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Interparty Spatial Relationships in Norwegian Storting Roll Call Votes*

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The purpose of this study is to map interparty spatial relationships embedded in non-unanimous roll call votes recorded during the 1985–86 session of the Norwegian parliament. The analysis is theoretically grounded in the one-dimensional Scandinavian five-party model and a two-dimensional model which assumes that the conventional left–right continuum is intersected by an urban protest/rural traditionalism axis. While the one-dimensional solution which arrays the parties along the conventional left–right continuum is statistically defensible, a two-dimensional solution appears better to reflect the reality of contemporary Norwegian politics in which the post-Second World War welfare-state consensus is being challenged by the Progressive Party. The resulting divisions among the non-socialist parties may preclude a stable center-right governing coalition.

The Scandinavian countries in general, and Norway in particular, have for many years been characterized by what must, at least from a broad comparative perspective, be considered conditions of relative democratic stability, orderliness, and predictability. As generally observed for other European countries, Scandinavian polities were described in the 1960s as systems with 'frozen policy alternatives' (Lipset & Rokkan 1967, 50). The social structure, political parties and resultant public policies appeared to have remained nearly fixed for decades.

This is certainly not to suggest that there are no meaningful divisions. Indeed, a number of scholars (Rokkan 1970; Valen 1981; Valen & Urwin 1985; Strøm & Leipart 1989) have identified a half dozen politically relevant socioeconomic cleavages in Norwegian society. Conflict has occurred along territorial, sociocultural, religious, moral, class, and urban–rural lines. More recently, the unsettling impact of the struggle over membership in the EEC followed by increased voter volatility has contributed to conditions which may have gradually 'thawed' the frozen policy alternatives, if indeed they ever were frozen in the first place (Shamir 1984). Thus, notwithstanding the relative homogeneity of Norwegian society, there have been a sufficient number of politically relevant fault lines to place Norwegian politics in a state of flux, particularly in recent years.

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The purpose of the present article is to identify interparty spatial relationships as these are embodied in non-unanimous role call votes in the Storting,

the Norwegian parliament. The intent is to assess the extent to which these votes may be interpreted in terms of a single left–right dimension as opposed to a more complex two-dimensional solution. Such an analysis provides insight into the functioning of a more general Scandinavian five-party unidimensional model, as well as the modifying impact of the Christian People's Party and Progressive parties in Norway. Before undertaking the analysis, however, a brief review of the general Scandinavian model and the Norwegian party system is in order.

A Scandinavian Five-Party Model and the Norwegian Party System

In the postwar period, Scandinavian politics have been dominated largely by a five-party model which has been highly stable and consensual in nature (Elder et al. 1988). In spatial terms, the parties generally are argued to be arrayed along a single 'left–right continuum' reminiscent of Anthony Downs' (1957) classic illustrations. From left to right the parties may be ordered as followed: radical left–Social Democrats/Labour–Agrarian/Centre–Liberals–Conservatives (Elder et al. 1988).

Despite the political stability and similarities found within the Scandinavian region, significant modifications to this general model cannot be overlooked. With specific reference to Norway, two important 'deviations' may be noted. First, the Christian People's Party rose to national prominence in the 1940s, and continues today as a significant actor among non-socialist parties. Concerned with traditional religious beliefs, teetotalism and, more recently, abortion (Madeley 1977; Svåsand 1988), the Christian People's Party is somewhat difficult to place along the conventional ideological spectrum. As others have noted, Christian parties throughout Scandinavia,

> . . . in line with the Norwegian Christian People's party, view themselves as centre parties: closer to the left in social policy matters, but on the non-socialist side in protecting the basic inviolability of private property (Elder et al. 1988, 68).

A second, and potentially more profound, alteration in the party system in Norway has occurred as a result of the emergence and recent ascendance of the Progressives, a neo-Poujadist party very much in the tradition of Denmark's anti-tax Progressive Party and the French National Front. All of these movements appear to flourish in the wake of 'new waves of social deprivation', leading them to espouse policies which encourage many observers to label them as 'right-wing extremists' (von Beyme 1988).

Under its current leader, Carl I. Hagen, the Progressive Party takes conservative or right-wing positions on a good many issues, including

taxation, law and order, free enterprise and immigration. However, Hagan is arguably at the forefront of a seemingly anti-system, not a conservative, movement. No other party seems to challenge the basic assumptions undergirding the business-as-usual welfare state quite like the Progressives. Indeed, they may be best understood not as conservatives or right-wingers, but in terms of the challenge they seem to pose to the consensual nature of Norwegian politics (Shaffer 1988).

In addition to the Christian People's and Progressive Parties, there are currently two other non-socialist parties controlling seats in the Storting. The Conservatives, the largest non-socialist party, have been the principal mobilizer of center-right coalitions in post-Second World War Norway. Having developed an urban and rural electoral base, the Conservative Party places considerable emphasis on private economic initiatives, lower taxes, and individual freedom and responsibility. The Conservatives, however, have made their peace with the fundamental welfare-state premise of a major government role in the management of economic activity. For example, although less enthusiastic about public-sector growth than the socialist parties, the Conservative Party has supported the Norwegian state oil company and has backed large-scale subsidies for fishing and agriculture (Svåsand 1988). In addition to the Conservatives, there has been the Center Party, which, in spite of a core constituency of farmers, dropped its original agrarian label in the late 1950s in an effort to broaden its electoral base to include urban and industrial voters.

At the socialist end of the political spectrum one finds the Labour Party, holding the largest number of seats in the Storting, and the much smaller Socialist Left, which is ideologically more pure, and thus more ardent in its commitment to socialism. The Labour Party is primarily responsible for the massive growth of the public sector during the post-Second World War period. Under its control, the Norwegian welfare state became a model of social democracy commanding a great deal of respect in other Western democratic societies.

These two socialist and the four non-socialist political parties have controlled all of the seats of the Norwegian Storting in recent years. Presumably, they fit the model of the Scandinavian five-party model, as modified by the Christian People's and Progressive Parties, both of which are assessed in terms of their prospects of joining coalitions with center-right parties. In other words, the role of these parties, as well as others likely to win parliamentary seats, is typically couched in terms of a unidimensional left–right continum (Rommetvedt 1984; Kuhnle et al. 1986).

This simple notion also has instructed much of the debate over party strategies. Presumably, leaders would seek to form coalitions with those parties in relatively close ideological proximity along the left–right dimension (Axelrod 1970; de Swaan 1973). Thus, the Conservative Party might

not only court the Center Party, but also quite possibly the Progressives and Christian People's Party, both of which have been identified as departures from the Scandinavian five-party model (Elder et al. 1988).

Although such a unidimensional left–right or government–opposition description of conflict structure is frequently employed (Damgaard 1973; Berglund & Lindström 1978; Arter 1984), a multidimensional interpretation of party behavior in Scandinavian parliaments has received some empirical support (Stjernquist & Bjurulf 1970; Pedersen et al. 1971; Nyholm 1972; Damgaard & Rusk 1976; Clausen & Holmberg 1977). Given the impact of the Christian People's and the Progressive Parties, a two-dimensional framework may provide additional insight into the relationships among the six Norwegian parliamentary parties.

Certainly if spatial analysis of Norwegian voters is any indication, then a multidimensional framework would be anticipated. For example, a factor analysis of 31 items from the 1985 national election survey produced four dimensions along which voters can be arrayed (Aardal & Valen 1989; Valen 1990). A more parsimonious clustering of the 1985 electorate is portrayed by a dominant left–right continuum intersected by a vertical axis which simultaneously taps urban–rural values and religiosity (Listhaug et al. 1990b). Consequently, it is quite plausible to hypothesize that the salient cleavages among citizens would be projected into legislative decision-making behavior.

