

ROMANIA AND BULGARIA IN THE EUROPEAN UNION: A SPATIAL ANALYSIS OF COUNCIL VOTING

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Abstract:

In this paper I investigate the voting behaviour in the Council of the European Union between January 2006 and February 2009, i.e. immediately before and after the accession of Romania and Bulgaria. In order to do so I have coded the results of the 339 codecision votes that took place during the period of reference and applied various multidimensional scaling methods that commonly used for the analysis of voting behaviour in legislatures: metric scaling, W-Nominate, Heckman-Snyder, and optimal classification. The results of the analysis tell us about the relative viability of the different methods in the EU context and provide us with a preliminary ideological map that represents the ideological positions of Romania and Bulgaria vis -a-vis the other member states of the EU.

Keywords: European Union, Council, voting, preferences, scaling

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INTRODUCTION

On 1 January 2007 Romania and Bulgaria joined the European Union, which, since then is composed by 27 member states. In this paper I investigate how the two new member states have behaved in the main legislative institution of the Union, the Council.

There have been a number of empirical studies that have tried to extract member state ideologies from empirical evidence of Council voting (Mattila and Lane, 2001; Thomson et al., 2004; Hagemann, 2007). All these studies suffer from the scarcity of data available about an institution that leaves much to be desired in what regards transparency. Most voting is undertaken informally, so that we end up with a very reduced sample of explicit votes (Hayes-Renshaw et al., 2006). Yet the studies have been able to process that limited evidence and produce ideological maps of member states, usually on a two-dimensional space (Mattila and Lane, 2001; Thomson et al., 2004; Hagemann, 2007).

The results of these studies allow us to learn about the main dimensions of conflict in the Council, as well as the positions of particular member states along those dimensions relative to other member states. They allow us to see whether a member state has extreme or central preferences, and who are its main allies and opponents as far as Council voting is concerned.

But all of these studies cover periods in which Romania and Bulgaria were not members of the European Union, so I know very little about the ideological position of these countries. That is the reason why I have decided to analyze the Council votes that took place during 2007, 2008 and the first two months of 2009, after the accession of the two countries. I have also included the data from 2006 in order to increase the sample size and improve the reliability of the results, at least in what regards the dimensions of conflict and the relative positions of the other 25 member states.

The rest of the paper is divided in four sections. In the first section I will present the data used in the analysis. In the second section I will present the four different unfolding methods applied. In the third section I will present the main results of the analysis. In the final sections I will present some conclusions.

THE SAMPLE

One of the main difficulties when one wants to study the Council is its lack of transparency. Until recently, even the most important legislative decisions were taken behind closed doors. Recently there has been a number of steps aiming at increasing the transparency of the institution when it acts in a legislative capacity.

The Council's rules of procedure as amended following the Seville European Council of June 2002 state that the Council's deliberations on acts to be adopted in accordance with the codecision procedure shall be open to the public. Council sessions are also public when the Commission presents its most important legislative proposals and during the ensuing debate in the Council. In addition, it is laid down that the vote on legislative acts adopted by codecision shall be open to the public. In such cases, Council deliberations are made public through transmission of the Council meeting by audiovisual means, notably in an overflow room. The outcome of voting is indicated by visual means in real time in the Council's meeting room and on a television screen which relays the voting to the Press Centre. The results of voting in Council deliberations on acts adopted by codecision since 2006 may be found on the Council's website.

Table 1. Public votes on codecision acts from 2006 to February 2009

	2006	2007	2008	2009 (2 months)	2006-09
Votes	81	86	150	22	339
Contested votes	18	26	26	8	78

Table 1 presents the distribution of the sample. From the total of 339 votes, the great majority were taken unanimously, and only 78 were contested by at least one member state. This reduces the sample size considerably.

THE TREATMENT OF ABSTENTIONS AND NON PARTICIPATION

The scaling methods applied in this paper need a binary input (yes or no) whereas member states also have two other options (abstaining or being absent from the vote). It is common to assume that abstentions are purposeful acts, and yet in applied analysis of roll-call votes the information provided by the mere fact of not seeing a vote is commonly thrown away, by coding abstentions as missing variables. Thus, the failure to model the process that leads to abstentions deprives scholars of information that they could use to improve inferences about ideal points (Rosas and Shomer, 2008).

