suggested and provided by Clinton, Jackman and Rivers, 2003; Poole, 2000; Poole and Rosenthal, 1997, for example). Hence, explaining even small 'case study' events such as in this paper requires substantial upfront investment.

Our analysis below therefore proceeds at several levels. In Section 2, we explain the lacuna in UK roll call work with reference to both data availability issues and the intellectual traditions of researchers. In particular, we discuss the long-overlooked legacy of Adyelotte and the 'Iowa School.' Turning to our application, in Section 3 we contend that-somewhat surprisingly-House of Lords reform is a nuanced multi-dimensional issue that cuts across the standard 'left-right' spectrum of British political debate. In Section 4 we discuss the use - and necessity-of multidimensional scaling methods to analyze our hypothesis. In Section 5 we present evidence that is consistent with our claims. Section 6 concludes.

## 2 Reform in Context: British Political Science and Politics

There have been few studies of roll calls in the British Parliament, and almost none of roll calls in its unelected upper house, the House of Lords. Elsewhere, scholars of British politics have tried to explain this famine (Spirling and McLean, 2007a,b). Briefly, there are data issues and intellectual issues.

### 2.1 Data Issues

Unlike the US Congress, the UK Parliament does not make it easy for the researcher to find or code roll calls. The authorities of the House of Commons have a retrofitting program to provide machine-readable rollcalls back from the present starting date of 1992, but as the primary consumers are academics rather than parliamentarians, it is unlikely ever to become their top priority. UK-based academics are slow to request the data, for intellectual reasons discussed below. The official publication of rollcalls is on a notoriously unfriendly website, ${ }^{1}$ though some public-domain cooperative coding projects offer current data in friendlier form. ${ }^{2}$ But their focus is the citizen wishing to know how her MP has voted, rather than the scholar, so once again they have only weak incentives to retrofit.

The House of Lords is even less far forward than the House of Commons. Until 1999, the wholly unelected house was dominated by the Conservative Party, and perhaps the House authorities shared the (incorrect) consensus of scholars that its roll calls were uninteresting. Since 1999, as explained below, no party has had, or is likely to have, a majority. The house authorities are giving greater priority to making roll calls available, but as yet only one team known to us (Meg Russell and Maria Sciara at University College London) has undertaken secondary analysis.

Scholars interested in past roll calls must therefore do their own coding from manual records. The heroic pioneer was, of course, W. O. Aydelotte, the founder of the Iowa school of legislative studies. His work on the British Parliament of 1841-7 took him twenty years of single-handed toil. The results, in our view, have been shamefully under-used (but see McLean, 2001; SchonhardtBailey, 2006). In the next subsection we discuss why. A semi-mechanized system was devised by Firth and Spirling (2007), which uses the R language and statistical environment and its regular expression capabilities to process text representations of the records. The code and instructions are in the public domain.

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### 2.2 Intellectual issues: tradition

The main tradition of parliamentary studies in the UK has always been Namierite. (Sir) Lewis Namier (1888-1960), a historian who was a refugee from Habsburg-endorsed persecution of Polish Jews, held the firm ideology that parliamentary politics was not ideological. In Namierite politics (Namier, 1929, 1930; Cannon, 2004), all politicians seek only private goods. In 1951 Namier was the re-founder (an earlier foundation having foundered) of the History of Parliament, a huge multischolar enterprise that since then has calendared the private interests of all MPs (not Lords) up to 1832 , although there are still some gaps in the record. It is currently considering whether to advance beyond 1832, or to give priority to the pre-1832 House of Lords.

Although the Namierite tradition respects data, it does not respect numbers. Therefore, parliamentary historians were at best weakly supportive of Aydelotte's efforts from the 1950s to the 1970s. His own conclusions (especially Aydelotte (1967, 1972)) were broadly Namierite. The country gentlemen, who had most to lose from their leader Sir Robert Peel's unexpected conversion to free trade, in the shape of the repeal of the Corn Laws in 1846, formed the backbone of opposition to him in his own party. But the significance of Aydelotte's results was not understood until a generation later. Parliamentary historians were not trained to understand even descriptive statistics. Nor were graduate students in either British history or British political science. There has therefore been little take-up of the Poole-Rosenthal (Poole and Rosenthal, 1997) industry-standard suite of programs by UK analysts, or for analysis of the UK Parliament.

