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Under Which Conditions Do Parties Attract Voters' Issue Reactions? Party-Varying Issue Voting in German Elections 1987-2009

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Are voters' choices influenced by parties' position-taking and communication efforts on issues during a campaign? And if so, do voters' reactions to issues differ across parties? This article outlines a research design for the statistical identification of party-varying issue reactions within the established paradigm of the Spatial Theory of Voting. Using a special feature of Conditional Logit and Probit Models, i.e., the estimation of alternative-specific coefficients instead of fixed 'generic' distance effects, it is possible to detect asymmetrically attached issue saliencies at the level of the voters, and hence at the demand side of politics. This strategy opens a new way to systematically combine insights obtained by salience approaches with the Spatial Theory of Voting. An application to the German Parliamentary Elections from 1987 to 2009 demonstrates that it is predominantly parties taking polar positions, and, more specifically, niche parties taking polar positions that induce such asymmetric issue voting.

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The extensive literature on issue voting based on the Spatial Theory of Voting has time and again shown that issues do matter (see, e.g., Adams *et al.* 2005; Thurner 2000). But, does every party identically attract electoral attentiveness on one and the same issue – given obviously quite different issue-related campaign strategies? Surprisingly, the literature on spatial models has been rather tacit on this topic. A recently growing research community in the area of issue competition highlights that issue-related campaigning includes not only position-taking but also the asymmetric intensity and emphasis of presenting such positions (see De Vries and Hobolt 2012; Green-Pedersen 2007; Guinaudeau and Persico 2014; Meguid 2005, 2008; Rovny 2012; Wagner 2012b). This latter aspect captures the saliency attached by a party to an issue. So far, research on spatial issue voting exclusively focuses on the implications of the differences in parties' position-taking on parties' market shares and for voters' choice probabilities. On the contrary, parties' asymmetric emphasis on issues has been at the centre place of the Saliency Theory of Voting (Budge and Farlie 1983a, 1983b, Robertson 1976) and the Issue Ownership approach (Petrocik 1996).

This article contributes to this discussion by offering a new way to systematically integrate the saliency aspect of issue competition with the Spatial Theory of Voting. The Spatial Theory of Voting assumes that the saliencies voters attach to issues are identical across parties. In contrast, the saliency approaches explicitly expect varying issue saliencies at the level of the parties. We propose to relax the former's, mostly implicit, equality assumption with regard to voters' issue reactions towards parties. The empirical examination of this assumption will allow us to assess whether the saliencies voters' attach to issues are actually identical across parties. Following the saliency approach, we agree with the observation that parties strategically attempt to shift voters' attention to those issues, which have a higher relevance in their portfolio, and to downplay the salience of those issues, which are of minor importance for these electoral segments. This results in varying issue saliencies at the level of the parties,

representing the *supply side issue saliency*. As a consequence of this, we expect that the voters' attributed salience to a particular issue – which we name *demand side issue saliency* – also varies across parties. Therefore, supply side asymmetry in issue saliency should be reflected in asymmetric demand side issue saliency, and vice versa.

Based on this argument, the article outlines a straightforward and simple research design for the statistical identification of such party-varying issue saliencies within the established paradigm of the Spatial Theory of Voting and Random Utility Maximization. To achieve this objective, we will use a special feature of Conditional Logit and Probit Models, i.e., the possibility to estimate party-specific coefficients instead of fixed 'generic' spatial issue distance effects (see Thurner 2000). This will allow us to estimate issue saliencies at the level of the demand side that are potentially non-identical between parties. It is this feature that enables us to provide a systematic theoretical and empirical bridge between the salience approaches on the one hand and the Spatial Theory of Voting on the other hand. Therefore our objective is in line with recent efforts to improve our understanding of parties' issue-related campaign strategies beyond pure position-taking. Additionally, our suggested approach follows the claim that an appropriate model of issue voting should always integrate party strategies and individual vote choice (see, e.g., Bélanger and Meguid 2008; Green and Hobolt 2008; Van der Brug 2004) and to compare various equilibrium outcomes.

We apply our model of spatial issue voting with party-varying saliencies to the German Parliamentary Elections from 1987 to 2009. Our results provide strong empirical evidence that issue saliences at the level of the voters considerably vary among the parties of this multi-party system, indicating that the impact of issues on party choice is different across parties. Therefore, the resulting equilibrium positions clearly deviate from those being identified under the current commonly used assumption of identical issue reactions. In addition, the results support our expectations that it is predominantly parties taking polar positions and, more specifically, niche parties adopting polar positions that attract voters' issue reactions. This finding clearly demonstrates that the type of party (mainstream vs. niche) moderates the parties' success when engaging in a strategy of issue polarization in order to become the object of issue voting.

The next section introduces the debate on the role of saliency in models of issue voting. We then derive hypotheses on the occurrence of party-specific issue voting. Subsequently, we illustrate the statistical approach to the estimation of such party-varying issue saliencies at the level of the voters. Finally, we introduce data and present findings.

The Role of Saliency in Models of Issue Voting

According to the Downsian perspective of issue voting, formalized in the Spatial Theory of Voting, voters evaluate parties with regard to their differential position-taking on manifold issues and cast a ballot for the party that guarantees the highest expected utility (Downs 1957). As parties in modern complex societies decreasingly succeed in offering consistent one-dimensional ideological packages covered by, e.g., the left-right dimension, the identification of the relative impact of separate controversial 'position issues' on the electoral success is highly important (Adams *et al.* 2005; Alvarez and Nagler 1998; Thurner 2000).