In this paper I have coded abstention and absence from the votes differently depending on the voting rule applicable. When the rule was qualified majority both abstentions and absences were coded as negative votes, because they do not contribute to the number of votes required for adopting the decision (see Hix, 2001: 669). Conversely, I have coded both abstentions and absences as positive votes when the voting rule was unanimity, because this rule just requires that no member states votes against the decision. Curiously enough, it is easier sometimes to adopt a decision by unanimity than by qualified majority (Nugent). Only the absences of Romania and Bulgaria during 2006 were coded as a missing votes.

FOUR MULTIDIMENSIONAL SCALING METHODS

In this paper I apply four different unfolding techniques in order to summarize the information from 339 votes into a simple ideological map of the member states. The unfolding model is a geometric model for preference and choice. It locates individuals and alternatives as points in a joint space, and it says that an individual will pick the alternative in the choice set closest to its ideal point. Unfolding originated in the work of Coombs (1964) and his students. It is perhaps the dominant model in both scaling of preferential choice and attitude scaling (Everitt and Howell, 2005).

The four alternative unfolding techniques that I have applied are metric scaling, W - NOMINATE, Heckman-Snyder, and optimal classification. All of these routines estimate ideal points within a multi-dimensional policy space to predict legislators' votes. I have estimated the member state coordinates for two dimensions because they are easily represented into an

ideological map and because that is common practice among models of voting both in the European Parliament and the Council of the EU.

The first simple metric scaling method is described in Poole (1984; 1990; Poole and Rosenthal, 1997). The procedure is very robust and converges very rapidly to a minimum from a random or non random starting configuration. It is particularly useful for the analysis of large data sets with missing entries (in our case, the voting records for Romania and Bulgaria during 2006).

The second method is NOMINATE, Poole and Rosenthal's (1997) multidimensional metric unfolding technique. I use the static version of this algorithm, W-NOMINATE, which is designed to run in personal computers. It differs from the dynamic version D-NOMINATE in that it uses a slightly different deterministic utility function and that it constrains legislators and roll call midpoints to an n-dimensional hypersphere of radius one.

W-NOMINATE is a scaling procedure that performs parametric unfolding of binary choice data. Given a matrix of binary choices by individuals (for example, Yes or No) over a series of Parliamentary votes, W-NOMINATE produces a configuration of legislators and outcome points for the Yea and Nay alternatives for each roll call using a probabilistic model of choice. It is discussed in detail in Poole (2005), Poole and Rosenthal (1997; 1991; 1985).

The third measure comes from Heckman and Snyder (1997) who analyze roll call data using a statistical method similar to NOMINATE. The main differences between Heckman -Snyder and NOMINATE are the parameterizations of the error terms and the utility functions of the legislators. NOMINATE assumes that error terms follow a logistic function while Heckman and Snyder assume a uniform distribution. NOMINATE uses normally distributed utility functions while Heckman and Snyder employ quadratic utility functions.

The fourth technique is optimal classification, developed by Poole (2000b). Optimal Classification (OC) is a scaling procedure that performs non-parametric unfolding of binary choice data. Given a matrix of binary choices by individuals (for example, Yes or No) over a series of Parliamentary votes, OC produces a configuration of legislators and cutting lines/planes that maximize the correct classification of the choices. It is discussed in detail in Poole (Poole, 2000b). The geometry of the roll call voting problem upon which Optimal Classification is based is covered in the first three chapters of Poole (2005).

This is a non-parametric methodology similar in structure to NOMINATE. The scaling method employs the same spatial model used by Poole and Rosenthal (1997) in their NOMINATE procedure and the scaling method is "NOMINATE-like" in structure. However, rather than maximizing the likelihood of the legislators' choices, the scaling method developed below *maximizes correct classification* of the legislators' choices. The scaling method is *nonparametric* because no assumptions are made about the probability distribution of the legislators' errors in making choices. The only assumptions made are that the choice space is Euclidean and that individuals making choices behave as if they utilize symmetric, single-peaked preferences.