The Norwegian Parliament and Roll Call Voting Behavior

As a modified unicameral legislature, the Norwegian parliament is organized into two divisions: (1) the Lagting which is comprised of one-quarter of the Storting members, and (2) the Odelsting which is made up of the remaining three-quarters of the Storting membership. It is in this second division where every 'law' must be introduced, passed, and sent to the Lagting, which, in turn, can vote the measure into law. If the Lagting rejects the bill twice, the full Storting can pass it with a two-thirds vote. With the exception of the small number of laws introduced in the Odelsting, however, all legislative matters are acted upon by the Storting in plenary session. Policy debates, questions put to government ministers, treaty ratification, and the passing of the budget take place in the full Storting (Svåsand 1988). Therefore, roll call votes in the Storting, as opposed to the Odelsting and Lagting, involve committee recommendations and amendments related to line items in the government budget.

Until now very little quantitative analysis has been completed for the Norwegian parliament, perhaps because it is not considered to be a signifi-

cant policy-making actor, or because its actions are determined largely by high levels of party cohesiveness (Laegreid & Olsen 1986). In so far as roll call voting behavior is concerned, there are precious few works which address the question of interparty relationships and cleavages. The pioneering effort of Bjurulf & Glans (1976), which covers the sessions from 1969 through 1974, offers support for the left–right unidimensional model, rather than a multidimensional one (Berglund & Lindström 1978). However, given the time frame of their research, the full impact of some politically divisive forces, such as the EEC battle and the more recent urban anti-tax sentiment, may not have been felt.

In this regard, the case of Denmark offers perhaps the best basis for anticipating the post-1973 world of the Norwegian Storting.[1] Two particularly relevant studies provide compelling evidence that prior to 1974, Danish legislative parties were arrayed along the familiar left–right dimension. In one, Damgaard (1973) demonstrates that parliamentary parties coalesce with ideologically adjacent parties on nearly all Folketing votes recorded during the 1953–70 period. In the second, Damgaard and Rusk (1976) compute one- and two-dimensional multidimensional scaling solutions for roll call votes taken during seven different governmental periods from 1953 through 1972. On the basis of stress measures and variance explained, they conclude that voting in the Folketing was unidimensional. Moreover, unidimensionality characterized nearly all identifiable policy domains, with the exception of labor and tax measures during a few periods.

Yet not all empirical studies are unanimous in their support of the notion that a single dimension of conflict existed in Danish legislative behavior. In a study of a government bills and agenda motions for the 1953–57 and 1960–64 periods, for example, Pedersen et al. (1971) computed two-dimensional multidimensional scaling solutions, and on the basis of stress values of zero, concluded that party space is at least two-dimensional.[2] The only substantive theoretical interpretation applied to this second factor, however, is an 'old' vs. 'new' party cleavage.

Danish party politics was shaken profoundly during the 1973 election, in which the principal winner was Mogens Glistrup's Progress Party, one which was clearly

> . . . symptomatic of the times, being a genuine 'Poujadist-type' party which protested against the economic ills of the country and the incompetence of the major parties in finding solutions for them. (Damgaard & Rusk 1976, 200)

A two-dimensional spatial representation of Danish voters revealed the major left–right spectrum intersected by a 'protest against established parties' axis. Not surprisingly, roll call voting in the ensuing session of the Folketing was explained by the ubiquitous left–right continuum, and a dimension which distinguished between 'predominantly compromising' and 'predominantly opposing' parties.[3]

Much as in Denmark, Norway also has undergone rather significant post-1973 political changes, in this case wrought by the divisive battle over EEC membership, frustration over high taxes, and the perception of the government's inability to respond adequately to contemporary economic and social problems. Given the success of the Norwegian Progressive Party, particularly under the leadership of Carl I. Hagen, in capitalizing on voter frustration, there is ample reason to anticipate a modification of the five-party unidimensional model in the actions of the Storting. This prospect is heightened by the fact that, analogous to the Danish case, voter perceptions of the Norwegian parties are best represented in two-dimensional space (Converse & Valen 1971), especially with the advent of the Progress Party's precursor, the Anders Lange Party, in 1973 (Rabinowitz et al 1991). Since then the left–right axis has been intersected by '. . . a cultural dimension which incorporates elements of center-periphery and urban-rural as well as religiosity' (Listhaug et al. 1990b). Indeed, in keeping with this line of reasoning, a recent analysis of Odelsting roll call votes (Shaffer 1988) indicates the possibility of a two-dimensional conflict structure, but one which is muted by virtue of the fact that many of the pure leftist or rightist votes receive so few votes that they are not recorded by individual Storting member, and thus are excluded from analysis.

Data and Methodology

As in all modern legislatures, the work of committees is central to the overall policy-making process in Norway. The parliamentary committees reflect major substantive policy areas, and operate to serve the Odelsting, the Lagting, and the Storting as it convenes in plenary session. There are, in other words, not separate committee systems for each division of the Storting. In this study interparty relationships are inferred on the basis of non-unanimous parliamentary votes occurring during plenary meetings in the 1985–86 session. More specifically, the votes concern (1) revenue measures and (2) expenditure proposals across the full range of substantive policy areas handled by the Norwegian government. Roll call votes subject to analysis in this study resulted from recommendations emanating from the following committees:

1 Foreign Affairs and the Constitution
2 Church and Education
3 Consumer Affairs and Administration
4 Finance
5 Agriculture
6 Shipping and Fisheries
7 Municipal Affairs and the Environment

8 Social Affairs
9 Energy and Industry
10 Communications
11 Justice

In the next section, interparty relationships will be delineated for substantive policy areas on the basis of specific votes related to each committee's policy domain.[4] Nearly all votes involved specific revenue and expenditure items in the annual budget. Typically, the full Storting votes on a series of line item committee proposals, as well as amendments put forth by individual members on behalf of one or more political parties.

At present machine-readable data for the Storting are not readily available. Although an efficient electronic voting system was adopted in 1969, only one hard copy of recorded roll call votes taken in any given session is retained, and that is housed in the Storting archive. For this study, the votes of all individual members of parliament across 411 Storting roll calls taken during the 1985–86 session had to be entered into a file which serves as the data base for the ensuing analysis. As of this writing, this is the only machine-readable Storting roll call data file in existence.[5]

For roll call votes in each policy area, as well as the complete set of votes, one- and two-dimensional multidmensional scaling (MDS) solutions are computed, in order to identify interparty spatial configurations. Euclidean distances calculated for all pairwise combinations of political parties constitute the MDS input. Estimating Euclidean distances on the basis of mean party values for each roll call vote is quite appropriate, in light of the exceedingly high levels of intraparty cohesiveness.[6] On approximately 84 percent of the Storting votes (336/402) analyzed in this research *every single representative* voted with his or her party. On the remaining measures, usually only one or two members broke party ranks. In fact, a miniscule 0.2 percent of all of the *individual* votes cast on the 402 roll call votes broke with party position. Moreover, the intraparty cohesion level held at more than 99 percent for proposals emanating from all eleven standing committees identified above. When parliamentary members vote together 99.8 per cent of the time (48,440 party line votes/48,561 total votes), treating party as the unit of analysis is eminently reasonable.

A word on the validity of roll call votes as indicators of party position is in order here. A rather intriguing methodological conundrum arises when non-unanimous votes are analyzed. If there were a sizable number of unanimous roll call votes, for example, then including them in the analysis should reduce significantly the observed spatial differences among the political parties. The question, quite simply, is why exaggerate interparty differences by selecting for close study only divided votes?

