

Valence or Position? Both! A Unified Conception of Party Competition and Its Implication for the Model-Based Reconstruction of Parties' Political Profiles from Their Manifestos

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EPSA Conference 2021

24–25 July 2021

There are two distinct conceptions about how parties use political topics to appeal to voters. According to the first conception political topics that parties refer to in their manifestos are essentially controversial. In one variant of this conception parties make either positive or negative references to these topics and their respective position is expressed by the balance of positive and negative positions. In a different variant of the conception the controversial nature of topics becomes manifest by parties' divergent selective emphasis of them. In the second conception parties avoid taking stances on controversial topics. Instead parties mostly refer to non-controversial political aims or "valence issues" and selectively emphasize those of which they have gained "issue ownership".

In the paper I argue that neither of these conceptions is exclusively valid and propose a synthesizing conception. I construct a model that formalizes this conceptual synthesis and develop a method of reconstructing parties' political profiles based on this model from manifesto data. This model will be implemented in open source software and applied to data from the Manifesto Project.

1 Introduction

One of the predominant conceptions of politics views it as a conflict of ideas or of socially or economically interests. This is so because it is impossible to realise the goals of divergent ideologies at the same time or to realise different social or economic interests at the same. A

government neither can realise the goals both of socialism and economic neo-liberalism, nor can it enact policies that preserve traditional within-family hierarchies and policies that work towards gender equality.

Another conception of politics views it as a competition between teams that offer different solutions to public problems or different ways of effectively produce public goods. Instead of trying to persuade voters to follow them into a particular political direction, they emphasize different political problem areas for which they have acquired a reputation of problem-solving competence. Thus one party emphasizes fighting rising prices and the stability of the country's currency while its main competitor emphasizes creating jobs by public spending.

It seems that both conceptions cannot both be true at the same time, yet both can claim a certain level of plausibility. The first conception is more coherent with the observation that there appear to be clear divisions between a political "Left" and a political "Right" which are more than mere political "brands" and with the occasional emotional heat of political debates. The high level of effective polarisation in current American politics or British politics may be cases in point. Yet one could also argue that citizens are less interested in any kind of utopias of social harmony and justice and more in the government taking care of their fundamental needs for safety, security, and economic well-being, whatever the means for attaining them are. For them, different policy proposals may not be ends in themselves, but different ways to reach the same goals or the expression of different priorities among the same set of goals. That the parties' electoral fortunes wax and wane can be best explained by their varying success at tackling major problems facing the country or by the varying urgency of social and economic problems that they have positive or not-so-positive reputation of solving them.

One way of reconciling these two conceptions is that each of them is (partially) correct for a segment of the political landscape. For voters and politicians who can be considered to belong to the ideological fringe, radical goals of societal transformation are more salient than the solution of problems that arise within the framework of the social and political status quo. For voters and parties that can be considered to belong to the ideological centre ground (or that consider themselves to be thus located) problem-solving is more important. Of course, cynics may argue that a problem-solving approach to policy is only a style of campaigning and actually a facade for a more or less hidden agenda guided by ulterior motives of an ideological or more venal kind.

The present paper discusses how these two major conceptions influenced one of the major approaches to the reconstruction of the positions of political parties, the *Manifesto Project*. It shows that both approaches have motivated certain aspects of the way manifestos are translated into political positions. Yet neither the full coding schema used nor its use to reconstruct "left-right" placements of parties is fully consistent with either of these theoretical approaches. The paper then proposes an alternative measurement theory for political texts that takes into account the nature of ideologies and their relations to issue position. This more intuitive exposition of the measurement theory is followed by a formal construction of

a measurement model. The paper concludes with a discussion of challenges in the application of this model and avenues of further research.