Determining the relative statistical weight assigned to issues in the individual vote decision (*demand side issue saliency*) in spatial issue voting models follows established techniques: the electoral researcher calculates issue distances between each voter's ideal point and the

perceived position of each party. The subsequent estimation of coefficients for these distances yields saliencies expressing the weight of a particular issue for the voters' electoral decisions. Alvarez and Nagler (1998) and Thurner (2000) demonstrated that spatial issue voting in multi-party systems can be properly estimated by using so-called Conditional Logit and Probit Models. These statistical models allow us to take into account the issue distances for each of the parties. In contrast to the attributes of voters, these variables constitute attributes of choice objects. Based on these models and their analyses of issue voting in the US and European contexts, Adams *et al.* (2005) are able to show for example that there is non-convergent position-taking even in two-party systems – contrary to the Downsian expectation of convergent party platforms. In this approach, voter loyalties (party identification) as well as candidate evaluations are theoretically introduced as non-policy or non-issue factors. They capture segment-specific biases requiring that parties take divergent issue positions.

A careful reading of the contributions by Alvarez and Nagler (1998) and Adams *et al.* (2005) uncovers a striking assumption, which is actually highly restrictive but has not been discussed in detail so far (for an exception, see Thurner 2000). As a rule, this literature assumes that all voters *identically* react to the issue positions of all parties, i.e., voters attach issue saliencies that are supposed to be identical for every party. E.g., Glasgow (2001: 124) states the following: 'The impact of issue distances is assumed to be constant across all three parties included in the model [...]'. Despite referring to the possibility of specifying issue parameters varying across parties, Alvarez and Nagler (1998: 66-7) also decide to 'estimate only one issue distance parameter for each issue [...]' (see also Adams *et al.* 2005: 17). We propose to turn this homogeneity assumption into a hypothesis to be tested empirically. The relaxation of the assumption of equal issue reactions towards all parties allows us to examine whether the saliencies voters attach to issues are actually identical across parties. As a consequence, we will be able to address the following new questions: Does every party attract identical levels of attentiveness on the same issue? Put differently, is every party equally successful in attracting voters' attention on issues, or are there systematic differences in the impact of issue-related attitudes on party choice across parties?

The homogeneity assumption in spatial models of issue voting stands in sharp contrast to the insights obtained by the salience approaches. This perspective explicitly expects varying issue saliencies at the level of the parties (*supply side issue saliency*)[1] owing to the parties' incentives to strategically manipulate the saliencies of strategically selected issues (Budge and Farlie 1983a, 1983b; Petrocik 1996; Robertson 1976; Stokes 1963). According to this view, parties choose to emphasize or to avoid talking about issues as opposed to announcing concrete issue positions. In particular, parties strategically aim to shift voters' attention to those issues that are advantageous to them (i.e., issues that are likely to improve their electoral performance) and to decrease the salience of those issues that are disadvantageous to them (Budge and Farlie 1983b; Kriesi and Sciarini 2004; Petrocik 1996; Rovny 2012; Wagner 2012b). These party-varying campaign 'investments' in different issues are due to the parties' specific ideological reputations. It is the ideological backgrounds that determine which issues are the parties 'core issues' (see, e.g., recent work done by Rovny 2012). As Petrocik (1996) outlined, the continuous selective emphasis and de-emphasis of respective issues may lead to the ownership of an issue. However, most of the parties officially declare to have many or all issues in their sale, i.e., they present themselves as political multi-product firms.

The variation of supply side salience across both issues and parties is also highlighted by other recent studies. Wagner and Meyer (2014) address the question of whether parties' strategic salience decisions differ systematically across parties. Their findings clearly

demonstrate that parties that have more resources at their disposal are more likely to focus more broadly on those issues that are currently of public concern, therefore pursuing the 'riding the wave' salience strategy. By contrast, parties characterised by possessing fewer resources and a stronger policy-oriented motivation tend to engage in the narrower salience strategy of issue ownership. Additionally, recent efforts to integrate positional and salience approaches also provides strong empirical evidence in this regard (see, e.g., De Vries and Hobolt 2012; Rovny 2012; Van de Wardt 2014). By highlighting the importance of the multidimensional character of party competition and the parties' varying interest in these different issues, Rovny (2012) demonstrates that parties benefit from both emphasizing favoured issues and adopting rather 'blurred' positions on disadvantageous issues. Van de Wardt (2014) shows that parties tend to respond to internal divisions by strategically decreasing the salience of those issues on which there is great amount of disagreement among their support base.

Based on these recent results and in view of our proposed relaxation of the spatial identity assumption, we argue that the varying issue saliency at the supply side level should be reflected in asymmetrically attached issue saliencies at the level of the voters, and hence at the demand side of politics. We expect that voters electorally respond to both the position-taking and the issue emphasis efforts of the parties. Therefore, voters' issue reactions should also vary across parties. The identification of those party-varying issue saliencies at the level of the voters, so-called party-specific issue voting, will allow us to improve our knowledge of the connection between parties' issue-related strategic decisions and the individual vote decision based on issues. In particular, our approach permits us to indirectly measure the success of such strategies of position-taking and salience.

Hypotheses on Party-Varying Issue Voting

If voters' reactions towards issue distances are distinct across parties, the obvious next question is: which parties are more likely to induce such asymmetric voter reactions on specific issues? More specifically, what explains the relative sizes of such reactions? Following the recent extensive discussion of the effectiveness of different issue-related strategies of party competition, we propose three hypotheses for the explanation of the occurrence and the differential size of party-varying issue voting. We expect party-specific issue reactions to be higher for (1) parties taking polar positions, and for (2) niche parties. More specifically, we argue that polarization strategies actually pay out only for niche parties.

