

# UK OC OK?\*

A NOTE ON INTERPRETING OPTIMAL CLASSIFICATION SCORES FOR THE UNITED KINGDOM  
HOUSE OF COMMONS

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## Abstract

Scholars working on roll-call data for non-US parliament are exhorted to utilize Poole's (2000) non-parametric Optimal Classification procedure for binary data, but rank orderings arising from application to Westminster are misleading, and certainly not ideological continua. The problem arises from the government-versus-opposition nature of British parliamentary politics and the strategic voting that is entailed therein. Moreover, the goodness of fit statistics for a one dimensional model of House of Commons voting have an ersatz accuracy. Advances in spatial analysis and ideal point estimation will need to consider this problem carefully.

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# 1 Introduction

Non-parametric Optimal Classification (OC) is a technique designed by Keith Poole (2000) with the basic algorithm made generally available to scholars.<sup>1</sup> We go into greater detail below, but it suffices to note here that this technique—unlike the parametric techniques of Poole & Rosenthal (1985, 1997) or Clinton, Jackman & Rivers (2004) which are commonly utilized in the US context—does not rely on distributional assumptions about errors to uncover information from binary roll-call data. The theoretical model underlying statistical methods like Poole & Rosenthal’s NOMINATE is spatial voting with errors. Some distribution is chosen for the errors and they are assumed independent and identically distributed across legislators and roll calls. But, if these error assumptions are basically incorrect, then the estimates are misleading.

Unsurprisingly, party whipping and a government-versus-opposition nature to politics will violate these axioms. In this light, Poole’s new method of OC, which dispenses with such assumptions, seems ideal for the United Kingdom House of Commons: the algorithm simply minimizes classification errors which occur when a Member of Parliament’s vote is inconsistent with the separating hyperplane identified for that particular division. Moreover, unlike the parametric methods, OC treats all errors equally. This has the specific comparative advantage that when some “strategic calculus” (Rosenthal & Voeten 2004, 622) is involved in a voting decision (i.e. it is not consistent with a spatial voting model) the overall estimates of MP positions will not be too badly affected.

Unfortunately, we find that OC produces counter-intuitive results that simply do not reflect any reasonable substantive interpretation of the House of Commons and its ideological construction during the the period under study (1997–2001). That is, the rank ordering for the parliament of 1997–2001 did not accord to common understandings and anecdotal knowledge as to which MPs should be properly considered of the left and those that should be properly considered of the right. Particularly, several left-wing Labour MPs are given scores placing them to the *right* (i.e. more conservative than) the bulk of the Labour party.

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<sup>1</sup>see [http://voteview.com/Optimal\\_Classification.htm](http://voteview.com/Optimal_Classification.htm)

This article explains this statistical problem. We proceed as follows: Section 2 briefly describes the United Kingdom parliament and its procedures for those unfamiliar with them. Section 3 details a ‘successful’ application to the French Fourth Republic Rosenthal & Voeten (2004). Section 4 details our results from the House of Commons, including the counter-intuitive findings we uncovered. Section 5 outlines the problem that strategic voting (in particular, “government-versus-opposition” divisions) causes for OC. Section 6 concludes, and suggests further avenues of research that might prove more fecund for uncovering the ideological continuum underpinning Commons politics.

## 2 Divisions at Westminster

The majoritarian nature of the British electoral system ensures that the Prime Minister is the leader of the largest party by seat share, and will hold a majority, or, failing that, a plurality of seats at Westminster (Adonis 1990, 21–25).<sup>2</sup> The executive, known as the ‘cabinet’, is headed by the Prime Minister and is thus fused with the legislature in the sense that the head of the government is drawn from the ranks of the parliament. In a Westminster system, the government controls the business of the House of Commons, the main representative chamber.<sup>3</sup> This ‘business’ refers to the proposing and passing of legislation, and also to the timetabling of the debate on these matters.

The largest parliamentary party not in government forms the “Official Opposition.” They are joined on the opposition benches by all other (smaller) parties which are also outside of the government.<sup>4</sup> As its moniker suggests, the opposition’s *de facto* role is to ‘oppose’ the government’s legislation. Since it normally lacks a unifying political agenda (perhaps other than to defeat the government), the opposition’s constituent parts may give dissimilar, even conflicting, reasons for their decision to vote (typically) contrarily to the government’s agenda.

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<sup>2</sup>Westminster is the geographical location of the House of Commons, and the term ‘Westminster’ is used by political scientists to denote characteristics of legislatures similar to those described here.

<sup>3</sup>Formal (and informal) rules of parliament enable influence by the non-governmental parties throughout the parliamentary session; these are essentially limited to the opportunity to debate and counter-propose legislation.