2 The conflicting theoretical foundations of conventional manifesto research

If one follows Ian Budge (2001), one of the main initiators of the *Manifesto Research Group* (MRG), which later transformed into the *Comparative Manifestos Project* (CMP) and finally into the *Manifesto Project* (MarPor), then the guiding principles of the MRG is the “valency and saliency” theory of party competition (Robertson 1976; Budge and Farlie 1983), which he summarises as follows (Budge 2001: 82):

1. *Party strategists see electors as overwhelmingly favoring one course of action on most issues. Hence all party programmes endorse the same position, with only minor exceptions.*
2. *Party strategists also think that electors see one party as more likely than the others to carry through the favored course of action.*
3. *Hence each party has a set of issues that ‘belong’ to it, in the sense that the centrality of these issues in an election will increase its vote.*
4. *A party therefore emphasizes its ‘own’ issues in its election programme, in an attempt to increase the salience of these for voters. It emphasizes ‘rival’ issues less or not at all.*
5. *Policy differences between parties thus consist of contrasting emphases placed on different policy areas.*

Based on this assumption the Manifesto Research Group and its successors compiled party manifestos (also known as electoral platforms) of the major political parties in western democracies since the end of World War II. These manifestos were segmented into quasi-sentences (sentences and sentence-like parts of a text such as bullet point items) and these segments were then coded into a set of categories referred to policy topics and policy goals. Typical such goals are “Democracy”, “Productivity”, or “Peace”.

Budge contrasts this with what he calls the confrontational approach to measuring party policy (Budge 2001: 86):

1. *Issues are generally confrontational and not valence in nature, i.e. parties take up a range of explicit positions on each issue, ranging from fully pro to fully con, without inherent constraints.*

2. *The party position on each issue can thus be measured separately and independently of its position on any other issue by the balance of ‘pro’ versus ‘con’ references to that issue proposal.*
3. *Hence party policy differences on individual issues are separate from and independent of relative emphases on them and must be measured from direct statements of support or opposition to specific policy proposals.*
4. *Relative emphases on issues only come into the measurement of party policy differences as weights attached to previously measured pro-con differences, when putting individual issues together to form a composite index or policy space.*

In order to be able to test this confrontational approach, the coding schema of the Manifesto Research Group also includes categories that make explicitly positive or negate references to policy topics or policy goals, for example “Military +”, “Military –”, “Welfare state +”, “Welfare state –”, “Traditional morality +”, and “Traditional morality –”. (Volkens 2001: 108) regards it as a confirmation of the “valency and saliency theory” that manifestos contain quasi-sentences that belong to categories that correspond to negative references such as “Military –” or “Welfare state –” much less often than quasi-sentences that belong to “positive” categories such as “Military +” or “Welfare state +”. Yet in addition to these, there are many categories in use by the MRG and its successors that neither fit into the more general group of consensual pure “valency and saliency” topics nor into a clear “pro” or “con” group of topics. These are categories such as “Nationalisation”, “Economic planning”, and “Free enterprise”. First, it is hardly plausible to call “Nationalisation” a consensual policy goal and the same can be said of “Free enterprise” when it is used to justify the privatisation of public utilities. Second, there are no “con” variants of these topics in the MRG/CMP coding schema. If one interprets “Nationalisation” or “Free enterprises” as positive references in terms of the confrontational approach, then the opposite categories “Nationalisation –” and “Free enterprises –” are missing. Yet one can also argue that these policy topics have a “hidden” confrontational nature, by virtue of non-consensual. Re-interpreted in more abstract terms, “Nationalisation”, “Economic planning” and similar topics are “pro-socialist” or “anti-capitalist”, while topics such as “free enterprise” or “economic orthodoxy” are “anti-socialist” or “pro-capitalist”. However, there are also “intermediate” policy topics that are neither coherent with a traditional state-centred socialism nor a with an unencumbered capitalism but rather with a regulated capitalism or a mixed economy. Such topics are “Market regulation”, “Keynesian demand management”, and “Corporatism”.

Even though the “official” methodological approach of the MRG and the CMP is the “valency and saliency” theory, the most popular “end-product” of MRG, CMP, and MarPor still is the “RiLe” index, which is based on a “confrontational” interpretation of the policy topics. Its construction involves the following steps (Budge and Klingemann 2001: 22):

1. Each coding category used by MRG/CMP/MarPor is either assigned to a “Left” or to a “Right” group of categories (or “super-category”) or is disregarded.
2. In each coded manifesto, a sum of percentages of quasi-sentences assigned to one of the “Left” super-category is computed (referred to as L) as well as sum of percentages pertaining to the “Right” super-category (referred to as R).
3. Finally, a difference score $RiLe = R - L$ is computed for each manifesto.

