

DETERMINING THE PATTERN OF PARTY EVALUATIONS:
PROXIMITY AND DIRECTIONAL MODELS OF IDEOLOGY

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Determining the pattern of party evaluations: proximity and directional models of ideology

The local elections in the Netherlands of March 7, 2006, resulted in nationwide losses for the coalition parties CDA, VVD and D66. Ben Verwaaijen, the Dutch CEO of British Telecom and a member of the VVD, is drafting the VVD election program for the 2007 parliamentary election, and was interviewed on Dutch television about the political direction his party should take. Verwaaijen answered: "The fact is that choices have to be made. This requires clarity – clarity and lucidity." On the question whether Tony Blair should be an example for Dutch political leaders, Verwaaijen was more hesitant: he argued that Blair is in a much better position to actually change government policies than the Dutch prime minister because of the differences between the Dutch and the British political system.¹

These comments highlight an important dilemma for party strategists. Should a party take moderate, centrist standpoints on major political issues, or should it take positions that are as clear and unambiguous as possible? Verwaaijen opts for the latter. From an electoral viewpoint, such a strategy will only work when voters understand and reward those parties which choose sides. Do voters reward parties that take a clear side on the issues, or are voters inclined to prefer the party that is merely close to their own position? And how does the political-institutional environment affect the chances of success of this strategy? These questions are at the core of the debate on proximity and directional theories of issue voting.

The dilemma of party strategy has wider implications. For more than 50 years, views on how voters make up their mind when deciding which party or candidate to vote for have been moulded by the proximity approach to decision-making. The proximity approach is based on a few fundamental assumptions (Black 1958). Most importantly, the preference order of the voters for the competing parties is determined by the closeness or proximity of these parties to the voter's ideal point on the most important dimension(s) of politics. In other words, the preference curves of voters for the parties are assumed to be single-peaked. Suppose further that in a polity, parties and voters can be positioned on a single dominant, ideological dimension. Support for a political party would then be highest among those voters who occupy the same position on the ideological dimension as that party – for voters on either side of the party position, support drops off the further away voters locate themselves.²

Since the end of the 1980s, the proximity approach has been challenged by an alternative theory of party support – directional theory (Rabinowitz and Macdonald 1989; Macdonald, Listhaug and Rabinowitz 1991). Directional theory assumes that the ideological (or issue) dimension is split between two directions, starting from a neutral midpoint. As in proximity theory, parties and voters occupy positions along this dimension. But in contrast to proximity theory, party support is not determined by the closeness of voter and party, but by direction and intensity instead. Direction refers to whether parties and voters are on one or the other side of the center position. Intensity refers to the exact position of party and voter, either on the left-hand or on the right-hand side of this center. The basic question for voters in directional theory is not: "which party is closest to my own ideological position?", but rather: "which party most forcefully voices my ideological leaning while remaining trustworthy?".

The introduction of an alternative, directional explanation of issue- and ideology-based party support has given rise to a lively debate on models and methods. I am not addressing, or even summarizing that debate here: key publications include (apart from those already mentioned): Westholm (1997); Macdonald, Rabinowitz and Listhaug (1998); Westholm (2001); Macdonald, Rabinowitz and Listhaug (2001); the debate has been placed into a wider theoretical perspective by Merrill and Grofman (1999). Instead, this paper addresses the tenability of the single most basic assumption underlying the proximity model. This is the assumption that support for a party peaks among those voters who occupy

ideological positions near the position of the party – and drops off along both sides of the party position. Listhaug, Macdonald and Rabinowitz (1994) provided an analysis of this assumption for six northern European democracies, and found evidence in favor of the directional model (with some noteworthy exceptions). I follow their analytical strategy, but I expand the analysis to 25 democracies on five continents, using the advance release of Module 2 of the Comparative Study of Electoral Systems.

Obviously, expanding earlier work to completely new political settings presupposes that the tools applied in North America and Western Europe can also be used elsewhere in the democratic world. The tenability of this assumption still has to be shown. Therefore, another issue addressed in this paper is to what extent the relationship between ideology and party evaluations can be generalized to other continents.

The paper proceeds as follows. First, the two competing models of party support are presented, and some testable hypotheses are developed. Second, the data and research strategy are introduced. Thirdly, the results from the empirical analysis are presented – initially for a single election in some detail, and thereafter for all other elections investigated. The paper concludes with a summary of findings and some implications.

Models of party support

Support for political parties depends on many factors. Personal characteristics of the voter, including demographic characteristics, help explain why he or she likes one party better than another. Party characteristics, including its size, age and leadership, contribute another part of the puzzle. From the viewpoint of political science, however, the most interesting variables explaining party support are those which refer to the political convictions of the voters and the parties: positions on political issues, government policies, and more generally ideological positions.

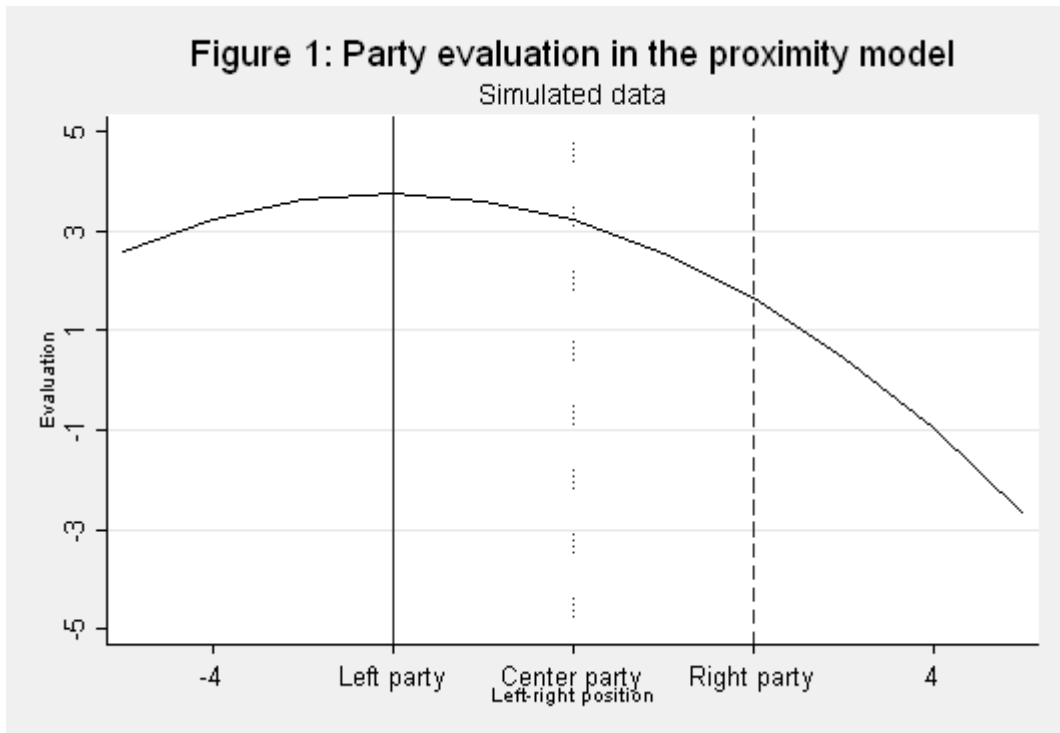
Ideology, according to Downs' (1957, 96) definition, is a verbal image of the good society and of the chief means for constructing such a society. Uncertainties in the world of politics make it difficult for voters to rationally compare the positions of political parties on specific issues. Ideologies can serve as decision-making shortcuts for these voters: both parties and voters can use the language of ideology to communicate their political positions to each other without getting trapped in the details. The internationally most widely used shortcut in this sense is the left-right position. In many democracies, both voters and parties use the labels "left" and "right" (and varieties such as "far left" or "extreme right") to denote their basic political outlook. In spatial terminology, both the parties and the voters occupy relatively stable positions on the left-right continuum.

Taking these party and voter locations on the ideological continuum as given, according to the proximity model of party support, affect of a voter i for a party j simply is a (negative) function of the distance between the voter's position (L_i) and that of the party (L_j) (e.g. Listhaug, Macdonald and Rabinowitz 1994, 114):

$$(1) A_{ij} = -(L_i - L_j)^2$$

In this formula, distance is expressed as the square of Euclidean distance. It should be noted that distance thus defined varies monotonically with the Euclidean metric or with city-block metric; therefore, affect measures based on these latter metrics can be used as well. The fundamental prediction of the proximity model is that voters like best the party that is ideologically closest to their own ideological position, and that their support for parties drops off the further the parties are removed from the voter's position. For a single voter whose ideological position is on the left (-2), and three parties located at the right, center and left respectively, the proximity model is graphically illustrated in Figure 1. The single-peaked

evaluation curve of the voter is at its maximum at position -2 , where both the voter and the left party are located. At both sides of this maximum, evaluation drops off.



The directional model developed by Rabinowitz and Macdonald (1989) is based on a similar spatial representation of party and voter locations as the proximity model. An important difference however is that the directional ideological continuum has a neutral midpoint, and two distinct directions on either side of this midpoint. For example, the midpoint of the left-right continuum is labelled as the neutral point. When we move in the left direction of this midpoint, ideological positions are left with an increasing intensity. When we move in the right direction, ideological positions are increasingly right.

