Modern democracy is built on the notion that the choice of political leadership, and thus ultimately the control of policy, is in the hands of the people. By voting for parties in popular elections, the individual citizen transfers political authority to the elites whose task it is to act on his/her behalf. The best guarantee that ‘the people’s representatives’ will make decisions corresponding to the ‘will of the people’ consists, some theorists would claim, in the elites’ holding views essentially similar to those of their voters.

From a normative point of view, perceptual agreement among political actors is then a desirable characteristic of modern mass democracies (Berelson, 1952). To maintain a meaningful communication between voters and elected representatives, citizens need to have clear and correct perceptions of which alternatives there are to choose from, the most important differences between them, and what the principal ideological conflicts between the alternatives are all about. The more accurate and common perceptions of the political world, the more efficient the communication of political preferences in society. In this context, efficient usually means high levels of ideological representation and well-functioning translation of preferences into parliamentary seats by means of the electoral system (Converse 1964; Converse 1975; van der Brug 1997).
The empirically interesting question is how reality fits these normative assertions. In this paper we base our predictions on the Downsian theory of spatial competition. Hence, we make use of a simple assumption that people’s perceptions of parties and policies are guided by a common underlying spatial structure, and that their preferences for a position in the policy space is conditioned by the proximity to certain parties.

We will be preoccupied with two basic questions: First, what is the nature of the policy space? May the space of parties best be described by one or several ‘ideological dimensions’? Second, do party voters and party elites operate within the same – or within a separate – policy space? Are the perceptions of the voters different from those of the elites, in the sense that they view the political world in more simple terms?

In order to examine these questions, we have chosen to do a comparative study of Norway and Sweden, using multidimensional unfolding analysis of party evaluations. The two countries fit the purpose of our analysis quite neatly: They share many institutional and political characteristics that enable us to keep constant a number of theoretical variables. A distinctive Nordic five-party model formed the basis of electoral competition in both countries, and even though the party systems have been changing, striking similarities are to be found in the division of votes between socialist and non-socialist parties. Moreover, the linkage between parties and their social structure was basically of the same strength and direction from one country to the next (Pettersson and Valen, 1979; Lane et al. 1993). Yet important variations are to be found in the cleavage structure and the political agenda of the two countries, which enable us to test out the structure of the policy space and its impact on mass-elite linkages.

This paper is organized in six parts. After the introduction, the second part gives an overview of the various approaches to the study of policy and the process of party competition. The third part describes the development of parties and cleavages in Norway and Sweden. In so doing, we give a short account of current developments and salient issues. Part four addresses briefly some basic methods for constructing the policy space of parties, and discusses more thoroughly the methodology as well as the data applied in the paper. The fifth part examines the perceptions of voters and elected representatives in the two countries, and attempts to relate the perceptual patterns to the political context of each nation. The final part of the paper sums up and discusses the empirical findings in the light of the initial theoretical framework.

2. CLEAVAGES AND THE POLICY SPACE OF PARTIES.

More and more frequently, political scientists have begun to use multidimensional concepts of political space to predict policy distances between political actors. The spatial theory of voting, for example, identifies two classes of actors: voters and candidates (or parties). Electoral preferences may be structured in terms of unidimensional or multidimensional models of policies. It is implicit that these parties’ (and individuals') preferences may be described in terms of a “position” in these conflict dimensions. Moreover, the weight – or the relative importance – that different actors attach to different dimensions may be interpreted as the “saliency” of these dimensions.
The most common way of operationalizing the idea of a relevant dimension in Western Europe is to use the left-right scale. It represents a simple and convenient way to simplify a complex reality, and consistently with the predominance of the “class-cleavage”, we often think of the left-right dimension of social and economic policy as marking the birth of the “typical” and “modern” West-European party system (see e.g. Bartolini & Mair, 1990). However, if we take account of the variation in the strength and presence of the pre-industrial and non-class cleavages, it is easy to recognize other ideological dimensions that are quite independent of the left-right dimension (see e.g. Pedersen et al., 1971; Converse & Valen, 1971; Daalder & Mair, 1983; Daalder, 1984, Laver, 1989). For instance, there is no reason to believe that rural interests – per se – should coincide with “leftist” interests, or that they should automatically be correlated to “rightist” placement on the left-right scale (Laver and Hunt, 1992).

According to Rokkan (1970), mass politics in Western Europe have been structured around four lines of cleavages. The first two, center-periphery and church versus state, emerged as a result of the national revolution in Europe. The other two cleavages derived from the industrial revolution in Europe, and generated a conflict between workers and employees on the one hand (the class cleavage), and rural (agricultural/producers) interests versus urban (industrialists/consumers) interests on the other. The constellation of cleavages emerged in different forms across Europe, and accounted for the most part for variations among the party systems which developed. The duration and strength of the various cleavages has varied, but it is the class cleavage that has dominated the political conflict for most of this century (see e.g. Rokkan, 1970; Rose, 1974; Dalton et al., 1984; Bartolini & Mair, 1990).

A clear awareness of the very different intensity of particular cleavages made Lipset and Rokkan (1967) direct their attention to the way in which cleavages had been politicized and depoliticized at certain points in time. Consistently with a cleavage-defined approach, the saliency of cleavages is the important factor in understanding the dimensionality of the policy space. Issues like the availability of alcohol, abortion, language policy, nuclear energy, the EU, as well as a whole range of issues related to economic politics and income distribution have all contributed to the preservation of policy dimensions rooted in the traditional cleavage structure, as well as generated new ones.

For empirical analysis, which dimensions should be constructed is clearly a question conditioned by system-specific characteristics. In a two-party system, parties and voters are seen as distributed along one single dimension of ideology (see e.g. Downs, 1957), most commonly the left-right dimension. Elections are fought on the basis of issues related to the ‘left’ and the ‘right’. In a multi-party system, however, elections are fought on the basis of multiple dimensions, and the relative importance of the various dimensions is likely to be weighted differently by each actor (Robertson, 1976; Budge and Farlie, 1983; Laver, 1989; Laver and Hunt, 1992; Budge, 1994). Thus,

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1 Lijphart (1984:128), in listing the various issue dimensions of partisan conflicts, explicitly relates them to the lasting party-system cleavages in Western Europe. Among the most important dimensions (in addition to the socio-economic class dimension) he identifies religious and urban-rural controversies.
parties build up their electoral support on issue types which they have made their “own”, e.g. morality, welfare, agriculture, public spending – and their preferences relative to these issues determine their policy positions in the policy space. The models generated by David Robertson (1976) and Ian Budge and Dennis Farlie (1983) explicitly assume that parties occupy a particular area within the policy space, marked out by their ideology, often specified in the party name (Christian Democrats, Socialists, Labor, Conservatives etc.). Moreover, the electorate will vote for these parties on the basis of ideology, and their voting decision is based upon how well parties perform in the policy space. On this point, different models disagree about the “best” performance or strategy to attract voters.

In this paper, the main theoretical focus is the Downsian spatial model of party competition. Until recently, this has not been a controversial approach. It should be noted, however, that competing models have been challenging the proximity logic of the spatial theories. Let us briefly consider one of them; the directional theory of issue voting.

2.1. PROXIMITY OR DIRECTION?

“Proximity theory” and “directional theory” are spatial in the sense that voters and parties can be represented as points in a policy space. They provide different explanations, however, on how the mass public and the political elites interact with regard to issues, and they differ most fundamentally in how voters conceptualize these issues. Proximity theory assumes that both parties and voters act from political self-interest, that voters have specific policy preferences, and that they would choose parties on the basis of ideological proximity. Hence, they cast their vote for parties that are close to them in certain policy areas. The “guidance” for parties in the Downsian proximity model is to take a position in the policy space that is occupied by the median voter. Contrary to the original version of the model, generated by Anthony Downs (1957), later models do not restrict self-interest to purely economic self-interest: it may also relate to moral or philosophical questions. The crucial factor is the extent to which these issues are important enough to the voters to have an impact upon their voting choice (Enelow and Hinich, 1984:2-3).