If the “valency and saliency” theory were fully correct, it should be impossible to put the policy topics into “Left” and “Right” super-categories. So does that mean that in practice, the confrontational approach prevails? Not, really, because only 26 of the 56 original categories are used to construct the two super-categories. Of course, this restriction to a subset of the original categories means a loss of information. A reason for this is that not all topics can be interpreted as indicating a clear position on a single political dimension and that many indeed may be non-confrontational. Notable examples are “Economic goals”, “Productivity”, or “Agriculture”. But there are other categories that are clear “con” categories, but are not included in the “RiLe” index, such as “Traditional morality –” or “Internationalism –”. On the other hand, there are some topics that may be contentious, but are not included into the index. Some of them may belong to a different ideological dimension, such as “Environmental protection” or “European Community +” and “European Community –”. Others could be considered as marking intermediate positions on an (economic) left-right dimension, such as those mentioned earlier.

If there are several political or ideological dimensions and the RiLe-Index is intended to represent only one of them, then it might be inevitable to discard several policy topics that belong to the other dimensions. (In fact, the CMP provides some alternative indices of political/ideological positions.) However, there is an inherent limitation of the construction of the RiLe-Index that is easily overlooked, but none the less problematic: All categories in the “Left” super-category are weighted the same, as do all the categories in the “Right” category, that is, no distinctions with regards to the “extremity” of the categories are made. That is “Welfare state +” is treated as radical as “Nationalisation” and “Peace” is treated as radical as “Decolonisation”. Furthermore some intermediate, but nevertheless non-consensual topics drop out of the index because they do not surpass an arbitrarily set threshold of polarity.¹ While it may appear that disregarding less polar topics will increase the validity and reliability of a RiLe-Style index, it is easy to demonstrate that this is not the case at all. The resulting index is way too sensitive to minor changes from the left to the right of the centre of the political spectrum (or the other way round), but incapable to distinguish between more or less radical stances on the political left or political right Elff (2017).

¹That principal component analysis was used to decide about the inclusion or exclusion of categories does not make the decision less arbitrary. Decisions about the number of principal components and the relevance of loadings of certain variables are mere conventions at best.

3 A unified conception of party competition

It should be hard to ignore that the “valency and saliency” theory of party competition is empirically falsified – unless perhaps one has tethered one’s academic career to it – given the high degree of polarisation that politics currently shows in several contemporary democracies. Politics is nowadays framed often framed in terms of right and wrong, if not good and evil. If parties or politicians choose to ignore climate change, racism, or income inequality as political problems, they do not so because they perceive a lack of issue ownership or a lack of reputation for successful problem solving in these areas. Instead, they tend to deny the importance if not the existence of these problems. And if English Conservatives promise to “deliver Brexit” they do not do this under the assumption that everybody in Britain wants Brexit and they are merely the team that is most effective in making it happen.

That notwithstanding, one ask why some scholars find support for the “valency and saliency” theory in the texts of party manifestos and why they find the no support in them for the confrontational approach. The main reason for this is of course, the relative paucity of explicit negative references to any policy topics in the party manifestos considered by the MRG/CMP/MarPor. But this less a consequence of politics being all about valency than of (1) the nature of political ideologies, (2) the failure to distinguish between policy topics and political issues, and (3) the nature of political rhetoric.

Anthony Downs once defined ideologies as the “verbal image of the good society and of the chief means of constructing such a society” (Downs 1957: 96). While he contends that ideologies should not be taken at face value because they often are “means to political power employed by social classes or other groups, rather than as mere representations of actual goals” (Downs 1957: 96) it had late been argued that parties and politicians cannot use ideologies as disposable means but that they have to act at least *as if* they are committed to them, lest to be viewed as insincere, unreliable, or non-credible (Alesina 1988; Hinich and Munger 1994). That notwithstanding, ideologies include the formulation of goals, so that to the degree that party manifestos express ideologies, they mention and espouse these goals. Affirming ideological goals as “free enterprise” or “social justice” simply is a more effective way to communicate one’s commitment to them than to declare one’s opposition of the goals formulated by the ideologies of competing parties.