RESULTS

The ideological coordinates of the 27 member states are shown in

Table 2 in the appendix. They have been calculated using the W-NOMINATE and the Optimal Classification computer programmes available at <http://voteview.ucsd.edu/dwnl.htm>. The metric scaling and the Heckman-Snyder coordinates are automatically rotated to best match the W-NOMINATE coordinates. The election of two-dimensional model is also common in the analysis of coalition formation in the European Parliament (Hix and Lord, 1997; Hix, 1999; Noury, 2002; Gabel and Hix, 2002; Gabel and Hix, 2002; Hix et al., 2006).

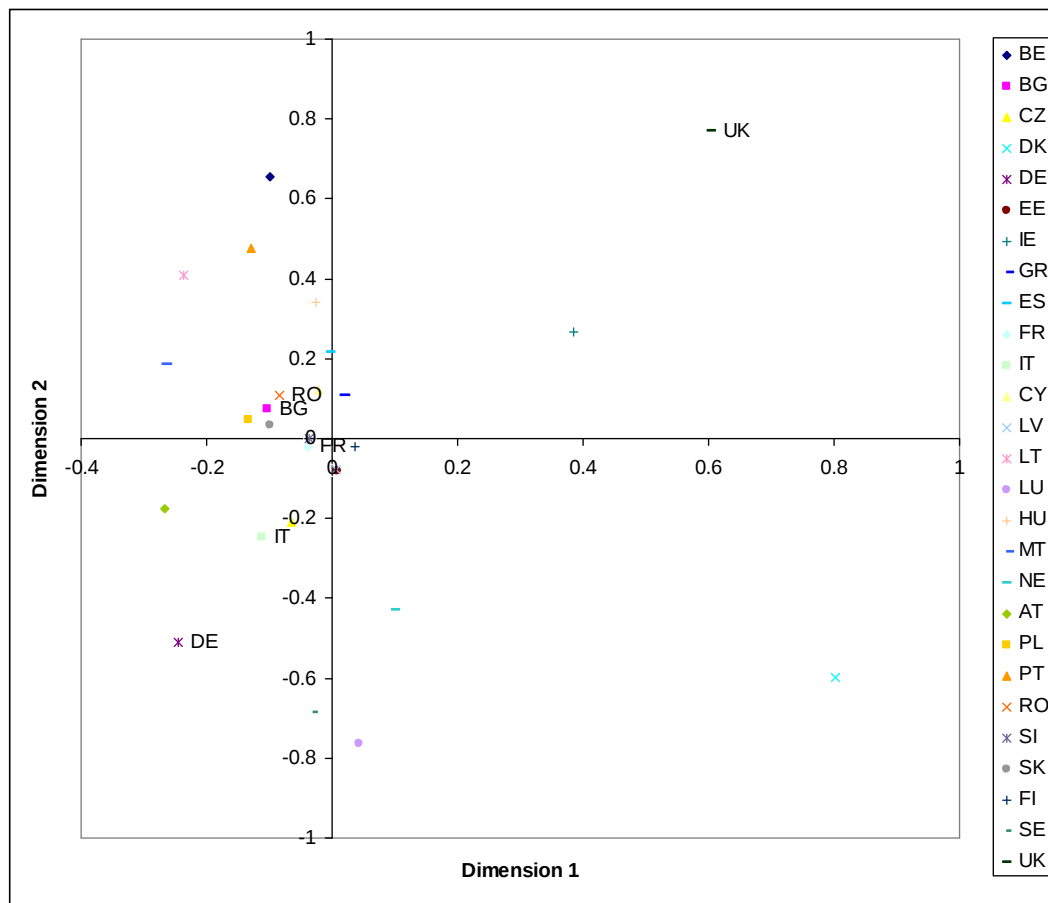


Figure 1. Two-dimensional ideological map of the Council, 2006 -09 (Metric scaling)

Figure 1 shows the two-dimensional ideological map of the 27 member states of the EU applying a metric scaling procedure to the codecision votes taken between January 2006 and February 2009. Romania and Bulgaria are clearly at the centre of the political spectrum, which is in line with the fact that both countries have generally voted with the majority. In fact, Bulgaria always voted with the majority and Romania voted against only in a single occasion, in 2008, related to pesticides. The positions of other major member states have also been highlighted, with the UK and Germany on opposed extremes and France and Italy in more central positions.