“Directional theory”, on the other hand, assumes that voters have only diffuse preferences, and that for most voters, issues represent a choice between two sides. Their position on that issue, and hence their voting choice, is determined by the direction of their position and the intensity of their preference (Rabinowitz and Macdonald, 1989; Listhaug et al., 1990; Macdonald et al., 1991). Hence, parties stimulate support from voters by taking strong stands on the side of the issue voters favor. Weak stands have

2 In a recent article on issue voting Macdonald et al (1998:654) explain the difference between the two models as such: “If we imagine a scale with one end representing a health care system controlled entirely by the government and the other end representing a system with no government role whatsoever, each individual’s choice of position would reflect her most desired policy. A position in the center of the scale, for example, would represent an equal blend of government and private health care provisions. According to proximity theory, parties generate support from voters by being close to them on the issues. The closer the party to a voter, the more the voter will like the party”. Using the same example for the directional theory the authors proceed: “The end-
little impact on evaluation. Consistently with the argument of Enelow and Hinich (1984), directional theorists argue that party competition takes place on the basis of multiple dimensions. But the “guidance” for parties is not to take centrist stands – quite to the contrary. Party competition takes place on the basis of centrifugal forces: voters prefer parties to take strong stands and to mark the ideological “direction”. On this basis, they will evaluate which parties are “best” in certain issue areas (Rabinowitz and Macdonald, 1989; Listhaug et al., 1990; Macdonald et al., 1991; 1998).

We can not here go into the extensive scholarly debate that has taken place over the last few years as to which model fits ‘best’ the psychological dynamics behind voter preferences (see e.g. Iversen, 1994; Westholm 1997). For us, the two models are interesting because they have quite different expectations regarding mass-elite relations. Directional theorists have a minimalistic view of voter sophistication and behavior. They claim that voters are driven by affective reactions towards party policy and, consequently, that they are quite sensitive to party strategy. By contrast, proximity theory puts much emphasis on the rationality of the individual voter. Rather than forming voters’ opinions and attitudes, parties adapt to popular sentiments. Whereas directional theory has a top-down perspective on mass and elite opinion formation, proximity theory is driven by a bottom-up perspective. Consequently, from the point of view of proximity theory, a poor fit between the opinions of the elites and those of the voters would be a normative problem. In directional theory, on the other hand, the effectiveness of parties in the electoral process is linked to their roles as opinion leaders and to their ability to influence the long-term agenda. The voters may eventually adopt the opinions of the elites – and end up on the same side – when informed about the parties’ stands on new trends and policies.

In this paper, we follow a long tradition of mapping party spaces with the aid of scaling and dimensional analysis techniques. We do not see how the rise of directional theory could have an impact upon the mapping procedure itself. Actors’ party evaluations is the only input to the unfolding procedure. As with both the proximity and directional theory, we are anxious to know more about which factors are shaping actors’ preferences for political alternatives. However, at present we are not attempting to predict party choice. Rather, we are interested in learning more about how actors perceive the political world – as well as the number and nature of the underlying ideological dimensions that have produced the set of party preference orderings in a polity. What the spatial distances in our unfolding models actually reflect is to a large extent an empirical question.

3. THE POLITICAL CONTEXT OF NORWAY AND SWEDEN.

Explanations of the development and consolidation of the party systems have conventionally used a model that links the parties to social cleavages. Originally, the party systems reflected a common Nordic five-party model (Rokkan and Valen, 1962; points of the health policy scale, for example, would reflect a strong preference for one side over the other, while a middle position would reflect neutrality between the two sides – rather than a preference for a mix of government versus private health care”.

5
Berglund and Lindström, 1978, Urwin, 1997) which emerged around 1920. From left to right the parties were: the Communists, Labor (the Social Democrats), the Liberals, the agrarian Center parties and the Conservatives. However, subsequent development turned out to be quite different.

Sweden exposed a remarkable stability and maintained the five-party model until 1964, when the tiny Christian Democratic Party emerged. Norway, on the other hand, deviated from the model already in 1933, when a religious faction broke out of the Liberal Party and formed the Christian People’s Party. Another split occurred in 1961, when internal dissension broke Labor’s majority position and led to the formation on its left of the Socialist People’s Party within a space largely vacated by the Communist Party. There has always been some opposition within the Labor Party to its government’s foreign policy, especially over the NATO issue, but also over the question of membership in the European Community (later European Union). When the latter issue came on the agenda in 1972, fragmentation occurred in a number of parties. The Liberals were split in two, and an anti-EC faction broke out of Labor and joined the Communists and the Socialist People’s Party in a Socialist Election Alliance. The latter was later renamed the Socialist Left Party. Finally, a right-wing populist party emerged in 1973: Anders Lange’s Party, named after its founder. It later changed its name to the Progress Party. In Sweden the rise of the Green Party in the 1980s marked a changing pattern also here, and reached a peak with the breakthrough of the right-wing protest party, New Democracy, in 1991. However, the latter party did not last for long, and was voted out of parliament after only one term.

Hence, the Swedish party system reflects a remarkable stability compared to the Norwegian one. These differences are clearly related to the saliency of different cleavages in the two countries. The cleavage structure in Sweden is simple, and the party space has most commonly been conceived with only one salient dimension, the left-right dimension. Resembling the logic of a two-party system, electoral competition as well as government formation have followed the pattern of ‘socialist’ vs. ‘bourgeois’ blocs. The cleavage structure of the Norwegian system, on the other hand, is more complex, and in addition to the left-right dimension, a center-periphery and a moral-religious dimension have occasionally been salient. These characteristics have been particularly evident with the question of membership in the European Union on the political agenda.

Nevertheless, to a considerable extent Scandinavian politics has reflected the class division in industrial society, in which the left-right dimension is the main characteristic of the party systems (Borre, 1984; Lane et al. 1993). A common feature of the two countries is a strong labor movement. Since the 1930s the Social Democrats have been the dominating parties in both countries, faced with a string of non-socialist parties competing for government office. Access of ‘bourgeois’ parties to government power has therefore normally been conditioned by the possibility of forming non-socialist coalitions that are stronger than the Social Democrats in terms of parliamentary seats. However, fragmentation and competition among the bourgeois parties have tended to produce a Social Democratic government even in cases where the Social Democrats are far below the 50 per cent mark. As for the strength of the non-socialist
parties, considerable variations are evident. Table 1 shows the distribution of votes at four different elections for the last four decades.

**Table 1**  
**VOTE DISTRIBUTION IN NORWEGIAN AND SWEDISH PARLIAMENTARY ELECTIONS, PERCENT.**

<table>
<thead>
<tr>
<th></th>
<th>Norway</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Sweden</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialist/Communist</td>
<td>5.3¹</td>
<td>11.6²</td>
<td>6.3³</td>
<td>7.7⁴</td>
<td>4.5</td>
<td>5.3</td>
<td>5.4</td>
<td>12.0</td>
</tr>
<tr>
<td>Greens</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.6</td>
<td>4.5</td>
</tr>
<tr>
<td>Labor</td>
<td>46.8</td>
<td>35.3</td>
<td>40.8</td>
<td>35.0</td>
<td>47.8</td>
<td>43.6</td>
<td>44.7</td>
<td>36.4</td>
</tr>
<tr>
<td>Liberal</td>
<td>8.9</td>
<td>6.9⁵</td>
<td>3.6⁶</td>
<td>4.5</td>
<td>17.5</td>
<td>9.4</td>
<td>14.2</td>
<td>4.7</td>
</tr>
<tr>
<td>Center</td>
<td>9.3</td>
<td>11.0</td>
<td>6.6</td>
<td>7.9</td>
<td>13.6</td>
<td>25.1</td>
<td>10.1⁸</td>
<td>5.1</td>
</tr>
<tr>
<td>Christian</td>
<td>9.6</td>
<td>12.3</td>
<td>8.3</td>
<td>13.7</td>
<td>-</td>
<td>1.8</td>
<td>2.3</td>
<td>11.8</td>
</tr>
<tr>
<td>Conservative</td>
<td>20.0</td>
<td>17.4</td>
<td>30.4</td>
<td>14.3</td>
<td>16.5</td>
<td>14.3</td>
<td>21.3</td>
<td>22.9</td>
</tr>
<tr>
<td>New right</td>
<td>-</td>
<td>5.0⁹</td>
<td>3.7</td>
<td>15.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Others</td>
<td>0.1</td>
<td>0.5</td>
<td>0.3</td>
<td>1.6⁷</td>
<td>0.1</td>
<td>0.5</td>
<td>0.3</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Per cent</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: ¹ Includes the Socialist People’s Party and the Communists. ² Includes the Socialist Election Alliance (SV) and the Marxist Leninists (AKPml). ³ Includes the Liberal Party (V) and the New People’s Party (DNF). The latter later changed its name to the Liberal People's Party (DLF). These parties were the result of the split of the old Liberal party in 1972 due to the EU membership issue. They merged again in 1988. ⁴ Includes Anders Lange’s Party (ALP), named after its founder, which changed its name in 1977 to the Progress Party (FRP). ⁵ Includes the Socialist Left Party (SV), the Communists (NKP) and the Marxist Leninists (AKPml). ⁶ Includes the Socialist Left Party (SV) and the Red Election Alliance (RV) (the former Marxist Leninists). ⁷ In 1997 an entirely new protest party, called the 'Coastal Party' (Kystpartiet) was elected, represented by one seat from the northern province of Nordland. The party, which is headed by Mr. Steinar Bastesen, a controversial and outspoken whaling captain, reflects a peripheral protest vote by the fishing communities in the north. In 1989 another protest party from the north, the so called 'Aunelisten', also gained one seat from the province of Finnmark. ⁸ In the Swedish Election 1985, the Christian Democrats and the Center Party formed an election alliance in some districts, allowing the party leader of the Christian Democratic Party, Alf Svensson, a seat in parliament.