### 2.3 Intellectual issues: strong party system

The House of Commons has been strongly partisan since 1886, except during periods of wartime coalition government. With a fused executive and legislature, the government dominates the agenda and most of the votes through its majority and whips. Most votes simply label which MP represented which party.

There have been more fluid times - especially from 1841 to 1886 and during World Wars I and

II—but the lack of readable data has deterred analysis, except of 'Aydelotte's Parliament' of 184147. Instead, analysts have turned to more unobtrusive measures of ideology, such as Early Day Motions (e.g. Berrington, 1973; Franklin and Tappin, 1977). However, the greater propensity of governing party MPs to rebel since the 1970s, and especially since 2001, combined with machinereadable data, makes systematic analysis possible for the first time.

Unfortunately, the best mode of analysis is unclear. In a strong party system with most votes whipped, a parametric program such as the Poole-Rosenthal NOMINATE suite is inappropriate: since we cannot assume 'errors' across legislators and bills are indeed independent and identically distributed (iid), the maximum likelihood estimates we obtain need not be consistent. When we do have sincere votes in small numbers-as perhaps we do below-assuming the asymptotic properties of the same estimators hold is a fortiori problematic.

The non-parametric Optimal Classification program Poole (2000), which is a lineal descendant of the Guttman scaling used by Aydelotte, has been used successfully to analyze roll calls in one strong party system, the French Fourth Republic (Rosenthal and Voeten, 2004). However, it does not work in a context with extensive strategic voting, such as the House of Commons. When rebels on the government side vote strategically with the opposition against a government proposal, at least one of those groups is voting strategically, and OC misreports their position (Spirling and McLean, $2007 a, b)$. Note that while a Bayesian solution - in the sense of, say, Clinton, Jackman and Rivers (2003) or Martin and Quinn (2002)—would solve the 'small-n' problem, it still requires iid errors to uncover 'correct' estimates.

Hence, we must seek other tools to tease out the underlying dimensionality of UK parliamentary votes and, below, we rely on relatively 'low-tech' multi-dimensional scaling, in this case principal coordinate analysis.

## 3 Reform of the House of Lords: a multidimensional issue

At first sight, reform of the unelected House of Lords seems a straightforwardly Downsian issue for legislators. The unelected house was overwhelmingly Conservative until 1999. It had complete power to block government legislation until 1911, and has qualified veto power since then, which becomes absolute in the last year of a Parliament. The reduction of its powers in 1911 was carried by a leftist government against bitter opposition from the Conservative opposition and two successive unelected kings. One would expect reforms to make the Lords wholly or partly elected to be supported by left politicians and resisted by right politicians.

However, there is a cross-cutting dimension. Some politicians of the left have an interest either in an upper house that remains unelected, or in its abolition outright. Some politicians of the right have an interest in its being elected. Part of the motivation for left support for an unelected house is Namierite. Some left politicians want to go there and become Lords. Others want to put some of their party colleagues there for reasons of party management (e.g., to make them ministers when an election would be inconvenient, or to get rid of awkward or elderly associates).

However, the more interesting left motivation against reform, and right motivation for reform, comes from understanding the nature of the veto wielded by the unelected Lords, and by a possible elected successor. The present Lords veto is constrained by the 1911 reduction of its powers. But it is also constrained by a convention drawn up in 1945 between the leaders of its Conservative and Labour groups. Labour had a huge (145) majority in seats in the elected house at the time. This 'Salisbury-Addison convention' stated that the (at the time always Conservative) Lords would not vote down those measures of an elected government that were in the manifesto issued in the election it had won. The force of the Salisbury-Addison convention is weakening, now that the Lords are no longer overwhelmingly Conservative. The pivotal Liberal Democrat group in the Lords do not accept it. ${ }^{3}$

[^2]The 1999 reforms ousted most of the hereditary peers. Although they did not introduce elections, all parties were allowed to make nominations so that the balance of parties more closely reflected that in the Commons. However, there are a large number of non-party Lords, labeled Crossbenchers, Bishops, and Law Lords. Labour is the modal party, but on standard unidimensional issues, the median peer is a bishop, law lord, or crossbencher.

