The impact of party strategies on the determinants of voting choices

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Introduction

Spatial models of electoral competition are based on the central idea that voting choices are influenced by the relative issue positions of voters and parties. In recent years, significant advances have been made in this theoretical framework. The basic spatial model has been extended in different ways, by specifying different types of spatial utilities, by integrating behavioral factors, or by accounting for voters' discounting of party positions (Merrill and Grofman 1999; Adams 2001; Adams et al. 2005; Schofield and Sened 2006). This has led to more robust models, that offer more powerful explanations of both voters' and parties' behavior.

However, some assumptions of spatial models may still be seen as unrealistic. This paper focuses on one such potential problem: the assumption that the determinants of electoral utilities are homogeneous across parties. Virtually all spatial models of voting choice assume that the vote function that relates voters' characteristics to party evaluations is the same for all parties. I suggest here instead that the determinants of electoral utilities may vary across parties. The weight attached to the various considerations that influence electoral utilities might be related to party characteristics.

Heterogeneity *across voters* has long been recognized in models of voting choice. We know for example that voters with a higher level of political sophistication rely more strongly on ideology and issues when making their voting decision (e.g., Zaller 1992). Also, party identifiers differ from political independents by relying less strongly on ideology or issue positions when evaluating parties (Lachat 2006, 2007). Heterogeneity across parties, by contrast, is rarely accounted for. The assumption of inter-party homogeneity *must* be made when explaining voting choice – rather than electoral utilities for single parties. For each respondent included in a statistical analysis of a discrete-choice model, the sum of the predicted probabilities of voting for each of the parties competing in the election is always equal to 1. The model has the character of a zero-sum game. In a simple case with only two parties, this means that anything which may increase the preference for one of the parties must at the same time and to the same extent reduce the preference for the second party. If a voter likes what party A says, it must change his or her probability to support party B. The same logic applies to models of voting choice in multiparty contexts. If a change in the issue preference of a voter increases the probability to vote for one of the parties, it must reduce the chances to support other parties. For each explanatory factor, positive and negative effects on

the predicted voting probabilities will sum to zero. This is perfectly logical if one thinks in terms of probabilities or vote shares, which represent relative preferences, not absolute ones. However, spatial models usually rely on measures of *electoral utilities*, rather than voting choice. The dependent variable, typically, is a measure of the 'attractiveness' of a party and is measured separately for all (major) parties. The analysis focuses thus on the evaluation of the choice alternatives, rather than on voting choice. This corresponds to a two-stage model of the voting decision process (van der Eijk et al. 2006; van der Eijk and Marsh 2007; Rosema 2006). The first stage represents the evaluations of parties, which can be measured with electoral utilities. The second stage is the translation of these evaluations into a voting choice – where citizens decide to support the party for which their expected utility is highest. When focusing on the first stage of this voting decision model, the assumption that voters evaluate all parties using the same set of criteria can still be made. This paper, however, suggests that this hypothesis should be relaxed. Using data from recent Dutch elections, I show that there is substantial variation across parties in the relationship between issue preferences and electoral utilities. Voters do not rely on entirely different criteria when evaluating a social-democratic party or a conservative party, for example, but the weights they attach to different issue dimensions vary substantially. I also suggest two factors that may explain such differences: the salience with which parties address issues, and the degree of extremity of their issue positions.

In the next section, I discuss these hypotheses in more detail. I also review the literature that has addressed this question, directly or indirectly. Then, I briefly discuss the differences between the hypotheses developed here and a somehow similar question that has emerged in the debate between the proximity and directional models of voting choice. In the fourth section, I present the data, the operationalization of the concepts, and the model specification. The analyses are separated into two parts. Section five shows the extent of the variation across parties in the impact of issues, while section six tests possible explanations for this variability. The paper concludes by a discussion of the implication of these findings.

Hypotheses

There are at least two factors that may explain differences across parties in the determinants of electoral utilities: the *salience* with which parties address various issues and the *extremity* of parties' issue positions. Parties do not all emphasize the same issues in their electoral programs or during the campaign. Rather, they try to focus on the political issues for which