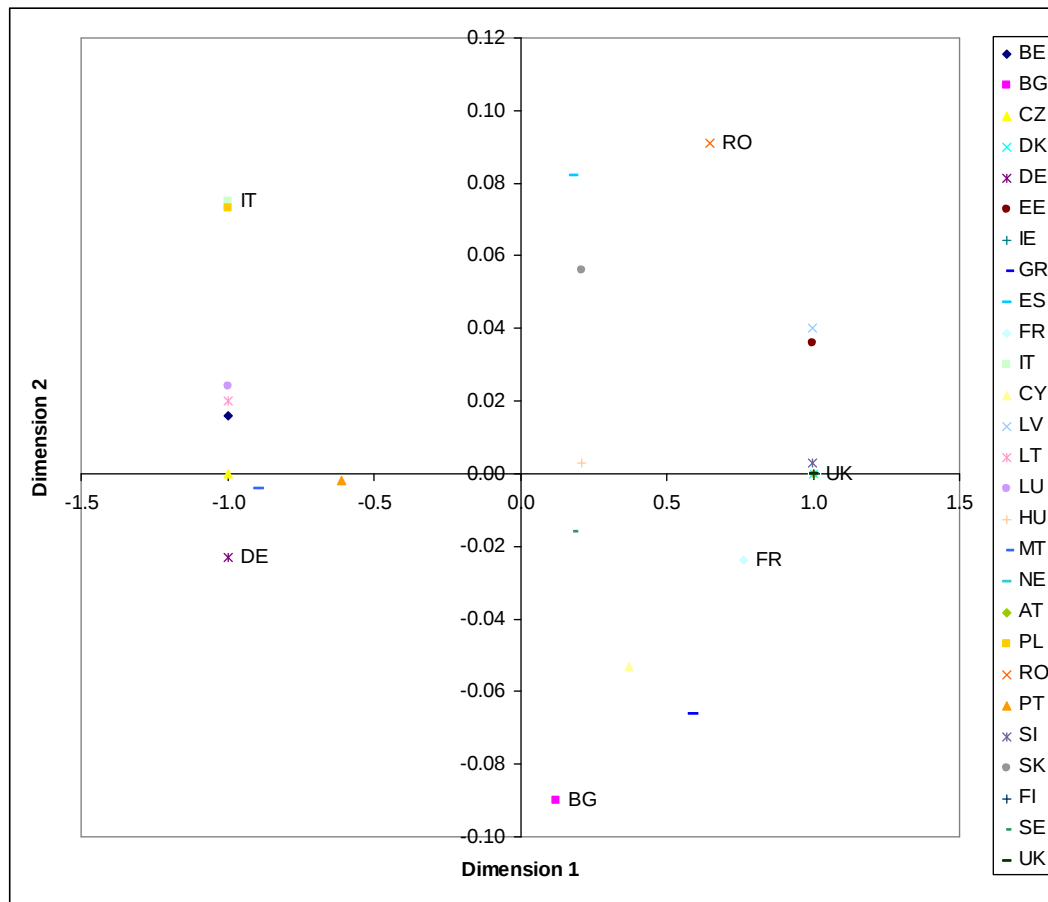


Figure 2. Two-dimensional ideological map of the Council I, 2006-09 (W-NOMINATE)

Figure 2 presents the same ideological map calculated using the W-NOMINATE scaling technique. The results are not so clear in this case because many member states have coordinates on the extremes of the first dimension. Recall one of the simplifications of W-NOMINATE with respect to the dynamic version D-NOMINATE is that the former constrains the coordinates to fall between -1 and 1. The inaccuracy of the resulting coordinates is probably due to the scarcity of contested votes in the dataset (78) and the lopsided nature of the majority of those votes (even in contested decisions, very few member states vote against the majority).