At the same time, a case can also be made that since only non-unanimous

votes with a minimal minority size are permanently recorded, the 'true' spatial location of small parties which back more 'extreme' measures may well be misspecified in an opposite sense; they may, in fact, be *further* removed from larger, more moderate parties. For example, in the 1985–86 session the Socialist Left Party could have introduced an amendment to raise dramatically spending on a social-service line item, only to have received the support of a few representatives. Or, among the non-socialists, the Progressives could have put forth a motion which received the backing of only its own two members. In both instances, the votes of individuals would not have been known because (1) the Storting archive keeps a record of individual votes only for non-unanimous roll call votes where there is a minority of approximately 5 percent or more, and (2) the published parliamentary debates (*Stortingsforhandlinger*) do not report individual member voting positions. Therefore, any measures of their policy positions would be limited primarily to 'less extreme' committee recommendations or amendments. In this context, the use of non-unanimous roll call votes is all that is available for the Norwegian case.

Other strategies for tapping party orientations may possibly produce more valid measures. For example, Rommetvedt (1984, 1988) has developed an interparty distance indicator based on committee reports, in which party positions can be given much fuller expression. By comparison, in a set of roll call votes the range of options is much more constrained.

Similarly, party platforms permit explication of ideology and policy preferences in a manner not possible with roll call votes. Systematic analysis of party manifestos initially incorporating nineteen Western democracies (Budge et al. 1983) has since been extended to Norway (Bilstad 1986; Shaffer 1989; Strøm & Leipart 1989). Examination of party positions related to international relations, freedom and democracy, government, economy, welfare and quality of life, fabric of society, and social groups offers considerable insight into interparty differences over broad principles.

While positions on committee reports and party manifestos allow expression of even the subtle nuances of party orientation, in the end real policy alternatives must be put in a form which can be voted up or down. The interparty relationships which emerge in this context may be argued to better indicate coalition patterns rooted in actual policy-making behavior. Clearly the alternatives from which to choose may be constrained and simplified in such situations, but this is the essence of parliamentary decision-making processes.

Findings

Before turning to multidimensional scaling solutions for broad substantive policy areas, a mapping of party locations in both one and two-dimensional

Fig. 1A. One-Dimensional MDS Coordinates. Ali Roll Call Votes.

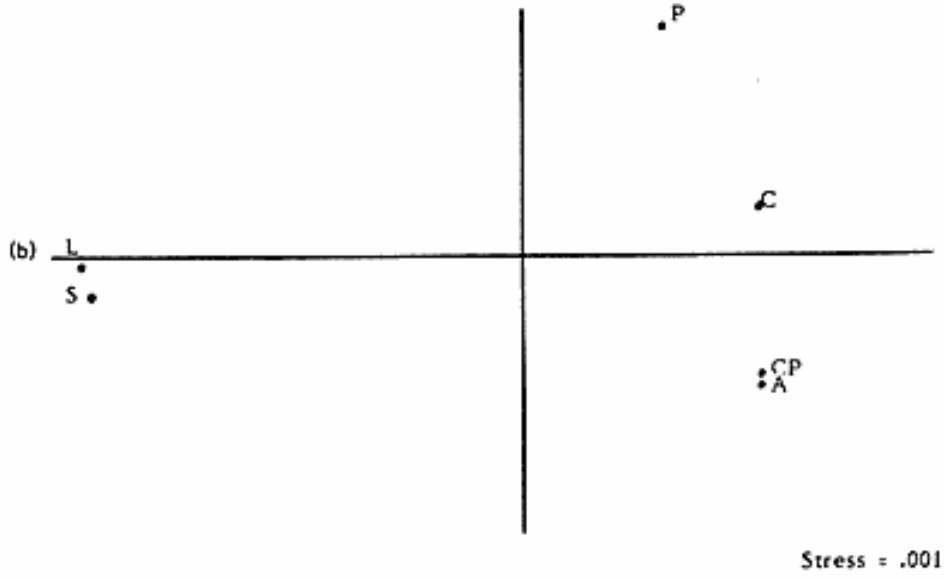

Fig. 1B. Two-Dimensional MDS Coordinates. All Roll Call Votes.

space on the entire set of 402 roll call votes is displayed in Figure 1. The one-dimensional plotting (Fig. 1a) presumes the simple left–right, or more accurately in the present case, government–opposition model. The Labour (L) and Conservative (C) Parties occupy the polar opposite positions, with the Socialist Left (S) allied with Labour, and the Center (A–agrarian), Christian People's (CP) and the Progressive (P) Parties in close proximity to the Conservatives. This result makes a good deal of sense in the context of a unidimensional left–right explanation of Scandinavian politics. Moreover, this is precisely the kind of outcome which encourages speculation about the formation of non-socialist coalitions which can wrest power from the socialists.

On purely statistical groups, with a stress value of 0.004, and a monotonic relationship between distances and disparities, there would be no reason to carry the analysis any further. From a theoetical perspective, however, the relatively 'moderate' position of the Progressive Party appears to defy conventional wisdom, and therefore, imposing a one-dimensional solution on party roll call vote positions may well suppress a theoretically important secondary cleavage. Under its charismatic leader, Carl I. Hagen, the Progressives are often described as 'right-wing', and appealing to popular resentment of high taxation and the favorable treatment of immigrants,

they promote a rollback of the welfare state in a manner unacceptable even to the traditional defenders of private initiative, the Conservative Party. Assuming that this is an accurate portrayal of the Progressives under Hagen, and not simply rhetorical hysteria, then their location emerging under the one-dimensional MDS solution is difficult to defend on theoretical grounds.

The spatial locations depicted in the two-dimensionsal MDS solution (Fig. 1b) may in this sense better reflect conventional wisdom, particularly regarding interparty tensions among non-socialist parties. The stress value does not indicate a statistically superior outcome, and, in fact, given the small number of points (i.e. parties), the solution might be unstable.[7] Thus, the two-dimensional solution should be viewed as tentative, albeit highly instructive.

In the two-dimensional plot depicted in Fig. 1b the major horizontal axis represents the broad left–right dimension of Norwegian politics, and on this axis, there is almost no differentiation among the non-socialist parties. By way of contrast, the right-of-center parties diverge substantially along the vertical axis, which might be labeled an 'Urban Protest–Rural Traditionalism' dimension. The reader should note that this two-dimensional space inferred for the political parties in the 1985–86 Storting is strikingly similar to that reported by Listhaug et al. (1990b) for the 1985 Norwegian electorate. Given Carl I. Hagen's anti-system, anti-bureaucracy appeal to urban voters and unwillingness to support the agricultural sector, the Progressives (P) appear to be the most committed to slashes in the public sector and much greater reliance on the private market and individual rather than collective choice.

Rural traditionalism seems a logical position for the Christian People's Party (CP), given its historical support among farmers. Its traditionalist orientation is perhaps most clearly reflected in the perceived moral obligation to help the downtrodden, a belief which explain their strong support for extending government aid to Third World nations. The Center Party (A) figures as a more rural-traditional non-socialist party as a result, at least in part, of its long-term commitment to collective protection of farming interests which leads to unswerving support of agricultural subsidies, and a slightly less intense enthusiasm for private initiative.