The dominating position of the Social Democrats/Labor is clearly reflected in the 1961-figures, and in Sweden the party maintained its position until the most recent election in 1998, when its popular support declined dramatically. It is, however, to the benefit of the Socialists, and the 1998 election therefore marks a return to the traditional two-block system, which in the beginning of the 1990s had more the character of a ‘three-block’ pattern (Oscarsson, 1998). In Norway the Labor Party was considerably weakened in 1973, but recovered somewhat in 1985 until its popular support declined considerably in 1997. In both countries the trend popularly known as “Høyrebølgen” (the right-wing tidal wave) is reflected in the 1985 election result of the parties to the right. These elections also mark a decline of the parties at the center. The latter group of parties regained some support in the most recent election, but then to the benefit of the Christian parties, which did very well in both countries. Hence, to some extent the electoral trends run parallel in Norway and Sweden, but differences are also evident. The most striking difference in the late 1990s concerns the position of the Conservative parties. In Sweden, the Conservatives uphold their position as the main opposition.
party to Labor, whereas in Norway this position has been overtaken by the ‘new-right’ Progress Party.

3.1 THE POLITICAL AGENDA OF THE 1990s.

In their comparative analysis of cleavages in Norway and Sweden, Petersson and Valen (1979) noted that the political agenda in Sweden appeared to be quite different from that in Norway. Whereas Norwegian politics during the 1970s revolved around the EC and oil issue, Swedish political debate concerned itself mainly with nuclear energy and wage-earners’ funds. Consequently, the Swedish party system has been totally dominated by the left-right dimension. Even though attitudes toward nuclear energy and the European Union have generated a tendency towards two-dimensionality during the 1980s and 1990s, the analysis of Oscarsson (1998) indicates that these dimensions are not uncorrelated with the left-right dimension. Still, the left-right dimension is by far the most important ideological dimension in the Swedish party system.

By contrast, the Norwegian conflict structure has most commonly comprised two dimensions of policy: the left-right dimension and the moral-religious dimension (Converse and Valen, 1971). Consistently with the position of the various parties towards membership in the EC in the early 1970s and the EU in the 1990s, these two dimensions have been supplemented by a third dimension (Valen, 1976; Aardal and Valen, 1995; Narud, 1996a; Ray and Narud, 1999). Whereas the membership question in Sweden, which was on the agenda for the first time in 1994, basically followed the division of ‘left’ versus ‘right’, in Norway it created hostility among previous friends and allies in the bourgeois camp. Most important in this regard is the mobilizing effect upon territorial cleavages, the center-periphery and the urban-rural dimension (Rokkan and Valen, 1964; Bjørklund and Hellevik, 1993; Narud, 1995a; b; Ringdal and Valen, 1998). By the turn of the millennium the positions of the parties in the Norwegian policy space are clearly incompatible with traditional two-block politics.

In the Nordic countries, in the 1990s the question of how each country should deal with its future relationship to the EU has been one of the most important issues on the political agenda. Evidence from the Eurobarometer indicates that European elites are ‘out of tune’ with their electorates on matters concerning closer cooperation and the future implementation of important EU legislation. Overall, elites and masses are separated by questions of European integration, national sovereignty and democratic development. In line with these observations, the results from a comparative Nordic study demonstrated that Nordic elites are much more favorable towards integration than are their voters. The most striking discrepancy between the two levels was found

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3 Parallel to the decisions taken by the EU in regard to the single market, results from the Eurobarometer in the winter of 1991-92 showed that a negative shift of opinion had occurred on the question of European integration. This shift showed up first among the larger and wealthier EU members; then, in 1993, it appeared within such countries as Portugal and Greece as well. The shift of opinion was not registered by EU elites until the spring of 1993 (Skjaak, 1994).
in Sweden (Narud and Valen, 1999; Valen et al., 1999). Hence, for the question of mass-elite linkages the EU membership issue represents a challenge.

3.2 EXPECTATIONS

The Norwegian cleavage structure is complex, and the party system has undergone considerable fragmentation. The Swedish cleavage structure is much more simple, and considerable stability is evident in the development of the party system. Hence:

1. We expect the spatial structure of the Norwegian system to comprise more policy dimensions than the Swedish.

2. Because of a more simple spatial structure, we expect a higher perceptual congruence in Sweden than in Norway.

In addition, with the question of EU membership on the political agenda in the 1990s, considerable discrepancies have been observed between the preferences of the voters and those of the political elites. This pattern has been most clearly observed in Sweden. Hence:

3. In Sweden, we expect to find a separate EU dimension on the voter level, but not on the elite level.

Below we set out to test these propositions empirically. Before doing so, a brief overview is required of the various ways of constructing the policy space of parties and voters, as well as a discussion of the data and methodology.

4. CONSTRUCTING POLICY SPACES.

Laver and Hunt (1992) indicate three basic methods of selecting the sets of dimensions that give meaning to the relevant policy space. The first is an extension of the “a priori” approach of the deductive theorist, in the sense that the selection of dimensions is not systematically justified in empirical terms. The analyst in effect assumes a set of underlying policy dimensions and tries to operationalize these. A second approach involves listening to the actors themselves by, for example, asking them to locate themselves and others on a policy scale. The third basic method is more fundamentally inductive. It involves taking a large set of data on the various actors in a particular system and attempting to reduce this, by using various data techniques, to a low dimensional representation of the policy space. The dimensionality of the policy

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4 See Saglie (1995) for an excellent discussion about inductive versus deductive approaches for the construction of policy spaces.
space is thereby determined empirically, not theoretically, as is the case with the other two methods described.5

By combining different units of analysis with the various sources and types of data Pedersen, Damgaard and Nannestad Olsen (1971) have systematized the various approaches. These are listed in Table 2 below.

### Table 2

<table>
<thead>
<tr>
<th>Unit of analysis</th>
<th>Party ideology program</th>
<th>Individual voter</th>
<th>Legislator</th>
<th>Parliamentary Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of data</td>
<td>Data from content analysis of programs, policy statements, etc.</td>
<td>Interview data: - party preference orderings - party voters’ policy attitudes - party voting changes</td>
<td>Interview data: - ranking of parties - policy attitudes Voting data: - roll calls</td>
<td>Voting data: - total population of divisions - subsets of divisions Data on cabinet coalition formations</td>
</tr>
</tbody>
</table>

Source: Pedersen et al., 1971:90

For the empirical construction of the policy space, the table indicates that there are several data sources available to us. One source is the various sets of “expert judgments” collected (e.g. Laver and Hunt, 1992; Huber & Inglehart 1995), or data on legislative behavior (e.g. roll-call data or committee ‘remarks’). Another is the data based on West-European party manifestos collected by members of the “manifesto group” (see e.g. the volume edited by Laver and Budge (1992). A third approach is to use policy positions as perceived by political elites or party positions as perceived by the mass electorate (see e.g. Hillebrand and Meulman, 1993; Esaiasson and Holmberg, 1996; Narud, 1996b; Oscarsson, 1998; Narud and Skare, 1999; Matthews and Valen, 1999).