<sup>4</sup>Though technically incorrect, we use the term ‘opposition’ as a catch-all for the non-government parties here.

A key feature of the House of Commons is that a member of parliament (MP) relies on party patronage for career advancement, and their election at the constituency level is almost solely a product of their party identification (and that party's current fortunes) rather than their *personal* appeal to voters (Jennings 1969). Most voters base their localized ballot box decision on the party labels of those competing: constituent service as a foundation of (re)election—in the US sense of ‘pork-barrelling’ localized benefits—is relatively minor.

## 2.1 Government versus Opposition

By and large then, roll calls in the United Kingdom parliament amount to either supporting or opposing the government's proposals. The parties are highly cohesive in voting: the great majority (approximately 99 percent) of divisions are ‘whipped’, insofar as the respective party leaderships state a party line which MPs are expected (and have incentives) to toe. ‘Rebelling’—in the sense that the whip is defied—scuppers promotion prospects and leads to demotion where applicable. If rebels are particularly reckless, the whip may be ‘withdrawn’ (see Silk (1987, 46–48)). This latter punishment is the equivalent of expulsion from the parliamentary party, and usually makes it impossible to run for that party at the next (and subsequent) general election(s). Contrast this situation with the US Congress where Representatives and Senators from *different* parties form shifting coalitions from bill to bill.

Given this logic, it should be clear that a government party MP rebels when s/he votes *against* the explicit wishes of the government, and *with*—in terms of the similarity of the ‘yea’ or ‘nay’ division choice—the opposition parties. In particular, notice these rebels need not agree *substantively* with any of the opposition parties’ positions on the bill: for example, the government party rebels may feel some government bill does not allocate sufficient funds to public spending (“not enough!”), whilst others (particularly amongst the opposition) hope to defeat the bill on the converse basis that the proposal is profligate (“too much!”).<sup>5</sup>

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<sup>5</sup>Note that rebels may express their displeasure by proposing amendments to government bills that substantially alter the government's plans, or even negate them. This subtlety is entirely consistent with the arguments offered here and below.

## 2.2 The First Blair Parliament

The Parliament of 1997–2001 represents the first time since that of 1974–9 that Labour had won a majority; since 1979, the Conservative party had controlled the government. The Labour party’s modernization and metamorphosis to “New” Labour had seen it jettison several key ‘socialist’ tenets concerning nationalization and personal (and corporate) taxation. Yet, interestingly, many ‘Old’ Labour MPs who had actively and very vocally opposed this dash for electability would be sitting on the government benches. Hence, there would presumably be some opportunity for rebellion in a very public forum—by actually voting against the government. An opportunity was provided by the thumping majority that Labour had achieved at the 1997 general election (the landslide result left the government controlling 65% of the Commons). As Cowley notes, when a government has a large majority, backbenchers can “bark as loud as they want, knowing they will not bite” (Cowley 2002, 10). Third, and more practically, the 1997–2001 Parliament was the first for which complete voting records were available online, which meant that a voting matrix, representing each MPs decision at each division could be straightforwardly constructed (see Firth & Spirling (2003*a*) and Firth & Spirling (2003*b*)).

## 3 Non-Parametric OC

In non-US parliaments, the standard parametric techniques used by Poole & Rosenthal and Clinton, Jackman & Rivers are inappropriate. An interesting example of Poole’s method in application is provided by Rosenthal & Voeten and we briefly review their work here, before applying the algorithm to the British case.

### 3.1 French Fourth Republic

Rosenthal & Voeten (2004) utilize the OC algorithm for the French Fourth Republic parliaments, which lasted 1946–1958. This period was marked by five key features that make parametric methods inappropriate: party discipline; changes in party affiliation during the life of the parliament; proxy voting (whereby legislators gave their votes to others to use); low numbers of errors in terms

of the spatial model assumed (voting was almost ‘perfect’ spatially); a small number of votes were highly strategic.

The authors are delighted with their results. They fit a 2-dimensional model with which they garner a 97.6% correctly classified result. They argue that “future studies should consider these [advantages of Poole’s method] when analyzing roll-call voting in settings other than the United States Congress” (Rosenthal & Voeten 2004, 631). Importantly, they argue that the OC technique is essentially robust to the ‘both ends against the middle’ voting that took place in some of the parliaments during the period under consideration. The essence of this problem is that, when the government arises from the center of the legislature, there may be circumstances in which both the left and the right attempt to defeat it in confidence votes. This is a strategic move in the sense that the attempt to cause the government to fall was based on non-ideological calculations. Parametric methods would struggle with such observations: if a fascist voted with the Communists on some strategic matter (even if this was a very rare event), parametric methods will pull the fascist towards the center. However, the non-parametric OC cutting line will be essentially unaffected.