Firstly, we expect that those parties engaging in a strategy of polarization, i.e., parties occupying extreme positions away from the centre of a given issue are more likely to become the object of issue voting and to induce larger demand side issue saliencies. As shown by Rovny (2012) and Wagner (2012b), parties can raise the salience of their beneficial issues by offering polar, extreme positions on these issues (see also De Vries 2010; Kriesi and Sciarini 2004; Lachat 2011). By adopting polar stances, parties can use shrill, strident and intransigent simplifications to promote their favoured issues. Often, they set aside implementation details of policy measures and disregard office-seeking considerations. As a consequence, polarizing strategies are easily communicated and get attention by media and voters. In particular by frequently emphasising their polar stances on selected narrow issues, these parties reach the voters' attentiveness and establish an easy link between the issues and the respective parties. Already Rabinowitz and Macdonald (1989) in developing their 'directional model' suggest that parties taking a polar anchor position attract the attention of voters. Whereas these authors

propose to 'misuse' the original spatial measurement by adopting a multiplicative calculus on the issue scale, we maintain the spatial logic but nevertheless try to detect the effectiveness of polarization strategies. This leads to the following hypothesis:

> **H_1 Polar Party Hypothesis:**
> *Polarizing parties attract relatively higher issue effects as compared to those parties signalling moderate positions.*

Secondly, drawing on the extensive debate that focuses on the question of whether different types of parties (mainstream vs. niche) behave differently in campaigns and whether these strategies contribute in a distinguishable way to their electoral performance, we will examine whether this also holds according to our new design. We expect the type of party to moderate the occurrence and relative size of party- varying issue voting.[2] Previous research on niche and small party behaviour stresses the idea that this type of party follows quite distinct issue-related campaign strategies as compared to their larger counterparts (see, e.g., Adams *et al.* 2006, 2012; Ezrow 2008; Ezrow *et al.* 2011; Meguid 2005, 2008; Meyer and Wagner 2013). In particular, they point out that niche parties primarily aim to pursue policy-seeking goals in order to meet their supporters' policy demands. By contrast, mainstream parties follow vote-maximizing and office-seeking strategies. Moreover, niche parties should be by definition more homogeneous internally (activists, members) as well as externally (targeted voter segments). Due to this higher cohesion resulting from their organizational structure, they are able to send less ambivalent issue signals as compared to mainstream parties. They have to make fewer rhetorical compromises when taking and emphasizing issue positions. As a result, issue reactions should be more probable with regard to such parties. In contrast, mainstream parties seek to attract large and more heterogeneous voter segments in order to pursue their vote- or office-seeking incentives. Due to these motivations, mainstream parties may tend to refrain from adopting clear, unambiguous stances on issues on which there may be a high potential of disagreement among their support base. Due to their policy-oriented motivation and their organizational structure, we expect that niche parties induce higher issue voting effects:

> **H_2 Niche Party Hypothesis:**
> *Compared to mainstream parties, niche parties induce larger issue voting effects.*

In fact, we observe both niche and mainstream parties taking polar positions on issues. Do these polarization strategies really pay out the same way for both types of party? Or should we expect, based on the arguments above, that it is actually only niche parties choosing a polarization strategy that really profit from it? Considering this, our third hypothesis addresses the question of whether the strategic decision of polarization on an issue is equally promising for mainstream and niche parties. We argue that the success of the polarization strategy to induce party-specific issue voting is actually moderated by the type of party. Specifically, we expect that particularly niche parties benefit from polarizing strategies on issues.

Actually, recent studies of niche party behaviour demonstrate that these parties are especially motivated to take and to accentuate selected extreme positions in order to 'differentiate' themselves from their mainstream counterparts and to occupy a niche to survive electorally (Spoon 2009, 2011; Wagner 2012b). The 'policy-differentiation' incentive of niche parties leads to the selection of some extreme issue stances. As soon as mainstream parties

move to the poles – which especially happens in order to satisfy extreme segments and to deter new party entry – this necessarily provokes disagreement from moderate segments of these parties. As a result, a strategy of policy moderation on their core issues should be electorally costly for niche parties, whereas a polarization strategy should always bear a high risk for mainstream parties to be blamed for radicalization (Adams *et al.* 2006; Ezrow 2008; Ezrow *et al.* 2011). Drawing on these arguments and empirical results, we hypothesize that it is niche parties benefitting from taking polar stances on issues. This leads to our last hypothesis on the party-induced asymmetry of voters' issue reactions:

> **H_3 Niche and Polar Party Hypothesis:**
> *Niche parties taking polar positions on an issue attract larger issue effects as compared to mainstream parties taking polar positions.*

A Statistical Model of Spatial Issue Voting with Party-Varying Saliencies

Issue voting with party-varying saliencies can be easily identified using established statistical models. We illustrate this new design with an application to the German multi-party system. In accordance with the Spatial Theory of Voting we focus on controversial political issues, so-called 'position issues'. Issue distance coefficients are usually interpreted as the importance or weight voters attribute to issues. This is equivalent with our notion of issue saliency detected at the voter level (*demand side issue saliency*). That these saliences are identical across parties has been taken for granted so far. We propose to scrutinize this non-theorized assertion by turning it into an empirically testable hypothesis. The implementation will be demonstrated in the following. Our model is based on absolute issue distances[3] between the most preferred position of voter i on an issue k, x_{ik}, and the corresponding individually perceived position of party j, p_{ijk}. The disutility function is weighted by the issue-specific salience coefficient α_k:

$$U_{ij} = \sum_{k=1}^{K} \alpha_k \left| x_{ik} - p_{ijk} \right|. \quad (1)$$

For our new research design we propose to use established statistical models.[4] They allow us to go beyond current practice and to estimate party-specific issue saliences. We assume that the overall utility of party j for voter i depends on a deterministic component, V_{ij}, and a stochastic component, ε_{ij}, such that

$$U_{ij} = V_{ij} + \varepsilon_{ij}, \quad (2)$$

where ε_{ij} follows an iid extreme value distribution. It is assumed that rational voters (i.e., maximizing their utility) choose the party in which the difference in the deterministic term exceeds the difference in the stochastic component. Therefore, the probability P_{ij} of voter i choosing party j compared to choosing any other party h is given by

$$P_{ij} = P(V_{ij} - V_{ih} > \varepsilon_{ih} - \varepsilon_{ij}), \forall h \neq j. \quad (3)$$