The effect is that the win set of the status quo - the set of points that would beat the status quo in a straight vote - contracts. From 1911 to 1999, except in the last year of a parliament, the win set of the status quo was the set of points that the median MP, normally a whipped member of the governing party, could be persuaded to reach. Post-1999, with Salisbury-Addison weakening, it has been the set of points that both the median MP and the median peer could be persuaded to reach. The situation comes to resemble more closely that in the US Congress. It is widely believed by UK politicians that the Salisbury-Addison convention would be scrapped once the upper house becomes elected, because the rationale for it is that an unelected house should defer to an elected one. This would confirm the reduction in size of the win set over the status quo. In Figure 1, we show the logic graphically. As the number of Conservatives in the Lords was reduced by the 1999 reforms, so the median peer became a cross-bencher and, as the chamber gains legitimacy, is increasingly important to please to assure long-term government legislative success. Ideology, interest, discount rates, and myopia help to determine whether a politician wishes a large or a small win set over the status quo. None of these is related to the standard left-right dimension.

A politician's ideology may be majoritarian (wishing the current majority to be unfettered, and hence wishing a large win set) or proportional (wishing the outcome to be consensual, and hence wishing a small win set). Her material interest of course depends on whether she is in government or opposition in the elected house. However, if non-myopic, she can foresee that another party may win a future election for control of the elected house; and her discount rate for the possible outcomes over such future parliaments may vary (notably with her age and closeness to retirement).
(a) House of Commons

(b) Pre-1999 Lords

(c) Post-1999 Lords


Figure 1: Changing median in House of Lords: effect of the 1999 reforms. Not to scale, panel (a) shows the general situation (as in 1997) of a large Labour majority in the Commons; panel (b) demonstrates the preponderance of Conservatives pre-1999, though their votes were irrelevant from the perspective of government legislative plans; panel (c) shows a possible profile from the post-1999 era. Note that the proportion of Conservatives is reduced and the median moves to those of the 'cross-benchers' (XB in the figure) -who have a potentially profound effect on legislation.

In 2003, both houses voted on a number of options to increase the elected component of the House of Lords. The Commons (but not the Lords) also held a vote on whether to abolish the Lords outright. In the Commons, all options were defeated, including the option of an all-appointed house. But as the status quo was an all-appointed house, this set of votes revealed a contradiction. Strategic voting (certainly) and multidimensionality (possibly) contributed to this result (McLean, Spirling and Russell, 2003). The unelected Lords voted by large majorities to remain unelected, and defeated all options that would have introduced an element of election to their chamber.

### 3.1 The 2007 Votes

In 2007 both houses revisited the issue. In 2003 the Commons had used a version of Approval Voting, such that each MP was invited to vote for as many of the options as she wished, without imposing a single-peakedness (or even acyclicity) constraint. The result was indeed cyclic: Status Quo $>80 \%$ Elected $>100 \%$ Elected $>60 \%$ Elected $>$ Status Quo (McLean, Spirling and Russell, 2003, Table 1). In response, Jack Straw MP, the leader of the house in 2007, proposed an instant rank-order vote (Instant Runoff/Alternative Vote). In face of protests (sincere and/or strategic) that this violated the traditions of the House, Straw withdrew this proposal, and again no singlepeakedness or acyclicity constraint was imposed on MPs' voting. The government had hinted at its own preferences in a White Paper (Cm 7027, 2007) proposing to make the Lords $50 \%$ elected. The results of the votes, on 7 March 2007, are shown in Table 1. As noted in the table, the votes (numbered 65 through 72 in the parliamentary record) referred to

65- support for a bicameral parliament (ayes voting in favor, resolution passed)
66 - support for a fully appointed Lords (ayes voting in favor, resolution not passed)