The key assumption of the directional model is that voters are more attracted to parties that intensively voice their own ideological position (left or right) than to parties that are closer to the neutral point. That is, up to a certain limit: when a party's position is really extreme on the ideological continuum, it will lose support. For all "normal" parties, however, voters' affect will vary with the intensity with which both the voter and the party choose their sides. This assumption is modelled as follows:

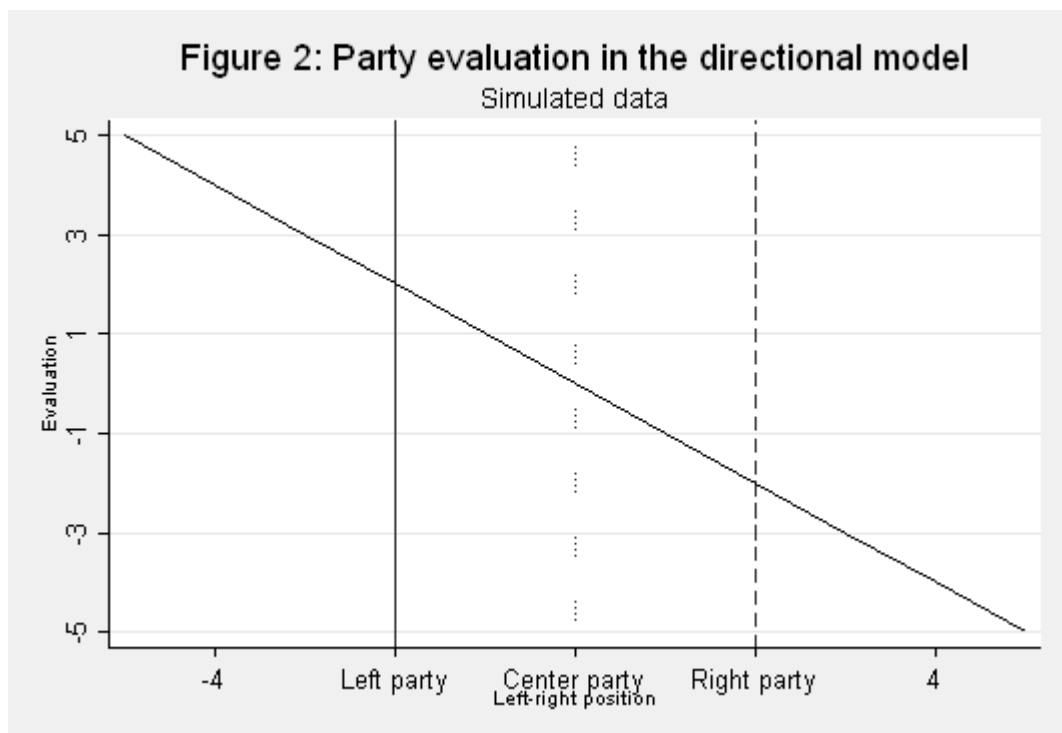
$$(2) A_{ij} = L_i * L_j - P_{ij}$$

Voter i 's affect for party j is directly related to the product of the position of the voter and that of the party on the ideological continuum. A penalty P_{ij} for the party is subtracted when the party is too extreme. Normally, when parties do not take irresponsible stances, P_{ij} will be zero and the last term in the model can be ignored, so that the model simplifies to:

$$(2a) A_{ij} = L_i * L_j$$

When the voter and the party are on opposite sides of the neutral point, affect will be negative and become more negative when the party and/or the voter are more intense. Rather than single-peaked preference curves, the directional model assumes monotonically

increasing or decreasing preference curves. The more intense the party position (up to the limit of responsibility), the steeper the voter's preference curve. The more intense the voter's position, the steeper the voter's preference curve. In this model, parties positioned near or at the neutral midpoint of the ideological continuum will provide the weakest cues to voters, and will therefore produce relatively flat preference curves. For the same voter of the left and three parties as in Figure 1 above, evaluation according to the directional model is illustrated by Figure 2. Note that, in contrast with Figure 1, the voter's evaluation of the party does not drop off at the left of his own ideological position. Rather, it increases further, indicating that parties to the left of the voter's position would be evaluated even higher than the left party included in Figure 2. When a party would be too extreme, however, it would become less attractive. We assume that this situation does not occur on the part of the left-right continuum shown here.



From individual evaluations to support curves

After this brief introduction into the models underlying the proximity and the directional theories, we now turn to the implications for the electorate as a whole. Which predictions can be derived for the pattern of party evaluations under the proximity model and under the directional model when not just one, but millions of voters are considered?

The step from individual evaluations to support curves for the electorate is relatively straightforward. It is nevertheless presented here in some detail because the concept and derivation of support curves (and their meaning for the evaluation of the proximity and directional models) has been the subject of some debate (see in particular the contributions by Westholm and those by Macdonald, Rabinowitz and Listhaug mentioned in the list of references.³

Under either the proximity or the directional model, individual evaluation curves such as those in Figures 1 and 2 can be constructed for every voter. Of course, within a given party system the ideological positions of the voters vary. Thus, depending on the voter's ideological position, the maximum of the curve under the proximity model, or the slope and sign of the

curve under the directional model, will be different. Distinct individual evaluation curves can be drawn for voters at each position on the ideological continuum.

Moreover, different voters on one and the same position on the ideological continuum may have different interpretations of the evaluation scale. Some voters tend to evaluate all parties rather highly; others are more reserved in this respect. Some voters use the full range of evaluation scores; others tend to use just the middle range. But such individual differences are typically *non-systematic*: for every voter whose evaluations follow a deviant pattern in one direction, another voter can be found whose deviations go in the opposite way. With a sufficiently large number of voters on each ideological position in the sample, these non-systematic differences will cancel each other out. As a result, a single evaluation curve provides a valid summary of the individual evaluations of many voters with the same position on the ideological spectrum, and this evaluation curve can by the same logic be meaningfully compared with curves constructed for voters at other ideological positions.

Finally, we now change our viewpoint from the voters to that of the political parties. Every party also occupies a position on the ideological continuum (see Figures 1 and 2). This party position at some point cuts the evaluation curves of voters. If the party position is close to the voters' position, and the proximity model is valid, this cutting point will be relatively high on the voters' evaluation curve. If the party position is not close to the voters' position, under the proximity model the cutting point will be lower on the voters' evaluation curve. In contrast, the directional model predicts that the cutting points of party position and voters' evaluations are higher when the party takes a more intensive stance in the direction of the voter (as long as this stance is not perceived to be extreme).