These results are based upon all non-unanimous roll call votes and therefore no distinctions can be made for broad substantive policy arenas. The remaining MDS solution are computed for votes taken on issues dealt within specified Storting committees. The first set of roll call votes to be analyzed involve budget recommendations and amendments to matters dealt with by the Foreign Affairs, Church and Education, Consumer Affairs, Finance, Agriculture, and Shipping and Fisheries committees. For each of the substantive policy areas, a significant level of disagreement

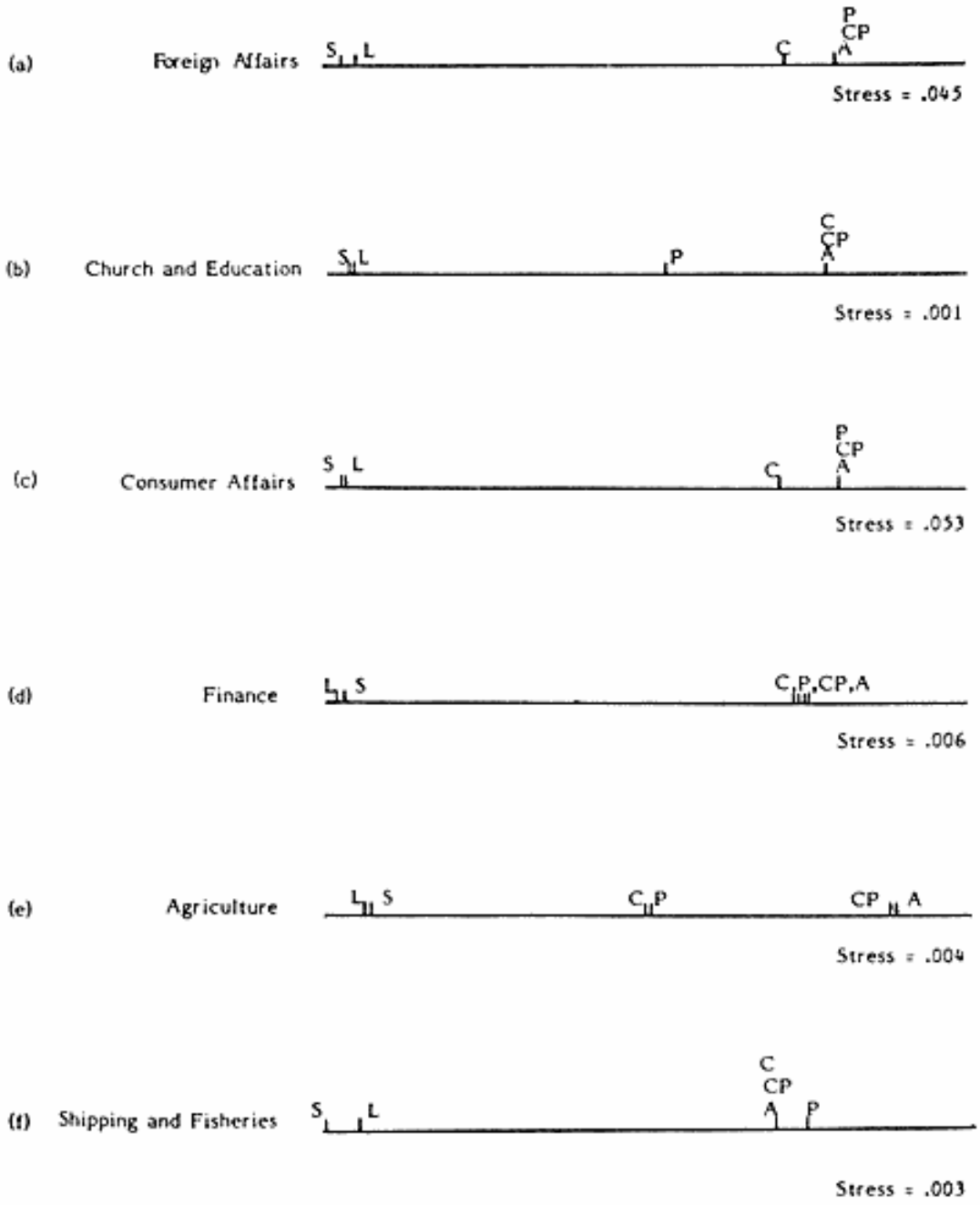

Fig. 2. One-Dimensional MDS Coordinates. Selected Policy Votes.

emerges among the non-socialist parties, at least in the two-dimensional multidimensional scaling analyses.

The one-dimensional MDS solutions for five of these six policy areas reveal a government–opposition continuum with Labour and Conservatives generally occupying the extreme positions along the spectrum (see Fig. 2). The one distinct exception occurs on agricultural measures (Fig. 2e) where

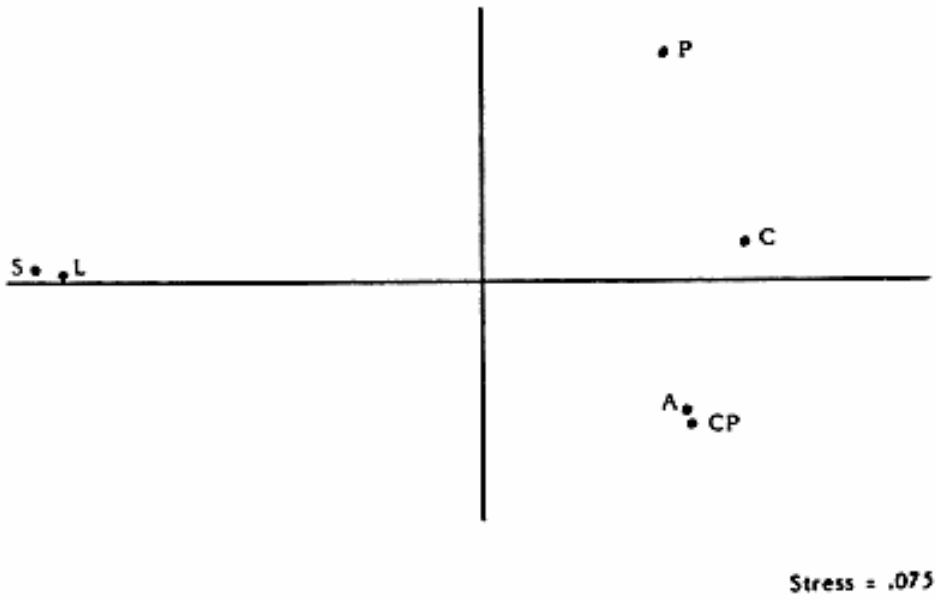

Fig. 3. Two-Dimensional MDS Coordinates. Foreign Affairs Policy Votes.

the Conservatives and Progressives occupy the middle ground between the Labour–Socialist Left and Center–Christian People's coalitions. While all non-socialists frequently voted together, the Center and Christian People's Parties often were the only supporters of a number of measures related to such questions as market prices and farm subsidies.

While these plots are interpretable in the context of the unidimensional left–right spectrum in Scandinavian politics, these solutions appear to be plagued by intrasitivities when viewed in light of the matrices of Euclidean distances. On foreign-affairs spending, for example, the Progressives are actually closer to the Conservatives than they are to the Center and Christian People's Parties. Similarly, on financial issues, the Conservatives are much closer to the Progressives than they are to the Center and Christian People's Parties. In addition, these one-dimensional solutions did not result in a clearly monotonic relationship in the plot of interparty distances and disparities. If there is a secondary axis along which non-socialists are arrayed, then a two-dimensional MDS solution should reveal a theoretically and statistically more satisfying result.