The probabilities reflect different degrees of preferability of parties (Random Utility). According to McFadden (1974) the logit choice probabilities are given by

$$P_{ij} = \frac{\exp(V_{ij})}{\sum_{h=1}^{J} \exp(V_{ih})} \quad (4)$$

The deterministic utility component V_{ij} may consist of individual-specific attributes s_i (e.g., sex, attitudes) and alternative-specific attributes z_{ij} (e.g., distance of voter position towards party position):

$$V_{ij} = \beta_{j0} + s_i^T \boldsymbol{\beta_j} + z_{ij}^T \boldsymbol{\alpha}. \quad (5)$$

With regard to individual characteristics s_i, the corresponding coefficients $\boldsymbol{\beta_j}$ indicate segment-specific varying evaluations of parties. On the contrary, note that with regard to alternative-specific attributes z_{ij}, the related coefficients $\boldsymbol{\alpha}$ have no alternative-specific subscript. In the case of so-called 'generic' attribute coefficients, only one parameter for an alternative-specific attribute is estimated – implying that the attribute is valuated *identically* with regard to *all* parties. However, statistically the generic coefficient can be split up into as many alternative-specific coefficients as there are parties to compete. The usage of such alternative-specific coefficients is well-known in transportation economics and econometrics, but has to our knowledge not been discussed or used in political science so far.[5] When transferred to the issue voting context, we strongly expect that voters' issue reactions vary across parties due to the obvious fact that each party strategically manipulates the saliencies of selected issues. For example, one would expect that the issue distance in the case of the issue of immigration may induce different saliencies or reactions when voters assess far-right parties as compared to more liberal parties – even in the case of identical distances. Furthermore, one would expect that voters react more strongly to issue positions of Green Parties with regard to environmental or energy issues because Green Parties claim to 'own' these issues and to hold the highest respective issue competence.

In the following, we outline the specification of this model formally by highlighting the difference between fixed or generic and alternative-specific issue distance parameters. We follow the requirement of subjecting hypotheses of issue voting to a competitive multivariate test (see Adams *et al.* 2005; Alvarez and Nagler 1998; Thurner 2000) – by controlling for party identification and candidate evaluations as the most important non-policy factors. Assume that V_{ij} consists of the following components: (1) a base utility of a party j[6], constituted by the alternative specific constant β_{j0}; (2) the individual-specific evaluation of candidate j (i.e., voter's evaluation of party jth leader) represented by $\beta_j Candidate_i$; and (3) the perceived issue distance between voter i and party j represented by $\alpha IssueDistance_{ij}$. Then, the following equation results:

$$V_{ij} = \beta_{j0} + \beta_j Candidate_i + \alpha IssueDistance_{ij}. \quad (6)$$

The issue distance parameter α captures the estimated issue salience. As it is statistically fixed and constrained to be identical, the substantial assumption one buys is that the issue saliency is identical for all parties. Provided the generic issue distance coefficient is statistically significant, the previous literature presumes – without further explicit discussion – that the estimated issue reactivity of the voters does not vary across parties. Moreover, in the case of a statistically insignificant generic issue distance coefficient, the literature so far asserts that there are no issue voting effects with regard to all parties. Both assumptions are not necessarily correct: First, it may be the case, e.g., that issue reactions

with regard to different parties differ markedly, and/or they may exist only for a subset of parties. Second, it is possible that the generic coefficient is not statistically different from zero, and at the same time one or several significant alternative-specific coefficient(s) exist(s) behind the fixed insignificant coefficient. Therefore, we strongly recommend testing these assumptions explicitly and empirically – by 'splitting' the generic parameter into so-called alternative-specific parameters, i.e. by specifying for each party a specific partial utility function for each kth issue, and therefore, by estimating for each party-issue-distance combination a separate parameter.

After splitting the individual-specific candidate evaluations (into $J-1$ coefficients) and the generic issue distance coefficient into J coefficients, the following alternative-specific, partial observable utility functions for the main German parties result (C: CDU/CSU = Christian Democrats; S: SPD = Social Democrats; F: FDP = Liberal Party; G: Greens; L: Leftist Party):

$$\begin{aligned} V_{iC} &= \alpha_C IssueDistance_{iC}, \\ V_{iS} &= \beta_{S0} + \beta_S Candidate_i + \alpha_S IssueDistance_{iS}, \\ V_{iF} &= \beta_{F0} + \beta_F Candidate_i + \alpha_F IssueDistance_{iF}, \\ V_{iG} &= \beta_{G0} + \beta_G Candidate_i + \alpha_G IssueDistance_{iG}, \\ V_{iL} &= \beta_{L0} + \beta_L Candidate_i + \alpha_L IssueDistance_{iL}. \end{aligned} \tag{7}$$

We are now able to ask the following new research question: Are voters actually attributing different issue saliencies depending on which party is considered? As a baseline, we formulate the following null hypothesis:

> **H_0 Null Hypothesis:**
> *There are no party-specific issue effects, implying that issues are identically valuated with regard to all parties.*

Here we have to distinguish between the following situations: (1) There are no issue voting effects with regard to all parties on an issue. Thus, the generic issue distance coefficient should not be statistically different from zero. However, (2) it might be the case that behind a statistically non-significant generic issue distance coefficient there may be 'hidden' significant party-specific issue distance coefficients. If, and only if we observe such party-specific issue voting effects for at least a subset of the parties, this would be a necessary and sufficient indicator that the assumption of identical issue reactions with regard to all parties has to be rejected. As a consequence, this would indicate that not all parties are equally successful in attracting voters by their issue-related strategies in election campaigns.