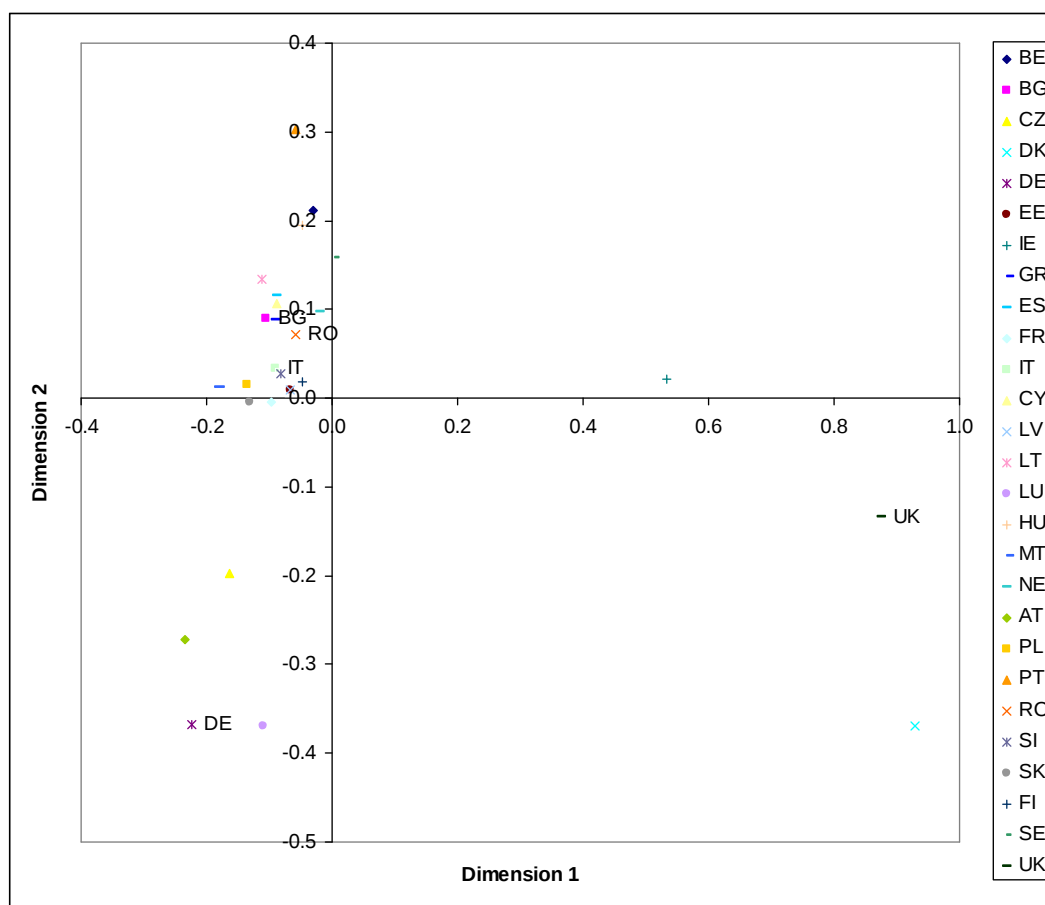


Figure 3. Two-dimensional ideological map of the Council, 2006-09 (Heckman-Snyder)

Figure 3 shows the ideological map of the Council when we apply the Heckman -Snyder model. The results are clearer than in the case of W -NOMINATE because this method is more compatible with lopsided votes. In fact, it has been applied to a subsample of lopsided votes in the US Congress in order to control for party power, under the assumption that voting on lopsided votes will be less influenced by political parties, which are less likely to spend their resources on those kinds of votes (Snyder Jr and Groseclose, 2000). Again, both Romania and Bulgaria appear at the centre of the political spectrum.