## 4 Application: Westminster

In short then, OC seems the method of first resort for classifying Commons legislatures for the 1997-2001 period: we now use it and report our findings.

A sample of the rank ordering that the Optimal Classification procedure yields for the period after the General Election of 1997, until the General Election of 2001, is given in Appendix A.<sup>6</sup> This rank ordering is constructed from the 1279 divisions that took place in the relevant time period. MPs that did not vote *at least ten times* during the 5 years were *a priori* excluded from our analysis. Some 668 do appear in total and we note that MPs vote with varying frequency.<sup>7</sup> The

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<sup>6</sup>The full list is available on application from the authors. Appendix C gives some replication information that readers may find helpful.

<sup>7</sup>The range of division attendance was 18 to 1143. Note that MPs who leave the Commons mid-term (or who join through by-election) are treated in the same way as all other MPs in the analysis

OC scaling is based on those votes that each MP actually casts.<sup>8</sup> So if the technique has worked correctly, Appendix A ought to be an edited list of MPs from the most liberal parliamentarian in the Commons to the least liberal; from the least conservative to the most conservative.

#### 4.1 Overview: Party Groupings

Dealing first with the big party groupings, we note the following from the data. The first 421 MPs in the Commons (counting in from the left) are Labour MPs. The last Labour MP appears in position 430, the intervening members being variously “independent” and one from Northern Ireland’s nationalist SDLP<sup>9</sup>. The other SDLP MPs occur to the right of this position. The Scottish Nationalists and the Welsh Nationalists are to their right, with the Liberal Democrats holding the middle ground before the smattering of Ulster Unionists and Democratic Unionist MPs appear. The Conservative party dominates the right: from position 499 (with the exception of an independent and a Democratic Unionist) to position 664. The remaining 3 places are filled, in theory, by the most right-wing members of the Commons. Respectively they are a Democratic Unionist, United Kingdom Unionist and an Ulster Unionist.

Thus far, the OC mechanism has caught much of our intuitive understanding of Commons’ ideologies. Labour is a party with socialist, trade unionist origins, and we might expect its MPs to lie to the left of the Liberal Democrats. It does not seem outlandish that the Liberal Democrats inhabit the ‘middle ground’ of British politics—certainly, commentators have suggested this positioning yields much of their appeal in the electorate. Similarly, there seems little to object to the notion that the Conservative party is of the right. The other parties, including the Scottish, Welsh and Northern Irish nationalists seem uncontroversially placed close to the centre. Indeed the latter is a sister organization of the British Labour party. The Ulster unionists (of varying varieties) are also plausibly placed close to, amongst and beyond the Conservative ranks. Although the Ulster Unionists differ violently amongst themselves, UK experts would generally classify them all as to

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<sup>8</sup>That is, abstentions are treated as indifference.

<sup>9</sup>Shaun Woodward is classified as a Labour MP, since this was his status in 2001 (following his December 1999 defection). He spent half of the parliament voting with the Tory front-bench however, so he is dropped from our descriptive statistics here

the ‘right’ of the Conservatives.

Of course, this party alignment should not be accepted without critical comment. We might expect *inter alia* objections to the assumption that the Liberal Democrats really continue to function in the centre area of the political spectrum. Their policy pronouncements between 1997 and 2005 on the Euro, public spending and taxation and the Second Gulf War suggest an ongoing move left towards—or perhaps even ‘leapfrogging’—Labour’s traditional platform. Similarly, some Scottish and Welsh nationalist policies seem more left-wing than the governing party’s. Nonetheless, even if the ordering of the parties is not *entirely* persuasive here, the implied relative positions seems a plausible representation of reality. *Between* parties, the OC ranking looks both reliable and valid.

## 4.2 MPs at the Group Margins

*Within* parties, however, there is a problem. This is particularly true for those—ostensibly—placed to the right of the body of the Labour party.

Recall that the Labour party MPs count in from the ‘left’ to position 430. The last 30 scaled positions include MPs such as Tam Dalyell (position 409), Robert Marshall-Andrews (411), Dennis Skinner (412), Jeremy Corbyn (420), Diane Abbott (415), Tony Benn (417), Ken Livingstone (422) and Bernie Grant (426). To be clear, OC classifies these MPs as some of the most *right-wing* of the Labour party. Ideologically then, they are the closest to the Conservatives. This seems odd. Commentators have not been slow to cite some or all of these individuals as Labour rebels, but not for the reason suggested by the attendant analysis. Rather, these members are widely accepted as ideologically *left-wing*—disagreeing with the government on foundation-hospital NHS reform, the Iraq war and social-security/disability benefits to name but three policy areas. Yet here we observe them being placed *right* of their Prime Minister and, in fact, the entire Cabinet.