For the empirical analysis of this paper, elite and mass surveys have been applied. The strength of elite surveys is the direct information they provide on the actual perceptions and preferences of the legislature. They give unique information about the evaluation of the actors as they appear in a particular context. Moreover, they allow for the direct comparison of voter perceptions and preferences. In the first part of the analysis we focus on the perception of parties and voters of the policy space, relying on ‘neutral’ instrument of measurement: sympathy ratings. In the second part of the analyses we attempt to analyze the spatial patterns in the light of specific policy issues.

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5 For a discussion about advantages and disadvantages concerning the various approaches, see Laver and Hunt, 1992, particularly pp. 44-46. For an overview of possible approaches to the study of party distances, see also Pedersen et al. (1971) and Laver and Schofield (1990).
4. DATA AND METHODOLOGY

Hypotheses about how voters, party activists and members of parliament perceive the political world in Sweden and Norway will be tested with multidimensional unfolding analysis of party evaluations. As will become clear, unfolding analysis is a scaling technique well suited to addressing research questions about the dimensionality of the party space, the inter-party distances, the substantive meaning of the spatial structure as well as the degree of perceptual agreement among actors.

The first and most important reason for making use of unfolding techniques is theoretical: The assumptions underlying the unfolding model are analogous to the assumptions underlying the Downsian spatial theory of elections. For instance, the unfolding model and the spatial theory both assume perceptual agreement – that all actors perceive the political world in much the same way. If this assumption does not hold, the unfolding model simply will not fit the data. Thus, applying the unfolding model means, in practice, testing the Downsian theory (see also Rabinowitz 1978; Rabinowitz & Macdonald 1989).

Second, unfolding techniques analyze the information from a set of preference orderings and produce spatial representations with both stimuli (e.g. parties) and subjects (e.g. individuals). Even scholars who are skeptical about the usefulness of scaling techniques for the purpose of theory testing agree that the construction of joint spaces for stimuli and subjects is a prerequisite for theory testing (see Budge & Farlie 1978; see Knutsen 1989), especially since most theories of electoral competition have focused on the interactions between voters and parties.

The third reason for using unfolding analysis is that we put ourselves in a position where we actually can make plausible interpretations of the party spaces. Because the unfolding technique yields coordinates for both parties and individuals in the same space, we are able to make extensive use of external data to give more substantive and reliable interpretations of the spatial point configurations. We do this by bringing information on individuals’ positions in the party space back into the original data set and using it in subsequent analyses.

Fourth, the unfolding procedure is tailored for data on individuals’ evaluations of political stimuli. These types of data have been collected in the form of sympathy rating scales or feeling thermometers in a large number of surveys, and combined with the application of the multidimensional unfolding techniques they make comparative research a potentially promising venture.

How can we infer anything about the actors’ perceptions of political stimuli just by analyzing their evaluations of political stimuli? Again, our main operationalization rests on the Downsian assumption that there is a close relationship between ideologi- cal distance and preference. Furthermore, the rationale for this operationalization rests upon one of the most well-established results from experimental social psychology: that attitude similarity is intimately related to attraction. The degree of affective response is a positive function of the degree of similarity in attitudes and beliefs (Byrne 1971; Byrne, Ervin & Lamberth 1970; see also Granberg 1993:107). In addition, it
should be noted that actors’ preference orderings of political stimuli contain all the information necessary to produce spatial representations of the underlying ideological structure.

Measuring perceptions of ideological distance with evaluative responses to political stimuli is of course not new. In the literature, there are many examples of operationalizations of psychological or affective distances (see Converse & Valen 1971; Mauser & Freyssinet-Dominjon 1976; Särövik 1976; Weisberg & Rusk 1970). All sympathy scales or dislike-like scales originate from the American feeling thermometer, which was more or less used to tap voters’ ‘gut feelings’ to political stimuli. These types of ‘spinal’ responses to parties and candidates have a generic character from which we can benefit. Although we can not be certain about the true substance of these political evaluations, we may still use them as measures of distance between individuals and political stimuli. To what extent these distances reflect ideological differences is an empirical question.

4.2 ADVANTAGES OF EVALUATIVE RESPONSES

There are four reasons why evaluative response measures (such as a dislike-like scale) may be preferred over more cognitive-oriented measures (such as predefined issue-dimensions) (Oscarsson 1998:26-28).

1) The first is that evaluative response measures yield more representative results. Asking people to place parties along issue dimensions produces a lot of non-responses, particularly from non-sophisticated voters. However, almost all respondents seem to be capable of producing evaluative responses to parties and candidates. For instance, in the Swedish National Election Surveys, about 80 percent of the respondents manage to place all parties along the left-right scale. This is a low figure, considering that Swedish voters are more familiar with the left-right continuum than voters in many other countries, and that the eleven-point scale applied in Swedish surveys comprises a neutral ‘escape’ alternative. The average response rate for the dislike-like scale is much higher, about 97 percent.6

2) Evaluative response measures have higher comparability across time and space than cognitive-based measures. Labels like ‘left’ and ‘right’ are prone to change over time and have had different meanings in different polities and cultural contexts (Bob-

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6 In most social psychology models, the processes of evaluation are post-cognitive — i.e. individuals are supposed to perform a cognitive analysis of ‘pros’ and ‘cons’ before they can produce reliable evaluative responses. However, in a famous article, “Feeling and thinking. Preferences need no inferences”, Robert B. Zajonc presents evidence that evaluations are pre-cognitive: “I argue… that, to arouse affect, objects need to be cognized very little, in fact minimally” (Zajonc 1980). People are used to making snap evaluative judgments of other people on a day-to-day basis. They do not have to access memory or start up cognitive processes to produce evaluative responses. This, among other things, makes us confident that evaluations are good measures of ideological distance. Of course, evaluative responses do not tell us everything about a person’s relation to a party or the same person’s perception of the political world, but we still think it provides relevant information about these matters.
bio 1996; Lapone 1981). Although we do not have any experimental research results available on this subject, we believe that the meanings of ‘like’ and ‘dislike’ are less susceptible to change across time and space than the meanings of ‘left’ and ‘right’.

3) Evaluative response measures may also have less research bias compared to measures based on predefined issue-dimensions. Particularly if we want to know how many -- and which -- latent underlying ideological dimensions are present in a given political system, we would like to have as ‘neutral’ instruments as possible. By contrast, if we ask people to place parties along a number of predefined scales, we always risk overestimating the actual impact of these issues on voters’ political preferences. Hence, we believe it is a good research strategy to complement the strictly theory-driven deductive approaches with the more inductive ones.

4) Evaluative measures may also produce more reliable results than cognitive measures of party placements. On the other hand, evaluative responses generated with feeling thermometers or sympathy scales are known to suffer from measurement errors (Rabinowitz 1978; Weisberg & Rusk 1970). From experiments with very short panels, we know that the response stability of evaluative responses using the Swedish dislike-like scale is quite low (.77 < r < .92). But these figures are definitely not lower than the stability figures for party placements along the eleven point left-right scale (Oscarsson 1998:27). Moreover, single stimulus data on voters’ placements of parties along an issue scale are often analyzed alone, for one party at the time. However, with scaling techniques, data on voters’ evaluations of parties and party leaders can be analyzed simultaneously. Such a procedure helps us reduce the impact of measurement errors. In addition, making use of the ordinal information in voters’ party preference orderings provides a complete model that includes both stimuli and subjects.

4.3 THE MULTIDIMENSIONAL UNFOLDING MODEL

The classic unidimensional unfolding technique was originally developed by the American psychologist Clyde H. Coombs in the 1950s (Coombs 1964). Although the multidimensional unfolding model (MDU) is theoretically well established (Coombs, Dawes & Tversky 1970; Hays & Bennett 1960; Hays & Bennett 1961), the statistical algorithms used to fit the model to data are often problematic, since a relatively large number of parameters need to be estimated with relatively small data sets (Jacoby 1991:67-70). This procedure renders unfolding sensitive to certain characteristics of data – such as large numbers of weak preference orderings (e.g. many ties) or the inclusion of stimuli with extreme values (e.g. ‘very’ popular or ‘very’ unpopular) (van Schuur & Post 1990). Thus, results from unfolding analyses must always be carefully evaluated and externally validated.

One plausible solution to the multidimensional unfolding problem was developed by George Rabinowitz in the mid 1970s (Rabinowitz 1976). Rabinowitz was troubled by the fact that no method existed for producing inter-stimuli distances that were consistent with the multidimensional unfolding model. In earlier work (c.f. Weisberg & Rusk 1970), inappropriate biased measures of spatial distance, such as the Pearson correlation, had been used (Jones 1974; Nannestad 1985). Rabinowitz’s work resulted
in a procedure called Line-of-Sight (LOS). The LOS-procedure is non-metric and suitable for large populations of individuals.