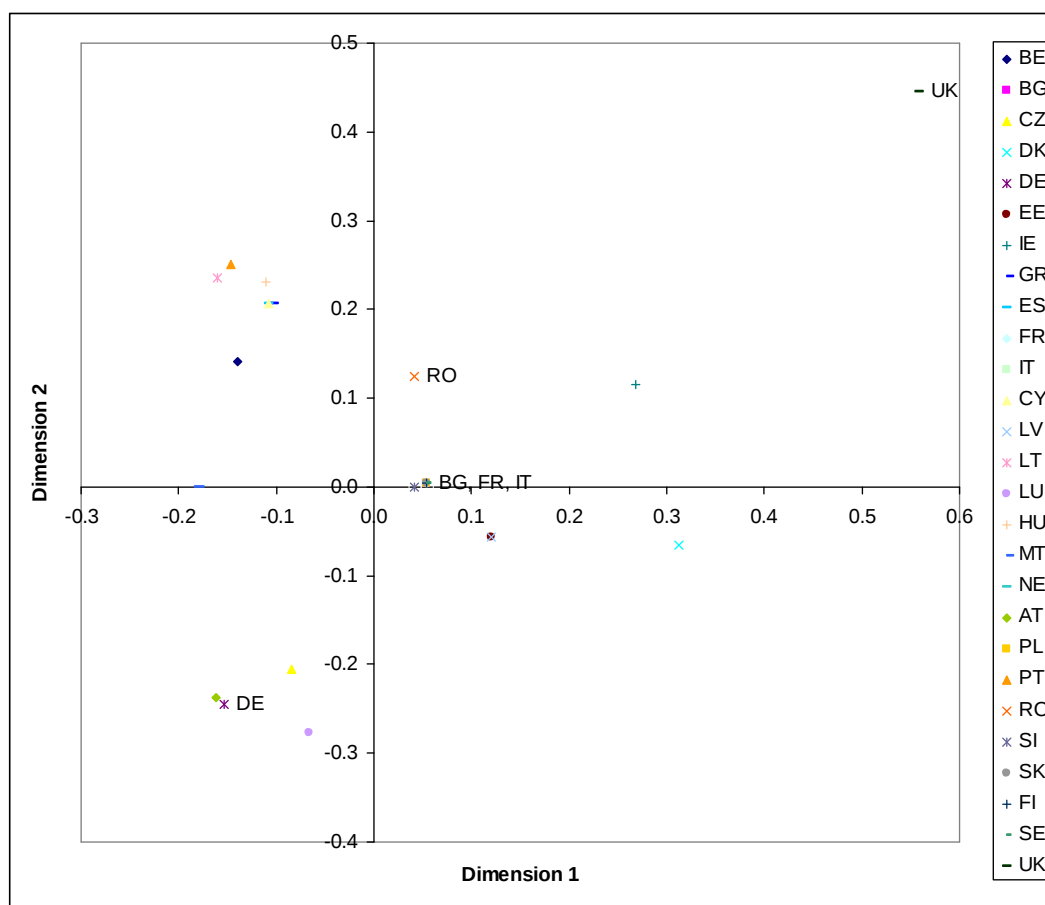


Figure 4. Two-dimensional ideological map of the Council, 2006-09 (Optimal classification)

Finally, Figure 4 shows the result of applying the non-parametric optimal classification method to the same sample of codecision votes. The results are rather clear, showing that this method is rather robust even when there is a high proportion of lopsided votes. Again, Romania and Bulgaria appear at the centre of the political spectrum and Germany and the UK on opposing extremes. France and Italy are also rather centrist, sharing preferences with Bulgaria.

CONCLUSIONS

Scaling method techniques such as NOMINATE and optimal classification have become increasingly popular for estimating legislators' ideal points and, subsequently, for making inferences about the policy space of a given legislative body (Poole and Rosenthal, 1997; Morgenstern, 2004; Rosenthal and Voeten, 2004; Hix et al., 2007). However, at the same time that these methods are being applied to more and more empirical data sets, it is also becoming increasingly apparent that these methods suffer from both statistical and theoretical deficiencies (Clinton et al., 2004; Lewis and Poole, 2004).

The main criticism is that standard errors are not reported when generating ideal point estimates in either NOMINATE or optimal classification, which makes it impossible to draw conclusions about the variance around the estimates (Hagemann, 2007). Consequently, a concern arises regarding whether the estimates are really consistent and fully reliable (Poole and Rosenthal, 1997; Lewis and Poole, 2004; Jackman, 2001). Thus, strictly speaking, optimal classification is *not* a statistical model, although standard errors can be estimated via bootstrapping for the legislator coordinates (Lewis and Poole, 2004; Poole, 2000a). However, a recently developed Bayesian model

seems more attractive because it includes not only estimates for both actors' ideal points, but also the standard errors around the estimates (Hagemann, 2007).

In this case, given the reduced size of the dataset (only 78 contested codecision votes between 2006 and February 2009), it would be virtually impossible to obtain significant differences in the coordinates that would allow us to make inferences. Still, the scaling method techniques presented in this paper can provide important insights into the underlying structures and into actors' preferences in the Council, such as the centrist nature of Romania and Bulgaria during their first two years of membership in the EU.