Who then were the most left wing members of the Commons (1997-2001) if it is not these individuals? Apparently, MPs Galbraith and Radice, with members Turner and Gibson not far to

their right. Expert opinion would class all of these as ‘government loyalists’ on the back benches.<sup>10</sup>

As suggested above, the Liberal Democrats are a left of centre party. Problematically, every single Liberal member has a higher (‘more right’) scaling score than any Labour MP. In fact, their scores place them right of centre in parliamentary terms. For example, Paddy Ashdown, leader of the Lib Dems between 1997 and 2001, scores 458. The most right wing members of the Commons, including the Rev Ian Paisley of the Democratic Unionist Party, score 667. Hence, Ashdown—and all his MPs—lies well beyond the Commons’ half-way point in terms of relative scaling.

Appendix B gives the iterations report from the OC rank order for 1997 to 2001. From the first iteration there are practically no errors of the sort alluded to above (just 1 percent by the 10th iteration). The proportion of those correctly classified by the simple rearranging of cut points and then legislators is some 99.1 percent. By contrast, for the US 107th Senate the comparable figure was 91.9 percent. Voting at Westminster seems perfect. However, even if the *reliability* of the OC technique is high, its *validity* appears low.

## 5 The Fundamental Problem: Strategic Voting

Poole’s nonparametric technique initially seems ideal because it dispenses with the assumptions of i.i.d. errors across both legislators and roll calls in a parliamentary session. Such assumptions are unrealistic and inappropriate for Westminster-style legislatures. The underlying formal model is similarly parsimonious, in that it assumes only “that legislators have Euclidean preferences defined over some ideological/policy space and that they vote sincerely for the alternative closest to their ideal point” (Poole 2000, 212).

The problem occurs not with the Euclidean preferences: we have no reason to assume British legislators have some otherwise defined ordering. Rather, we take issue with the supposition that

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<sup>10</sup>Davies appears at position 3 and was originally Secretary of State for Wales, but left the Commons a year later to become First Secretary of the (new) Welsh Assembly. Expert opinion would consider him a loyalist.

all MPs vote sincerely and proximally. They do not: in particular, the official opposition will reject a government bill in favor of the status quo, even when the status quo is *further* from their ideal point than the proposed policy.

To describe this problem more formally, let there be a total of  $n$  MPs voting in  $m$  divisions. Each division  $j = 1, \dots, m$  presents MPs  $i = 1, \dots, n$  with a choice between a ‘yea’ position  $\zeta_j$  and a ‘nay’ position  $\psi_j$ . Without loss of generality, assume that the ‘nay’ position is the status quo. We assume that  $\zeta_j, \psi_j \in \mathbb{R}^d$ , where  $d$  denotes the dimensionality of the bill space. Let  $y_i = 1$  if MP  $i$  votes ‘yea’ on the  $j^{\text{th}}$  division and  $y_i = 0$  otherwise.

In a sincere voting model, MPs may be assumed to have quadratic utility functions over the bill space so that  $U_i(\zeta_j) = -\|\mathbf{x}_i - \zeta_j\|^2 + \eta_{ij}$  and  $U_i(\psi_j) = -\|\mathbf{x}_i - \psi_j\|^2 + \nu_{ij}$  where  $\mathbf{x}_i \in \mathbb{R}^d$  is the ideal point of MP  $i$ ,  $\eta_i$  and  $\nu_i$  are the stochastic elements of utility (the ‘errors’), and  $\|\cdot\|$  is the Euclidean norm.<sup>11</sup> Utility maximization then implies that  $y_{ij} = 1$  if  $U_i(\zeta_j) > U_i(\psi_j)$  and  $y_{ij} = 0$  otherwise.

But at Westminster, opposition MPs, indexed  $i_o$ , have discontinuous utility functions  $U_o = U_o(x, g)$ , where  $g$  can be modeled with an indicator function defined as

$$g_j = \begin{cases} 1, & \text{if } \zeta_j \in G \\ 0, & \text{otherwise} \end{cases} \quad (1)$$

and where  $G$  is the set of bills that the government proposes in a legislative session.<sup>12</sup> Recall that the nay position on bill  $j$ — $\psi_j$ —is the status quo, hence supporting a proposal—whichever places it on the agenda—is equivalent to voting ‘yea’ (voting for  $\zeta_j$ ). From the opposition MPs’ perspective

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<sup>11</sup>The choice of a quadratic utility function is simply for ease of exposition: any single peaked and symmetric function that captures preferences would serve equally well. For example, Gaussian preferences are admissible.