they expect to have an advantage over their competitors. This is the central contention of the 'saliency theory' of electoral competition (Budge and Farlie 1983b). This theory argues that parties 'do not compete by arguing directly with each other, but by trying to render their own areas of concern most prominent' (Budge and Farlie 1983b: 23). While this hypothesis applies probably with more strength to the content of party programs than to the campaign itself, as reflected in the mass media,[1] we may still observe important differences across parties in the issues with which they are associated. This expectation is also in line with the 'issue ownership' theory (Petrocik 1996; Petrocik et al. 2003). It argues that parties have a reputation at being particularly good at handling specific issues, such as those related to the welfare state for Social-democratic parties, or to environmental protection for the Greens. Parties seek to give more importance to these issues in voters' decisions, by emphasizing them during the campaign (Petrocik 1996). This argument is similar to that of the theory of Budge and Farlie (1983b). However, it also offers an additional reason to expect strong associations between parties and specific issues during the campaign: As shown by Petrocik et al. (2003) in the context of American Presidential elections, the media tend to emphasize the 'traditional' party-issue associations even more strongly than the candidates do themselves. Research based on this theory has also shown that the associations between parties and candidates are salient to voters. There are systematic patterns in voters' perceptions of party competence (Petrocik 1996; see also RePass 1971).

Such frequent associations between parties and issues are important as they may increase the *accessibility* of specific issues in voters' memory. Attitudes that are frequently activated, or that have been activated recently, have a higher degree of accessibility (Iyengar and Kinder 1987). They are more likely to impact on voters' evaluations of parties, candidates, or of other political actors. If a party or candidate is frequently put in relation with a given issue – because the party emphasizes that issue in its campaign communications, or because the party and the issue are frequently associated in the media – this issue should have a strong impact on the evaluation of the corresponding party. We know from research on priming effects that the media play a central role in influencing which issues are salient for voters, or which ones they consider to be important (Iyengar et al. 1982; Krosnick and Kinder 1990; Johnston et al. 1992; Miller and Krosnick 2000). This, in turn, affects the issues voters rely most strongly on when evaluating political actors. The political issues, as well as the associations between

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[1] During the campaign, parties may often have no choice but to confront the proposals and issues of their competitors (Budge and Farlie 1983a; Kriesi et al. 2006). Also, the associations between parties and issues presented in the media only partially reflect the issue emphases of party programs (Kriesi 2007) or of the campaign messages directly controlled by the parties (Petrocik et al. 2003).

parties and issues, that are emphasized by the media will be more easily accessible for voters, and they should have a stronger impact on their evaluations (Iyengar 1990; Krosnick 1988, 1990). This is due to an 'accessibility bias', that is, 'the general tendency of individuals to attach greater weight to considerations that are, for whatever reason, momentarily prominent or salient' (Iyengar 1990: 168). On salient issues, voters are also more likely to perceive large differences between the positions of the competing parties (Krosnick 1988). If electoral choice really corresponds to a two-stage process, then, I would expect the evaluations of a given party to be more strongly influenced by the salient issues of that party. The relative impact of issues on party evaluations should vary across parties, as a function of the salience with which these issues are addressed by the corresponding party during the campaign.[2] Variability in the determinants of party preferences may also be linked with parties' *issue positions*. I expect that the impact of a given issue on party evaluations will be larger for parties that take more extreme positions. A similar hypothesis has been discussed in the literature regarding the *overall* impact of ideological and issue dimensions. Several authors have shown that a higher level of party system polarization on a given dimension leads to a stronger impact of that dimension on voting decisions. This has been shown with respect to both the left-right dimension (Eijk et al. 2005; Green and Hobolt 2006; Ensley 2007; Lachat 2007) and more specific issues (Alvarez and Nagler 2004; Knutsen and Kumlin 2005). This effect has mainly been explained by the salience of the corresponding issue dimensions. Alvarez and Nagler (2004), for example, argue that parties will invest less effort in communicating their issue stances on issues where they do not diverge from other parties. In such cases, voters should be less certain of the party position and the corresponding issue or ideological dimension should be less accessible when making evaluations (Knutsen and Kumlin 2005). I expect a similar effect to characterize the influence of issues on separate party evaluations. The impact of a given issue dimension on voters' electoral utilities should be larger for parties whose issue position differ strongly from those of their competitors.

To sum up my hypotheses, I expect the impact of issue dimensions on party evaluations to vary across parties. This variation should be related to party characteristics: The impact of a given issue dimension should be larger when the corresponding party takes an extreme position and when this issue is salient in the party's campaign.

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[2] A similar hypothesis has been suggested by van der Brug (2004). He focuses however on the congruence of voters' and parties' preferences in terms of *issue importance* rather than issue positions, as I do here. Focusing on data from the 1998 Dutch election study, he finds little evidence for cross-party variation.

Relationships with the debate on proximity vs. directional voting

In the last two decades, there has been an ongoing debate between two models of issue voting: the *proximity* model, in the tradition of Downs (1957), and the *directional* model, suggested by Rabinowitz and Macdonald (1989). This debate is important here because some of the arguments used to support one or the other theories have similarities with the hypotheses introduced above.