The two-dimensional solution produced for foreign affairs votes results in a dominant socialist–non-socialist horizontal axis intersected by one on which the center-right parties differ substantially (see Fig. 3). While the bulk of the measures reflect the familiar left–right cleavage, the non-socialists were divided on a few relevant issues. For example, the Center and the Christian People's Parties sided with Labour and the Socialist Left on aid to Nicaragua and policy regarding South Africa, as well as a number

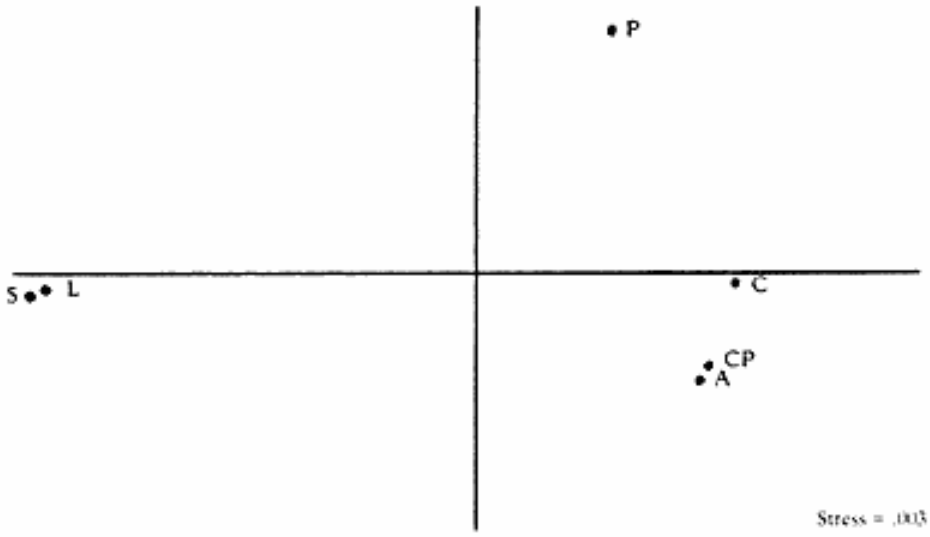

Fig. 4. Two-Dimensional MDS Coordinates. Church and Education Policy Votes.

of other expenditures related to foreign assistance. The Progressives were most consistent in their opposition to expenditures on foreign aid, occasionally even joining with the left in opposing, for example, aid to Pakistan.

Results for votes on matters from other committees confirm the relevance of pursuing a two-dimensional solution. Figure 4, for example, displays the two-dimensional plot for measures pertaining to church and education. Again a primary left–right division emerges, but in this case, the Progressive Party, while usually siding with other non-socialists, departed on a number of matters, such as funding of the church council and technical training.

As can be observed in Figure 5, the left–right dimension separating socialists from non-socialists is in force for finance measures. However, even though the overwhelming majority of these questions split along left–right lines, there was a significant bipolarization among center-right parties with the Conservatives and Progressives spatially removed from the Center and Christian People's Parties. This schism resulted from a greater propensity for the Christian People's and Center Parties to back measures in support of such special interests as greater agricultural subsidies and price supports, and with the Conservatives and Progressives limiting public-sector activity by lining up behind actions such as imposing budget savings.

On policies under the jurisdiction of the Consumer Affairs and Administration Committee (Fig. 6), the non-socialists were divided on the levels of government subsidies to the press and political parties. The Conservatives desired a reduction in the funding of parties, while the Center and Christian People's Parties, which rely more on public funds (Svåsand 1988), voted

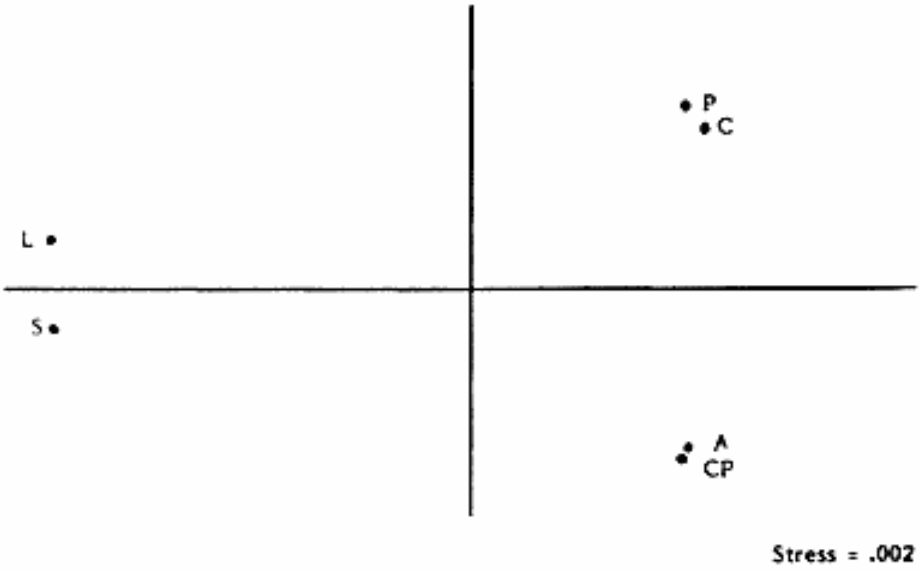

Fig. 5. Two-Dimensional MDS Coordinates. Finance Policy Votes.

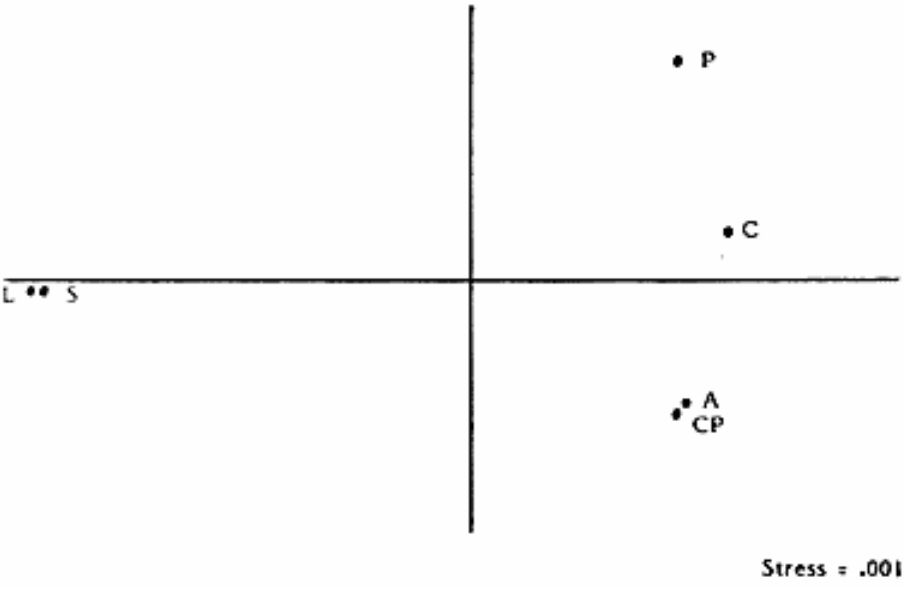

Fig. 6. Two-Dimensional MDS Coordinates. Consumer Affairs Policy Votes.

against such a reduction. The Progressives favored these cuts, and, in addition, were the only non-socialist party to vote against increases in the subsidies for the press.

The two-dimensional solution for agriculture (Fig. 7) reveals a spatial pattern similar to that for Finance Committee measures (Fig. 5). In fact, agricultural subsidies again emerge as the key issues over which there

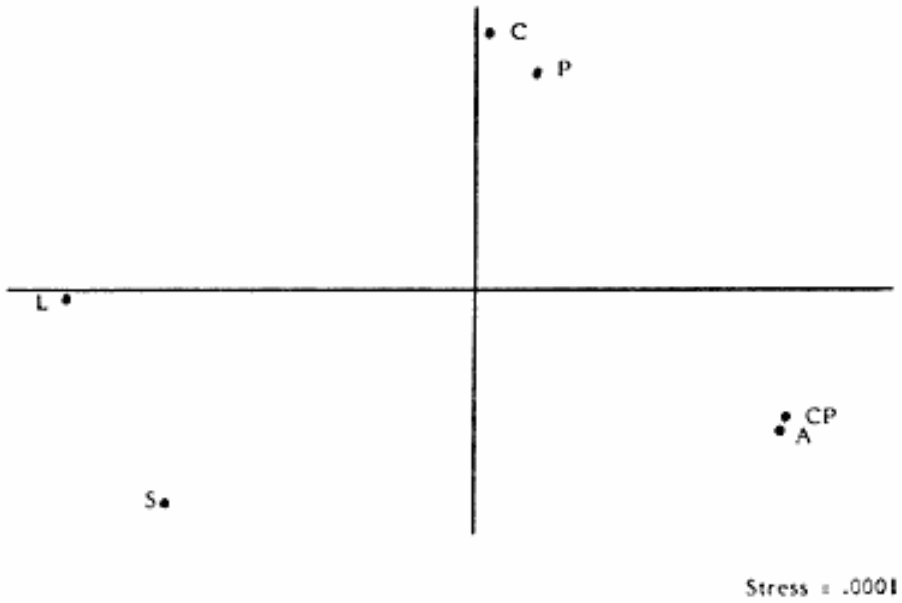

Fig. 7. Two-Dimensional MDS Coordinates. Agriculture Policy Votes.