<sup>12</sup>It is assumed (and is empirically true) that the government will always back its own version of the bill, rather than accept rebel or opposition amendments. See also footnote 5

then,

$$U_o(\zeta_j) = \begin{cases} -\gamma, & \text{if } g_j = 1 \\ -\|\mathbf{x}_o - \zeta_j\|^2, & \text{otherwise} \end{cases} \quad (2)$$

where  $-\gamma$  is some ‘sufficiently’ large negative constant; if the government proposes a bill,  $-\gamma$  is sufficient to outweigh any ‘spatial’ policy-based benefit the opposition MPs would gain from seeing it passed relative to the status quo. This calculus has the observational consequence that

$$y_{oj} = \begin{cases} 0, & \text{if } g_j = 1 \\ 0, & \text{if } U_i(\zeta_j) < U_i(\psi_i), g_j \in \{0, 1\} \\ 1, & \text{if } U_i(\zeta_j) > U_i(\psi_i), g_j = 0 \end{cases} \quad (3)$$

Notice here that the cases where the government proposes the legislation, and the cases where opposition MPs sincerely prefer the ‘nay’ option, are observationally equivalent. Empirically, at Westminster, nearly all legislation (and thus nearly every vote), is proposed by the government.

## 5.1 The Optimal Classification process

The Optimal Classification algorithm consists of two procedures in a chain: first, a ‘cutting plane’ is found, then the legislator coordinates (ideal points) are located. Poole (2000, 215–231) devotes several pages to explaining the procedure, and provides some useful examples. To understand why the results for the UK look so at odds with our expectations, it is helpful to analyze the procedures in light of the Westminster strategic voting problem noted above.

### 5.1.1 The ‘Optimal’ Cutting Plane

Let  $\mathbf{X}$  be the  $n \times s$  matrix of legislator coordinates, and recall that  $n$  is the number of MPs and  $s$  is the number of policy dimensions. To make matters especially simple (and realistic) assume that  $s = 1$ . The  $n$ -vector of votes on the  $j$ th roll call is denoted  $\mathbf{t}_j$ . A legislator is ‘correctly classified’ if, given they voted ‘yea’/‘nay’, their ideal point is classified on the ‘yea’/‘nay’ side of the plane.

Notice that finding the optimal cutting plane is equivalent to finding the plane that maximizes

the number of correct classifications on a one-dimensional line. In Poole’s case, since  $s > 1$ , there was a second criterion whereby the orientation of the plane in space needed to be considered. The method works as follows. The projected legislator coordinates are arranged left to right in order as  $w_1$  to  $w_n$  such that  $-1 \leq w_1 \leq w_2 \leq w_3 \leq \dots \leq w_n \leq +1$  and the  $Y$ ’s and  $N$ ’s above the projection line indicate how the corresponding legislator voted in the  $j$ th division. There are  $2n$  unique perfect voting patterns and it is a straightforward operation to compare each perfect pattern with the *actual* pattern of votes,  $\mathbf{t}_j$  (Poole 2000, 217). The next step is to obtain the optimal normal vector which essentially involves moving the cutting plane through the space in a direction that increases correct classification. This is done by moving the cutting plane towards the MP points that are classification errors. Again, Poole (2000, 218) gives a technical discussion of this procedure, but for present purposes, it suffices to note that the algorithm will efficiently classify those that agree with the government (the  $Y$  voters) from those that do not (the  $N$  voters), *regardless* of the ‘left’ or ‘right’ ideological leanings of the MPs in question.

### 5.1.2 The ‘Optimal’ Legislator Coordinates

Given the  $n \times 1$  vector,  $\mathbf{N}$ , of normal vectors and the  $n \times 1$  vector of votes of the  $i$ th MP,  $\mathbf{t}_j$ , Poole’s algorithm then finds the MP ideal point  $\mathbf{x}_i$ , which maximizes the correct classification.

In the present situation, we are assuming one dimension (for or against the government) and a large number of divisions, say 1300. Given an MP’s pattern of votes the problem is to find the point in the line that maximizes the correct classification. Optimal Classification essentially moves the MP up or down the (1-dimensional) policy line in such a way that reduces the number of errors. In the Poole case, this algorithm—of moving the legislator point in a ‘city block’ fashion parallel to the ‘next’ dimension—is run for each dimension in turn (second, third, fourth etc.) and then repeated as many times as is required. A local maximum will then obtain: that is, the MP point cannot be moved in any direction such that the number of correct classifications can increase.