Data and Operationalization

Our model of issue voting with party-varying issue saliencies is applied to cross-sectional surveys of the German Parliamentary Elections 1987, 1990, 1998, 2002, 2005 and 2009.[7] These studies include questions in which respondents were asked to locate parties' positions and their own positions on several issues[8] on a 7- or 11-point scale.[9] The dependent variable 'vote choice' is operationalized via the stated vote intention. The set of alternatives includes only parties receiving a vote share total of at least 5 per cent in the respective election. These

parties are: the Christian-Democratic Party (CDU/CSU), the Social- Democratic Party (SPD), the Liberal Party (FPD), the Green Party, and – since the election year 1998 – the Leftist Party (PDS/Leftists). Our key explanatory variables are the absolute distances between the individually perceived parties' positions and the self-reported positions of respondents on a given issue.[10] To provide a hard test of the role of issue considerations in the individual vote decision we follow the approach of Adams *et al.* (2005) and control for party identification and candidate evaluations[11] as the most important non-policy factors. Polar parties are defined as those parties which are perceived to take the most extreme positions on an issue while at the same time being significantly differently located from every other party.[12] Based on their relatively smaller issue portfolios, we define the Greens, the Leftist as well as the liberal party FDP as niche parties.[13]

Empirical Results

The presentation of empirical results is divided into two parts: In the first part we test whether voters actually exhibit party-varying issue saliencies. The second part explains the strength of such party-specific saliencies along the proposed hypotheses.

Identifying Party-Varying Issue Saliencies

As a first step of our analysis, we aim to determine whether the saliencies voters attach to issues vary across parties by estimating (Nested) Conditional Logit Models[14] with party-specific coefficients for spatial issue distances. By estimating these coefficients for each of the parties separately, we are able to scrutinize the conventional assumption of a constant issue distance parameter. In order to illustrate the difference between a model of issue voting with fixed generic issue distance coefficients and a model with party-varying issue distance coefficients, we contrast the results of these models.

Figure 1 depicts and compares the estimated issue distance coefficients with 95 per cent Confidence Intervals. The left column of Figure 1 shows the generic issue effects, the right column depicts the party-specific issue reactions that are statistically significant at the 5 per cent level.[15]

FIGURE 1
SPATIAL ISSUE EFFECTS IN GERMAN PARLIAMENTARY ELECTIONS 1987-2009

[insert Figure 1 here]

Note: Left column displays generic issue distance coefficients, right column party-specific issue voting effects significant at the 5 per cent-level.

Also note again that we control for party identification[16] and candidate evaluations in the background. As expected, party identification proves to have a strong and statistically significant positive impact for all parties on vote choice. In addition, candidate effects discriminate considerably with regard to their impact on choosing different parties (see Appendix A in the supplemental material).

Focusing on the issue distance coefficients, we highlight the following points resulting from Figure 1. Firstly, 12 out of 17 generic issue distance coefficients are statistically

significant indicating that issues are relevant choice criteria, even when controlling for party identification and candidate images.[17] This suggests that in most cases there is a separate issue effect with regard to at least one party on these issues.

Secondly, by splitting up the fixed generic coefficients into *j* party-specific issue reactions, we can show that a non-significant generic issue distance parameter does not necessarily imply that there is no impact from such an issue. With regard to the five non-significant generic coefficients (unification and abortion in 1990, immigration and EU in 1998, EU in 2002), we estimate for two of these issues significant separate party-specific effects. Even though the corresponding non-significant generic issue coefficients would suggest that there are no issue effects with regard to all parties, the specification of party-varying issue saliences enhances our insight that a non-significant generic coefficient does not necessarily imply that there are no issue reactions at all. With regard to the EU issue in 1998 and 2002, it is indeed the case that behind a statistically non-significant generic issue distance coefficient there are 'hidden' significant party-specific issue reactions. E.g., consider this issue in 2002: By defixing the generic coefficient and specifying instead party-varying issue saliencies, it can be shown that only for one party we identify a statistically significant issue effect, namely for the Leftist Party. In other words, on this issue only the Leftist Party proves to be a significant object of issue voting. A closer inspection of the perceived party positions on this issue provides a possible reason: this party constitutes the only polar party on this issue (see Table 1). In addition, when examining all electoral manifestos on this issue, it turns out that the Leftist Party unconditionally advocated the acceptance of all European Union accession candidates (see its electoral manifesto 2002: 24) – in contrast to the moderate positions of all the other parties. Consequently, the statistically achieved result can be validated externally. In sum, by estimating only one issue distance parameter, we would falsely conclude that the EU issue played no role in this election.

Thirdly, a significant generic coefficient does not incontrovertibly indicate that there are identical issue reactions with regard to all parties. In particular, the examination of Figure 1 shows that for almost all significant generic issue distance coefficients, we identify party-specific effects only for a subset of parties. Exclusively in the case of the issue of unemployment in 1987, we observe for all parties (the PDS was not included in this analysis) separate significant issue effects.[18] Thus, our null hypothesis, stating that issues are identically valuated with regard to all parties, can be rejected – except for the issue of unemployment in 1987. In most circumstances, only subsets of issue distance coefficients prove to be statistically significant. This is a non-ambiguous sign that voters' issue reactions indeed vary across parties. Take, for example, the issue of taxes in 2009. All expert observers unanimously agreed after-the-fact that the Liberal Party (FDP) was most successful in promoting the reduction of taxes and in effectively politicizing this issue. Our results support this interpretation. However, our findings additionally suggest that also the Leftist Party and the Christian-Democratic Parties (CDU/CSU) effectively played on this ground. The example again demonstrates that not all parties are equally successful in attracting voters by their issue-related strategies in campaigns, and that our research design provides a reliable evidence-based procedure to detect such asymmetries. There is additional evidence that the Greens prove to predominate in politicizing issues. E.g., in the case of the issue of immigration, the Greens succeed in almost all elections to become the object of issue voting. Less counterintuitively, this can also be observed for the issue of nuclear energy. In four out of six possible issue effects, we see a party-specific issue effect with regard to the Greens.