The multidimensional unfolding procedure applied here includes three steps (Listhaug, Macdonald & Rabinowitz 1990; Rabinowitz 1978): First, the LOS-procedure analyzes individuals’ party evaluations and produces a square, symmetric dissimilarity matrix with ordinal ranking of the distances between stimuli. Second, the LOS-matrix is analyzed with standard non-metric multidimensional scaling routines in order to retrieve a stimulus configuration in a n-dimensional space. In the third step, the external multidimensional unfolding method produces a policy space for parties as well as for voters, by jointly analyzing the stimulus configurations and the original party evaluations. Data on the subjects’ coordinates can preferably be merged back into the original data set for subsequent analysis, thereby facilitating interpretation and external validation.

4.4 DATA AND OPERATIONALIZATIONS

To compare political actors’ perceptions of the party space in Norway and Sweden, we need fully comparable, high quality data on party evaluations for voters and elected representatives. Fortunately, similar measures of party evaluations are commonly included in the Swedish and Norwegian National Election Studies (1994 and 1997, respectively), and in the Legislative Studies of MPs in Sweden and Norway (1994 and 1996, respectively). All four surveys applied a similar eleven-point dislike-like scale to measure party evaluations (see Figure 1).

The number of stimuli for which we can apprehend evaluative measures has a great impact on the robustness of the multidimensional unfolding procedure. Since evaluative responses contain errors, and actors’ preference orderings of parties have many tied preferences, the number of stimuli should be a minimum of eight to provide robust solutions to the unfolding problem. Therefore, we make use of voters’ evaluations of both parties and party leaders in the analysis (altogether 14 stimuli in Sweden and 18 stimuli in Norway). Hence, what we are actually studying is the voters’ perceptions of the parties’–and the party leaders’–policy space.

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7 This is of course not the only strategy for multidimensional unfolding. However, it enables ‘laymen’ who are not very familiar with advanced programming to make use of the technique. Moreover, it allows us to perform multidimensional unfolding with standard statistical packages. In the first stage of the MDU-procedure, we use a SAS-IML program that performs the LOS-procedure. The program was kindly provided by William G. Jacoby, University of South Carolina. In the second stage, we analyze the LOS-matrix with the non-metric multidimensional scaling procedure (in SAS) in order to recover a stimulus configuration. In the third step, we make use of the ALSCAL procedure in SPSS to perform the external multidimensional scaling.

8 This approach to the multidimensional unfolding problem has been successfully implemented in earlier comparative research (Listhaug, Macdonald & Rabinowitz 1990; Rabinowitz, Macdonald & Listhaug 1991), and more recently, in an extensive study of the development of the Swedish party space during the period 1956-1996 (Oscarsson 1998).
Narud & Oscarsson

Figure 1
The eleven-point dislike-like scale.

Note: This is the Swedish traditional version of the dislike-like scale. It was used in the 1994 Swedish Election Study and Legislative Study. The eleven-point scale applied in the 1997 Norwegian Election Study ranges from 0 (dislike) to 10 (like), but lacks a middle alternative. The Norwegian Legislative Study version of the dislike-like scale is the same as the Swedish (i.e. consistent with the one shown in Figure 1).

In the Legislative Studies, of course, only parties were evaluated. Although the elite level data – due to few stimuli – are not ideal for the purposes of unfolding analysis, we know from previous studies that the structure of preferences at the elite level is quite stable (Oscarsson, 1998). The successful application of the unfolding model to political elites may be explained by the fact that MPs’ ‘expert’ type of evaluative responses actually contain less measurement error.

5. Mapping the Norwegian and Swedish party space

One common explanation as to why political communication can take place in modern democracies is the use of shortcuts. That is, actors use different types of ideologies, belief systems or cognitive schemas, to organize information about the political reality (see Downs 1957: 97-99; Conover & Feldman 1984; Popkin 1991; Kuklinski, Luskin & Bolland; Zaller 1992; Sniderman 1993). Although many citizens lack sufficient knowledge about political affairs and about parties’ policy stands, ideological shortcuts make it possible to sort out and evaluate political information, and make it easier to form and express political preferences. Well-functioning ideological shortcuts and common perceptions of what kinds of political conflicts are structuring the political world seem to be a necessary feature of modern representative democracies.

Our main research question concerns the nature of actors’ perceptions of the political world. We will try to construct spatial models of voters’ and MPs’ perceptions of the Norwegian and Swedish party systems. How many dimensions are necessary to sufficiently describe the structure of political preferences among Swedish and Norwegian voters and elites?

5.1 Model appropriateness and dimensionality

To begin with, we need some confirmation as to whether the assumptions of the unfolding model holds. Is it likely that a given set of subjects’ preference orderings have been induced from a common, underlying spatial structure? We then need to find an answer to the question of dimensionality: Which n-dimensional unfolding model is the most appropriate?
In Table 3, we present the results from the first two stages of the multidimensional unfolding procedure, the Line-of-Sight procedure and the non-metric multidimensional scaling of political stimuli. The results provide information about the overall model appropriateness as well as the dimensionality of the data structure.

**Table 3**

**Results from multidimensional unfolding analysis of party preference orderings of voters and MPs in Sweden 1994 and Norway 1996/1997.**

<table>
<thead>
<tr>
<th></th>
<th>number of subjects</th>
<th>number of stimuli</th>
<th>coeff. of scalability</th>
<th>badness-of-fit</th>
<th>suggested dimensionality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sweden</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voters 1994</td>
<td>2,086</td>
<td>14</td>
<td>.37</td>
<td>.13</td>
<td>.05</td>
</tr>
<tr>
<td>MPs 1994</td>
<td>298</td>
<td>7</td>
<td>.55</td>
<td>.22</td>
<td>.04</td>
</tr>
<tr>
<td><strong>Norway</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voters 1997</td>
<td>1,696</td>
<td>18</td>
<td>.49</td>
<td>.37</td>
<td>.17</td>
</tr>
<tr>
<td>MPs 1996</td>
<td>128</td>
<td>9</td>
<td>.61</td>
<td>.25</td>
<td>.10</td>
</tr>
</tbody>
</table>

Note: The results are from the first two stages of the multidimensional unfolding analyses. The coefficient of scalability comes from the Line-of-Sight procedure and is a rank correlation that can vary between −1 and +1. Positive values higher than .40 mean good scalability (Rabinowitz 1976). Badness-of-fit values (Kruskal’s Stress-2) lower than .20 indicate good fit between the unfolding model and data (Young & Hamer 1987).

The coefficient of scalability is an overall measure of appropriateness of the unfolding procedure. Fortunately, the scalability coefficients for our four analyses are above or just under the rule-of-thumb criteria of acceptable scalability (> .40) (Rabinowitz 1976). This result means, in practice, that the theoretical assumptions underlying both the unfolding model and the Downsian model of party competition hold, at least to some degree. Thus, we have reason to believe that the set of evaluative responses actually was produced by actors who are scattered across a political space, who have singled-peaked preferences, and who have common perceptions of the political world (i.e. the parties’ positions and inter-party distances in the space). The results also indicate that subsequent stages of the unfolding analyses possess a potential to uncover a latent preferential structure.

Interestingly, the scaling model seems to be more appropriate for modeling elites’ evaluations than those of the voters. The coefficients of scalability are higher for Swedish and Norwegian MPs (.55 and .61, respectively) than for the electorates in the two countries (.37 and .49, respectively). However, a clearer structure of preferences among elites than among voters is not very surprising.

The scalability measure from the LOS-procedure cannot provide insights about the dimensionality of the space. The classic way of assessing this is to try out a number of
scaling models with different dimensionality and calculate a goodness-of-fit measure to see how well the n-dimensional model can reproduce the data structure.\textsuperscript{9}

We know from earlier experiences that scaling procedures of this kind produce spaces with low dimensionality, usually in the range between one and three dimensions. In the multidimensional unfolding analyses of Swedish and Norwegian voters and MPs, we have tried out one-, two- and three-dimensional models. For each model, a badness-of-fit measure was calculated (Kruskal’s Stress-2). The lower the BOF-measure, the better the fit between the unfolding model and data.