## 5.2 OC at Westminster

The consequences of using OC for Westminster should be obvious to the reader: it will yield a rank order of MPs, from those that have maximal agreement with the government to those that have minimal agreement with the government. The cutting plane on almost every vote simply divides those that support the government on that particular bill from those that do not. Moving MPs around (in this case, up and down) will be a straightforward operation given the obvious cut point.

To the far ‘left’ of the order, we will see MPs that most regularly concur with the government’s legislative agenda: Cabinet members, junior ministers outside the Cabinet, and loyal backbenchers. Over to the ‘right’ OC will place those who almost always vote against the government: the Conservative party, that forms the Official Opposition and others (including Ulster Unionists of varying hues) that oppose the government more often than not. The ‘middle’ of the order will be a mixed bag: these individuals sometimes agree and sometimes disagree with the government. On the one hand, we expect to find centrist parties, like the Liberal Democrats. On the other, we should now expect to find Labour’s left-wing rebels: MPs like Tony Benn and Diane Abbott. These individuals generally agree with the government on all issues other than a few key divisions where they oppose the Cabinet’s proposals because they are too “right-wing” or too “liberal” (in the European, economic, sense).

Notice that fitting a second dimension will not be ‘necessary’ (in the sense that conventional goodness-of-fit is already maximized by one dimension) since almost every MP can be well classified given their preponderance to support or oppose legislation the the genesis of which was the executive of the British parliament (the government).

To be clearer here, if we observed another 1000 party whipped votes in the Commons, the correct classification statistic would climb even higher and would approach 100 percent in the (not too distant) limit as the number of free (or quasi-free votes) becomes a vanishingly small proportion of all votes cast.

### 5.3 Some Evidence: Rebels and Opposition Unite

The essence of the critique offered above is that, on any one division, *either* Labour ‘rebels’ voted against the government on matters of principle, whilst the Conservative opposition did so strategically, *or vice versa*. One way to show this is to consider some of the specific bills over which the rebels dissented, and contrast their public statements—which hopefully reveal their preferences—with those of the opposition. Cowley (2002, 22–93) gives a thorough discussion of the issues that divided left-wingers from their more conformist brethren in the 1997–2001 parliament. In particular, three of the largest rebellions (in terms of numbers of MPs) were on the Welfare Reform and Pensions Bill of 1999 (74); the Transport Bill of the same year (65); and the Criminal Justice Bill of 2000 (37) (Cowley 2002, 92). Briefly, and drawing on Cowley, we consider each in turn here.

#### 5.3.1 Welfare Reform and Pensions Bill

The Welfare Reform and Pensions Bill dealt *inter alia* with reforms to the way that the state paid incapacity benefit to the disabled. In particular, it proposed means tested benefits for and reduced payments for those who had made private provisions for health care<sup>13</sup> or pensions. Some 68 MPs signed an Early Day Motion<sup>14</sup> which called

... upon Her Majesty’s Government to give more consideration to a more generous set of arrangements for those recipients of incapacity benefit who draw upon occupational pensions. [EDM 375,1999]

Commensurate with this ‘principled’ rhetoric, several MPs who would later rebel made seemingly ideological statements in Commons’ debates on the subject. Tom Clarke argued that occupational (i.e. non-state) pensions were “nest eggs, not luxuries” that should not be attacked by the government (Cowley 2002, 47). Roger Berry, the author of the EDM above made a particularly telling plea: “What on earth could be the justification [for cutting benefits]? ... perhaps the Tories did not cut it enough.” Frank Field was similarly critical of (his) the Labour Party government on

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<sup>13</sup>The United Kingdom has a “National Health Service” that funds medical services from general taxation, free at the point of delivery.

<sup>14</sup>A public statement by MPs, that won’t be debated in the legislature, but that draws attention and support to a particular (policy) position.

this count, recalling “the Tories’ endless attack on the welfare state that they inherited and their endless push to means-test [that, in the 1980s] were undermining decent working-class morality in our constituencies” (Hansard, HC Debates, 20 May 1999: Column 1256). The Tories here are the Conservative opposition, who by both reputation and ideological commitment are generally critical of broad-based state benefits funded by taxation. So, in response to Berry’s proposed amendment to the government bill—an amendment that would drop means testing—we might therefore expect the Conservatives to join Labour and overwhelmingly reject it. We would expect this precisely because means testing disability benefit is presumably an improvement for the Conservatives relative to the status quo. In practice, the Conservatives *supported* the amendment, and voted *with the rebels*.<sup>15</sup> This support included the then shadow (opposition) Secretary of State for Social Security, Iain Duncan Smith. In this case, the Labour rebels appear to have voted sincerely and the Conservatives strategically.

