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**The contingency of voter learning:  
How election debates influence voters' ability and accuracy to position  
parties in the 2010 Dutch election campaign**

**Abstract**

Election campaigns are expected to inform voters about parties' issue positions, thereby increasing voters' ability to influence future policy and thus enhancing the practice of democratic government. We argue that campaign learning is not only contingent on voters' characteristics, different sources of information, but also on how parties communicate their issue positions in election debates. We combine a two-wave panel survey with content analysis data of three televised election debates. In cross-classified multilevel auto-regression models we examine the influence of these debates in the 2010 Dutch parliamentary election campaign on voters' knowledge of the positions of eight parties on three issues. The Dutch multiparty system allows us to separate voters' ability to position parties from their accuracy in ordering these parties. We reach three main conclusions. First, this study shows that voters become more able and accurate during the campaign. However, these campaign learning effect erode after the elections. Second, whereas voters' attention to campaigns consistently contributes to their ability to position parties, its effect on accuracy is somewhat less consistent. Third, televised election debates contribute to what voters learn. Parties that advocate their issue positions in the debates stimulate debate viewers' ability to position these parties on these issues. In the face of the complexity of campaigns and debates in multiparty systems, campaigns are more likely to boost voters' subjective ability to position parties than their accuracy.

**Keywords:** Campaign Effects, Issue Learning, Policy Positions, Election Debates

## Introduction

Do campaigns matter? The popular idea is that they do, why else would parties and candidates spend so much money, time and effort? Although scholars have long found campaign effects to be minimal, recent literature increasingly argues otherwise (Iyengar & Simon, 2000; Schmitt-Beck & Farrell, 2002; Claassen, 2011; Arceneaux, 2006). The increasing importance of campaigns in the scientific literature is not only due to the continued rise in electoral volatility (Dalton, 2004), but also reflects a more sophisticated research agenda.

This study examines to what extent election campaigns in general and the content of election debates in particular contribute to voters' knowledge of issue positions. Learning effects are relevant: Voters use issue position knowledge in their vote decision making process, for instance based on the principles of proximity or directional voting (see Aarts et al. 1999; Kleinnijenhuis & De Ridder 1998). Yet, they can only rely on issue voting to the extent that they know where a party stands for vis-à-vis the other parties (Key 1996; Bartels 1986). As such, (issue) learning can indirectly influence election outcomes (Lenz, 2009); campaigns could even bring the electorate closer to the ideal of democracy steered by an informed citizenry (Delli Carpini & Keeter, 1996; Graber, 2004).

The literature has made great headway in understanding learning effects. Campaign learning is contingent on a number of factors. First, it depends on the receiver: campaigns have different effects on different voters (Matthews, 2006; Claassen 2011; Arceneaux 2006). Second, what voters learn during campaigns is mediated by the sources of information, ranging from interpersonal contacts to campaign ads. Scholars disagree which medium is most inductive to learning (Druckman 2005). Norris and Sanders (2003) suggest that all of these sources, as all media content contains campaign information. Yet, De Vreese and Boomgaarden (2006: 332) argue: "*When news contains a lot of relevant and substantial content, that is when news is informative about the topic of interest, exposure has a positive effect on knowledge gains*" Both sides seem to agree that it is not so much the medium (outlet) itself, but rather the information provided by the outlet that stimulates knowledge during campaigns.

This study scrutinizes the implications of the line of reasoning that political knowledge is stimulated mainly by information-heavy media. We argue that campaign learning is simultaneously issue-specific (contingent on the attention given to each policy field), party-specific (contingent on the attention given to each political party), and issue-party-specific (contingent on the attention given to each political party on each policy field). While issue-party-specific information contributes to knowledge of issue ownership (Kleinnijenhuis & Walter, 2014), this study aims to assess whether it contributes to knowledge of (relative) party positions. To the extent that parties devote more attention to their position on certain issues over others, we expect voters to learn more on those parties' positions on those issues. Vice versa, if parties fail to make their issue position clear, or deliberately 'obfuscate' their position, voters will have a hard time picking up this information (Franklin, 1991). A stringent test of this issue-party-specific learning effect requires a multidimensional, multiparty system that differentiates the positions of a range of parties on a range of issues.

Specifically, this study focuses on party-issue-specific information in televised election debates, as they are central campaign events (e.g., Reinemann & Wilke, 2007; Van Aelst, Thorbjørnsrud, & Aalberg, 2011). Although election debates provide dense information on candidate/party positions on a range of issues, the extent to which these debates inform the viewers varies between candidates as well as between issues (Benoit & Hansen, 2004; Pfau, 1988). We aim to explain this variation by arguing that voters are more likely to learn the positions of those candidates/parties on those issues that – in combination – got the most attention (i.e., speaking time) during the debates.

Moreover, we distinguish between two aspects of campaign learning: ability to position parties on a range of policy issues, and accuracy in positioning parties correctly. These two aspects are of equal interest. Parties' attention to specific issues might affect either or both. An increase in voters' perceptual ability to position parties on issues does not necessarily imply an increase in their accuracy to do so (see Koch 2003; 2008; Jenssen et al. 2012). The former is more subjective than the latter, and thereby potentially less relevant: prospective issue voting requires accurate knowledge where a party stands for (Key 1996; Bartels 1986). The distinction between ability and accuracy is particularly valuable to understand campaign effects in multiparty settings (Jenssen et al. 2012), as

the accurate placement of parties on issues is exponentially more demanding than in a two party system.