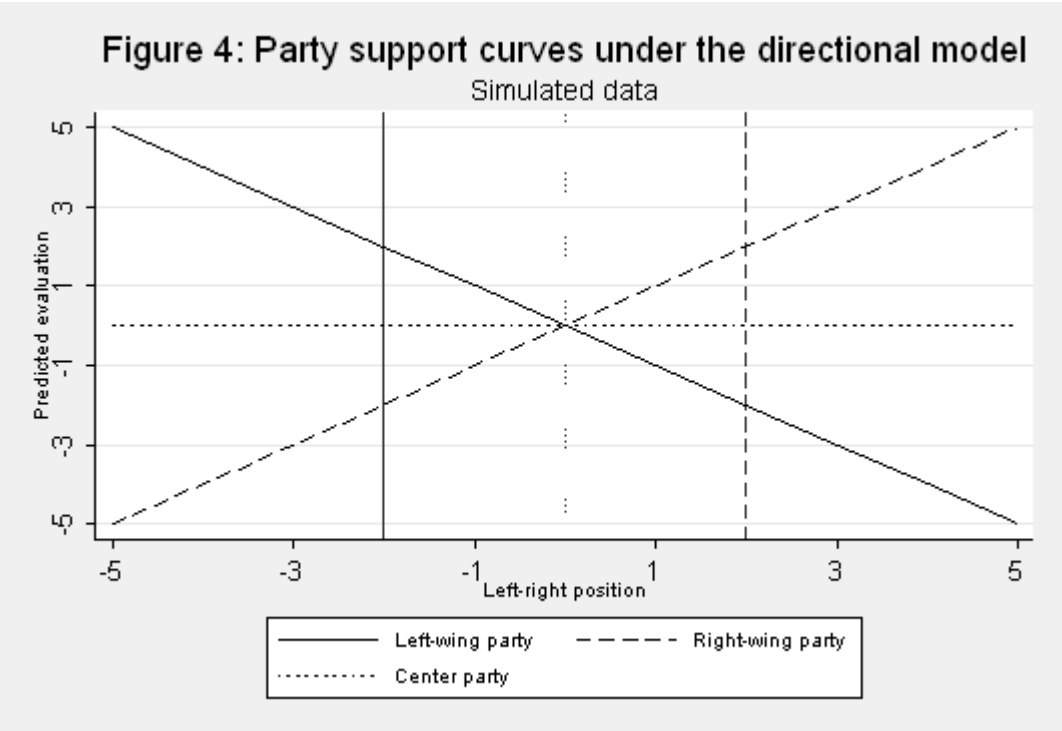
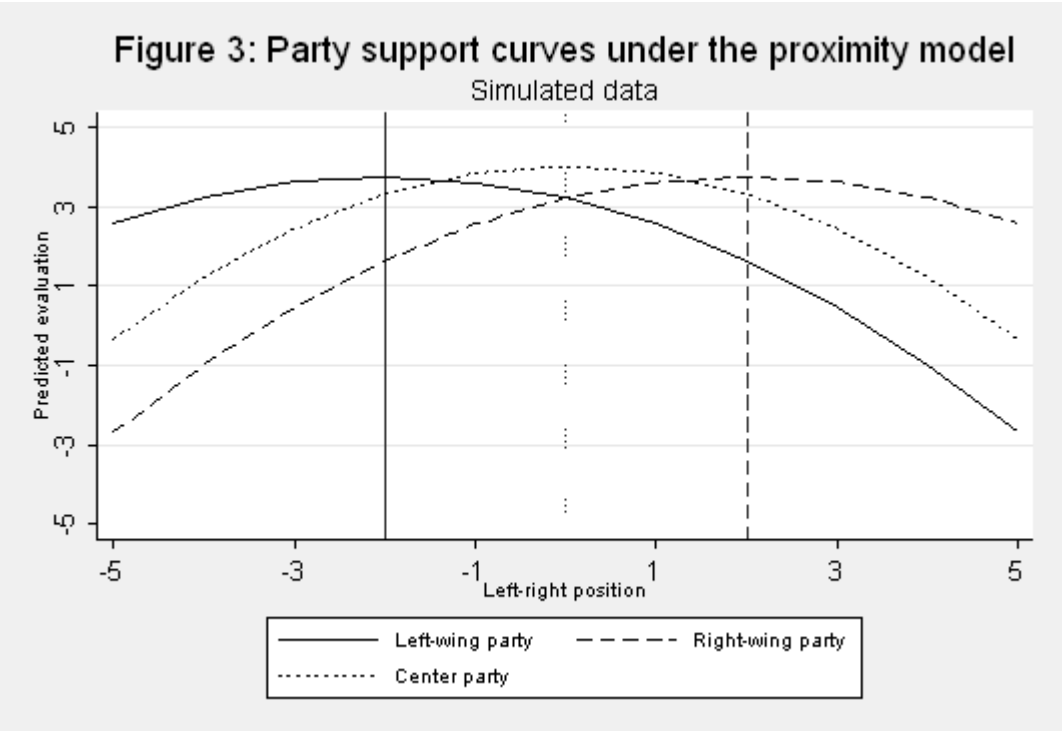
By connecting the evaluations of each party for voters at different positions on the ideological continuum, *party support curves* are obtained. The proximity and the directional models predict different patterns of support curves. These different patterns, for three hypothetical political parties (left, center, and right) are shown in Figures 3 and 4 (cf. Listhaug, Macdonald, and Rabinowitz 1994, 115). Note that despite the resemblance between Figures 1 and 3, and 2 and 4, the interpretation of the figures is now completely different. Whereas Figure 1 depicts the individual evaluation curve of a voter under the proximity model, Figure 3 shows the support curves of three political parties under the same proximity logic. Similar interpretations hold for Figures 2 and 4.

Figure 3 shows how, under the proximity model, the support (evaluation) of a political party is highest among those voters who occupy the same ideological position as the party, and drops off among the voters on both sides of that party position. Figure 4 shows how under the directional model party support is higher among voters who are on the same side of the ideological continuum as the party, and increases when the voters are ideologically more intense. The clearer the party position, the steeper the support curve. In contrast, under the directional model a party taking a center position on ideology does not provide a clear cue to voters, and therefore does not provoke much support at all, for voters at any position on the ideological spectrum. This is reflected in the flat support curve for the center party.⁴

Party support curves thus follow completely different patterns under the proximity and directional models. Of course, in the real world neither voters nor parties are programmed to follow the logic of one of these models – in reality, party systems may show a mixture of proximity and directional logic both for single parties and for the system as a whole. The precise message is to be found in the data.

Depending on which of these two models is more appropriate, our descriptions of voter decision-making in elections, and more generally of voters' attitudes towards political parties, will therefore be widely divergent as well. More practically, party strategies designed to win the support of groups of voters are also completely different depending on whether the proximity or the directional model holds in a political system. To find out which model fits

our empirical data best, party support curves will be used as the tools for our subsequent analysis of the pattern of party evaluations in the real world. Before presenting the analyses, I first outline the data and the method of analysis to be used, and then formulate specific hypotheses that will subsequently be put to a test.



Data

For an empirical assessment of party support curves, we need only two pieces of information about the voters. First, we need the voters' positions on the ideological continuum. Secondly, a measure of their evaluation of the political party is required. Both pieces of information are routinely included in many election studies all over the world, and have been standardized in the Comparative Study of Electoral System (CSES), which will be used in this paper.

In this paper we use the third advance release of Module 2 of the CSES (June, 2005), which includes data for 25 elections in as many different countries. Party evaluation was assessed by asking survey respondents to rate the party on a scale from 0 to 10, where 0 means that the respondent strongly dislikes the party, and 10 means that the respondent strongly likes the party. The ideological position of voters was measured by asking the respondents to place themselves on a scale running from 0 to 10, where 0 means "left" and 10 means "right". As discussed earlier, the left-right continuum is the most commonly used indicator for political ideological positions. But the left-right dimension is not equally common in the ideological parlance of all political systems – therefore, in our analyses we will explicitly assess the explanatory power of left-right positions.

This advance release of CSES Module 2 covers 16 elections in Europe (four of which in central and eastern Europe), one in the Middle East, two in Latin America, one in North America, three in Asia and two in Australia. We expect that the importance of left-right ideology will differ greatly across these 25 elections. Indeed, in some countries the terms "left" and "right" are used routinely in everyday political discourse, whereas in other countries these terms are perhaps only well-known to a small part of the population. In our analyses, we will pay explicit attention to the possibility that the left-right ideological continuum may not be important at all for the evaluation of political parties.⁵

The required information is available for all 25 elections in the data set. Extra information that will be useful for interpreting the results, is provided by the mean left-right ratings of the political parties by the respondents. These mean ratings of parties can be regarded as an approximation of the ideological position of the parties, and form the background against which our findings will be interpreted.

Method of analysis

The method of analysis to be used is parabolic regression analysis. This method provides a direct test of the proximity and directional models of party support.⁶ The logic is simple. In parabolic regression, party evaluation is regressed on both the voter's ideological position *and* on the squared ideological position. The equation thus includes both a linear and a quadratic term for ideology. When the ideology scale is centered around zero (meaning that "5" is subtracted from the original scale value measured in the survey), the linear and the squared term will hardly be correlated, so that collinearity problems are avoided.⁷ The parabolic regression equation to be estimated for a party is:

$$(3) \text{ Evaluation} = b_0 + b_1(\text{Ideology}) + b_2(\text{Ideology})^2 + \text{error}$$

This equation can estimate both (proximity model) curves that show a peak around the party's position, and (directional model) curves that increase or decrease monotonically across the ideological spectrum. To see how the equation is related to the proximity and directional models discussed earlier, consider the following.

The ideological positions of political parties are given – in our analyses of voter support for parties, these party positions are therefore constants. Now reconsider the proximity model given by (1):

$$(1 \text{ repeated}) A_{ij} = -(L_i - L_j)^2$$

This can be rewritten as:

$$(4) A_{ij} = -L_i^2 - L_j^2 + 2 L_i * L_j$$

In (4), L_j stands for the party position, which is fixed. Using C (for “constant”) instead of L_j , the equation can be written as:

$$(5) A_{ij} = -L_i^2 - C^2 + 2C * L_i$$

In (5), the only non-constant terms are $-L_i^2$ – a quadratic term with a negative sign – and $2C * L_i$ – a linear term with the sign of C .

According to the directional model (in its simplified form, i.e. without the penalty term), affect is the product of the voter position and the party position on ideology:

$$(2a \text{ repeated}) A_{ij} = L_i * L_j$$

Since, again, the party position is fixed, replacing it by the constant C yields:

$$(6) A_{ij} = C * L_i$$

Comparing (5) and (6), it appears that when the constant terms are disregarded, the crucial difference between the proximity and the directional model is the presence of the quadratic term $-L_i^2$ in the equation (5). When this term is negligible, the affect function simplifies to equation (6), and the directional model would hold. In contrast, when it is non-negligible, the affect function would display curvature – a necessary condition for the proximity model to hold.

Returning to the regression equation in equation (3), the coefficients b_1 and b_2 show how the voter’s ideological position is linked with the evaluation of the party. When b_2 is negligible, the directional model is supported. When b_2 is negative and non-negligible, the support curve will show curvature with a maximum. The maximum occurs where the first derivative to ideology of equation (3) equals zero. It is easily verified that this maximum will occur at the ideological position $-(b_1/2b_2)$. Under the proximity model, the maximum should coincide with the ideological position of the party, and it should certainly lie within the range of values of the ideology scale (i.e. in the range between -5 and $+5$). When a support curve reaches its maximum value outside the range of ideology scale values, this means that it monotonically increases (or decreases) across the full range of ideology, which would support the directional model. Finally, when b_2 is positive, the support curve has no maximum.