When using standard rule-of-thumb criteria for assessing dimensionality, the BOF-coefficients confirm our hypothesis that the Norwegian party system has more of a multidimensional character than the Swedish one. For Swedish voters and MPs, the unidimensional unfolding model shows a reasonably good fit, although the two-dimensional models would comprise all relevant variation in the data structure (BOF\textsubscript{2}=.05 and BOF\textsubscript{3}=.04).

The badness-of-fit measures for Norway indicate that we need to select more complex unfolding models to be able to describe all variations in the data. For Norwegian MPs, a two-dimensional model will probably do (BOF\textsubscript{2}=.10). The Norwegian voters’ party evaluations seem to have a very complex structure, since only the three- and four-dimensional unfolding models have acceptable badness-of-fit values, (BOF\textsubscript{3}=.14 and BOF\textsubscript{4}=.05). Four-dimensional solutions to these types of scaling procedures are rare.

Since each scaling problem is unique, it would be a mistake to apply the same rule-of-thumb to all scaling problems. The choice of dimensionality must always be a question of interpretability – if we have no plausible interpretation of all dimensions in a model, a good fit is not reason enough to apply the model. In technical terms, dimensionality can be seen as the number of relevant sources of variation in the actors’ perceptions of the political world (Jacoby 1991). To assess the number of relevant sources – given our research questions – we need more information than just badness-of-fit measures provided by the scaling program. The scaling procedure itself cannot provide insights about the substantive meaning of the results. Scaling models can only be interpreted and evaluated by means of a-priori theoretical statements, by relating them to earlier empirical findings, or by adding external data to the models.

To sum up, we are reluctant to give a definitive answer to the question of dimensionality, until we have introduced external data into the unfolding model. In the subsequent analyses, we will make use of the two-dimensional unfolding models. However, we will also consider the unidimensional unfolding model for Swedish voters, and the three- and four-dimensional unfolding models for Norwegian voters. We believe this

\textsuperscript{9} The actual choice of dimensionality is always a dilemma, since the model of fit always improves with higher dimensionality: The main purpose of scaling techniques is data reduction, i.e. to describe a data structure with as few dimensions as possible. At the same time, we want to end up with scaling models that have a reasonably good fit. This is a well-known problem with factor analysis as well. According to Coxon & Davies (1982:8), the most common error made by scaling analysts (as well as factor analysts) is that they extract too many dimensions.
approach will cover all viable options concerning the dimensionality of actors’ party preferences.

5.2 Stimulus Configurations

The second step of the multidimensional unfolding procedure produces coordinates for the political stimulus in an n-dimensional space. Figures 2 and 3 show the stimulus configurations for our two-dimensional unfolding models of elites and voters in Sweden and Norway.

Although spatial representations of party systems are appeal to most of us, the stimulus configurations alone will not suffice to give a plausible interpretation. However, we can easily draw on the results from earlier research, and come up with tentative ideas about the meaning of the dimensions. For instance, we can see from the Swedish voters’ ordering of the parties, that their perceptions are guided by the traditional left-right dimension (Left-SocD-Green-Centre-Lib-ChrD-Con). We know from previous research that this ordering is represented by the horizontal dimension of the party space. The second dimension of the space, which is vertical, may represent inter-party distances along a European Union dimension. Here, the most pro-EU parties tend to be positioned further to the northeast regions of the space (Con-Lib), while the con-EU parties tend to have more southwest positions (Left-Green). We will test out this proposition when bringing in the external data.

The Swedish MPs’ perceptions of the party space correspond quite well to the voters’ perceptions. The largest discrepancy is the fairly extensive inter-party distance between the Social Democratic and Green elites, which does not correspond to the pattern we see on the voters’ map of the Swedish party system.

The Norwegian voters’ party evaluations are also structured according to a left-right dimension (see Figure 3). The horizontal dimension reflects the left-right ordering of the Norwegian parties in the 1990s (Red-SocL-Centre-Lab-Chr-Con-Prog). As in Sweden, the vertical dimension in Norway seems to represent an ideological conflict over EU-membership – the Labor Party and the Conservative party are the strongest pro-EU, the Center Party being the most ardent opponent of the EU.

The traditional left-right dimension is also present in the Norwegian MPs’ perceptions of the party space. The ordering of the parties along the horizontal dimension in the lower part of Figure 3 is a left-right ordering. At the elite level, it is hard to come up with an immediate interpretation of the vertical dimension – there is no apparent fit with any party ordering along an EU-dimension, even though there is a tendency for the con-EU parties (Red, Soc.L.,Center) to cluster together.
Note: We use the following party labels for the Swedish parties: Left – the Left Party; SocD – the Social Democratic Party; Center – the Center Party; Lib – the Liberal Peoples’ Party; Con – the Conservative Party (the Moderates); Green – the Environmentalist Party (the Greens); and ChrD – the Christian Democratic Party. The smaller points on the voters’ map of the party system represent the positions of party leaders.
Figure 3
Stimulus configurations for voters and members of parliament in Norway, 1997 and 1996, respectively.

Norwegian voters 1997

Norwegian MPs 1996

Note: We use the following party labels for the Norwegian parties: SocL – Socialist Left Party; Lab – Labor Party; Lib – Liberal Party; Chr – Christian People’s Party; Center – Center Party; Con – Conservative Party; Prog – Progress Party; Red – Red Election Alliance; Indep – Independents (or ‘Free Democrats’). The smaller points on the voters’ map of the party system represent the positions of party leaders.
Just by glancing at the stimulus configurations, we see that there is quite a large amount of perceptual agreement between citizens and elites both in Sweden and in Norway. If we use a more formal measure of congruity – such as a rank correlation of the inter-party distances from the LOS-matrix – we learn that the perceptual agreement between elites and voters is relatively high both in Sweden (\(\rho=+.83\)) and in Norway (\(\rho=+.88\)). Thus, we cannot confirm our second hypothesis that there is a greater perceptual agreement between elites and voters in the unidimensional Swedish system than in the more complex, multidimensional Norwegian party system.

5.3 Interpreting the party space

Regrettably, many users of scaling techniques end their analyses with a discussion about the substantial meaning of the stimulus configurations that they have retrieved from the scaling procedure. However, such an exercise more often reveals information about the researcher himself rather than about the data. Most ‘mappers’ do not take advantage of the available procedures that may assist them in interpreting and producing external validation – although many of these methods are much easier and less time consuming than the scaling procedure itself.

Since unfolding produces joint spaces for stimuli and subjects, we can use the subjects’ spatial coordinates as variables in the subsequent analyses. By reintegrating the information about individuals’ positions into the original data set, we may use a substantial amount of external information for interpretative purposes. For innovative researchers, the use of external data opens up a number of ways to explore different regions of the party space and perform advanced theory testing on the system level.

The most relevant external information available to us is individuals’ political attitudes to a number of relevant issues. The Norwegian and Swedish datasets contain a large number of issue-related questions, providing us with the means to give the ‘empty’ generic evaluative space a substantive interpretation. There are of course many ways of exploring the party space with the aid of external analyses. Here, we use a simple linear regression analysis. These methods are described in standard textbooks about scaling and dimensional techniques (Kruskal & Wish 1978). The dimensions of the party space are used as independent variables in the regression. As dependent variables, we use all political attitude variables available to us in the given dataset, one at a time. This means that it often takes a large number of regressions to accomplish an analysis of the party space. Note that there is no causal theory behind the use of regression analysis – it is simply used as an interpretative tool.

Each regression gives information about the direction and strength of the relationship between individuals’ political attitudes and their position in an n-dimensional space. This information can be used to illustrate graphically the direction and strength of an issue. The set of regression coefficients is standardized so that sum of their squares equals one. Then we can calculate the direction cosine. If we have a small number of dimensions, we can even display the results from the regression analyses graphically, as straight lines across the party space.
We begin this exercise with the two-dimensional model for Swedish voters’ and MPs’ perceptions of the party space (see Table 4). In the analyses, the two uncorrelated dimensions serve as independent variables and are regressed upon one attitude at a time. Each regression analysis estimates the unstandardized regression coefficients, the direction cosine and the overall fit expressed in terms of a multiple R coefficient.\(^\text{10}\)

The results from the regression analyses confirm that the horizontal dimension of the Swedish voters’ party space indeed is a left-right dimension (see table 4). The Swedish voters’ left-right self-placements correlate strongly with voters’ positions along the horizontal dimension (R=.74), as well as a number of traditional left-right attitudes concerning income differences, the size of public sector and socialism.