First, several authors have argued that the relative performance of the two models of issue voting may vary across parties. The proximity model and the directional model differ from one another in the level of information required from voters. In the proximity model, voters compare their own issue or ideological positions to the positions of parties. In the directional model, by contrast, voters have diffuse perceptions of parties' locations, and they simply evaluate in which direction parties want to move the status quo, and how intensively they advocate such a change (Rabinowitz and Macdonald 1989). This also means that directional voting is cognitively less demanding than proximity voting (Macdonald et al. 1995). Merrill and Grofman (1997; 1999) have suggested that this difference may matter for the contrast between incumbents and challengers. Citizens are typically less informed about the policy positions of challengers than about that of incumbents. They will have been confronted more directly with the consequences of the incumbent party's or candidate's decisions. This should provide the incumbent with an advantage in terms of communicating its positions to the electorate. Evaluating the consequences of challengers' positions, by contrast, should be a more difficult task. Voters may be more uncertain of how a challenger party or candidate will implement its propositions if its wins the election. As a consequence, the relative explanatory power of the two models may vary (Merrill and Grofman 1997, 1999): The proximity model, relative to the directional model, should fare better for incumbents than for challengers. This hypothesis has been confirmed in the case of American Presidential elections (Merrill and Grofman 1997, 1999) and of British legislative elections (Cho and Endersby 2003).[3] However, while these results support the idea that the same vote function may not apply to all parties, this hypothesis differs in one important respect from those of the previous section. Here, the focus is on the relative goodness-of-fit of the two spatial models, rather than on the relative impact of issues within a given model.

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[3] The hypothesis has also been tested in the case of Belgium, by Maddens and Hajnal (2001). While they find variations across parties in the relative performance of the two spatial models, it is not related to the government vs. opposition contrast.

The second similarity between my hypotheses and the proximity vs. directional debate regards the impact of the extremity of party positions. Macdonald et al. (1991) have also argued that the impact of issues should vary across parties, as a function of the extremity of party positions. Thus, they reject 'the implicit assumption of the proximity model that all parties are evaluated by the same issue criteria' (Macdonald et al. 1991: 1108). This assumption, they argue, must not be made with the directional model, as it includes 'an interaction between voter and party intensity that makes the issue more critical if the party is more extreme' (Macdonald et al. 1991: 1122). Macdonald et al. also perform a test to support their argument: They estimate a proximity model of voting choice, with data from the 1989 Norwegian election study, separately for each party. The impact of issues on party evaluations is stronger when parties take an extreme position on the corresponding issue. This corresponds exactly to the hypothesis presented in the previous section. However, Macdonald et al. draw a different conclusion: They interpret these results as supporting the directional model against the proximity model. I do not agree with their conclusion, for several reasons. It is true that, with the directional model, extreme positions have a larger impact than centrist positions. But the same could be said about the proximity model, which is often operationalized with squared distances, rather than linear distances. In this case, too, larger distances can be said to have a stronger impact. Second, even if such specifications include an effect of extremity, we do not know how much of the effect they capture. It is telling that Macdonald et al. (1991) do not extend their test by also estimating separate directional models. If their argument was correct, they should find no effect of extremity with the directional model. The results I present in further sections show that this expectation is not met.

To sum up this discussion, I argue that the expected effects of extremity and salience should be independent of the model specification. While this paper does not aim to test once again the relative performance of these two theories, I have estimated a series of models with various specifications, in order to show how robust my results are. The specifications of these models will be presented in the next section.

Data and methods

To analyze the variability across parties in the impact of political issues, I consider recent Dutch elections. This choice is guided by both theoretical and pragmatic reasons. First of all, an important consideration is that the hypotheses can only be meaningfully tested if there are enough relevant cases, that is, party × issue combinations. Furthermore, the parties should

vary from one another in their issue emphases and issue positions. These requirements can only be met by considering a multiparty system, structured by several issue dimensions. Then, of course, this variety must be reflected in the corresponding election studies. I need measures of voters' positions on several issue dimensions, of their perception of party positions on these issues, and of voters' electoral utilities for the corresponding parties. Finally, in order to analyze the impact of salience, I also need data on the content of the campaign.

Data from the Netherlands fare quite well on all of these criteria. The 1994, 1998, and 2002 election studies include questions on voters' positions and on their perceptions of party positions for six issue dimensions in 1994, and seven in 1998 and 2002. While this is still a relatively modest number of issues, I can gain more confidence in the results by replicating the analysis for three different years. For these election campaigns, I can also rely on data from content analyses of the media, which provide information on the salience with which each party addressed these issues (Kriesi et al. 2006, forthcoming).