67 - the government proposal: support for a $50 \%$ elected Lords (ayes voting in favor, resolution not passed)

68- support for a $60 \%$ elected Lords (ayes voting in favor, resolution not passed)

69 - support for a $80 \%$ elected Lords (ayes voting in favor, resolution passed)

70 - support for a $100 \%$ elected Lords (ayes voting in favor, resolution passed)

71- a Conservative amendment that would expel hereditary peers from the Lords only after elected peers had taken their seats (ayes voting in favor, amendment not passed)

72 - original proposal that would expel hereditary peers before elected peers would take their seats (ayes voting in favor, proposal passed)

There were thus eight divisions, and 646 MPs entitled to vote, of whom 445 voted in every division and a further 153 voted in some but not all. Suspicions that parties in the Commons vote differently is confirmed by the $p$-values for the $\chi^{2}$ statistics for each column - all of which are statistically significant at the $1 \%$ level.

The House of Lords voted on some of the same options a week later. It did not hold a vote on its own abolition, nor a vote to delay proceedings. The results of the five votes in the Lords on 14 March are as shown in Table 2. Clearly, party makes a difference to preferences (note the $p$-values), though, in general, their Lordships are not overly enamored of the (more than zero percent) elected options, rejecting every one by large margins.

## 4 Methods

Though the tables above are useful for summarizing division outcomes they tell us little about individual decision-making and the underlying dimensions of debate. Scaling law-makers in some policy or ideological space would be helpful but, as noted, industry standard techniques will not, in general, be suitable. Here then we take the more basic approach of principal coordinate analysis, a form of multidimensional scaling which falls under the rubric of principal component analysis (and is thus a type of factor analysis). This technique is well known and well described elsewhere (306-307 Ripley and Venables, 2002, for example), so we limit ourselves to a brief description.

As with the model-based methods derived from item response theory, the broad idea is to take

| Division | $65 \quad 66$ |  |  |  | $\begin{aligned} & 67 \\ & 50 \% \text { elect } \end{aligned}$ |  | $\begin{aligned} & 68 \\ & 60 \% \text { elect } \end{aligned}$ |  | $\begin{aligned} & 69 \\ & 80 \% \text { elect } \end{aligned}$ |  | $\begin{aligned} & 70 \\ & 100 \% \text { elect } \end{aligned}$ |  | $\begin{aligned} & \hline 71 \\ & \text { rmve hereds (amend) } \end{aligned}$ |  | $\begin{aligned} & \hline 72 \\ & \text { rmve heredits } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bicameral |  | Fully Apptd |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Aye | No | Aye | No | Aye | No | Aye | No | Aye | No | Aye | No | Aye | No | Aye | No |
| Party Con | 182 | 1 | 80 | 103 | 26 | 155 | 42 | 139 | 80 | 98 | 57 | 126 | 174 | 8 | 16 | 112 |
| Lab | 169 | 155 | 117 | 201 | 129 | 189 | 135 | 184 | 159 | 164 | 212 | 98 | 5 | 311 | 307 | 0 |
| LibDem | 60 | 0 | 0 | 61 | 0 | 63 | 0 | 60 | 62 | 0 | 59 | 0 | 63 | 0 | 60 | 0 |
| SNP | 6 | 0 | 0 | 6 | 0 | 6 | 0 | 6 | 0 | 6 | 6 | 0 | 0 | 6 | 6 | 0 |
| PC | 3 | 0 | 3 | 0 | 0 | 3 | 0 | 3 | 3 | 0 | 3 | 0 | 0 | 3 | 3 | 0 |
| UU | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ind/Other | 2 | 1 | 3 | 0 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 1 |
| Total | 423 | 157 | 204 | 371 | 156 | 419 | 179 | 393 | 306 | 269 | 338 | 226 | 243 | 330 | 393 | 113 |
| $\chi^{2}$ |  | 168.88 |  | 48.01 |  | 71.19 |  | 56.72 |  | 72.04 |  | 119.45 |  | 519.78 |  | 422.4 |
| $p$-value |  | < 0.01 |  | < 0.01 |  | $<0.01$ |  | < 0.01 |  | < 0.01 |  | $<0.01$ |  | < 0.01 |  | $<0.01$ |