Alternative predictions

In the foregoing, a number of different predictions have been made which distinguish between patterns of support curves under the proximity model and under the directional model. The first of these is:

- (1) Under the proximity model, the quadratic term in the estimated support curve is non-negligible and negative. Under the directional model, the quadratic term is negligible and/or positive.

Secondly,

- (2) Under the proximity model, a peak in the support curve is located on the ideological scale at the ideological position of the party. Under the directional model, no peaks exist or – if they exist – are located outside the range of the scale.

For the question whether the analyses make any sense at all in the specific context of an election, we assess the importance of the ideological left-right scale. We will look at the explained variance by the parabolic regression. When the explained variance (R^2) is very low, obviously party support is obviously dependent on other, uncharted factors, and we should not attach great value to the impact of ideology. Thus,

- (3) For both the proximity and the directional model to hold, ideology as measured by the left-right scale must contribute to the explanation of party support.

Finally, although the party positions on the left-right scale are not strictly needed in the regression analyses, it is instructive to include these positions in the results. The party positions may for example be compared with the slope, and with the maximum values of the estimated support curves. Our final analysis in this paper addresses this point.

An example: the Australian 2004 election

The full taste of our analyses can best be grasped by providing an example in some detail. We focus here on the Australian Lower House election of October 9, 2004. This election returned the right-wing governing coalition of Liberals and National party into power, after a close race with the left-wing Labor party. Prime minister John Howard's Liberal party (40.9% of the vote) won exactly half of the seats in parliament (75 seats), and its coalition partner, the agrarian National party (5.9%) won 12 seats. Labor (37.7%) won 60 seats, and the remaining three seats were allocated to independents. The left-liberal Democrats (1.2%) and the Greens (7.2%) did not win any seats, and neither did Pauline Hanson's One Nation (1.1%).

In the Australian National Election Study, evaluation scores for these six parties have been collected, together with the respondent's position on the left-right scale. In addition, the left-right ratings of the six parties mentioned are available, which gives us the mean position of these parties in the eyes of the voters.

We ran six parabolic regressions according to the specifications explained above, one for each party. The key results are summarized in Table 1.

The Australian parties depicted in Table 1 have been ordered from left to right – from Greens to Liberals. Three parties (Greens, Labor, and Democrats) are regarded as left-wing, and three parties are seen as right-wing (One Nation, National, Liberal). In the case of Australia, the parabolic regression coefficients for all parties are fully in accordance with directional support curves. The linear coefficients for the three left-wing parties are negative (implying decreasing curves over the ideological spectrum), and those for the three right-wing parties are positive (increasing curves). The quadratic coefficients could make any curvature in the support curves visible, as required by the proximity model. But for none of the six parties is there curvature of any significance. None of the party support curves peaks within the range of the ideological spectrum (–5 - +5).

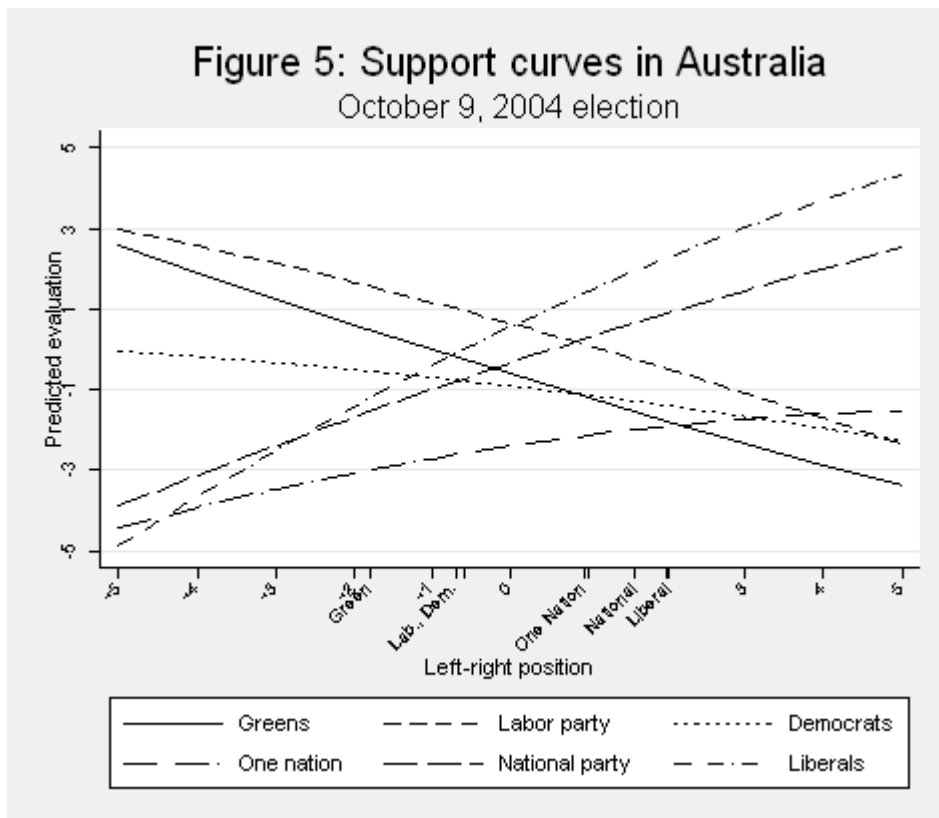
In the Australian case, the linear coefficients follow the pattern predicted by directional theory. The slope of the evaluation curves is steepest for the most outspoken parties, and flattest for the parties closest to the center position on ideology. The two parties closest to the center position do not provide clear ideological cues to the voters, which is reflected in the relatively low R^2 's for these parties (Democrats and One Nation). (An alternative explanation that cannot be ruled out in this case is that left-right ideology is less relevant for the evaluation of these parties.) The conclusion therefore must be that support for political parties in Australia follows the directional logic: voters like parties better when they are more intensively on their side when it comes to ideology.

Table 1: Pattern of party evaluations in the Australian 2004 election

Party	Ideological position	Linear coefficient	Quadratic coefficient	Maximum	R ²	N
Greens	-1.79	-0.60	0.01	no maximum	0.17	1,388
Labor party	-0.69	-0.54	-0.01	off scale	0.17	1,413
Democrats	-0.59	-0.22	-0.01	off scale	0.04	1,388
One Nation	0.94	0.29	-0.02	off scale	0.05	1,392
National party	1.59	0.64	-0.01	off scale	0.22	1,386
Liberal party	2.03	0.92	-0.03	off scale	0.33	1,422

The results for the Australian 2004 election are graphically displayed in Figure 5, which depicts the estimated support curves for the six parties, and their ideological position. Having discussed the results in Table 1, the curves in Figure 5 are not surprising. They completely conform to the curves expected under the directional model (cf. Figure 4). The curves decrease as they increase monotonically, without peaks, and their steepness depends on the ideological position of the party.

Compared with the information in Table 1, the curves in Figure 5 show one extra piece of information. They also incorporate the different *intercepts* of the estimated support curves (b_0 in equation (3)), which were omitted from Table 1. It can be seen, for example, that except for voters of the far left the Liberal party gets generally higher evaluations than the National party; and that One Nation and the Democrats receive low evaluations practically across the board.



The Australian election of 2004 thus shows relationships between party support and the ideological positions of voters which conform to the directional model. Moreover, left-right ideology apparently is important for the evaluation of most parties, as can be seen from the percentage of explained variance. But is Australia just a special case, or can we describe

party support in all our cases with the help of the directional model? To see this, we now turn to an overview of the results for 24 other elections.

Results

In this section the main results of our analyses of all elections included in the advance release of CSES Module 2 are presented. Details of the parabolic regression analyses can be found in the Appendix (Table A1).

Cases in which left-right ideology is unrelated to party evaluation

We first address the requirement common to both the proximity and directional models of ideology and party support, namely that ideology must contribute to the explanation of party support. When that is not the case, it does not make much sense to analyze the pattern of party support based on voters' ideological positions. In such cases, perhaps other ideological dimensions than left-right are used as the shortcut Downs (1957) referred to.

When does left-right ideology not provide a significant contribution to the explanation of party support? Obviously, the answer is to some extent subjective, but at least two indications can be found in Table A.1. The first of these is the absolute size of the linear and quadratic regression coefficients. In the limiting case when these are both zero, the estimated support curve is a horizontal line. When they are both close to zero, left-right ideology does not make a significant difference for the evaluation of the party. The second (and related) indicator is the explained variance of party evaluation in the parabolic regression.

We are especially interested in the regression coefficients and explained variance for parties that are positioned at the extremes of the ideological spectrum, since evaluation of these parties should be related to voters' ideology in both the proximity and the directional model (in the directional model, it is assumed that parties in the center do not provide clear ideological cues to the voters, and therefore their evaluation will be weaker related with the ideological position of the voters).