A last important reason for investigating the Dutch case is linked with the measurement of the dependent variable. As emphasized in the introduction, it is essential to have direct measures of electoral utilities, rather than a simple measure of voting choice. Such measures are available in a large number of national election studies, in various forms: like/dislike scales, questions on the degree of sympathy, thermometer ratings, or probabilities of future vote. While all of these question formats measure the 'attractiveness' of parties, they are not equivalent to one another. As van der Eijk and Marsh (2007) have shown, the probabilities of future vote fare better than alternative measures on several central criteria (see also van der Eijk et al. 2006; Tillie 1995). In particular, probabilities of future vote display a stronger relationship with actual vote choice (van der Eijk and Marsh 2007: 11-14). This aspect is central, as I expect the electoral utilities to be the basis on which the actual voting choice is made. Probabilities of future vote are measured in Dutch electoral studies with the following set of questions:

> *Some people are quite certain that they will always vote for the same party.*
> *Others reconsider each time to which party they will give their vote. I will*
> *mention a number of parties. Would you indicate for each party how probable*
> *it is that you will ever vote for that party? Tell me the number that applies to*
> *the party. If you do not know a party or if you do not know the answer, do not*
> *hesitate to say so and we will continue with the next party.*

> *The PvdA?*
> *Etc.[4]*

Respondents give their answers using a ten-point scale, ranging from 'certainly never' to 'sometime certainly'. Probabilities of future vote were measured for nine parties in 1994 and for eleven in 1998 and 2002 – though I can use only part of these in my analyses, as questions on the perceived issue positions were asked for a smaller number of parties.

The model to be estimated with these data can be specified as follows:

$$Y_{ij} = \alpha_j + \sum_{k=1}^{K} \beta_{jk} U_{ijk} + \varepsilon_{ij}, \tag{1}$$

where Y_{ij} is the electoral utility of voter i for party j, α_j is the value of the constant for the model of party j, U_{ijk} is the spatial utility for voter i and party j on issue dimension k, β_{jk} is the impact of these spatial utilities on the electoral utility of party j, and ε_{ij} is a random error term. Furthermore, the impact of spatial utilities should depend on party characteristics, that is,

$$\beta_{jk} = \delta_j + \sum_z \gamma_{zj} \cdot S_{zjk} + \theta_{jk}, \tag{2}$$

where β_{jk} is the coefficient from equation 1 and corresponds to the estimated impact of issue dimension k on the utility for party j, δ_j is the constant of the equation for party j, the S_{zjk} are z characteristics of party j on dimension k, and θ_{jk} is a random error term. In the models below, I include two party characteristics, the salience of each issue dimension and the party position. The latter will be included in both the linear and squared forms.

As mentioned before, various specifications have been proposed to measure spatial utilities. Following the proximity model of voting choice, spatial utilities are measured as the absolute value of the distance between parties and voters, that is,

$$U_{ijk}^P = \left| P_{jk} - P_{ik} \right|, \tag{3}$$

where P_{jk} and P_{ik} are the positions of party j and of voter i, respectively, on issue dimension k. The spatial utilities for the proximity model are also frequently defined as the *squared* distance, that is, the squared value of the utility defined in equation 3. In the directional

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[4] The order in which the parties are listed is randomized.

theory, spatial utilities are defined as the product of the positions of voters and parties, each measured from a neutral point:

$$U_{ijk}^{D} = P_{jk} \cdot P_{ik} \,. \tag{4}$$

These two models of issue voting also differ from one another regarding the measurement of party positions (for a review of this point, see Gilljam 1997; Merrill and Grofman 1999: 174–179; Lewis and King 2000; Macdonald et al. 2007). Proximity utilities are usually based on individual perceptions of party positions, while supporters of the directional model rely on the average perceived party positions. As discussed in the previous section, it is important to test my model with various specifications. Accordingly, I will estimate the effect of party characteristics on issue voting with both the directional and proximity models (the latter with both linear and squared distances), and I will combine each of these specifications with both individual and average party placements.