Table 1: Voting on Division 65 through 72. $\chi^{2}$ statistic and $p$-values refer for test of null hypothesis that parties do not differ in voting behavior.

| Division | Fully Apptd |  | $50 \% \text { elect }{ }^{2}$ |  | $60 \% \text { elect }{ }^{3}$ |  | 80\% elect ${ }^{4}$ |  | $100 \%$ elect ${ }^{5}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
|  | Aye | No | Aye | No | Aye | No | Aye | No | Aye | No |
| Party |  |  |  |  |  |  |  |  |  |  |
| Conservative | 143 | 14 | 6 | 149 | 8 | 137 | 22 | 128 | 11 | 137 |
| Labour | 100 | 48 | 26 | 108 | 24 | 110 | 40 | 105 | 60 | 83 |
| Lib Dem | 15 | 42 | 1 | 54 | 1 | 53 | 38 | 10 | 41 | 8 |
| Crossbench | 89 | 16 | 11 | 86 | 9 | 83 | 13 | 83 | 9 | 87 |
| Bishop | 5 | 0 | 2 | 3 | 2 | 3 | 0 | 3 | 0 | 4 |
| DUP | 3 | 0 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 |
| Green/Other | 4 | 1 | 0 | 5 | 1 | 3 | 1 | 3 | 1 | 3 |
| Total | 359 | 121 | 46 | 408 | 45 | 392 | 114 | 335 | 122 | 325 |
| $\chi^{2}$ |  | 106.78 |  | 29.79 |  | 22.41 |  | 92.38 |  | 142.15 |
| $p$-value |  | <0.01 |  | < 0.01 |  | < 0.01 |  | < 0.01 |  | $<0.01$ |

Table 2: Voting on Division 1 through 5 (House of Lords). $\chi^{2}$ statistic and $p$-values refer for test of null hypothesis that parties do not differ in voting behavior.
a complicated, multidimensional data set and 'reduce' it down to one of fewer, 'important', dimensions that can be straightforwardly interpreted and analyzed. Principal coordinate analysis is one of a number of so called 'distance' methods because the cases are reduced in space such that their proximity to each other reflects their 'similarity.'

It begins with a 'distance matrix', D, which here will be generated in terms of the 'agreement' between legislators across the votes. The technique uses $\mathbf{D}$ to produce a new, $k$-dimensional arrangement of the points (one per case) such that the distances between them, $\tilde{d}$, satisfy the minimization of

$$
\frac{\sum_{i \neq j}\left[d_{i j}^{2}-\widetilde{d}_{i j}^{2}\right]}{\sum_{i \neq j} d_{i j}^{2}}
$$

where $d_{i j}$ is the agreement score between the pair legislator $i$ and legislator $j$, for every $i$ and $j$ possible (Ripley and Venables, 2002, 308). Importantly, $k$ is a smaller number than the original dimension of the data. This means that we can plot the new points with distances $\widetilde{d}$ between them in $k$ dimensions-a visualization task that may well be impossible with the original dimensions.

An added complication for us is that not all MPs vote in all divisions and, though we might speculate that they abstain due to indifference, error, or other business at hand we cannot know for sure. Absent any covariate information, there is little to be done about the completely missing observations (i.e. when an MP has no vote recorded for any division) so we drop them. It is wasteful though to simply jettison the 153 partial observations (i.e. when an MP voted in an least one division) with which principal coordinate analysis would struggle. We can be certain that at least some MPs' partial abstentions are strategic ('not wanting to pre-commit myself') and thus not missing (completely) at random. So, in an attempt to bring the information from these MPs to bear, we pre-process our data by multiple-imputation. In particular, we use a Gibbs sampling method discussed by Van Buuren, Boshuizen and Knook (1999). This means that we can use our method of choice without further incident.