Political goals and policy objectives to which they are related should be clearly distinguished from issues, that is, from topics of political contention. Typical examples are the question whether and under what condition the termination of a pregnancy should be legal, whether immigration should be facilitated or prevented, or whether or not a minimum wage should be introduced or increased. That is, issues are usually specific questions about which alternative governments may have different policies, which in turn can be framed as being in line with different policy objectives. There are issues that are almost “perennial” at least over several decades (as the issue about nuclear disarmament throughout most of the period of the

Cold War), but they may also be relatively short-lived and country-specific (as for example the question whether more Jewish settlers should be allowed in the West Bank). If it is intended to contribute to a data set that spans several decades and with data points that are comparable over time, coders will likely sort explicit statements about issue positions made in manifestos into categories concerning the more general policy objectives.

Coding issue positions into categories concerning policy objectives is facilitated by the fact that blunt statements of issue positions are unlikely to attract voters. It is more effective to persuade voters to agree with a party's issue position by giving a justification in terms of political values or goals. An conservative christian is more likely to support a Republican candidate in his quest against the legalisation of gay marriage if he justifies it in terms of "protecting the family" (however hypocritical this may turn out to be in the end) and an urban African American will be more likely to support a Democratic candidate's campaign for "defunding" the police if she justifies it in terms of protecting the lives of African American citizens. These considerations lead to the following assumption:

Assumption 1 *Parties express their political positions by selectively emphasising certain policy topics and de-emphasising others. The more important a policy topic is for a party's ideology, the stronger its emphasis in a party manifesto.*

This assumption is hardly new or original. In fact it is the assumption that justifies the coding of quasi-sentences in manifestos into categories and using the distribution of coding categories as the basis of measures of political position. However, in this form the assumption contradicts the "valency and saliency" in its formulation by Budge: Selective emphases are not attempts to exploit ownership of valence issues, they are a way to take positions that be more or less contentious.

Yet there is one point that is correctly made by the proponents of valence politics and performance politics (e.g. Stokes 1963; Budge and Farlie 1983; Budge 2001; Clarke et al. 2009): Politics is *not only* about taking positions and persuading voters supporting them, it is *also* about *performance and success in problem solving*. Jimmy Carter's apparent lack of success to deal with the hostage situation at the US embassy in Tehran may have been a major contributor to his electoral defeat against Ronald Reagan, and similarly, the financial crisis of 2008 may have cost the Labour Party the access to Downing Street No 10. The consequences of the financial crisis may have cost the Labour Party not only the governing majority, but also (further) downgraded their reputation about handling well the economy. However, it is unlikely that this could have been avoided by de-emphasising the economy as a policy topic as issue ownership theory would have it. Instead it would have further hurt its reputation in terms of responsiveness to political problems. If one follows Laver (2001) then the emphasis given to a policy topic not only expresses a party's political position, but also its relative urgency due to external shocks, such as economic crises or international incidents. This leads to the following assumption:

Assumption 2 *The more urgent the problems are in a policy field, the more salient will the various policy topics become that parties may have, even if parties disagree on these specific topics.*

For example, if an economic crisis makes economic policy more urgent, then the various goals that parties have in this area become more salient, e.g. for a leftist party the goal of controlling the economy will become more salient, while for a neo-liberal party the goal of maintaining the freedom of enterprises and of unleashing the forces of the market will become more salient.

In addition to these two substantial assumptions, the proposed theory includes a more technical assumption:

Assumption 3 *Each party has a position in a space that is related to a broader area of policy (its policy space), such as economic policy, foreign policy, or social policy. Each policy topic has a location in one and only one policy space.*

Other things being equal (i.e. for given salience), a party is more likely to emphasize a policy topic the closer its position is to the location of this topic in the policy space.

This assumption makes the measurement theory proposed here a *spatial* theory. It is similar to the assumption on which the variants of Poole and Rosenthal's NOMINATE scores are based (Poole and Rosenthal 1985) and it is also based on Elff's "Dynamic State Space Model of Political Texts" (Elff 2013).