Probabilities of future vote and spatial utilities are available for four parties in 1994, and five in the next two elections. These parties are the PvdA, the VVD, D66, the CDA, GroenLinks (in 1998), and the LPF (in 2002). Voters' and parties' positions were measured on six or seven of the following eight issue dimensions:

- Euthanasia: 'Euthanasia should be forbidden' vs. 'euthanasia should always be allowed to end a life upon a patient's request'
- Crime (not in 1998):[5] 'The government should be much tougher on crime' vs. 'the government is currently acting tough enough on crime'
- Income differences: 'Differences in income should be increased' vs. 'differences in income should be decreased'
- Nuclear plants: 'Additional nuclear plants should be built' vs. 'no new nuclear plants should be built'
- Ethnic minorities: 'Foreign workers and ethnic minorities should be able to live in the Netherlands while preserving all customs of their own culture' vs. 'these people should adjust themselves fully to Dutch culture'
- European unification:[6] 'European unification is going too fast' vs. 'European unification should be completed as fast as possible'

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[5] The labels for the ends of the scale were different in 2002: 'The government should act tougher on crime' vs. 'the government is acting too tough on crime'.
[6] In 1998 and 2002, the corresponding labels were: 'European unification should go further' and 'European unification has already gone too far'.

- Asylum seekers (not in 1994): 'Allow more asylum seekers to enter' vs. 'send back as many asylum seekers as possible'
- Social benefits (only in 1998): 'Social benefits are too low' vs. 'social benefits are too high'

On all of these dimensions, respondents' positions and their perception of party positions were measured with seven-point scales. When estimating directional models of issue voting, the neutral point is defined as the middle of the scale.

Information on issue salience comes from a content analysis of the media. These data were collected in the framework of a research project on the transformation of national political spaces in Western Europe (Kriesi et al. 2006, forthcoming). All articles related to the election or to politics in general published during the two months before the election in two major newspapers (*NRC Handelsblad* and *Algemeen Dagblad*) were selected. The title and lead (or first paragraph, if there was no lead), were coded sentence by sentence, to identify all relationships between political actors and issues. While the positions of parties on these issues were also coded, I rely here only on the frequency with which a party was set in relation to each of the issues. For these content analyses, political issues were coded into twelve thematic categories. Unfortunately, the correspondence between these categories and the issue dimensions available in the survey data is not always perfect. In some cases, the categories of the content analysis are more general. The categories used to measure salience and the corresponding issue dimensions are: Cultural liberalism (Euthanasia, Ethnic minorities), Law and order (Crime), Economic liberalism (Income differences), Environmental protection (Nuclear plants), European integration (European unification), Immigration policy (Asylum seekers), and Welfare state (Social benefits).

The correspondence between the two sets of categories is particularly problematic for the issues of euthanasia and ethnic minorities, which fall into the same general category of 'cultural liberalism'. In the analyses below, I will mention how strongly the results vary when these two issue dimensions are excluded.

The salience of these issue categories for the various parties is measured as follows:

$$S_{jk} = \frac{N_{jk}}{N_j} - \frac{N_k}{N}. \tag{5}$$

N_{jk} is the number of issue statements of party j related to issue k, N_j is the total number of issue statements of party j, N_k is the total number of issue statements related to issue k, and

where *N* is the total number of issue statements, over all parties and issues. This measure indicates thus the difference between the salience of issue k for party j and the average salience of this issue.

Before turning to the empirical results, a last aspect of the estimation procedure must be discussed. The model specified in equations 1 and 2 is hierarchical. It combines individual-level and party-level variables, and it implies a cross-level interaction (the effect of party characteristics on the individual-level relationship between spatial utilities and party preferences). I estimate this model by following a two-step strategy (Achen 2005; Jusko and Shively 2005; Lewis and Linzer 2005): First, I estimate the individual-level model separately for each party, with OLS regressions. Then, I use the coefficients from the first-stage models as the dependent variables and regress them on party characteristics. I estimate the second-stage model using weighted least squares regressions, which allow accounting for the differences across parties in the standard deviation of the stage-one coefficients. The weights are computed following the method proposed by Lewis and Linzer (2005: 351f.).

Variation across parties in the impact of spatial utilities

First, I focus on the extent of the variation across parties in the impact of spatial utilities. To this end, I estimated the model of equation 1 separately for each party. Table 1 presents the corresponding results for the 2002 election study, with spatial utilities computed as linear distances and with individual perceptions of party positions.

We see that most issue dimensions have a significant and negative impact on electoral utilities. The predicted probabilities to support a party tend to diminish as the voter-party issue distance gets larger. Most interesting, however, is the degree to which these results vary across parties. As expected, we can observe substantial differences in the impact of the issue dimensions. This appears very clearly for the issues of crime, European unification, and asylum seekers, which have a significant impact for some parties but not for others. Voters' preferences on how tough the government should be with crime, for instance, do not influence the probabilities to support D66 and the CDA, but they have a strong impact on the likelihood to vote for the LPF. Variations across parties can be observed for all issues. Even for political issues that have a significant impact on all probabilities to vote, the estimated effects vary across parties, by a factor of two or three. For example, the point estimates for the issue of euthanasia range from -0.13 for the LPF to -0.33 for the CDA. Similarly, the estimated effects

of voters' attitudes towards the issue of income differences range from -0.09 (LPF, D66) to -0.30 (VVD).