The vertical dimension of the space is necessary to accurately describe the variation of ideological positions in a number of issues – EU-membership (R=.49), Christian values (R=.32), and nuclear power (R=.31). Although these issue-dimensions are not uncorrelated with the left-right dimension, they all have distinct directions in the space. They also enjoy high external validity compared to results from other Swedish studies. Voters’ self-placements along the green dimension are rather weak (R=.21), but correspond closely with the vertical dimension, suggesting a weak green dimension in the voters’ perceptions of the Swedish space.

From Oscarsson (1998), we know that this two-dimensional solution to the unfolding problem, as well as the interpretation of the space, has been remarkably stable during the last decade. The ideological struggle over EU-membership and Christian conservative-traditionalist values have gained importance during the 1990s, while the green environmentalist conflict has slowly been diminishing.\(^\text{11}\)

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\(^{10}\) The direction cosine can be used to illustrate graphically the results from the regression analyses (see Kruskal & Wish 1978:39). In this paper, the deviation from the horizontal dimension is expressed in terms of angles. The closer to zero, the less the deviation from the horizontal dimension. The closer to 90\(^\circ\), the greater the correlation with the vertical dimension. This procedure of spatially representing the results makes most sense for two- and three-dimensional models.

\(^{11}\) Conflicts over nuclear energy and EU-membership have triggered national referendums in Sweden twice (in 1980 and 1994, respectively). Aside from the dominant left-right dimension, the nuclear energy and the EU-dimension have had the strongest correlations with the unfolding models in Sweden during the 1980s and 1990s. Because these two issues repeatedly have proved to have the same direction in the party space, and since they seem to structure the Swedish voters’ party evaluations in about the same way, they may represent the same underlying ideological dimension. In Oscarsson (1998), the dimension is named the autonomy-delegation dimension. This dimension summarize variations in citizens’ desire to delegate/entrust autonomy, power and democratic control over matters that concern them personally, to a technical, political and/or economic elite.
TABLE 4
RESULTS FROM REGRESSION ANALYSES OF
SWEDISH VOTERS’ AND MPS’ POSITIONS
IN A TWO-DIMENSIONAL PARTY SPACE, 1994

<table>
<thead>
<tr>
<th>attitude / issues</th>
<th>unstandardized regression coefficients</th>
<th>multiple R</th>
<th>Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b_{DIM1}$</td>
<td>$b_{DIM2}$</td>
<td></td>
</tr>
<tr>
<td>Swedish voters 1994</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>left-right dimension</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left-right self-placements</td>
<td>+1.36</td>
<td>-.20</td>
<td>.74</td>
</tr>
<tr>
<td>Promote a socialist society</td>
<td>-1.40</td>
<td>+.15</td>
<td>.60</td>
</tr>
<tr>
<td>Reduce the public sector</td>
<td>-.57</td>
<td>+.07</td>
<td>.54</td>
</tr>
<tr>
<td>Reduce income differences</td>
<td>+.39</td>
<td>+.01</td>
<td>.43</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-placement on EU-membership scale</td>
<td>+1.22</td>
<td>+.53</td>
<td>.49</td>
</tr>
<tr>
<td>Promote a society with Christian values</td>
<td>+.64</td>
<td>-.44</td>
<td>.32</td>
</tr>
<tr>
<td>Retain nuclear power, even after 2010</td>
<td>-.27</td>
<td>-.37</td>
<td>.31</td>
</tr>
<tr>
<td>Promote an environmentalist society</td>
<td>-.27</td>
<td>-.53</td>
<td>.22</td>
</tr>
<tr>
<td>Self-placement on a green dimension</td>
<td>-.10</td>
<td>-.49</td>
<td>.21</td>
</tr>
<tr>
<td>Self-placement on a refugee scale</td>
<td>-.16</td>
<td>-.37</td>
<td>.13</td>
</tr>
<tr>
<td>Reduce foreign aid</td>
<td>-.11</td>
<td>-.10</td>
<td>.13</td>
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</table>

Swedish MPs 1994

left-right dimension

<table>
<thead>
<tr>
<th>attitude / issues</th>
<th>unstandardized regression coefficients</th>
<th>multiple R</th>
<th>Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b_{DIM1}$</td>
<td>$b_{DIM2}$</td>
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<td>Left-right self-placements</td>
<td>+1.68</td>
<td>+.41</td>
<td>.85</td>
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<td>Reduce the public sector</td>
<td>-1.01</td>
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<tr>
<td>Reduce income differences</td>
<td>+.79</td>
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<td>.74</td>
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<td>Other</td>
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<td>Self-placement on EU-membership scale</td>
<td>+1.29</td>
<td>+.43</td>
<td>.49</td>
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<tr>
<td>Promote a society with Christian values</td>
<td>+1.79</td>
<td>+.24</td>
<td>.63</td>
</tr>
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<td>Retain nuclear power, even after 2010</td>
<td>-.64</td>
<td>-.09</td>
<td>.48</td>
</tr>
<tr>
<td>Promote an environmentalist society</td>
<td>-.66</td>
<td>-.18</td>
<td>.26</td>
</tr>
</tbody>
</table>

Note: The results are from the 1994 Swedish Election Study and Parliamentary Study. Although the interpretation of the party space is based on a very large number of regression analyses, for interpretative purposes we have chosen to present the results from the model with the highest explained variance (i.e. with a high multiple R).

The Swedish MPs’ perceptions of the political world are more unidimensional than the voters’ perceptions. The three strongest issue-dimensions – left-right (.74<R<.85), EU-membership (R=.49) and Christian values (R=.49) – have almost identical directions in space and are all very close to the horizontal dimension. In the elite space, the EU- and Christian values dimensions are more or less collapsed into the traditional left-right conflict pattern. This result may reflect the fact that the Swedish voters were far more divided on the question of EU-membership than was the party elite in 1994.
Figure 4
Results from regression analyses of Swedish voters’ and MPs’ positions in a two-dimensional party space, 1994

Swedish voters

Swedish MPs
Similar to the Swedish case, the regression results for the Norwegian voters clearly indicate a strong left-right dimension ($R=0.67$), which seems to correlate with the immigration issue as well as with the EU membership issue (see table 5). Hence, pro-immigration sentiments and con-EU attitudes are located in a ‘leftist’ position, whereas negative attitudes towards immigration and positive attitudes towards the EU correlate with a ‘rightist’ position.

The two vertical dimensions may best be characterized as a moral-religious dimension and a ‘green’ environmentalist dimension, as the first concerns the question of promoting a society with Christian values, and the latter has to do with the question of building gas power plants in Norway. There is a tendency for those who prefer Christian values to lean towards the right, and those who are pro-environmentalist to lean towards the left, but the two dimensions still have very distinct directions.

The spatial configurations at the voter level are by no means new in Norwegian politics. The data confirm the dominant position of the left-right dimension, but we know from previous studies that both the moral-religious dimension and the ‘green’ environmentalist dimension have occasionally been salient. Their importance for party competition is conditioned by the political agenda, and the intensity of specific issues in the electoral campaign. The most surprising result is perhaps that no distinct urban-rural or center-periphery dimension is evident. Given the saliency of these dimensions during the EU membership debate, we should have expected a separate dimension encompassing territorial controversies. Instead, the EU dimension corresponds closely to the horizontal left-right dimension.

By looking at the leadership level, we detect a more nuanced picture. Here, as at the voter level, the left-right dimension is predominant ($R=0.79$). And parallel to the voter results, it correlates with the question of immigration ($R=0.51$) and privatization and market economy ($R=0.80$). However, at the elite level, the EU dimension makes out a separate dimension in the policy space. It is not uncorrelated with the left-right dimension, but it has a distinct direction and is stronger than many of the other issues included in Table 5 ($R=0.65$). Negative attitudes towards EU membership correlates with positive attitudes towards financial support to agricultural areas and restrictive attitudes towards oil production. Even though these attitudes are leaning towards the “leftist” corner of the policy space, they are still distinct enough to be characterized jointly as a separate “territorial” dimension. The other vertical dimension is the moral-religious dimension, which we also observed at the voter level. At the leadership level it is much stronger, however, and the attitudes of the elites have a slightly different leaning from that of the voters.