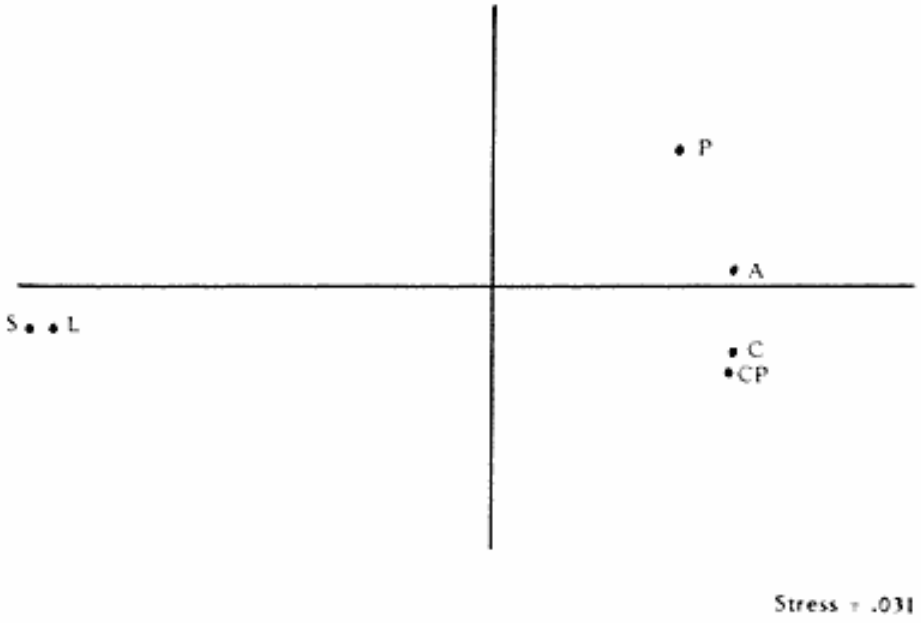

Fig. 8. Two-Dimensional MDS Coordinates. Shipping and Fisheries Policy Votes.

were significant divisions within the non-socialist bloc. The unusually large distance between the Labour Party and the Socialist Left was a consequence of the latter's greater enthusiasm for increased subsidies for agricultural interests.

For Shipping and Fisheries Committee recommendations (Fig. 8) there

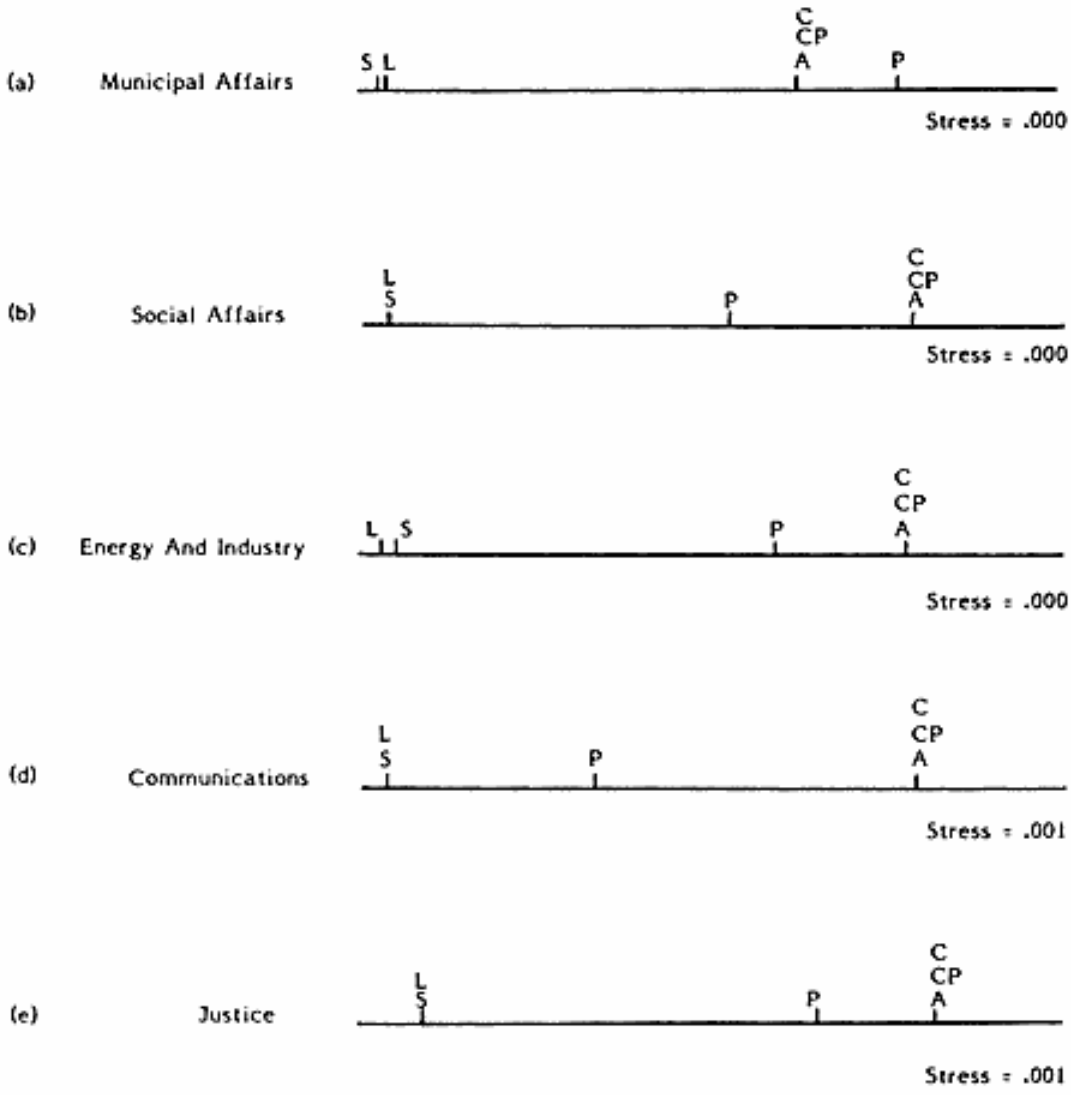

Fig. 9. One-Dimensional MDS Coordinates. Selected Policy Votes.

was but one issue, the proposed increased in subsidies for small boat harbors, which resulted in a breaking of non-socialist ranks. Not surprinsingly, the Progressive Party opposed the additional public funding. Otherwise, the conventional left–right dimension was the dominant factor for these substantive policy questions.

Turning now to the roll call votes on policy matters dealt with by the five remaining committees, the one common feature is the more theoretically defensible one-dimensional solutions reported in Figure 9. Unlike the initial six substantive areas, an inspection of the matrices of Euclidean distances in relationship to the unidimensional coordinates revealed no intrasitivities among any of the interparty spatial positions along the left–right spectrum.

Moreover, a plot of the actual party distances and the disparities was clearly monotonic.