'Table 1 about here'

The corresponding results for the 1994 and 1998 elections show similar variation. In both of these elections, the impact of issues varies strongly across parties, and some issues have a significant impact on only some of the parties. These results are summarized in Table 2, along with those of 2002. For each issue and election, the table indicates the minimum and maximum values of the point estimates, as well as their standard deviation. It appears clearly from the table that the results of 2002, discussed above, are not different from those of earlier elections. Clearly, there is much variation across parties in the type of issues that affect voters' electoral utilities. The major question is how this variability can be explained. I expect the impact of issue orientations on party preference to be related to parties' electoral strategy, that is, to their issue positions and to the salience with which each issue is addressed. I turn to these hypotheses in the next section.

'Table 2 about here'

The effects of party strategies

To estimate how much of this variation is due to the extremity of party positions and to the salience with which they address the various issues, I turn to the second stage of the estimation. Table 3 indicates the effects of parties' characteristics. The coefficients of the first-stage models were regressed on the average party position on the corresponding issue, in its linear and squared forms, as well as on the salience with which the issue was addressed. Party position has a significant impact in all three elections, but not salience. The relationship between party positions and the magnitude of the effect of spatial utilities is non-linear, as can be seen from the opposed signs of the linear and squared forms of the variables. Furthermore, we also see that the strength of this effect declines over time.

'Table 3 about here'

These effects are illustrated in Figure 1. It shows the predicted values of the stage-one coefficients, that is, of the effects of spatial utilities on the probabilities to vote, as a function of the average perceived position of parties. Both point estimates and the bounds of the 95 percent confidence interval are presented. The figure is divided into three panels, one for each election year. The range of values of party positions corresponds to the actual range observed in the data. These predicted results were computed by setting the salience of issues at its average value.

The figure shows clearly that the estimated effect of spatial utilities varies with party positions. The more extreme the position of a party on a given issue dimension, the stronger is the effect of that issue dimension on the probability to support the corresponding party. In the 1994 election, for example, the estimated coefficient for the effect of linear proximities is -0.07 for a party located on the middle of an issue scale. The magnitude of this effect increases strongly as parties move away from the center. The pattern is the same in 1998 and 2002, but the effect of parties' extremity is smaller, especially in 2002. The effect of party positions, however, is significant in all three elections.

'Figure 1 about here'

Issue salience, by contrast, does not appear to affect the strength of issue voting. The estimated coefficients are negative, as expected, but they are not significant, even considering the small number of observations.[7]

The results presented so far were all based on one possible specification of spatial voting, that is, on the proximity model with linear distances and with individual perceptions of party positions. It is important to see how robust these results are across alternative specifications. Table A1 in the appendix presents the regression results, similar to those of table 3, for five alternative models, based on squared distances, on directional utilities, and on average party positions.

The results of proximity models are quite robust and do not need much comment. The non-linear effect of parties' extremity is similar to what we observed in Figure 1. The effect is even stronger when relying on average party positions, rather than on individual perceptions. As far as issue salience is concerned, these alternative specifications do not either show any effect on the strength of issue voting. The results of directional models, however, are more

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[7] This result remains unchanged when removing the potentially problematic issues of euthanasia and ethnic minorities, for which the correspondence between the two sets of categories, at the individual and party levels, is weaker.

puzzling. When party positions are measured as individual perceptions, the results show a similar pattern to that of the proximity models. Party positions have a non-linear effect and the magnitude of the effect of issues increases as parties move away from the center. When party positions are based on the average perception of voters, however, the results appear to make little sense. Although the point estimates are very large, especially in 1994, none of the effects is significant. Furthermore, the signs of the point estimates are not consistent across years. What causes these surprising results? The problem seems to be the difficulty of the directional model to account for voters' support of centre parties. In some cases, the average perceived party position is very close to the middle of the scale, which corresponds to the neutral point in the directional theory. The scalar products will thus be quite small. In the directional theory, such issues should not contribute much to the level of support for the corresponding parties, as their centrist position signal a low commitment to that issue. However, there are several cases in the present data where party support is strongly related to issues dimension where parties take centrist positions. This leads to very large values for the estimated effects of directional utilities. A good example is the CDA in 2002. Its average perceived position on the issue of nuclear plants is 0.49, on the 0-1 scale. Using the proximity model, we saw in Table 1 that this issue has the largest impact on support for the CDA. The effect of this issue dimension is also very strong with the directional model, but this leads to a much stronger contrast between that and other issues. The corresponding coefficient is about seven times larger than the *average* (absolute) value of the other issue-coefficients. This potential problem means that the coefficients of centre parties tend to be of a much larger magnitude. Furthermore, the direction of these effects can be either positive or negative. When parties are very close to the centre, it is almost a matter of chance if they fall on one side or the other of middle value. Again, this should not be a problem following the theory of directional voting as such issues should not impact on voters' preferences. But they do – at least in the data analyzed here. This leads to coefficients that are very large in absolute value, and that are sometimes positive, sometimes negative. I do not think that these results make sense from a substantial point of view and I tend to consider that they reflect a general weakness of the directional model.