The spatial models of voting and of political texts just mentioned are based on another assumption that so far has remained implicit: that the relation of the distance between parties' (or candidates) locations and policy goals to the emphasis of the latter is the same for all policy goals. However, there are good reasons to not make this assumption. It was already remarked above that there are some policy goals that are relatively consensual. "Peace" may be one of them, even though it is put into the "Left" super-category in the RiLe index, other obvious examples are "Productivity" and "Economic goals". There are however also some other policy topics that are much less consensual and are espoused perhaps only by relatively radical parties, such as "Marxist analysis" and "No-growth economy". As a consequence the relation between parties' political positions and the emphases of policy goals may become much more variable.

The consequences of allowing for a variation in the relation between positions and policy emphases are illustrated by Figures 1 and 2. Both figures show how the emphasis of each of five policy goals located in a one-dimensional policy space varies with the position of a party. In Figure 1 the relation is the same for all parties. As the position of a party moves from "Left" to "Right", the emphasis of the "leftmost" topic decreases, whereas first the second-most "leftist" topic first increases and then decreases in emphasis and then the centrist topic first increases and then decreases in emphasis, etc. The emphasis of the three more centrist topics increases and decreases at the same rate. In Figure 2 the emphasis of the two "extreme topics"

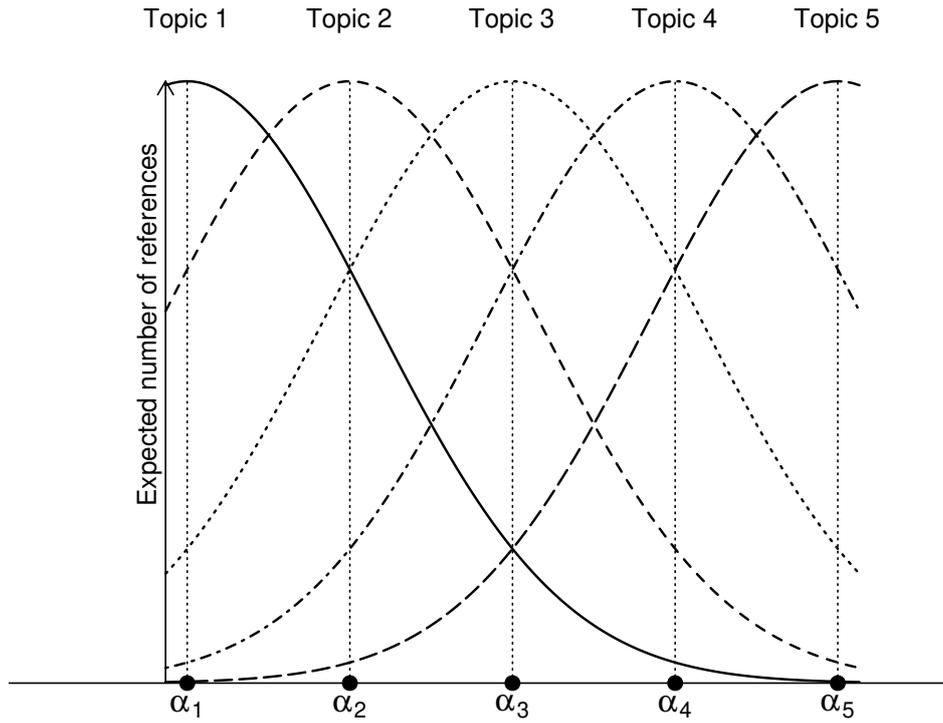


Figure 1: The emphasis of policy topics and five parties' positions in a uni-dimensional space if the relation between emphasis and position is the same for all policy goals