In all five policy areas, the Progressive Party abandoned the other non-socialists to back initiatives supported by Labour and the Socialist Left, although Hagen and Ytterhorn, the Party's two Storting members, usually voted on conservative lines. Although the Progressive Party would like to roll back the welfare state, it does favor aid to the 'truly needy', rather than those who should be more self-sufficient (Svåsand 1988). In addition, by appealing to those who feel left out of the process, such as pensioners and the middle-class service workers, the Progressives actually move a little toward the socialist parties. Thus, voting for some additional benefits for the handicapped, pensioners, and aid to kindergartens – a service in very short supply but sought by many middle-class families with both parents working outside the home – placed the Progressives in closer proximity to the socialist position. These sorts of issues were embodied in recommendations emanating from both the Municipal and Social Affairs Committees.

Likewise, the Progressives backed a number of industrial research and development initiatives coming out of the Energy and Industry Committees, as well as a few transportation measures from the Communications Committee. In both cases, however, the level of funding was occasionally less than that supported by Labour and the Socialist Left. Finally, although Hagen generally seeks a diminished role for the public sector, he is very much behind increased financial backing for police, jails, and courts. After all, law and order, or the perceived lack thereof, is a source of concern and frustration which has enhanced his popular support. This propensity leads him to be more closely aligned to the socialist parties which were also willing to spend the money on these policies emanating from the Justice Committee.

Even though one-dimensional solutions appear statistically adequate, a legitimate question arises with respect to the verisimilitude of the spatial representation with respect to the legislative process. Given conventional wisdom regarding the posture and actions of the Progressive Party, is its centrist position on the left–right continuum reasonable, or even plausible? If the Progressives are a party of protest, and, in Hagen's own words, the only party seeking a systemic change,[8] then is not a solution of at least two dimensions, while less parsimonious, more theoretically appropriate?

It is in this spirit that the two-dimensional MDS solutions for the remaining issue areas were computed. In *all five* policy domains the other non-socialist parties are tightly clustered at the conservative end of the left–right spectrum, while Labour and the Socialist Left occupy virtually the same position at the other end of the continuum. As the lone protest or 'anti-system' party, the Progressives are removed from all other parties

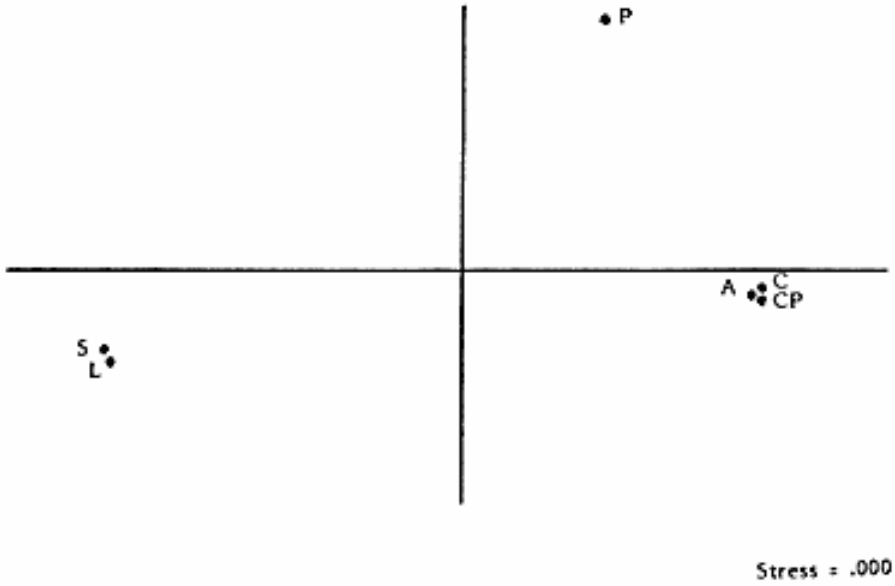

Fig. 10. Two-Dimensional MDS Coordinates. Municipal, Social, Energy and Industry, Communications, and Justice Policy Votes.

along the secondary vertical axis. The spatial configuration illustrated in Figure 10 reflects the party positions on all of the following legislative issues: (1) municipal affairs, (2) social affairs, (3) energy and industry, (4) communications, and (5) justice.

Perhaps the nature of the protest is rooted in a burgeoning urban secularism which challenges the welfare-state consensus so readily associated with Norwegian society. The growing urban middle class with both parents working outside of the home pulls at the fabric of the traditional, family-oriented social structure. The attendant urban dislocations, such as crimes against persons, the clear need for kindergartens, the desire of the upwardly mobile middle-class service worker who is not a major beneficiary of state welfare not to be taxed so heavily, and the frustrations of the pensioners, may indeed have fueled the protest movement led by Carl I. Hagen and the Progressive Party. In this context, the occasional support of spending for the functionally handicapped, pensioners, highways, industry, courts, and the police reflects attempts to mobilize the disaffected and not a moderate, centrist position along the left–right continuum. If so, their spatial location in Figure 10 tend to support their detractors' argument that the Progressives are out of the mainstream of Norwegian politics.

Summary and Discussion

No published roll call voting studies for recent sessions of the Norwegian Storting are to be found, owing largely to the general unavailability of the data. This study represents an attempt to correct that deficiency through a series of multidimensional scaling analyses of 402 non-unanimous roll call votes taken in a recent session of the Storting. Nearly all of these measures involved line items in the government budget.

Whether or not the parties' spatial relationships are best represented in one- or two-dimensional space is both a statistical and a theoretical question. In many instances, the two-dimensional solutions for a given committee's budget recommendations appeared statistically superior, while in other cases, the one-dimensional plots were equally justifiable on statistical grounds. What is to be confronted here is a classical issue. Ultimately, quantitative analysis should be theory-driven, a premise which may justify a two-dimensional result when a one-dimensional one is statistically sound. A central tenet of the scientific method, however, argues in favor of parsimony, a consideration nudging us back toward a one-dimensional representation.

Certainly theoretical grounds exist for a unidimensional framework. The Scandinavian five-party model, modified or not, is predicated upon the notion that political parties are arrayed along a single left–right continuum. It is clearly arguable that the preceding results are readily interpretable from this frame or reference, at least in about half the cases presented. Yet the consensual welfare-state system of Norway has been shaken considerably by the Progressive Party led by Carl I. Hagen, a mediagenic populist. Supported by urban, middle-class, service-sector, law and order, tax-weary voters, the Progressives would pursue a systemic change which far exceeds anything promoted by other non-socialist parties. Slashing taxes and a dramatic shifting away from a heavy reliance upon the public sector are key features of the Progressive Party revolt. These differences appear clearly in two-dimensional space. Hagen's party appears relatively isolated along an urban protest–rural traditionalism axis, a quite different view than the more centrist posture emerging from one-dimensional MDS solutions.

Generally speaking, it is the spatial isolation of the Progressive Party which has led many to consider them 'unfit' for membership in a non-socialist governing coalition (Strøm & Leipart 1990). Moreover, the authors of a recent study of the Norwegian electorate report that the Progressives are perceived to be too 'extreme to take part in government', and therefore, conclude that the Progressive Party is '. . . beyond the pale of normal Norwegian politics' (Listhaug et al. 1990a). Interestingly enough, the Progressives appear to be politically unacceptable to most voters in precisely the two-dimensional space inferred from the present study of Storting roll

call votes – i.e. the familiar left–right dimension intersected by an urban–rural protest, religious traditionalism axis (Listhaug et al. 1990b).

This conventional view is seriously challenged by evidence presented in a number of recent studies. Portraying the Progressives as 'too extreme' is a difficult case to make in light of the fact that they draw sizable electoral support away from the Conservative Party. From 1985 to 1989 Hagen and company siphoned off 18 percent of the Conservative voters (Aardal et al. 1990). Thus, within the context of electoral politics, the Progressives have been more positively rated in recent years (Listhaug 1989), have exhibited a degree of stability in their support among the voters (Harmel & Svåsand 1989), and, as a result, appear to have pulled the Conservative Party further to the right on the ideological spectrum (Harmel & Svåsand 1990).