An inspection of Table A.1 reveals that in four cases none of the (linear) slope coefficients for the parties exceeds 0.20, all quadratic coefficients are very small, and R^2 is invariably lower than 0.05. These cases, in which left-right ideology apparently is unimportant for the evaluation of political parties, are *Brazil (2002)*, *Mexico (2003)*, *Hong Kong (2004)* and *Taiwan (2001)*. In the case of Brazil, for example, the six major political parties are positioned in a narrow range of width 2.45 around the center position on the left-right scale of width 10. Whereas the ideological range used by the parties is greater in the cases of Mexico and Hong Kong, the regression coefficients in these cases are very small as well, suggesting almost horizontal straight lines. Finally, by way of illustration the support curves estimated for the case of Taiwan are depicted in Figure 6.

Like Brazil, the case of Taiwan shows a party system that clusters on a narrow segment of the left-right dimension – with a width of 1.68 even narrower than in Brazil. The support curves for the Taiwan parties can be compared with those depicted in Figure 5 for the Australian case. The differences between Figures 5 and 6 are evident: whereas in Australia the support curves together practically cover the full range of the evaluation scale, in Taiwan most lines (with the exception of the “leftist” Taiwan Solidarity Union and the “rightist” Kwo Min Tang) are almost horizontal, and the support curves cover only the -2 $-+1$ range on the evaluation scale.

Figure 6: Support curves in Taiwan
December 1, 2001 election

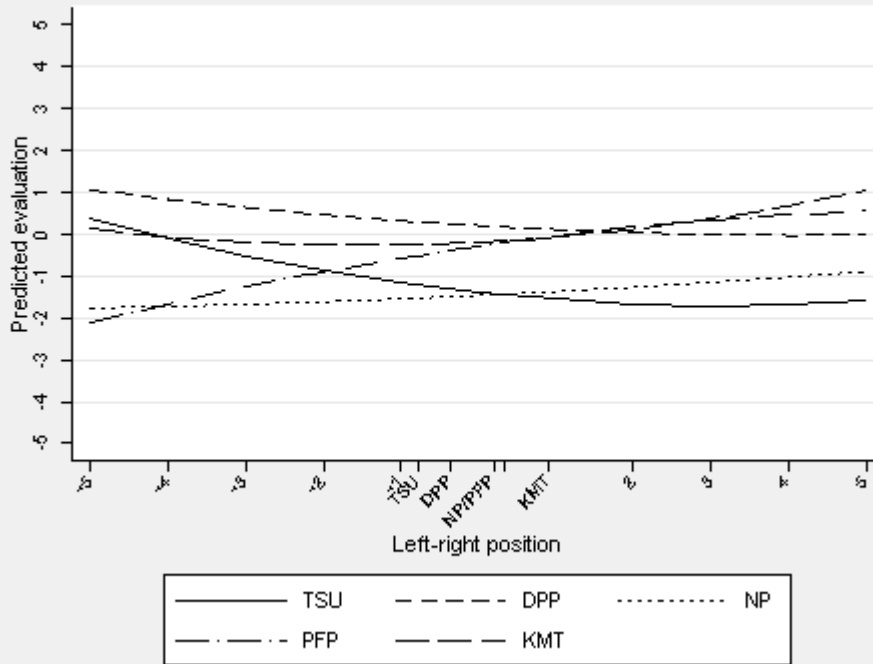
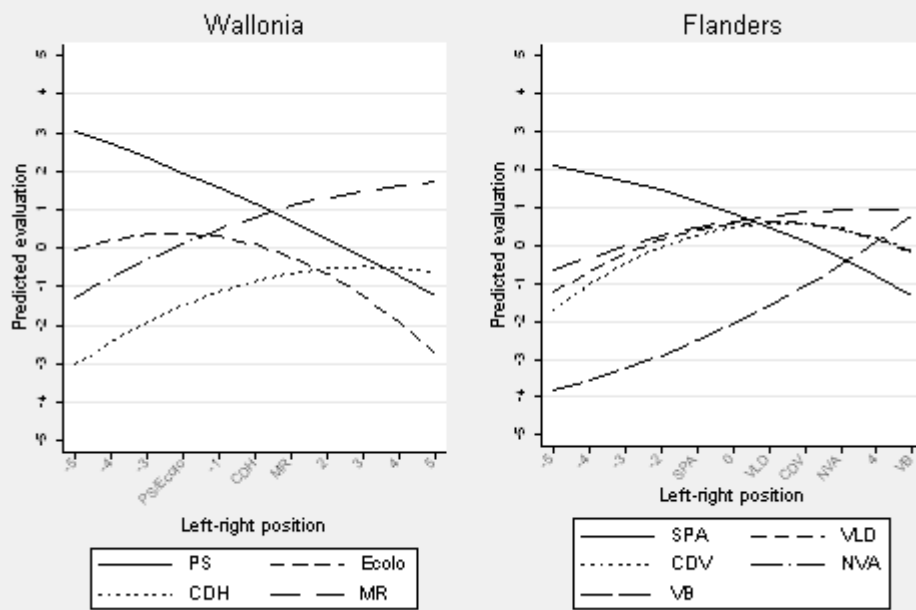


Figure 7: Support curves in Belgium, 2003



In our discussion of substantive results for ideology and party support, we will disregard these four cases. We repeat that there is a subjective element in this decision. For two other cases – Belgium (2003) and Ireland (2002) – the explained variance in party evaluation is also very low, but in these cases some party support curves are clearly sloped.

Therefore these cases have been included in the analyses. As an example, consider the two panels of Figure 7, which depict the support curves for the Flemish and Walloon parties in Belgium. Although the R^2 's of the regressions are all rather low, the curves show slopes and for some parties curvature as well. The Walloon environmentalist party Ecolo, and the Flemish VLD and CD&V all show a peak in support near their own ideological position, suggesting that the proximity model holds for these parties. In contrast, the Walloon socialist party PS and the Flemish socialists SP.A show clear directional curves. Finally, the extreme right Vlaams Blok shows a very low evaluation across the spectrum, which steeply increases for voters at the right end.

Curvature and peaks

For 134 regressions of party evaluation, we now consider the degree of curvature (indicated by the quadratic terms) and the location of peaks in the curves, provided that there is a maximum on the ideological scale. As we have seen in the case of Belgium, directional- and proximity-type support curves can co-exist in a single party system (disregarding now the low level of explained variance of evaluation in Belgium). For the Walloon party Ecolo, and for the Flemish VLD and CD&V the maximum of the support curves is close to the ideological position of the party, as predicted by the proximity model (for the NV-A the curvature is very low). Which patterns can be detected in the other cases in the analysis?

It appears that coexistence of directional- and proximity-type support curves occurs in quite a number of cases. The Bulgarian party system, for example, consists of two parties located on the left (the small BSP) and the right (UDF, with 18 per cent of the vote) of the ideological spectrum whose support is strongly and linearly dependent on the voters' left-right position. But it also contains a party, the National Movement Simeon II (43 per cent of the vote), which is the clearest example available of a quadratic support function peaking at the party location. Typically, the NM-Simeon II is a rather centrist party on the left-right scale.

In the cases of the Czech Republic election of 2002 and the Danish election of 2001, support curves of some parties do have a maximum, but it is somewhat removed from the party's left-right position. The same applies to Finland (2003). In contrast, the French 2002 election only shows some curvature for the small Mouvement des Citoyens/Pôle Républicain (MDC/PR) of Jean-Pierre Chevènement.

After inspection of all cases in Table A.1, it appears that in five out of 21 remaining cases *none* of the parties shows curvature with a peak on the left-right ideological scale. Political parties in these systems are evaluated completely according to the directional logic: the more outspoken the party is on ideology, the better it is evaluated by the voters who are on the same side. These cases are: Germany (2002), Iceland (2003), Spain (2004), Sweden (2002) and Australia (2004). As already mentioned, France (2002) might also be counted in this group if the small curvature for one small party is ignored.

In 15 or (including France) 16 cases – a clear majority in this CSES release – party systems show a mixture of proximity- and directional-types of support curves. But the proximity-type curves typically do not peak at the party's location on the left-right scale. Take for example the case of Finland (2003), where the three maximums of support curves are all dislocated at more than one unit from the party position. Moreover, simply counting the parties in these 16 cases, directional-type support curves clearly outnumber the curves with a maximum on the scale, by 72 to 34 (and including those cases in which the peak is located far from the party position, or in which the curvature is very low). However, the conclusion must be that there is not just one correct model of party support. Party systems shows mixtures, and straight lines are not always that straight (and neither are curved lines always that curved).

Slope, curvature, and party position

In our analyses so far, we have established that the shape of party support curves should be regarded as variable. The shape of support curves varies within and across party systems. An obvious implication seems to be that the debate on proximity and directional models of ideology, with which this paper started, is shifted. From the original question – which model fits the data better? – we have now arrived at the question: under which circumstances is party support better described by the proximity model, and under which circumstances is the directional model superior?

The latter question is not completely new. One set of “circumstances” that are of some importance for the structure of individual party evaluations refers to the political sophistication of voters. It is assumed that the proximity model requires a more complicated reasoning than the directional model, and that therefore less sophisticated voters are more likely to resort to directional thinking. The evidence for this assumption is however somewhat mixed (Macdonald, Rabinowitz and Listhaug 1995; Maddens and Hajnal 2001).