### 5.3.2 Transport Bill

The most controversial aspect of the December 1999 Transport Bill was its proposed partial privatization of the National Air Traffic Control Services (NATS). The specific objection raised by some 50 MPs in an amendment was that “the introduction of the private profit motive could jeopardise safety standards” (Cowley 2002, 70). But, more generally, the rebels were ideologically opposed to any form of privatization *per se*. This should not be too surprising: Labour is, by origin, a socialist party and, when in government in the postwar period, had nationalized industries such as coal, gas, petroleum, steel and others. Indeed, it was only in 1994 that the party had officially abandoned its constitutional Clause IV that committed it

To secure for the workers by hand or by brain the full fruits of their industry and the most equitable distribution thereof that may be possible upon the basis of the common ownership of the means of production, distribution, and exchange, and the best obtainable system of popular administration and control of each industry or service.

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<sup>15</sup>Division 191, 20 May 1999.

The Conservatives, meanwhile, spent much of the 1980s under Prime Minister Margaret Thatcher (re-)privatizing these very bodies. Matters would come to a head, with the rebels proposing several amendments to the bill. Division 185—had it passed—would have transferred NATS to a not-for-profit company. We might expect that the Conservatives would support the government on this issue: surely a privatization was favorable to them on ideological grounds, and they certainly were not opposed to a profit motive for their own privatizations. In practice, the Conservatives *supported* the amendment, and once again voted *with the rebels*.<sup>16</sup> Lest it be thought this was anything less than an official position, this Conservative support included their leader, William Hague, and the Shadow Secretary of State for Transport, Archie Norman.

### 5.3.3 Trial by Jury

The Criminal Justice (Mode of Trial) Bill sought to reform the way that those accused of certain criminal offences of ‘intermediate’ seriousness (like shoplifting or burglary) were tried. Historically, defendants themselves could choose either a trial by jury, or by a magistrate. The government contended that those choosing the former did so, in part, to receive a lighter sentence. They further argued that using the justice system in this way was immoral. The bill would give magistrates the power to decide the venue of the trial.

Some on the ‘liberal’ (in the American sense) left wing of the Labour party were concerned. In March 2000, the bill was reintroduced to the Commons, and Bob Marshall-Andrews, a generally rebellious backbencher and barrister, tabled an amendment that would have negated the bill because it

fails properly to safeguard or maintain the right to trial by jury in either way offences which may result in serious punishment and loss of livelihood. (Hansard, HC Debates, 7 March 2000: Column 917)

The vote on this amendment was Division number 84. What might the Tory opposition preference be on this issue? Traditionally the party of ‘law and order’—and no friends of trial lawyers—the

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<sup>16</sup>Division 185, 9 May 2000.

Conservatives would presumably be with the government in disposing of the amendment quickly, and then supporting the government on its bill. It wasn't to be, and the Conservatives aligned themselves *with* the Labour rebels in *supporting* the amendment. The Tory numbers once again included their leader William Hague, and, in fact, their shadow Home Secretary, Anne Widdecombe.

## 6 Discussion

The central purpose of this note was to draw scholars of British politics to a central problem with Optimal Classification, a technique that supposedly uncovers ideological dimensions in legislatures. For parliaments that exhibit strong 'government-versus-opposition' patterns of legislative voting, we contend that both in theory and in practice, OC will simply return a rank-ordering of MPs, from those that most to those that least agree with the incumbent government's policies. Ideological left wing 'rebels' appear in the center of the distribution, because they sporadically disagree for policy reasons with the government, whilst the Conservative opposition appears 'to the right' because they vote strategically to defeat the government. This is emphatically *not* the same as 'both ends against the middle' voting *a la* Rosenthal & Voeten (2004). Indeed, our limited 'case studies' above suggest that whilst rebels vote their sincere preference, the Tory opposition did anything but.

We do not expect this pattern to be limited to the 1997–2001 session, nor to the Labour party being in power. There is more data available via Firth & Spirling (2003*b*), should scholars wish to examine the patterns for other time periods for themselves.

For future research, we suggest that political scientists abandon traditional spatial models and more recent ideological classification techniques for the case of the United Kingdom or, in fact, any Westminster parliament where strategic voting is suspected. It is simply *not* the case that the results of an OC analysis can be interpreted as ideological continua in such circumstances. More general—non-model based—techniques, such as cluster analysis, may prove more fruitful, and will be explored in a future article.