We should treat the results in this paper are merely descriptive. But it is not just a matter of time to obtain more meaningful results. The reason is that explicit votes in the EU understate the extent of real conflict of interest among EU member states. The reason is that most real negotiations and decisions in the Council are taken informally behind closed doors, just to be rubberstamped by the Council in public session at a later date. In the explicit votes, governments on the minority side often prefer to vote with the majority and avoid the shame of being outvoted. Thus, if we want to obtain a really meaningful dataset, Council transparency should go deeper than formal voting. Until transparency extends to earlier stages of the procedure, EU scholars will suffer from scarcity of meaningful data vis-a-vis their American counterparts.

APPENDIX

Table 2. Member state metric scaling, W-NOMINATE, Heckman Snyder and optimal classification coordinates, 2006-2009

	Metric scaling		W-Nominate		Heckman-Snyder		Optimal classification	
Belgium	-0.098	0.654	-1.000	0.016	-0.030	0.212	-0.140	0.141
Bulgaria	-0.103	0.076	0.123	-0.090	-0.105	0.090	0.054	0.005
Czech Rep.	-0.065	-0.210	-1.000	0.000	-0.164	-0.197	-0.084	-0.205
Denmark	0.802	-0.597	1.000	0.000	0.929	-0.370	0.312	-0.066
Germany	-0.246	-0.510	-1.000	-0.023	-0.224	-0.368	-0.154	-0.245
Estonia	0.008	-0.081	0.998	0.036	-0.067	0.009	0.120	-0.056
Ireland	0.385	0.267	1.000	0.000	0.534	0.021	0.268	0.116
Greece	0.013	0.108	0.576	-0.066	-0.097	0.088	-0.108	0.207
Spain	-0.003	0.217	0.180	0.082	-0.089	0.116	-0.108	0.207
France	-0.039	-0.020	0.763	-0.024	-0.096	-0.005	0.054	0.005
Italy	-0.111	-0.246	-0.997	0.075	-0.091	0.033	0.054	0.005
Cyprus	-0.022	0.123	0.372	-0.053	-0.088	0.107	-0.108	0.207
Latvia	0.007	-0.079	0.998	0.040	-0.067	0.009	0.120	-0.056
Lithuania	-0.237	0.408	-1.000	0.020	-0.112	0.134	-0.160	0.235
Luxembourg	0.044	-0.765	-1.000	0.024	-0.109	-0.369	-0.066	-0.277
Hungary	-0.026	0.342	0.208	0.003	-0.048	0.195	-0.110	0.231

Malta	-0.272	0.186	-0.911	-0.004	-0.188	0.013	-0.184	0.000
Netherlands	0.102	-0.430	1.000	0.000	-0.019	0.097	0.054	0.005
Austria	-0.266	-0.175	1.000	0.000	-0.234	-0.272	-0.162	-0.238
Poland	-0.134	0.046	-0.997	0.073	-0.135	0.016	0.054	0.005
Portugal	-0.130	0.478	-0.611	-0.002	-0.059	0.303	-0.147	0.251
Romania	-0.083	0.107	0.648	0.091	-0.057	0.072	0.042	0.124
Slovenia	-0.036	0.000	0.998	0.003	-0.082	0.027	0.042	0.000
Slovakia	-0.100	0.035	0.208	0.056	-0.132	-0.005	0.054	0.005
Finland	0.036	-0.019	1.000	0.000	-0.047	0.018	0.054	0.005
Sweden	-0.031	-0.686	0.181	-0.016	0.005	0.158	0.054	0.005
UK	0.605	0.770	1.000	0.000	0.875	-0.133	0.558	0.445