Here we focus on a quite different aspect of elections that is likely to affect the way in which political parties are evaluated, namely the position of the political parties on the ideological left-right scale. The party position on that scale conveys information about how extreme, moderate, or centrist a party is in the eyes of the electorate. The party position thus lies at the basis of measures of *party polarization*.

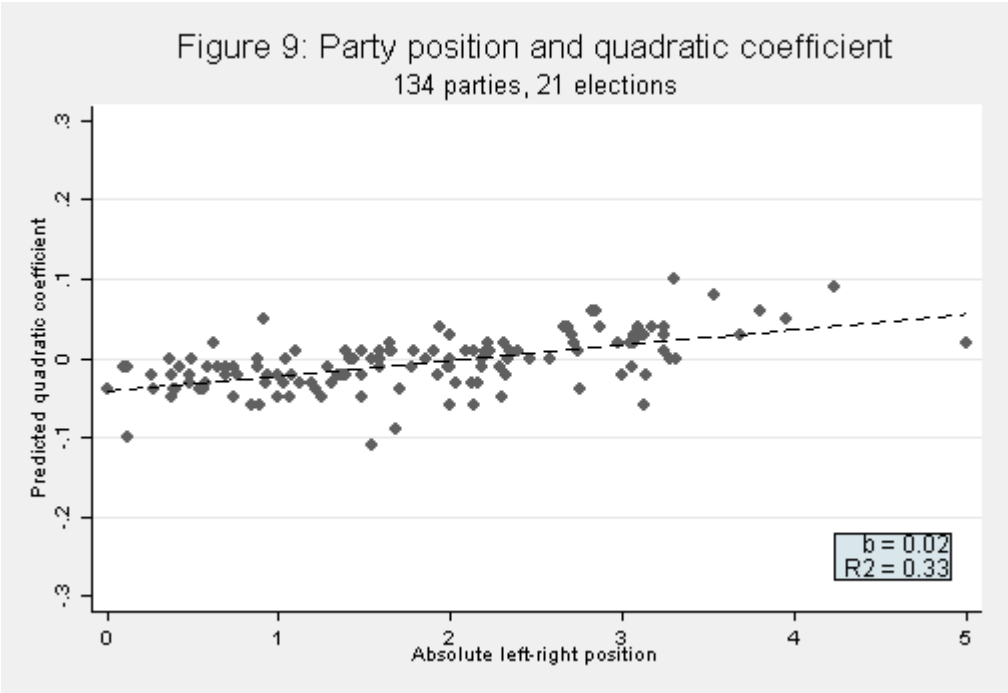
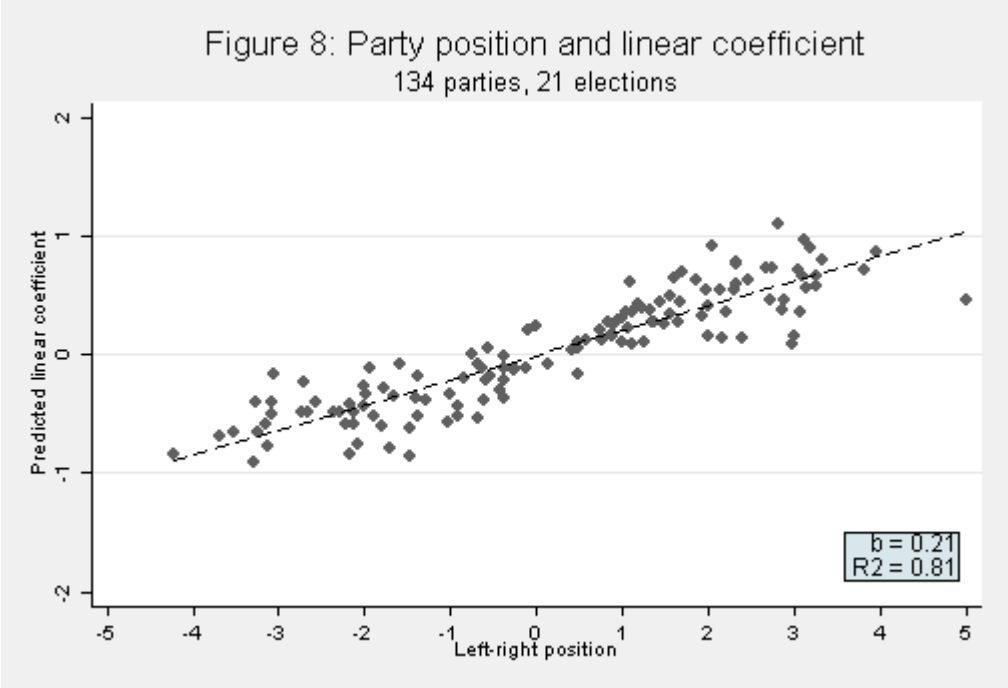
According to directional theory, a moderately high degree of party polarization would have favorable consequences for parties of the left or right, and unfavorable consequences for parties in the center. A low degree of party polarization would instead help parties in the center. When the major parties are all located near the center of the main policy dimension, the left and right parties among these do not enjoy the electoral advantage (according to directional theory) of being outspoken. According to proximity theory, parties of the center are always at an advantage provided that the distribution of voters also has its mass in the center. In both theories, differentiation of issue profiles of the parties enhances issue-based voting behavior (cf. van Wijnen 2001 for the Dutch case).

That polarization impacts on party choice (and not just party evaluation) is strongly suggested by an earlier analysis of three elections in the Netherlands (1971, 1986, 1994) (Aarts, Rabinowitz & Macdonald 1999). In that analysis, we suggested that when the major parties were relatively strongly polarized on the issues, parties in the center of the policy dimensions got *fewer* votes than when the major parties were less polarized. This suggestion would support directional theory.

In the final analysis of this paper, a first cut is made into the relationship between party polarization and the shape of support curves. Rather than using a single measure of polarization for a given election, we use the mean perception of the respondents of the party position on the ideology scale. The level of analysis is shifted from the individual respondents to the political party. The variables are: the party position on the left-right scale, the slope of the party’s support curve, and its quadratic coefficient.

Figure 8 shows, for 134 parties (excluding the four elections discussed above), a regression of the value of the linear coefficient of the party support curve on the mean left-right position attributed to that party by the respondents. The relationship is quite convincing. It not so surprising that negative coefficients are almost exclusively found where the party position is on the left side of the neutral point and positive coefficients are associated with right-wing positions. The point is that the linear coefficients (indicating the steepness of the support curve) are in the absolute sense larger when a party is further removed from the center. And conversely, center party tend to have flatter curves. Figure 8 thus suggests a clear (linear) relationship between party position and the strength of feelings that the party evokes among the voters. In the terminology of the directional model: the clearer the cues that parties

offer on ideology – either to the left or to the right –, the more important ideology becomes for the evaluation of the party.



In Figure 9, the relationship between party position and the quadratic coefficient of the support curve of the party is depicted. In this analysis, we use the absolute value of the mean left-right position of the party, since we expect that curvature only depends on the distance from the (neutral) center, and not on direction.

Recall that a support curve can only reach a maximum value when the quadratic coefficient is negative (when it is positive, the curve has a minimum value instead). Inspecting Figure 9, it appears that negative quadratic coefficients tend to be found for parties that are relatively close to the (directionally) neutral point on the ideology scale: the closer the

party position is to the center, the more curvature its support curve tends to show. Thus, Figure 9 suggests that the proximity logic tends to be more valid for center parties than for parties with a distinct left- or right-wing profile. But it should also be recalled that many support curves with curvature do not peak within the range of the ideology scale (as this depends on both the linear and the quadratic coefficients, it cannot be concluded from Figure 9 alone).

As incomplete as this final analysis is, the suggestion is very clear: how parties are evaluated, is associated with the clarity of their ideological position. Further research will have to specify and explain this relationship.

Conclusion and discussion

The question formulated at the beginning of this paper was, to which extent the key assumption of the proximity model, namely that party support among voters peaks at the ideological position of the party and drops off to both sides, could be sustained. Alternatively, the question could be rephrased to assess the tenability of the directional model of party support, which requires linear support functions that are steeper when parties are ideologically more extreme. This question follows from the debate on proximity and directional models of party support. Proximity and directional models were developed for connecting issue positions and ideological positions of both voters and political parties to each other. We focused on a single operational measure of ideology, namely the left-right scale. In this paper, we applied a simple parabolic regression model to a set of 25 elections from all over the world.

The analyses have shown that the left-right is almost irrelevant for party support in four out of 25 cases – these cases have therefore been disregarded. Of the remaining 21 cases, five cases conform to the expectations of the directional model: party support curves show practically no curvature, but decrease or increase monotonically across the ideological spectrum.

The 16 other cases contain at least one political party whose support curve is curved with a maximum somewhere on the ideological scale (usually somewhat removed from the party location). These 16 cases also contain political parties with directional-type support curves. Often, directional-type support curves are found for parties with ideological position on the left or right, whereas the proximity-type curve is associated with center positions.