The identification of these issue effects strongly validates the usefulness of our new approach to estimating party-specific issue reactions. This brief exploration of electoral programs and campaign statements substantiates that the detection of party-varying issue saliencies at the level of the voters allows us to improve our knowledge of the connection between parties' issue-related strategic behaviour and the individual vote decision based on issues. Our statistical model of issue voting with party-varying saliencies allows us to systematically guide our assessment of the effectiveness of parties' issue-related strategies in election campaigns and offers a new way to combine the insights of salience approaches with the Spatial Theory of Voting. In sum, 'defixing' the generic issue coefficient leads to interesting insights into issue voting – which vary across elections, issues and parties. In most cases, only several party-specific issue distance parameters turn out to be statistically significant. Thus, the assumption of identical issue reactions with regard to all parties has to be rejected. This implies that not all parties are equally successful in attracting voters based on their issue-related campaign efforts.

Additionally, it is now possible to compare the differences between generic versus party-specific coefficients with regard to choice probabilities and market shares. Figure 2 shows how the conditional predicted probabilities of party choice based on distances on the issue of nuclear energy in the 1998 election vary between these two different specification strategies. It demonstrates that, in the worst case, a fixed generic coefficient averages out highly different party-specific saliency parameters. Note also that the 95 per cent Confidence Intervals of the party-specific reaction functions with regard to the CDU/CSU and the Greens, for which we identify separate party-specific issue effects, do not overlap. Thus, also from a statistical point of view it is necessary to use alternative-specific coefficients.

FIGURE 2
CONDITIONAL PREDICTED PROBABILITIES OF PARTY CHOICE BASED ON THE ISSUE OF NUCLEAR ENERGY IN 1998: GENERIC VS. PARTY-SPECIFIC SPECIFICATION

[insert Figure 2 here]

Note: Issue Distances and Candidate Evaluations are fixed at their mean, Party Identification at zero.

Moreover, based on the party-specific specification of the issue distance coefficients we are able to show that this also leads to quite different Nash Equilibria on an issue dimension. Figure 3 displays the parties' optimal positions, their corresponding vote shares as well as the uncertainty around these positions for the issue of immigration in 1990.[19] The visualization of the competition on the issue of immigration in 1990 demonstrates that the Green Party, for which we identify a party-specific issue effect, actually attracted voters who would otherwise choose the SPD. Accordingly, the former party's vote share increases from 11.8 per cent to 18.4 per cent by moving further to the right and getting closer to the optimal position of the SPD. The Liberal Party (FPD), for which we also estimate a party-specific issue effect, gains additional votes by differentiating itself more from the mainstream party CDU/CSU. Thus, the varying effectiveness of parties' issue-related campaign strategies may also result in very different optimal locations.

FIGURE 3
NASH EQUILIBRIA ON THE ISSUE OF IMMIGRATION IN 1990: GENERIC VS. PARTY-SPECIFIC SPECIFICATION

[insert Figure 3 here]

Note: Left figure displays equilibrium resulting from generic issue distance coefficients, right figure displays equilibrium resulting from party-specific issue distance coefficients.

For all these reasons, we strongly recommend using this special feature of Conditional Logit and Probit Models in future studies of spatial voting in order to avoid averaging out highly different saliency parameters when specifying fixed generic coefficients.

Test of Hypotheses on Party-Varying Issue Voting

The extensive estimation results show that effects of issue voting vary substantially across parties. They corroborate our expectation that voters do not react identically to every party. Whether these findings are completely contingent on a campaign, or whether they follow a general pattern will be tested in this section. We hypothesize that issue reactions are primarily induced (1) by those parties taking polar positions ($\boldsymbol{H_1}$), (2) by niche parties ($\boldsymbol{H_2}$), and more specifically (3) by niche parties taking polar positions ($\boldsymbol{H_3}$) on an issue. Table 1 offers a synoptical summary comparing the observed party-specific issue effects with our expectations.

TABLE 1
PARTY-SPECIFIC ISSUE VOTING EFFECTS (SIGNIFICANT AT THE 5 PER CENT-LEVEL)

Election Year	Issue	Party-Specific Effects	H_1 Polar Parties	H_2 Niche Parties	H_3 Polar and Niche Parties
1987	Unemployment	**C - S - F - G**	**C**	**F - G**	-
	Nuclear Energy	**G**	C - **G**	F - **G**	**G**
1990	Unification	-	-	F - G	-
	Immigration	**F - G**	C - **G**	**F - G**	**G**
	Abortion	-	C - G	F - G	G
	Nuclear Energy	**C**	**C** - G	F - G	G
1998	Immigration	-	C - G	F - G - L	G
	EU	**G**	C - L	F - **G** - L	L
	Nuclear Energy	**C - G**	**C - G**	F - **G** - L	**G**
2002	Immigration	**G**	C - **G**	F - **G** - L	**G**
	EU	**L**	**L**	F - G - **L**	**L**
	Nuclear Energy	**G**	C - **G**	F - **G** - L	**G**
2005	EU	**C - S - F - L**	**S - L**	**F** - G - **L**	**L**
	Nuclear Energy	**F - G**	C - **G**	**F - G** - L	**G**
2009	Immigration	**G**	C - **G**	F - **G** - L	**G**
	Taxes	**C - F - L**	**F - L**	**F** - G - **L**	**F - L**
	Nuclear Energy	**C - S - F**	**C** - G	**F** - G - L	-

Notes: Abbreviations: C = CDU/CSU, S = SPD, F = FDP, G = Greens, L = Leftist. Bold letters report significant party-specific effects. -: indicates non-identified party-specific issue effect.

In order to test these hypotheses analytically we propose the following multivariate design. We specify linear regression models including all estimated party-specific issue effects (i.e., all party-issue combinations) for all election years as the dependent variable, generating 79 party-specific issue distance coefficients.[20] We regress these issue effects against the two considered party types (niche party, polar party on an issue).[21] The results are reported in Table 2. In order to test Hypotheses 1-2, Model 1 includes dummy variables for each category of the parties under consideration. Model 2 additionally includes a

multiplicative interaction term between polar party and niche party in accordance with Hypothesis 3.