Conclusion

In this paper, I have analyzed the variation across parties in the determinants of electoral utilities. I have proposed to relax the assumption that the weight of the various considerations

that influence electoral utilities is constant across parties. While this assumption is necessary in analyses of voting *choice*, it must not be made when analyzing electoral utilities. In line with a two-stage model of voting choice, such party evaluations represent the basis on which voters make their electoral choice. I have suggested that these evaluations should depend more strongly on the issues with which parties are frequently associated. Such associations in turn, should depend on both the content of the campaign and the traditional reputations of competence. More precisely, I have suggested that the impact of issues on electoral utilities should vary with two characteristics of party $\times$ issue relationships: the salience with which a party addressed the corresponding issue during the campaign and the extremity of the party position on that issue dimension.

These hypotheses were tested with data from three recent Dutch elections. The analyses have revealed much variation in the impact of issues across parties. Most important, they have shown that the impact of issues is strongly related to party positions – but not to issue salience. Electoral utilities are more strongly influenced by issues on which parties take non-centrist positions. The strength of this effect varies across elections – it is strongest in 1994 and weakest in 2002 – but it is significant in all cases. Furthermore, the effect is robust across alternative specifications of the proximity model of voting choice, with linear and squared distances, and with individual or average perceived party positions.

The hypotheses were also tested with the directional specification, but this leads to more ambiguous results. When average perceived party positions are used, which corresponds to the preferred specification in the directional theory of voting, the results are strongly influenced by the presence of center parties. For these parties, the estimated effects of directional utilities are often very large, but their direction becomes almost arbitrary as the party moves closer to the middle of the corresponding issue scale.

Appendix

'Table A1 about here'

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Table 1. Impact of (linear) proximity utilities on electoral utilities in the 2002 Dutch elections. Coefficients and standard errors estimated with OLS regressions. Party positions measured with individual perceptions

	PvdA	D66	CDA	VVD	LPF
Constant	0.80***	0.70***	0.91***	0.85***	0.68***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Euthanasia	-0.29***	-0.30***	-0.33***	-0.24***	-0.13***
	(0.04)	(0.03)	(0.03)	(0.03)	(0.04)
Crime	-0.13**	-0.06	-0.01	-0.09*	-0.17**
	(0.04)	(0.04)	(0.05)	(0.05)	(0.05)
Income differences	-0.24***	-0.09*	-0.22***	-0.30***	-0.09*
	(0.04)	(0.04)	(0.05)	(0.03)	(0.04)
Nuclear plants	-0.20***	-0.14***	-0.34***	-0.25***	-0.14***
	(0.03)	(0.03)	(0.04)	(0.03)	(0.03)
Ethnic minorities	-0.18***	-0.23***	-0.24***	-0.15***	-0.19***
	(0.04)	(0.04)	(0.05)	(0.04)	(0.05)
European unification	-0.05	-0.12**	-0.09	-0.09**	-0.17***
	(0.04)	(0.04)	(0.05)	(0.04)	(0.04)
Asylum seekers	-0.16***	-0.17***	-0.02	-0.17***	-0.33***
	(0.04)	(0.04)	(0.05)	(0.04)	(0.05)
N	1140	1055	1086	1137	730
R^2	0.03	0.29	0.27	0.33	0.37

*$p<0.05$; ** $p<0.01$; *** $p<0.001$*

Table 2. Summary of the estimated effects of (linear) proximity utilities with individual perceptions of party positions, by issue and election year.