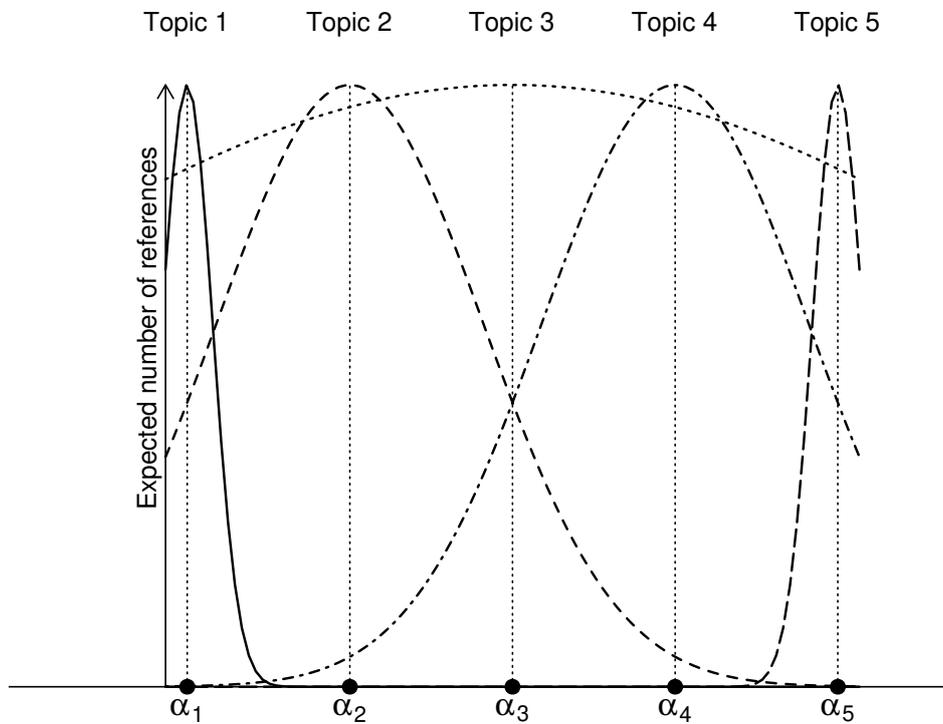


Figure 2: The emphasis of policy topics and five parties' positions in a uni-dimensional space if the relation between emphasis and position varies across policy goals

is so strongly related to a party's position that any of them find some noticeable emphasis only if the party is either positioned near the "leftist" or "rightist" end of the political spectrum. In contrast, the centrist topic is almost consensual, it finds a substantial amount of emphasis wherever a party is positioned in the political spectrum.

4 Formal construction of the measurement model

The data under consideration, the data set created first by the Manifestos Research Group, then by the Comparative Manifesto Project, and eventually by the Manifesto Project are the percentages of the quasi-sentences in a manifesto that refer to over 50 different policy topics. The data set also contains the total number of counts of quasi-sentences in each manifesto. From the percentages and the total counts it is straightforward to compute the counts of quasi-sentences that are used in each manifesto to refer to the policy topics. The simplest appropriate distribution by which such counts can be described is a Poisson distribution. As described discussed earlier, the expected emphasis of a policy topic reflects the salience of the policy area to which the topic belongs and the relative emphasis given to the topic which in turn depends on the location of the topic and the political position the party expresses by its manifesto.

Assumption 4 *Let m_{ijt} denote the number of times policy topic i is emphasized in the political text that party j has published on occasion t , then m_{ijt} is the realization of a random variable M_{ijt} that has a Poisson distribution with mean parameter μ_{ijt} given by*

$$E(M_{ijt}) = \mu_{ijt} = e^{v_t} e^{\eta_{ijt}} \iff \ln \mu_{ijt} = v_t + \eta_{ijt} \quad (1)$$

where e^{v_t} reflects the saliency of the policy domain in the manifesto and $e^{\eta_{ijt}}$, reflects the relative emphasis given to policy topic i in the manifesto.

As discussed earlier, the expected emphasis of a policy topic declines with the distance between location of the topic and the position of the party. Since the policy space may be uni- or multi-dimensional, the locations and positions can be represented by uni- or multi-dimensional vectors. It is assumed that the location of each policy topic is constant over time (in order to identify the coordinates of the policy space), whereas parties' positions may change over time. The evolution over time may be described e.g. by a vector-autoregressive random process which was discussed in (Elff 2013). A similar assumption may be made for the salience of the policy area. For mathematical simplicity, it is further assumed that the expected emphasis declines with the squared Euclidean distance between the topic location and the party position.