TABLE 2
IMPACT OF PARTY TYPE ON PARTY-SPECIFIC ISSUE VOTING

	Model 1		Model 2	
Party Type				
Niche Party	-0.17**	(0.05)	-0.09	(0.06)
Polar Party	-0.15**	(0.05)	-0.03	(0.08)
Niche x Polar Party			-0.20*	(0.10)
Constant	- 0.08	(0.04)	-0.12*	(0.05)
Observations	79		79	
R^2	0.19		0.24	

Standard errors in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

Notes: The dependent variable is the estimated party-specific issue distance parameter (logit coefficient) from individual-level (Nested) Conditional Logit Models for the German Parliamentary Elections 1987-2009. These Logit Models regress stated party choice against issue distances, controlling for party identification and candidate evaluations. This generates the 79 issue distance coefficients.

As can be seen from Model 1 in Table 2, there are remarkable differences in the impact of issue considerations on party choice when accounting for different types of parties.[22] Firstly, polarizing parties attract significantly larger party-specific issue voting effects as compared to those parties signalling moderate positions. Polarizing is therefore an effective strategy for politicizing voters. Second, niche parties exhibit significantly larger party-specific issue voting effects as compared to mainstream parties. To disentangle whether the strategic decision to engage in an issue polarization strategy is equally promising for niche and mainstream parties, Model 2 of Table 2 additionally includes a multiplicative interaction term between polar party and niche party. The estimated coefficient for the interaction term is large and statistically significant indicating that niche party status indeed moderates the effect of polar position-taking strategies on party-specific issue voting. According to our expectation, niche parties taking polar positions on an issue induce higher party-specific issue voting effects as compared to other parties. Niche parties clearly benefit from polarizing position-taking strategies, whereas for mainstream parties such voter reactions are not visible.[23]

The following interpretation of the interactive relationship between niche party and polar party type on party-specific issue voting in Table 3 is based on conditional incremental effects (see, e.g., Berry *et al.* 2012; Brambor *et al.* 2006). As can be immediately seen, the effect of polarizing on issues for mainstream parties is very small and insignificant. By contrast, the effect of polarizing strategies for niche parties is large and highly statistically significant, therefore as expected niche parties taking polar positions induce party-specific issue voting to a much higher degree than mainstream parties. As suggested by Berry *et al.* (2012), we also offer in Table 3 predictions about how the effect of niche party status differs with moderate/polar position-taking strategies, resulting in additional support for our expectations.

TABLE 3
TESTING THE NICHE AND POLAR PARTY HYPOTHESIS (H_3)

Incremental Effect of Polarization on		
Mainstream Party	-0.03	(0.08)
Niche Party	-0.24***	(0.07)
Incremental Effect of Niche Party on		
Moderate Party	-0.09	(0.06)
Polar Party	-0.29***	(0.08)

Standard errors in parentheses; $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Notes: Conditional incremental effects of polar party and niche party type on the expected value of the party-specific issue effects are based on Model 2 of Table 2. They are obtained by taking the arithmetic differences and show the changes in party-specific issue effects for a unit change in these discrete predictors.

In summary, the results of our analysis provide clear evidence in favour of both the Polar Party Hypothesis and the Niche Party Hypothesis. By recombining the controversial discussion on the operationalization of niche parties and specifying an interaction term between niche party status and the polarization efforts on an issue it becomes possible to provide a clear answer: Polarizing niche parties become successful issue owners, moderating office-seeking niche parties are not rewarded.

Conclusion

Not all parties are equally effective and successful in attracting electoral responsiveness on the same issues. Issue voting substantially varies across parties. Thus, there are systematic differences in the impact of issue attitudes on party choice across parties. This is one major finding of this study. We outlined a new research design for the statistical identification of such party-varying issue reactions within the established paradigm of the Spatial Theory of Voting. In order to demonstrate this, we proposed and applied a so far neglected feature of Conditional Logit and Probit Models, i.e., the estimation of party-specific coefficients instead of fixed 'generic' issue distance effects. Our proposed research design and empirical findings in the context of the German multi-party system will have considerable implications for future theoretical and empirical analyses of spatial party competition because they challenge and contest the conventional assumption of identical issue reactions. Hitherto, neither the literature oriented towards the classical spatial model, towards the directional model (Rabinowitz and Macdonald 1989), nor towards the unified approach (Thurner 2000, Adams *et al.* 2005) has ever empirically tested the underlying assumption of models with generic issue distance effects, namely that voters react identically towards issue positions of all parties. Our statistical model of issue voting with party-varying saliencies allows us to improve our knowledge of the connection between parties' issue-related strategic behaviour and the individual vote decision based on issues. The proposed research design provides a new way to transfer insights of salience approaches to the Spatial Theory of Voting. Parties not only take and shift positions; they also manipulate saliencies in order to politicize issues. Finally, by corroborating the expectation that especially niche parties engaging in polarizing position-taking strategies induce such asymmetric issue voting, our analyses also have relevance for studies on niche party behaviour. The next steps will be to extend this design to a cross-national perspective in order to find out whether this relationship holds more generally in different contexts.

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Supplementary Material

Supplemental material for this article can be accessed at [insert link to online appendix].