12 The fight over EU membership has been on the political agenda three times in Norwegian history. First in the beginning of the 1960s, then in 1972 and finally in 1994. Over the years a remarkable stability has been evident concerning the groups in favor of and against the EU. Each time, those in favor have been people from urban areas in the central parts of the country, whereas the population in the Northern and Western periphery as well as people from rural areas have been against membership (see e.g. Ringdal & Valen, 1998).
### Table 5
Results from Regression Analyses of Norwegian Voters’ and MPs’ Positions in a Two-Dimensional Party Space, 1996/97

<table>
<thead>
<tr>
<th>attitude / issues</th>
<th>unstandardized regression coefficients</th>
<th>multiple R</th>
<th>direction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b_{DIM1}$</td>
<td>$b_{DIM2}$</td>
<td></td>
</tr>
<tr>
<td><strong>Norwegian voters 1997</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Public-private sector</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left-right self-placements</td>
<td>+1.44</td>
<td>+.01</td>
<td>.67</td>
</tr>
<tr>
<td>Reduce income differences</td>
<td>-.30</td>
<td>+.05</td>
<td>.23</td>
</tr>
<tr>
<td>Equal distribution of wealth in the world</td>
<td>+.35</td>
<td>-.13</td>
<td>.35</td>
</tr>
<tr>
<td>Reduce the control of the state</td>
<td>-.44</td>
<td>-.05</td>
<td>.34</td>
</tr>
<tr>
<td><strong>Immigration</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-placement on immigrant policy scale</td>
<td>+1.00</td>
<td>-.18</td>
<td>.41</td>
</tr>
<tr>
<td>Reduce foreign aid</td>
<td>-.21</td>
<td>+.07</td>
<td>.39</td>
</tr>
<tr>
<td>Immigration a threat to national identity</td>
<td>-.54</td>
<td>+.03</td>
<td>.38</td>
</tr>
<tr>
<td>Give priority to Norwegians in job distribution</td>
<td>-.41</td>
<td>+.05</td>
<td>.29</td>
</tr>
<tr>
<td>Immigrants should receive native language support</td>
<td>+.56</td>
<td>-.13</td>
<td>.39</td>
</tr>
<tr>
<td><strong>Environmentalist-economic growth</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Build gas power plants in Norway</td>
<td>-.34</td>
<td>+.43</td>
<td>.36</td>
</tr>
<tr>
<td>Economic growth and productivity</td>
<td>-.31</td>
<td>+.23</td>
<td>.33</td>
</tr>
<tr>
<td>let the market forces guide the economy</td>
<td>-.38</td>
<td>+.15</td>
<td>.33</td>
</tr>
<tr>
<td><strong>Morality/religion</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Promote a society with Christian values</td>
<td>-.17</td>
<td>-.41</td>
<td>.31</td>
</tr>
<tr>
<td>Abortion</td>
<td>-.08</td>
<td>-.21</td>
<td>.27</td>
</tr>
<tr>
<td>Rights for homosexual partners</td>
<td>+.37</td>
<td>+.13</td>
<td>.24</td>
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<tr>
<td><strong>Territorial</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>support to agricultural areas</td>
<td>+.35</td>
<td>-.63</td>
<td>.31</td>
</tr>
<tr>
<td>attitude towards the European Union</td>
<td>-.06</td>
<td>+.17</td>
<td>.32</td>
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<td><strong>Norwegian MPs 1996</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Public-private sector</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>left-right self-placements</td>
<td>+1.67</td>
<td>-.45</td>
<td>.79</td>
</tr>
<tr>
<td>Promote privatization and market economy</td>
<td>+2.60</td>
<td>-.48</td>
<td>.80</td>
</tr>
<tr>
<td>Reduce income differences</td>
<td>+.80</td>
<td>+.01</td>
<td>.65</td>
</tr>
<tr>
<td>Reduce public sector</td>
<td>-1.13</td>
<td>+.32</td>
<td>.78</td>
</tr>
<tr>
<td><strong>Immigration</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote a multicultural society</td>
<td>-1.00</td>
<td>+.00</td>
<td>.41</td>
</tr>
<tr>
<td>less immigrants</td>
<td>-.51</td>
<td>-.01</td>
<td>.51</td>
</tr>
<tr>
<td><strong>Environmentalist-economic growth</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>raise oil production</td>
<td>+.68</td>
<td>+.58</td>
<td>.60</td>
</tr>
<tr>
<td>economic growth and productivity</td>
<td>+1.89</td>
<td>+.40</td>
<td>.64</td>
</tr>
<tr>
<td>industrial growth vs environmental protection</td>
<td>-1.61</td>
<td>-.51</td>
<td>.58</td>
</tr>
<tr>
<td><strong>Morality/religion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote a christian society</td>
<td>+.83</td>
<td>-1.37</td>
<td>.27</td>
</tr>
<tr>
<td><strong>Territorial</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>self-placement on a EU-dimension</td>
<td>+1.83</td>
<td>+2.03</td>
<td>.65</td>
</tr>
<tr>
<td>support to agriculture areas</td>
<td>+.57</td>
<td>+.35</td>
<td>.56</td>
</tr>
</tbody>
</table>

Note: The results are from the 1997 Norwegian Election Study and the 1996 Parliamentary Study.
Figure 5
Results from regression analyses of Norwegian voters' and MPs' positions in a two-dimensional party space, 1994.
In sum, we find that the two levels of the party have consistent views with regard to the left-right controversy, and they both single out a moral-religious dimension. However, contrary to the observed patterns in Sweden, the political space of the Norwegian elites comprises more dimensions than that of the voters. At the voter level, the EU attitudes are highly correlated with left-right position, whereas at the elite level, the question of EU membership seems to single out a separate territorial dimension.

6. Conclusions

In the present paper we have been concerned with the spatial structure of parties and voters in Norway and Sweden. The main goal has been to test out the dimensionality of the policy spaces, as well as the perceptual agreement between parties and voters in the two countries. Three hypotheses were formulated about expected country-differences, as well as about differences between the two party levels. In order to test out these hypotheses, we have relied on multidimensional unfolding analysis of party evaluations.

Our first “complexity hypothesis”, which states that the Norwegian party system will have more of a multidimensional character than the Swedish, is supported by the data. For Swedish voters and MPs, the unidimensional unfolding model shows a reasonably good fit, even though a two-dimensional solution is also appropriate. The evaluations of the Norwegian voters, on the other hand, seem to have a structure that is much more complex. Whereas a two-dimensional solution seems to fit the structure of the elite evaluations, only three- and four-dimensional unfolding models have acceptable badness-of-fit values for the voters. Indeed, four-dimensional solutions to these types of scaling procedures are rare.

Our second hypothesis, which states that there will be a greater perceptual agreement between elites and voters in the unidimensional Swedish system than in the more complex, multidimensional Norwegian party system, does not receive any support. In fact, there is a slight tendency towards the contrary, but not a significant one. The perceptual agreement between elites and voters is relatively high both in Sweden and in Norway.

Our third “country specific” hypothesis, which stated that we would find a separate EU dimension at the voter level in Sweden, but not at the elite level, is supported by the data. At the voter level this dimension reflects variations in citizens’ wish to delegate power and democratic control to the supra-national level of the EU, and has indeed gained importance during the 1990s.

Previous analyses have demonstrated that the territorial cleavage has been very important for the EU vote in Norway, whereas in the more uni-dimensional Sweden it has to a greater extent overlapped with the class-cleavage. However, at the time of the referendum, there was strong evidence for the importance of the territorial cleavage also among Swedish voters (Ringdal & Valen, 1998). In both countries the capital region and other communities with high population density were the core areas for EU support, whereas the more peripheral parts of the countries, especially the Northern re-
regions, represented the backbone of the opposition to EU membership. Among the Swedish elites, however, opposition to the EU was minor, and was first and foremost a phenomenon of the left.

The present paper has convincingly demonstrated the applicability of the multidimensional unfolding procedure for mapping the policy space of parties. We have reason to believe that the evaluative responses of voters and MPs actually is a good reflection of the actors’ perceptions of the political world. Moreover, the analysis indicates that the theoretical assumptions underlying the Downsian spatial model indeed hold. The challenge for future research is to provide even better interpretations of the spatial models, use the models for more systematic theory testing purposes, and to extend the analysis to more countries than Norway and Sweden.

REFERENCES


Narud & Oscarsson