It appears that there is not a single model of party support that accommodates all political parties in modern democracies. That is in itself not a surprising result – party systems differ, parties differ, and in the literature the so-called mixed model of party support is well known. But in a discipline in which the proximity model still is the dominant, if not exclusive model taught in textbooks – and in political discourse characterized by the same dominance of proximity logic – it should lead to further thinking. After all, at this stage we cannot even tell the Dutch VVD (see the first paragraph of this paper) what would be the wisest choice: a strategy of programmatic clarity and intense issue positions, or one of moderation, or some combination of both. If the suggestions of our final analysis, relating party positions to the shape of the support curves, are valid, the level of political polarization will be a major determinant of the shape of support curves. As one might have expected all along the way, strategic advice to a political party does not merely entail a choice between clarity and moderation, but also depends on the ideological distribution of the electorate and the positions taken by other parties.

References

Aarts, Kees, Stuart Elaine Macdonald, and George Rabinowitz (1999). Issues and Party Competition in the Netherlands. *Comparative Political Studies* 32: 63-99

- Black, Duncan (1958, 1987 ed.). *The theory of committees and elections*. Dordrecht: Kluwer Academic Publishers
- Downs, Anthony (1957). *An economic theory of democracy*. New York: HarperCollins
- Listhaug, Ola, Stuart Elaine Macdonald, and George Rabinowitz (1994). Ideology and party support in comparative perspective. *European Journal of Political Research* 25: 111-149
- Macdonald, Stuart Elaine, Ola Listhaug, and George Rabinowitz (1991). Issues and party support in multiparty systems. *American Political Science Review* 85: 1107-1131
- Macdonald, Stuart Elaine, George Rabinowitz, and Ola Listhaug (1995). Political sophistication and models of issue voting. *British Journal of Political Science* 25: 453-483
- Macdonald, Stuart Elaine, George Rabinowitz, and Ola Listhaug (1998). On attempting to rehabilitate the proximity model: Sometimes the patient just can't be helped. *Journal of Politics* 60: 653-690
- Macdonald, Stuart Elaine, George Rabinowitz, and Ola Listhaug (2001). Sophistry versus science: On further efforts to rehabilitate the proximity model. *Journal of Politics* 63: 482-500
- Maddens, Bart, and Istvan Hajnal (2001). Alternative models of issue voting: The case of the 1991 and 1995 elections in Belgium. *European Journal of Political Research* 39: 319-346
- Merrill III, Samuel, and Bernard Grofman (1999). *A unified theory of voting: Directional and proximity spatial models*. Cambridge: Cambridge University Press
- Mueller, Dennis C. (1989). *Public Choice II: A revised edition of Public Choice*. Cambridge: Cambridge University Press
- Rabinowitz, George, and Stuart Elaine Macdonald (1989). A directional theory of issue voting. *American Political Science Review* 83: 93-121
- van Wijnen, Pieter (2001). *Policy Voting in Advanced Industrial Democracies: The Case of the Netherlands 1971-1998* PhD dissertation, University of Twente
- Westholm, Anders (1997). The illusory defeat of the proximity model of electoral choice. *American Political Science Review* 91: 865-885
- Westholm, Anders (2001). On the return of Epicycles: Some crossroads in spatial modeling revisited. *Journal of Politics* 63: 436-481

Notes

¹ Buitenhof (VPRO/NPS, Nederland 3), 12 March 2006 (see <http://www.vpro.nl/programma/buitenhof/>).

² The proximity approach has led to the formulation of the median voter theorem (Black 1958; Downs 1957), which states that in the case of two-party competition on a single dimension, the voter on the median position decides which party will win the election. A vast literature exists which looks at the generalizability of this rather specific result (for an overview, see for example Mueller 1991).

³ In a nutshell: Westholm has criticized the use of party support curves because these (a) imply interpersonal comparisons of utility and (b) are vulnerable to what he calls an "eccentricity effect" – i.e., voters at the ends of the ideological spectrum tend to have more extreme opinions than those in the middle regions. Macdonald, Rabinowitz and Listhaug reply that interpersonal comparisons of utility are necessary for testing many political science theories, and that an eccentricity effect is theoretically unjustified.

⁴ It is emphasized again that in this presentation of the directional model, the region of responsibility (the border across which parties are perceived to be irresponsible) is ignored.

⁵ Another possibility is that political parties are not the most important objects of ideological leanings. This may be the case in presidential systems such as the United States. We will leave this possibility open.

⁶ Our use of parabolic regression analysis leans heavily on the description of the methodology by Listhaug, Macdonald and Rabinowitz (1994).

⁷ Party evaluations have been centered around zero as well (even though there was no compelling reason to do so).

APPENDIX

Table A1: Patterns of party evaluations (parabolic regressions)

Country/year	Party	Ideological position	Linear coefficient	Quadratic coefficient	Maximum	R ²	N
EUROPE							
Belgium 2003*	PS ²	-2	-0.43	-0.01	off scale	0.14	859
	Ecolo ²	-2	-0.27	-0.06	-2.23	0.06	857
	CDH ²	0	0.24	-0.04	3.10	0.05	998
	MR ²	1	0.30	-0.02	off scale	0.08	827
	SP.A ¹	-1	-0.34	-0.02	off scale	0.08	1,085
	VLD ¹	1	0.11	-0.05	0.10	0.02	1,089
	CD&V ¹	2	0.15	-0.06	1.38	0.03	1,081
	NV-A ¹	3	0.16	-0.02	4.06	0.03	826
	Vlaams Blok ¹	5	0.46	0.02	no maximum	0.09	1,092
Bulgaria 2001	BSP	-3.30	-0.91	0.10	no maximum	0.38	1,222
	Euroleft	-1.59	-0.09	0.01	no maximum	0.01	1,039
	MRF	0.12	-0.08	-0.01	-4.70	0.00	1,170
	M Georgievden	0.76	0.12	-0.02	2.49	0.01	1,020
	VMRO	0.88	0.16	-0.01	off scale	0.01	1,001
	NM-Simeon II	1.54	0.34	-0.11	1.55	0.08	1,156
	UDF	3.80	0.71	0.06	no maximum	0.28	1,225

* Left-right party positions not based on survey data but on expert judgments of the CSES collaborator.

¹ Party evaluation was asked only in the Dutch questionnaire

² Party evaluation was asked only in the French questionnaire

Table A1 (continued)

Country/year	Party	Ideological position	Linear coefficient	Quadratic coefficient	Maximum	R ²	N
Czech Rep 2002	KSCM	-4.23	-0.85	0.09	no maximum	0.42	838
	CSSD	-2.30	-0.48	-0.05	-4.60	0.22	838
	KDU-CSL	0.74	0.21	-0.05	2.32	0.06	827
	US-DEU	1.92	0.32	-0.02	off scale	0.11	821
	ODS	3.24	0.66	0.03	no maximum	0.27	839
Denmark 2001	Red Green	-3.53	-0.65	0.08	no maximum	0.33	1,794
	Socialist P	-2.22	-0.59	0.02	no maximum	0.27	1,860
	Soc Dem	-0.62	-0.38	0.02	no maximum	0.18	1,929
	Rad Left	-0.39	-0.37	-0.04	-4.32	0.15	1,848
	Christian P	0.48	0.11	-0.02	3.11	0.01	1,833
	Conservative P	1.98	0.54	-0.01	off scale	0.25	1,881
	Left Lib	2.32	0.78	-0.02	off scale	0.34	1,928
	Danish People	3.13	0.56	0.03	no maximum	0.19	1,924
Finland 2003	Left All	-2.66	-0.49	0.04	no maximum	0.15	1,062
	Soc Dem	-0.27	-0.11	-0.04	-1.41	0.02	1,062
	Green	-0.26	-0.14	-0.02	-3.52	0.02	1,054
	Christian Dem	0.84	0.28	-0.06	2.52	0.06	1,041
	Swedish P P	1.10	0.35	0.01	no maximum	0.08	1,019
	Center	1.19	0.43	-0.03	off scale	0.11	1,065
	Nat Coalition	2.46	0.63	-0.00	off scale	0.25	1,062

Table A1 (continued)

Country/year	Party	Ideological position	Linear coefficient	Quadratic coefficient	Maximum	R ²	N
France 2002	LO	-2.70	-0.24	0.03	no maximum	0.07	936
	PCF	-2.58	-0.40	-0.00	off scale	0.18	936
	Greens	-1.41	-0.37	-0.00	off scale	0.12	946
	PS	-1.39	-0.52	-0.02	off scale	0.23	940
	MdC/PR	-0.38	-0.02	-0.02	-0.47	0.01	712
	Dem Lib	0.88	0.17	0.00	no maximum	0.04	805
	UDF	1.37	0.28	-0.02	off scale	0.10	880
	RPR	1.66	0.44	0.01	no maximum	0.18	919
	FN	2.85	0.38	0.06	no maximum	0.18	952
Germany 2002	PDS	-3.07	-0.40	0.03	no maximum	0.12	1,856
	B90/Greens	-1.99	-0.33	0.00	no maximum	0.06	1,878
	SPD	-1.65	-0.36	0.02	no maximum	0.10	1,884
	FDP	-0.10	0.21	-0.01	off scale	0.04	1,871
	CDU	1.08	0.61	-0.02	off scale	0.22	1,884
	CSU	1.59	0.65	-0.00	off scale	0.21	1,864
	Schill	2.39	0.14	0.01	no maximum	0.02	1,671
	Republikaner	2.97	0.08	0.02	no maximum	0.01	1,831
	Hungary 2002	MSZP	-3.13	-0.78	-0.06	off scale	0.36
SZDSZ		-2.13	-0.59	-0.06	-4.83	0.27	1,061
ÖMC		-0.84	-0.20	-0.06	-1.72	0.07	868
MDF		2.68	0.73	0.04	no maximum	0.41	1,055
MIÉP		2.87	0.46	0.04	no maximum	0.24	1,049
Fidesz-MPP		3.10	0.96	0.03	no maximum	0.51	1,077