In addition, the Progressive Party has become organizationally institutionalized by creating structures very much like those of the other parties (Harmel & Svåsand 1989). Moreover, the party is no longer simply engaged in a negative protest. Their platform embrances a fundamentally divergent view of the welfare state, which reflects, among other things, a desire to address social problems through increased privatization. As one author notes, '. . . the Progressive Party has become institutionalized and is no longer the anti-party of the Anders Lange days' (Listhaug 1989, 174). In the final analysis, the Progressives cannot be labeled 'unfit for any coalition' (Strøm & Leipart 1990). Instead, at least from the Conservatives' point of view, they are '. . . sufficiently respectable to warrant entering negotiations for their potential governmental support' (Harmel & Svåsand 1989).

Whether or not the Progressive Party is 'beyond the pale of Norwegian politics', or 'sufficiently respectable', is a pivotal consideration when pondering coalition politics, not so much from the perspectives of a single left–right continuum, on which Progressives are not very far removed from other non-socialist parties, but in two-dimensional space, in which there are well defined cleavages among the non-socialists. If spatial representation with two axes is more valid than for one, then coalitional prospects are indeed quite different from those based upon a unidimensional left–right spectrum. Consider, for example, the outcome of the autumn 1989 Storting elections, which resulted in the party shares of the 165 parliamentary seats set out in Table 1. Obviously, no single party attained a simple majority of 83, a situation which required a degree of coalition-building.

Given this outcome, what options are available? The socialist allies control 81 seats, two short of an outright majority. There had been some speculation that the Center Party could form an alliance with Labour, which, under the above outcome, would yield a majority governing coalition. However, the Labour Party has never entered a formal government coalition with non-socialist or, for that matter, small leftist parties

Table 1. Party Shares of Parliamentary Seats, 1985 and 1989 Storting Elections.

		Storting Seats	
		1985	1989
Socialist	Labour	71	63
	Socialist Left	6	17
	FA Finnmark[9]	0	1
Non-socialist	Conservative	50	37
	Christian People's	16	14
	Center	12	11
	Liberal	0	0
	Progressive	2	22

(Strøm & Leipart 1990). It is conceivable, nevertheless, that Labour could head a government with the support of a non-socialist party.

The most probable and, indeed, eventual outcome was nonetheless that the Center Party would enter a non-socialist coalition comprised of the Conservative, Christian People's and the Center Parties, a bloc which controls 62 parliamentary seats. This minority-led government was made possible with the complicity of Hagen's Progressive Party. In one-dimensional space this solution presents no real difficulty. On most questions, Hagen and company would only have to move a relatively short distance to comprise a natural cluster with the other non-socialist parties.

Yet the situation is not that simple, especially given the Progressive's break, with the business-as-usual consensus nature of Norwegian politics. There may be more compelling logic to a spatial representation which depicts divisions within the non-socialist bloc, as well as the conventional dominant left–right axis of Scandinavian politics. In a good many of the two-dimensional MDS solutions reported above, the Progressives were often far removed from their potential center-right allies. A non-socialist governing coalition depending upon the Progressives would, from this perspective, be quite unstable, taking very little to cause Hagen to break ranks, thereby precipitating a collapse of a conservative government. This is, in fact, precisely what occurred during the session under scrutiny in this article (Svåsand 1988).

However, while the Progressives are typically the furthest removed from other non-socialist parties, there are public-policy issues over which the smallest center-right parties appear to be politically isolated. For example, on the agricultural roll call votes analyzed in the present study, the Center and Christian People's Parties appear to be pitted against the Conservative and Progressive Parties. If a controversy arises in which agricultural policy

may be salient, who would the Conservatives turn to as an ally? This is precisely the predicament the Conservatives faced in October 1990 when the Center Party would not accept the EC regulations on the foreign ownership of Norwegian companies. Given a relatively non-competitive agricultural sector, the Center Party remains staunchly opposed to membership in the Common Market. Any move to bring Norway into compliance with European Community policies could serve to unravel the governing coalition. In this instance, the Conservatives did not reconcile their differences with the Center Party over the Common Market, nor did they strike a bargain with the Progressives, and in the end, the non-socialist governing coalition dissolved. Given the inability of the Labour Party to garner anything approaching a majority of the seats in parliament, the seemingly irreconcilable differences among the non-socialists have nevertheless provided the Labour Party with a number of opportunities to head the Norwegian government.

In any event, the most divisive force in this politically charged area appears to be the Progressive Party. More than any other party, the Progressives question the social-democratic ideology of post-Second World War Norway. The present study appears to capture their rejection of some of the welfare state agenda, over which there has been an apparent consensus in the last few decades. However, the *extent* of Hagen's putative anti-system orientation may not be manifested in the available body roll call votes. While he frequently introduces amendments which often appear to be more extreme than others under consideration, Hagen's initiatives rarely received more than a couple of votes, and, as a consequence, were not included in the Storting archives.[10]

All of this could change dramatically during the next few sessions of the Storting. The full force of a Progressive policy agenda may indeed be projected in the full set parliamentary roll call votes. While non-socialist parties may seek mutual accommodation, coalitional instability could very well transform the Storting into a highly relevant arena for political combat in Norway.

NOTES

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1. There is even less evidence on the Swedish Riksdag and the Finnish Eduskunta than on the Danish Folketing and the Norwegian Storting, at least which allows any sort of comparison over time. Nyholm (1972) reports findings which indicate a multidimensional spatial structure in the roll call voting of Eduskunta members in post-Second World War Finland. While Stjernquist & Bjurulf (1970) present evidence which can be seen as clearly establishing unidimensionality (Bergland & Lindström 1978), the policy dimensional analysis of Clausen & Holmberg (1977) for the 1967 session of the Riksdag reveals a dominant left–right continuum, along with a minor dimension which was characterized as an ends-against-the-middle division. In any event, both Norway and Denmark experienced significant political shocks in the early 1970s, and analyses of the Storting and Folketing can be undertaken to document differences in parliamentary behavior which may have been wrought by the changing sociopolitical environment. As of this writing, no roll call voting data sets have been generated for the Eduskunta or the Riksdag after 1970.
2. Pedersen et al. (1971) do not present one-dimensional solutions for comparison.
3. Of course, the divergence of the 'predominantly compromising' parties and the 'predominantly opposing' parties along this axis is quite small relative to that observed for the traditional left–right continuum. See Figure 6 in Damgaard and Rusk (1976, 201).
4. The lone vote recorded for the Defense Committee recommendation on spending levels for new procurement is not included in the present analysis. In addition, a few votes are not analyzed because of a technical error. For example, someone might request to retake a vote because they accidentally voted incorrectly.
5. From the 1989–90 session onwards, machine-readable data files of recorded roll call votes in the Odelsting and the full Storting will be transferred to and stored in the archives of the Norwegian Social Sciences Data Services (NSD), which is located at the University of Bergen. For parliamentary sessions from 1969 through 1988 the recorded roll call votes were not dumped out onto tape or disk.
6. For a discussion of the multidimensional scaling technique, see Kruskal & Wish (1978), Rabinowitz (1975), and Schiffman et al. (1981).
7. With the small number of stimuli (i.e. parties) three or more dimensions cannot be determined, and a two-dimensional solution is unstable. For rough rules of thumb in deciding the number of stable dimensions, see Kruskal & Wish (1978).
8. 'Vi er alene om å ønske et reelt systemskifte fra politiker- og byråkratstyring og over til kundestyring.' (*Ukens Nytt*, 18 October 1988, p. 2.)
9. FA Finnmark ('The People's Action for Finnmark') is a protest party led by a former Social Democratic Storting member from Finnmark.
10. This happens to the Socialist Left Party as well – i.e. their proposals have so little backing that they are not part of the data set. Thus, they appear solidly aligned with Labour. However, unlike the Progressive Party, the Socialist Left does not have an anti-establishment bias.

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