## 5 Results

As discussed, we think that the votes under consideration pertain to two somewhat separate issues: (1) the (one dimensional) extent to which future members of the Lords ought to be elected and (2) attitude/treatment of the remaining hereditaries. We began by estimating a $k=10$ principal coordinates model (that is, a reduced space of 10 dimensions) and noted that the first extracted component explained around 36 percent of the variation in the data, the second (cumulatively) took the percentage explained to 63 percent and the third to 79 percent (that is, a third component added only 16 further percent of explanation). ${ }^{4}$ In weighing parsimony against explanatory power, we thus decided to opt for a two coordinate model and we summarize our findings in Figure 2.

Although we have almost 600 MPs in the data set, there are only 143 unique scalings. That is, the MPs can all be broken down into a relatively small number of groups. And, as readers can

[^3]
## Lords Reform Votes



Figure 2: Lords Reform Votes: $k=2$ principal coordinate analysis. 598 MPs, imputed data, 143 unique scalings, points jittered for ease of interpretation. 'Lib Dem' is shorthand for Liberal Democrats
readily see in the Figure 2, the great majority of MPs cluster close to one another, and to those in their party. To make it more apparent where masses of members lie, we 'jittered' the points to avoid MPs scaling point piling on top of one another. On this count, note particularly the tight Liberal Democrat (black triangles) grouping in the north-east quadrant of the figure. The Conservatives (light grey, open squares) lie to predominantly in the north quadrants and stretch across the $x$-axis, while almost all Labour MPs (dark grey bullets) are dispersed to the south of both the Tories and the Liberals.

Interpreting the dimensions is, we think, straightforward. The first dimension (the $x$-axis) refers to the MP's views (or their party leaders' views) on the preferable democratic content of a reformed Lords and is decreasing from left to right across the figure. That is, the Liberal Democrats favor a more democratic arrangement ( 80 or 100 percent elected), while Labour and the Conservatives are by no means unified, stretching from an all appointed house in the far right of the Figure across to rejecting this possibility and embracing only a fully elected Lords to the far left. The second dimension, the $y$-axis, appears to represent attitudes regarding the treatment of hereditary peers still remaining in the Lords. The Conservatives are more sympathetic to these remnants of previous reform, proposing that their exit by delayed if not completely avoided. By contrast, most Labour MPs seem to dislike the role played by these hereditaries seeking to get rid of them as soon as possible. The Liberal Democrats generally accept the need to dispose of their services eventually, but are more cautious than their Labour colleagues.

Of course, the two dimensions apparent in Figure 2 may not be stable over time: individuals-and parties-have preferences that change rapidly, either sincerely or opportunistically. One way to examine this possibility is to scale those who voted on both the 2003 votes and the 2007 divisions pertaining to Lords reforms. There are some 414 such MPs and in Figure 3 we report the results from these aggregate profiles (with requisite pre-processing via multiple imputation). ${ }^{5}$ The pattern is broadly similar: the parties are demarcated by their views on the role of the Lords, rather than

[^4]Lords Reform Votes (2003/2007)


Figure 3: Lords Reform Votes: $k=2$ principal coordinate analysis, comparison of 2003 votes to those of 2007. 414 MPs, imputed data, points jittered for ease of interpretation. 'Lib Dem' is shorthand for Liberal Democrats
its composition. Once again, Conservatives are more traditional in viewing hereditaries in the upper chamber as a 'good thing', while Labour members are unconvinced and Liberal Democrats lie somewhere in between.

## 6 Discussion

We have shown that, contrary to previous claims and 'common knowledge', voting in the House of Commons on House of Lords reform in 2003 and 2007 was two-dimensional. Our principal coordinate analysis has enabled us to label the dimensions.

Our graphs make no assumption as to whether MPs were being sincere or strategic in their voting. This is important, because simply assuming that voting is sincere can lead to profoundly misleading inferences (Spirling and McLean, 2007b). This is true of parametric or non-parametric methods that are well-understood and well-tested in the Americanist research tradition. We suggest other scholars of British politics think carefully about such issues before reaching for Poole-Rosenthal (or derivative) solutions to their analysis problems.