Notes

1. Since the location of saliency here is at the supply side of politics, empirical strategies to identify such saliencies have mainly used party manifestos as exemplified in the Comparative Manifesto Project CMP. For a recent assessment see Dolezal *et al.* (2014).
2. According to Meguid (2005, 2008), niche parties are defined as those parties seeking to emphasize new issues not captured by the traditional Downsian left-right cleavage, and these parties contest only on a selected subset of issues. However, note that Adams *et al.* (2006) and Ezrow (2008) conceive niche parties as taking extreme 'non-centrist' positions on the traditional left-right cleavage. These definitions are critically discussed by Meyer and Miller (2013) or Wagner (2012a).
3. By using linear instead of Euclidean squared loss functions, we follow recent insights by Singh (2014) who offers both theoretical arguments and empirical evidence in favour of the simple linear loss function.
4. See McFadden (1974) and Ben-Akiva and Lerman (1985) or Glasgow and Alvarez (2008), for applications in electoral research see Alvarez and Nagler (1998) or Thurner (2000).
5. See already Ben-Akiva and Lerman (1985: 168): 'An important aspect of the specification of discrete choice is the distinction between alternative-specific and generic attributes. A generic specification imposes restrictions of equality on a more general model with alternative-specific attributes.'
6. This base utility contains the unmeasured utility components – e.g., the party label.
7. There are no position issues included in the 1994 National Election Survey. For the 1990 election we use only the survey conducted in West Germany in order to stick to a coherent design for the whole period. A description of the national election studies and variables is provided on request.
8. The following issues are included: European Union (EU) (1998, 2002, 2005), Immigration (1990, 1998, 2002, 2009), Unification (1990), Nuclear Energy (1987-2009), Abortion (1990), Unemployment (1987), Taxes (2009).
9. To ensure that the issue effects are comparable over time, we standardized the issue scales before estimating the models.
10. Since the prevalent specification of utility losses in empirical voting models is based on quadratic loss functions, we re-estimated all the models below by specifying quadratic utility losses instead of linear ones. These analyses yield almost identical results and are available in Appendix B.1 in the supplemental material. Additionally, the linear specification improves the model fit and outperforms the quadratic specification (see also Singh 2014).
11. The National Election Surveys include questions in which respondents were asked to use 11-point scales to evaluate the party leaders. To keep the model parsimonious and to ensure comparability across time, we only include the candidate evaluations of the two large parties CDU/CSU and SPD.
12. In most cases, the means of the parties' positions are significantly different at the 5 per cent significance level. For the issue of unification in 1990 the perceived party positions do not statistically differ from each other and no polar parties could be defined. For the issue of unemployment in 1987 and the issue of EU in 2002, we are only able to identify one polar party on one side of the issue scales. For each of the remaining 14 issues, we have been able to exactly identify one polar party on both sides of the scales (see Table 1).
13. Note that this classification does not perfectly match the definitions suggested by, e.g., Meguid (2005, 2008) or Adams *et al.* (2006). Since it is difficult to apply these definitions to the German multi-party system when including only parties having a total vote share of at least 5 per cent (the remaining parties cannot be included in the analysis due to extremely small number of observations), we rely only on these parties.
14. Logit Models are based on the IIA assumption. Since Hausman-McFadden specification tests indicate that the IIA assumption is violated in several cases, we captured potential unobserved similarities between subsets of alternatives by estimating two-level Nested Conditional Logit Models (see McFadden 1984; Thurner 2000). Where necessary, we partitioned the choice sets into two clusters including the 'large parties' (CDU/CSU and SPD) and the 'small parties' (Greens, FPD, and the Leftists), respectively.
15. To facilitate readability of important party-specific issue reactions, we report only those party-specific coefficients that are significant at the 5 per cent level, whereas we display all generic coefficients. Appendix A in the supplemental material provides the tabled estimation results presenting all variables and parameter estimates.
16. Since party identification is also a relational construct (i.e., voter *i* has a loyalty towards a party *j*, or not), it presents an alternative-specific variable and can also be specified with *j* alternative-specific effects. It is, therefore, additionally possible to test whether party identifications (PI) vary across parties. So far, the literature on party

identification has, to our knowledge, not yet theorized the possibility of a party-varying PI explicitly – despite this being not counterintuitive.

17. Since party identification and candidate evaluations might be controversial in European politics, we assessed the robustness of our findings by excluding these variables and considering instead the meta issue Left-Right and socio-economic variables as controls. Even though omitting these variables naturally leads to 'overestimation' of party-specific effects, our main arguments and conclusions hold (see Appendix B.2 in the supplemental material).
18. Note that we performed a Likelihood-Ratio test to examine whether these party-specific issue coefficients are equal. The result indicates that in this case splitting up the generic coefficient is not necessary and that one fixed issue coefficient is sufficient.
19. Nash Equilibria are calculated with the R Package 'nopp: Nash Optimal Party Positions' by Curini and Iacus (2012), which implements the iterative algorithm by Merrill and Adams (2001) and Adams *et al.* (2005). In order to assess the uncertainty we used bootstrapping with 1000 replications.
20. Even though the identification of party-specific issue voting in the previous chapter was based on the significance of the estimated party-specific effects, we test the hypotheses by using the strength of these effects (i.e., the effect size) as the dependent variable because this design allows us to detect differences in the impact of issue considerations across parties.
21. Note that these models are based on estimates of the individual-level (Nested) Conditional Logit Models, estimated separately for each election year. Therefore, the dependent variable represents an estimated dependent variable (EDV), for which, in general, the regression residuals tend to be heteroscedastic when the sampling variance varies across observations. Since sampling size does not heavily vary across election years, it is not necessary here to account for differences in the standard deviations of the issue distance coefficients by applying weighted least squares or alternative FGLS approaches (see, e.g., Lewis and Linzer 2005).
22. Since the estimated party-specific issue distance parameter indicate utility losses (see equation (1)), the coefficients for polar and niche party type are also negative. They show how the increase in utility losses differs across different types of parties.
23. Since the Greens seem to predominate in politicizing issues, one might argue that the results about niche and polar parties particularly depend on the Greens. To address this concern, we further inspected the robustness of our finding by excluding the party-specific issue effects with regard to the Greens in the analyses presented in Table 2. These analyses yield comparable results, indicating that even when excluding the Greens from the models testing the stated hypotheses our main arguments hold. The details are available in Table B16 in Appendix B.3. We gratefully thank one anonymous reviewer for pointing this out.

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