REFERENCES

1. Clinton, Joshua, Simon Jackman and Douglas Rivers (2004) 'The statistical analysis of roll call data', *American Political Science Review* 98(02): 355-70.
2. Coombs, Clyde H. (1964) *A Theory of Data*. New York: Wiley.
3. Everitt, Brian and David C. Howell (2005) *Encyclopedia of statistics in behavioral science*. John Wiley & Sons.
4. Gabel, Matthew J. and Simon Hix (2002) 'Defining the EU political space: an empirical study of the European elections manifestos, 1979 -1999', *Comparative Political Studies* 35(8): 934-64.
5. Hagemann, Sara (2007) 'Applying Ideal Point Estimation Methods to the Council of Ministers', *European Union Politics* 8(2): 279-96.
6. Hayes-Renshaw, Fiona, Wim Aken Van and Helen Wallace (2006) 'When and why the EU Council of Ministers votes explicitly', *Journal of Common Market Studies* 44(1): 161--21.
7. Heckman, James J. and James M. Snyder (1997) 'Linear Probability Models of the Demand for Attributes with an Empirical Application to Estimating the Preferences of Legislators', *Rand Journal of Economics* 28(0): 142-89.
8. Hix, Simon (1999) 'Dimensions and alignments in European Union politics: cognitive constraints and partisan responses', *European Journal of Political Research* 35(1): 69-106.
9. Hix, Simon (2001) 'Legislative behaviour and party competition in the EP: An application of Nominate to the EU', *Journal of Common Market Studies* 39(4): 663-88.
10. Hix, Simon and Christopher Lord (1997) *Political parties in the European Union*. Basingstoke: Macmillan.
11. Hix, Simon, Abdul Noury and Gerard Roland (2006) 'Dimensions of politics in the European Parliament', *American Journal of Political Science* 50(2): 494-511.

12. Hix, Simon, Abdul Noury and Gérard Roland (2007) *Democratic politics in the European Parliament*. Cambridge: Cambridge University Press.
13. Jackman, Simon (2001) 'Multidimensional analysis of roll call data via Bayesian simulation: identification, estimation, inference and model checking', *Political Analysis* 9(3): 227-41.
14. Lewis, Jeffrey B. and Keith T. Poole (2004) 'Measuring bias and uncertainty in ideal point estimates via the parametric bootstrap', *Political Analysis* 12(2): 105-27.
15. Mattila, Mikko and Jan-Erik Lane (2001) 'Why unanimity in the council? A roll call analysis of council voting', *European Union Politics* 2(1): 31-52.
16. Morgenstern, Scott (2004) *Patterns of legislative politics: Roll-call voting in Latin America and the United States*. Cambridge: Cambridge University Press.
17. Noury, Abdul G. (2002) 'Ideology, nationality and Euro -parliamentarians', *European Union Politics* 3(1): 33-58.
18. Poole, Keith T. and Howard Rosenthal (1985) 'A spatial model for legislative roll call analysis', *American Journal of Political Science* 29(2): 357-84.
19. Poole, Keith T. and Howard Rosenthal (1991) 'Patterns of congressional voting', *American Journal of Political Science* 35(1): 228-78.
20. Poole, Keith T. (1984) 'Least squares metric, unidimensional unfolding', *Psychometrika* 49(3): 311-23.
21. Poole, Keith T. (1990) 'Least squares metric, unidimensional scaling of multivariate linear models', *Psychometrika* 55(1): 123-49.
22. Poole, Keith T. (2000a) 'The geometry of multidimensional quadratic utility in models of parliamentary roll call voting', *Graduate School of Industrial Administration, Carnegie Mellon University* (24 April).
23. Poole, Keith T. (2000b) 'Nonparametric Unfolding of Binary Choice Data', *Political Analysis* 8(2): 211-37.
24. Poole, Keith T. (2005) *Spatial Models of Parliamentary Voting*. Cambridge: Cambridge University Press.
25. Poole, Keith T. and Howard Rosenthal (1997) *Congress: A Political-Economic History of Roll Call Voting*. Oxford: Oxford University Press.
26. Rosas, Guillermo and Yael Shomer (2008) 'Non -ignorable abstentions in roll-call data analysis', *Paper Presented at the Annual Meeting of the MPSA Annual National Conference, Palmer House Hotel, Hilton, Chicago, IL, Apr 03*.
27. Rosenthal, Howard and Erik Voeten (2004) 'Analyzing Roll Calls with Perfect Spatial Voting: France 1946-1958', *American Journal of Political Science* 48(3): 620-32.
28. Snyder Jr, James M. and Tim Groseclose (2000) 'Estimating party influence in congressional roll-call voting', *American Journal of Political Science* 44(2): 193-211.
29. Thomson, Robert, Jovanka Boerefijn and Frans Stokman (2004) 'Actor alignments in European Union decision making', *European Journal of Political Research* 43(2): 237-62.