In fact, immediate press analysis of the 2007 Commons votes suggests substantial strategic voting. As the authoritative Constitution Unit analysis puts it:
$[\mathrm{T}]$ o great surprise, an all-elected chamber proved most popular. This was backed by 337 votes to 224 ... The division lists showed that numerous known opponents of upper house elections supported the all-elected option. This was a wrecking tactic to present the government with a dilemma and to maximize conflict with the Lords. [A]n allelected chamber would require the expulsion of the Bishops and the near-ending of non-party representation. . . All this provides an unpalatable prospect to a future Prime Minister. ${ }^{6}$

[^5]Poole and Rosenthal's work, and the branch of research (almost a subfield) it has sponsored, has intellectual roots in Rochester as well as Iowa. W.O. Aydelotte was interested in rolls class leading to a cataclysmic event, the Commons vote to Repeal the Corn Laws in 1846, which was not only a radical change of policy, but the agent of the destruction of the hegemonic Tory Party for a generation. It ended the political career of Prime Minister Peel and of a number of the Tory MPs who supported him contrary to their ideology, their material (personal and/or district) interests, or all of those. W.H. Riker, the founder of the Rochester School, was also interested in cataclysms and improbable events such as the ratification of the US Constitution and the election of Abraham Lincoln in 1860 (Riker, 1982, 1996). Though American in origin, this work has also seen application elsewhere: for example, McLean (2001) applies a Rikerian perspective to the House of Commons to examine equivalently unlikely outcomes such as the Second Reform Act (1867); the Anglo-Irish Treaty (1921) and the reversals of economic policy under Prime Minister Margaret Thatcher (197990).

Although Poole and Rosenthal acknowledge their intellectual debts to Riker, (Poole and Rosenthal, 1997, preface) the thrust of their work has been anti-Rikerian. Riker was interested in highdimensional politics. He argued that multidimensionality, whether really out there in the structure of opinion, or manufactured by heresthetical politicians, gave an opportunity to upset expected outcomes and generate unexpected ones. Poole and Rosenthal, as is well known, argue that voting over the entire history of the House of Representatives is of low dimensionality. This perspective may cause them and their followers to overlook multidimensional votes in legislatures. We have shown that votes on the reform of the UK Upper House are an example.

Prime-Minister-elect Gordon Brown has announced his intention to revisit constitutional reform, and specifically reform of the House of Lords. At this writing (May 2007) it is unclear what he will propose, nor how or whether his proposals may be carried through either house or both. He will need to deal with the multidimensionality of the issue, which gives scope for heresthetical manoeuvres against him-but also by him and his allies.

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[^0]:    ${ }^{*}$ This is a working paper and we thank Michael Lewis-Beck for comments on an earlier draft. Comments welcome. Please do not cite or circulate without permission.
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[^1]:    ${ }^{1}$ www.parliament.uk
    ${ }^{2}$ For example, 'The Public Whip' at www.publicwhip.org: see Firth and Spirling (2007)

[^2]:    ${ }^{3}$ See http://www.libdems.org.uk/media/documents/parliament/Conventionsmemojun06.doc.

[^3]:    ${ }^{4}$ As is standard, we computed the explanatory power (percentage of variance explained) of the first $q$ of a total of $p$ dimensions as

    $$
    \psi_{q}=\frac{\sum_{j=1}^{q} \lambda_{j}}{\sum_{j=1}^{p} \lambda_{j}}
    $$

    where $\lambda_{j}$ is the $j$ th extracted eigenvalue. In particular, in our case, $\lambda_{1}=379.7$ while $\lambda_{2}=289.9$.

[^4]:    ${ }^{5}$ In terms of goodness-of-fit, two dimensions seems to be a decent choice here too, explaining some 61 percent of the data variation-see Footnote 4 for our calculation method. In particular, $\lambda_{1}=478.9$ and $\lambda_{2}=245.6$.

[^5]:    ${ }^{6}$ Constitution Unit, UCL, Newsletter \#36, May 2007, p.1. Web version at http://www.ucl.ac.uk/constitution-unit/files/monitor/Monitor36.pdf