Table A1 (continued)

Country/year	Party	Ideological position	Linear coefficient	Quadratic coefficient	Maximum	R ²	N
Iceland 2003	Left Green	-2.74	-0.48	0.01	no maximum	0.17	1,217
	Soc Alliance	-0.92	-0.52	-0.03	off scale	0.21	1,238
	Liberal Party	0.49	-0.17	0.00	no maximum	0.02	1,147
	Prog Party	1.03	0.36	-0.03	off scale	0.11	1,237
	Indep Party	3.31	0.79	0.00	no maximum	0.41	1,242
Ireland 2002	Sinn Fein	-1.94	-0.11	0.04	no maximum	0.01	1,630
	Labour	-1.39	-0.19	0.01	no maximum	0.03	1,687
	Green	-0.64	-0.12	-0.01	off scale	0.02	1,618
	Fine Gael	1.06	0.23	-0.05	2.39	0.03	1,746
	Prog Dem	1.31	0.38	-0.03	off scale	0.09	1,701
	Fianna Fail	1.44	0.45	-0.00	off scale	0.11	1,761
Norway 2001	Soc Left	-2.23	-0.59	0.01	no maximum	0.27	1,942
	Liberal	-0.56	0.06	-0.04	0.71	0.01	1,939
	Center	-0.54	-0.18	-0.04	-2.28	0.05	1,934
	Labor	-0.42	-0.31	-0.01	off scale	0.09	1,944
	Christian P P	0.89	0.25	-0.06	2.22	0.06	1,946
	Conservative	3.04	0.71	0.02	no maximum	0.44	1,944
	Progress	3.09	0.66	0.03	no maximum	0.25	1,943

³ Regional parties in Spain have been omitted from the analysis

Table A1 (continued)

Country/year	Party	Ideological position	Linear coefficient	Quadratic coefficient	Maximum	R ²	N
Poland 2001	SLD-UP	-3.68	-0.69	0.03	no maximum	0.36	1,335
	PSL	-0.69	-0.08	-0.02	-1.73	0.01	1,303
	Self-Defence	-0.37	-0.12	-0.00	off scale	0.01	1,312
	UW	1.12	0.09	-0.03	1.72	0.02	1,300
	PO	1.34	0.28	-0.02	off scale	0.08	1,267
	PIS	1.65	0.28	0.01	no maximum	0.08	1,247
	LPR	2.21	0.36	0.01	no maximum	0.11	1,149
	AWSP	3.07	0.35	0.02	no maximum	0.14	1,342
Portugal 2002	BE	-3.27	-0.40	0.00	no maximum	0.13	1,048
	CDU	-3.09	-0.50	0.04	no maximum	0.19	1,097
	PCTP/MRPP	-3.05	-0.16	-0.01	off scale	0.03	1,003
	PS	-0.38	-0.22	-0.05	-2.29	0.06	1,099
	PPD/PSD	2.31	0.76	0.02	no maximum	0.33	1,102
	CDS/PP	2.72	0.46	0.02	no maximum	0.16	1,102
Spain 2004 ³	IU	-3.14	-0.59	-0.02	off scale	0.26	1,038
	PSOE	-1.70	-0.79	-0.04	off scale	0.35	1,050
	PP	2.82	1.10	0.06	no maximum	0.47	1,049
Sweden 2002	Social Dem	-1.48	-0.62	-0.05	off scale	0.35	1,004
	Left Party	-1.48	-0.86	0.01	no maximum	0.53	992
	Center Party	0.74	0.21	-0.01	off scale	0.08	963
	People's Party	1.54	0.49	-0.00	off scale	0.28	992
	Christian Dem	2.13	0.55	0.01	no maximum	0.27	983
	Conservative	3.95	0.87	0.05	no maximum	0.54	996

Table A1 (continued)

Country/year	Party	Ideological position	Linear coefficient	Quadratic coefficient	Maximum	R ²	N
Switzerland 03	SP/PS	-2.18	-0.84	-0.01	off scale	0.38	1,232
	GPS/PES	-2.09	-0.75	0.01	no maximum	0.31	1,231
	CVP/PDC	0.48	0.05	-0.03	0.69	0.01	1,199
	FDP/PRD	1.22	0.39	-0.04	4.90	0.16	1,215
	SVP/UDC	3.17	0.89	0.04	no maximum	0.32	1,231
MIDDLE EAST							
Israel 2003	Merets	-3.24	-0.66	0.01	no maximum	0.36	1,104
	Labor	-2.12	-0.49	-0.03	off scale	0.26	1,117
	Shinui	-0.12	-0.12	-0.10	-0.58	0.11	1,081
	Shas	2.00	0.40	0.03	no maximum	0.18	1,115
	Likud	2.75	0.73	-0.04	off scale	0.45	1,120
	National Union	3.24	0.57	0.04	no maximum	0.30	1,035
LATIN AMERICA							
Brazil 2002	PT	-1.30	-0.16	0.04	no maximum	0.04	1,850
	PTB	-0.29	0.01	-0.01	0.62	0.00	1,590
	PFL	1.00	0.18	0.00	no maximum	0.04	1,707
	PMDB	1.08	0.17	0.01	no maximum	0.03	1,769
	PSDB	1.15	0.12	0.00	no maximum	0.02	1,718
	PDT	1.15	0.12	0.00	no maximum	0.02	1,718

Table A1 (continued)

Country/year	Party	Ideological position	Linear coefficient	Quadratic coefficient	Maximum	R ²	N
Mexico 2003	Convergencia	-2.49	0.02	-0.03	0.29	0.01	1,040
	PT	-2.42	-0.01	-0.02	-0.17	0.00	1,142
	PRD	-1.17	-0.05	0.00	no maximum	0.00	1,336
	PVEM	-0.81	0.05	-0.01	2.39	0.00	1,223
	PRI	0.59	0.13	-0.00	off scale	0.01	1,386
	PAN	1.33	0.19	-0.00	off scale	0.03	1,384
NORTH AMERICA							
USA 2004	Democratic	-0.91	-0.44	0.05	no maximum	0.12	910
	Reform	-0.76	0.00	-0.02	0.02	0.01	537
	Republican	1.68	0.70	-0.09	3.85	0.25	911
ASIA							
Hong Kong 04	Dem Alliance	-1.63	0.11	-0.03	2.12	0.01	342
	Lib Party	-0.30	-0.02	-0.00	-3.37	0.00	339
	Ass for Dem	0.54	0.05	-0.01	3.42	0.00	299
	Dem Party	1.93	-0.08	0.01	no maximum	0.00	362

Table A1 (continued)

Country/year	Party	Ideological position	Linear coefficient	Quadratic coefficient	Maximum	R ²	N
Korea 2004	MDD	-1.77	-0.29	-0.01	off scale	0.07	1,166
	UD	-1.28	-0.38	-0.01	off scale	0.11	1,215
	NA21	0.40	0.03	-0.04	0.46	0.02	958
	SMD	1.25	0.10	-0.05	1.02	0.04	1,204
	JMY	2.16	0.13	-0.03	2.05	0.04	1,168
	HD	2.33	0.59	-0.00	off scale	0.22	1,222
Taiwan 2001	TSU	-0.77	-0.20	0.03	no maximum	0.01	875
	DPP	-0.35	-0.10	.001	no maximum	0.01	963
	New Party	0.20	0.09	0.01	no maximum	0.01	883
	FPF	0.33	0.27	-0.02	off scale	0.03	928
	KMT	0.91	0.09	0.03	no maximum	0.03	965
AUSTRALIA							
Australia 2004	Greens	-1.79	-0.60	0.01	no maximum	0.17	1,388
	Labor party	-0.69	-0.54	-0.01	off scale	0.17	1,413
	Democrats	-0.59	-0.22	-0.01	off scale	0.04	1,388
	One Nation	0.94	0.29	-0.02	off scale	0.05	1,392
	National party	1.59	0.64	-0.01	off scale	0.22	1,386
	Liberal party	2.03	0.92	-0.03	off scale	0.33	1,422
New Zealand 2002	Green	-2.35	-0.48	0.01	no maximum	0.13	1,243
	Alliance	-2.18	-0.42	-0.00	off scale	0.14	1,176
	Jim Anderton's	-1.90	-0.52	0.01	no maximum	0.17	1,046
	Labour	-1.04	-0.57	0.00	no maximum	0.19	1,288
	United Future	0.58	0.12	-0.03	1.71	0.02	1,052
	New Zeal First	1.48	0.26	-0.02	off scale	0.04	1,241
	National	1.85	0.63	0.00	no maximum	0.25	1,278
	Act New Zeal	2.29	0.55	-0.01	off scale	0.18	1,200