## A Rank Ordered Sample of MPs from ‘left’ to ‘right’ 1997-2001

Position	Name	Party	Score
1	Radice, Giles	Lab	1
2	Galbraith, Sam	Lab	2
3	Davies, Ron	Lab	3
4	Turner, Neil	Lab	3
5	Gibson, Ian	Lab	5
6	Iddon, Brian	Lab	9
81	Blair, Tony	Lab	80
211	Prescott, John	Lab	208
409	Dalyell, Tam	Lab	409
411	Marshall-Andrews, Robert	Lab	411
412	Skinner, Dennis	Lab	412
415	Abbott, Diane	Lab	415
417	Benn, Tony	Lab	417
420	Corbyn, Jeremy	Lab	420
422	Livingstone, Ken	Independent*	422
425	Hume, John	SDLP	425
426	Grant, Bernie	Lab	426
428	McGrady, Eddie	SDLP	428
429	Mallon, Seamus	SDLP	429
431	Jones, Ieuan Wyn	Plaid Cymru	431
432	Bell, Martin Tat	Independent	432
435	Salmond, Alex	SDLP	435
458	Ashdown, Paddy	LD	458
459	Kennedy, Charles	LD	458
490	Woodward, Shaun	Lab*	490
492	Trimble, David	UUP	492
509	Heath, Edward	Con	508
606	Hague, William	Con	605
634	Widdecombe Ann	Con	634
666	McCartney, Robert	UKUP	667
667	Ross, William	UUP	667
668	Paisley, Ian	DUP	667

\*Note that MPs are classified according to their party affiliation at the end of the parliament, before the general election of 2001. Thus, Ken Livingstone is classed as an Independent after being expelled from Labour in April 2001.

## B Goodness of fit statistics for OC analysis of 1997-01

Iteration	A	B	C	D	E	F
1	ROLL CALLS	1	5895	515966	0.01143	0.98857
2	LEGISLATORS	1	4896	515966	0.00949	0.99051
3	ROLL CALLS	1	4575	515966	0.00887	0.99113
4	LEGISLATORS	1	4449	515966	0.00862	0.99138
5	ROLL CALLS	1	4409	515966	0.00855	0.99145
6	LEGISLATORS	1	4381	515966	0.00849	0.99151
7	ROLL CALLS	1	4362	515966	0.00845	0.99155
8	LEGISLATORS	1	4350	515966	0.00843	0.99157
9	ROLL CALLS	1	4346	515966	0.00842	0.99158
10	LEGISLATORS	1	4341	515966	0.00841	0.99159

Column *A* gives the subject of movement in the iteration.

Column *B* gives the number of dimensions of the analysis.

Column *C* gives the number of classification errors.

Column *D* gives the number of choices.

Column *E* gives the error proportion.

Column *F* gives the correct classification proportion after the respective iteration of the OC procedure is complete.

## C Some Replication Information

Poole's (2000) technique is distributed as both a Microsoft Windows (with Intel processor) executable file, and a FORTRAN program (which is compatible with Lahey compilers). We assume most users will be using the Windows version.

Users should first download PERFL.EXE from [http://voteview.com/Optimal\\_Classification.htm](http://voteview.com/Optimal_Classification.htm). Then, they should obtain the data for the parliament (1997–2001) either from the current authors, or from <http://www2.warwick.ac.uk/fac/sci/statistics/staff/academic/firth/software/tapir/> where it is held in a (zipped) comma delimited form. If the latter, the data needs to be recoded such that a “yes” vote is coded ‘1’, a ‘no’ vote is coded ‘6’ and a missing value is coded ‘9’. The data then needs to be in a flat file format (like ASCII) which looks something like the following:

AbbottDianeLab	6661611166616161191...
AdamsIrenePaiLab	9661699999999999999...
AingerNickLab	6661611166616161111...
AinsworthPeterESCon	1196166699999616699...
AinsworthRobertCovLab	6661611166616161111...
AlexanderDouglasLab	9999999999999999999...
AllanRichardSheLD	9611699161669999999...
AllenGrahamNotLab	6661611166616161111...
AmessDavidCon	1196166699999619996...
AncramMichaelCon	1196166699999619999...
...	
...	

On the left are the names of the MPs (in alphabetical order) with a party indicator (LD, Lab, Con) etc. simply added at the end. On the right are the voting records for each bill.

The control card file, PERFSTRT.DAT should look as follows:

```
9701matrixformat.txt
NON-PARAMETRIC MULTIDIMENSIONAL UNFOLDING OF 9701 COMMONS
  1 1279  20  34  39  18  10 0.005
(34A1,3900I1) (I5,1X,34A1,2I5,50F8.3)
```

where 9701matrixformat.txt is saved to the same (working) directory as PERFL.EXE and PERFSTRT.

We use *exactly* the same defaults that Poole suggests on his website, except that the number 1279 in the third row of PERFSTRT.DAT refers to the number of votes in our data, 39 refers to a (presumed) left member from our data set (Tony Benn). The classification procedure was complete after approximately 1 minute and 20 seconds on a 3.5GHz PC.

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