	1994			1998			2002		
	min	max	s.d.	min	max	s.d.	min	max	s.d.
Euthanasia	-0.36	-0.15	0.09	-0.41	-0.15	0.11	-0.33	-0.13	0.08
Crime	-0.16	0.04	0.09				-0.17	-0.01	0.06
Income differences	-0.43	-0.12	0.16	-0.33	-0.05	0.14	-0.30	-0.09	0.09
Nuclear plants	-0.28	-0.05	0.10	-0.28	-0.14	0.06	-0.34	-0.14	0.08
Ethnic minorities	-0.26	0.01	0.12	-0.15	-0.01	0.06	-0.24	-0.15	0.04
Europ. unification	-0.14	-0.05	0.04	-0.05	0.01	0.03	-0.17	-0.05	0.04
Asylum seekers				-0.22	-0.04	0.07	-0.33	-0.02	0.11
Social benefits				-0.29	-0.14	0.06			

Table 3. Effects of party position and issue salience on the relationship between spatial utilities and probabilities to vote.

	1994		1998		2002	
	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
Position	4.14***	0.94	1.80*	0.68	1.31*	0.51
Position^2	-4.03***	0.92	-1.88**	0.61	-1.10*	0.45
Salience	-0.29	0.86	-0.38	0.29	-0.20	0.30
Constant	-1.13***	0.23	-0.54**	0.17	-0.54***	0.14
Adj. R^2	0.42		0.33		0.18	
N	24		35		35	

*$p<0.05$; **$p<0.01$; ***$p<0.001$*
Note: results based on linear proximity utilities and individual perceived party positions. The models are estimated with WLS.

Figure 1. Impact of the average perceived party positions on the effect of spatial utilities, by election year.
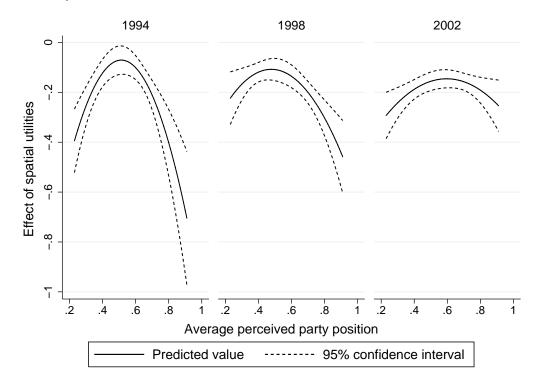
Table A1. Effects of party position and issue salience on the relationship between spatial utilities and probabilities to vote, for various specifications of the individual-level model.

	Position	Position^2	Salience	Constant	Adj. R^2	N
Squared proximities, individual perceptions						
1994	4.20***	-4.16***	0.07	-1.13***	0.36	24
	(1.09)	(1.07)	(1.04)	(0.26)		
1998	2.16*	-2.38**	-0.24	-0.61**	0.40	35
	(1.83)	(0.75)	(0.35)	(0.21)		
2002	0.96	-0.83*	-0.17	-0.46**	0.04	35
	(0.60)	(0.53)	(0.36)	(0.16)		
Directional, individual perceptions						
1994	-11.43***	11.02***	1.77	3.09***	0.49	24
	(2.30)	(2.24)	(2.12)	(0.55)		
1998	-4.90**	4.71**	1.09	1.57**	0.24	35
	(1.79)	(1.62)	(0.77)	(0.46)		
2002	-2.70*	1.97	1.05	1.29***	0.24	35
	(1.24)	(1.09)	(0.75)	(0.34)		
Linear proximities, average perceptions						
1994	6.84***	-6.65***	-0.72	-1.78***	0.38	24
	(1.67)	(1.63)	(1.52)	(0.40)		
1998	4.45***	-4.24***	-0.34	-1.20***	0.37	35
	(1.07)	(0.97)	(0.46)	(0.27)		
2002	2.58**	-2.25**	0.26	-0.85**	0.15	35
	(0.91)	(0.80)	(0.55)	(0.25)		
Squared proximities, average perceptions						
1994	8.16**	-8.12**	-1.22	-2.10**	0.26	24
	(2.51)	(2.46)	(2.34)	(0.60)		
1998	4.95**	-4.83**	-0.26	-1.34**	0.25	35
	(1.59)	(1.44)	(0.69)	(0.41)		
2002	1.78	-1.61	0.38	-0.70	0.03	35
	(1.33)	(1.17)	(0.83)	(0.36)		
Directional, average perceptions						
1994	19.46	-20.83	27.92	-2.29	0.00	24
	(43.98)	(42.99)	(39.92)	(10.52)		
1998	-6.03	5.09	6.16	2.44	0.05	35
	(7.92)	(7.20)	(3.39)	(2.00)		
2002	0.72	-2.16	9.09	1.13	0.00	35
	(10.75)	(9.44)	(6.57)	(2.91)		