Assumption 5 Let α_i represent the location of policy topic i in the relevant policy space and \mathbf{b}_{jt} represent the position of party j at election time t . Further, let u_t represent a random variable that describes the salience of the policy area at time t .

Then, the relation between the locations, positions, and saliences is described by the equation:

$$\ln \mu_{ijt} = v_t + \eta_{ijt} = u_t + \rho_i - \frac{\tau_i}{2}(\alpha_i - \mathbf{b}_{jt})'(\alpha_i - \mathbf{b}_{jt}) \quad (2)$$

The parameter ρ_i can be interpreted as representing the overall valence of the political topic, i.e. the tendency to be emphasised independent from the salience of the policy area and the position of the parties.

5 Challenges for the application of the model and further research

In order to apply the measurement model to reconstruct parties' political positions from party manifestos, one need first estimates of the measurement model. Only for given estimates it is possible to obtain reconstructed positions in the form of empirical Bayes posteriors. This procedure is similar to the application of IRT-models to obtain estimates (or more correctly: predictions) of cognitive abilities from mental test scores.

Maximum likelihood estimates for the model parameters can be computed by maximizing the (marginal) log-likelihood

$$\begin{aligned} \ell(\mathbf{m}; \boldsymbol{\rho}, \boldsymbol{\alpha}, \boldsymbol{\theta}) &= \ln \int \dots \int \exp[\ell(\mathbf{m}|\mathbf{u}, \mathbf{b}; \boldsymbol{\rho}, \boldsymbol{\alpha})] f(\mathbf{u}; \boldsymbol{\theta}) g(\mathbf{b}; \boldsymbol{\theta}) \partial \mathbf{u} \partial \mathbf{b} \\ &= \ln \int \dots \int \prod_{i,j,t} \exp(m_{ijt} \ln \mu_{ijt} - \mu_{ijt}) f(\mathbf{u}; \boldsymbol{\theta}) g(\mathbf{b}_j; \boldsymbol{\theta}) \partial \mathbf{u} \partial \mathbf{b}_j \end{aligned} \quad (3)$$

where μ_{ijt} is a function of the (unobserved) u_t and \mathbf{b}_{jt} and of the parameters ρ_i and α_i and where $f(u_t)$ and $g(\mathbf{b}_{jt})$ the density function assumed for the unobserved data. After obtaining estimates, empirical Bayes posterior expectations of the party positions can obtained as

$$\hat{\mathbf{b}} = \int \dots \int \mathbf{b} \frac{\exp[\ell(\mathbf{m}|\mathbf{u}, \mathbf{b}; \hat{\boldsymbol{\rho}}, \hat{\boldsymbol{\alpha}})] f(u_t; \hat{\boldsymbol{\theta}}) g(\mathbf{b}_{jt}; \hat{\boldsymbol{\theta}})}{\exp[\ell(\mathbf{m}; \hat{\boldsymbol{\rho}}, \hat{\boldsymbol{\alpha}}, \hat{\boldsymbol{\theta}})]} \partial u_t \partial \mathbf{b}_{jt} \quad (4)$$

The major challenge here is that $\ell(\mathbf{m}|\mathbf{u}, \mathbf{b}; \boldsymbol{\rho}, \boldsymbol{\alpha})$ is a non-linear function of \mathbf{u} and \mathbf{b} , so that integrals in equations (3) and (4) are not analytically tractable. Since the integrals are of a multi-dimensional, solving computing them numerically via quadrature is close to infeasible. In a similar situation, Elff (2013) used a Monte Carlo-approximation with the help of a MCEM algorithm. In recent literature variational approximations have been proposed to deal with unobserved-variable problems like the one at hand. With the help of variational

approximation it is possible to simplify multidimensional integrals to integrals of a much lower dimension so that numeric integration becomes feasible again. In certain situations using variational approximation can even eliminate the need of numeric integration, this applies for Poisson-normal integrals in particular (Blei et al. 2017; Ormerod and Wand 2012). At the time of writing of this paper, it still needs to be worked out how a variational approximation of the integrals in equations (3) and (4) can be constructed and if it is also possible to eliminate for numeric integration.

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