Therefore, we study campaign learning effects in a multiparty system, which have long been understudied (McKinney & Carlin 2004, but see Hansen & Pedersen 2014). This focus is necessitated by our aim to test issue-party-specific learning effects of election debates, and to simultaneously assess learning through ability and accuracy. We use a representative two-wave panel survey during the 2010 Dutch parliamentary election campaign. We combine this survey data (covering perceived party positions on three policy issues) with content analysis of the three main televised election debates (to obtain issue-party specific data) and content analysis of party manifestos and VAAs (to obtain accurate policy positions of parties).

We thus raise three cumulative research questions:

1. To what extent do voters learn about parties' policy positions on a range of issues during electoral campaigns in a multiparty system, most notably as a consequence of watching election debates?
2. To what extent are there differential campaign learning effects on voters' ability to position parties and voters' accuracy in doing so?
3. To what extent are campaign learning effects contingent on the information provided during the election debates?

## **Theory and Hypotheses**

### *Learning Effects*

Communication and political science scholars have been interested in what citizens learn during election campaigns for a long time (Blumler & McQuail, 1968; Trenaman & McQuail, 1961). Voters' knowledge of candidates' and parties' issue positions are considered key indicators of information gains typically registered during the course of a campaign (Chaffee & Kanihan, 1997; Chaffee, Zhao, & Leshner, 1994; Nadeau et al. 2008). Throughout a campaign voters learn about the ideas of parties which makes them more certain and better able to accurately indicate where the party stands for an a certain issue. Certainty and accuracy are separate but closely related aspects of learning (Koch, 2003, 2008). Throughout an election campaign voters might feel better

able to position parties on issue positions, even though these positions might not actually be more accurate. Nevertheless, when deciding which party to vote for voters place more weight on parties' issue positions, if they feel more certain about that position (Alvarez 1998; Bartels 1986; Peterson 2005).

Voters gradually learn the issue positions of the candidates through campaign events and media coverage of those events (Gelman & King 1993). The longer the campaign lasts the more information voters gain, as they have more time and opportunity to learn (Stevenson & Vavreck 2000). The upswing in voter learning occurs six weeks out from the elections and increases monotonically (Arcenaux 2006). In line with these results our first hypotheses state that:

*Learning Effect Hypothesis (H1):* After an election campaign voters are more certain and more accurate in positioning parties on specific policy issues than before

*Campaign Length Hypothesis (H2):* The learning effect is stronger among voters who are exposed longer to the campaign

#### *Election Debates and Party-Issue Profiling*

Debates between party leaders have become a natural part of election campaigns in most western democracies (Plasser & Plasser, 2002). They have become central campaign events for several reasons (Reinemann & Wilke, 2007). First, election debates attract a large audience (Van Aelst, Thorbjørnsrud, & Aalberg, 2011). Second, election debates provide voters ample opportunities to absorb political information by providing politicians with relatively long uninterrupted speaking time to discuss their political viewpoints (Benoit & Hansen, 2004) that viewers can immediately compare and contrast (Pfau, 1988). Third, debates are discussed extensively in other media outlets and interpersonal conversations (Coleman, 2000; Blais & Boyer, 1996). According to contagion theories people experience election campaigns as participants in various communication networks and regardless whether they watched the debate they will be infected by various beliefs, attitudes and behaviour as their network exposes them to these (Monge & Contractor 2003). Consequently, people that have not watched the

debate are able to learn about the debate as well (Benoit, Stein, & Hansen, 2004; Jamieson & Birdsell, 1988). Thus, election debates can have direct effects on their viewers and indirect effects through other media and interpersonal communication on their non-viewers (Cho & Ha 2012; Blais & Boyer, 1996).

Most studies conclude that debate exposure contributes to issue knowledge as long as candidates present correct information (see Maier & Reinneman, 2006). However, the knowledge gains due to debate exposure is conditional (Turcotte & Kirby, Goidel 2014). They vary across elections and candidates (Drew & Weaver, 2006; Benoit & Hansen, 2004). The extent to which voters learn from debates is related to the public need for orientation that differs across elections (Jamieson & Adasiewicz, 2000). Benoit and Hansen (2004: 136) conclude that “*While debates do inform voters, we should not assume that debates will inform voters about all candidates, or inform voters equally about both candidates in a given debate.*” There is even considerable variability of learning about particular candidates on specific issues: “*In numerous instances the debates produced significant learning outcomes about only one candidate, or about two candidates, in a particular issue sector*” (Pfau 1988: 108). The overall issue content of the debates does not suffice to explain this relationship: The relationship between debate content and issue learning is more complex, also related to how (much) politicians address specific issues. Zhu et al. (1994), for instance, find that debates only stimulate knowledge on those policy issues that were discussed during these debates. We formulate the following hypotheses:

*Debate Exposure Hypothesis (H3a):* The learning effect of positioning parties on issues is stronger among voters who are exposed to the election debates

*Campaign Attentiveness Hypothesis (H3b):* The learning effect of positioning parties on issues is stronger among voters who are attentive to the campaign

*Issue Profiling Hypothesis (H4):* The more parties communicate on specific policy issues during the televised election debates the larger the learning effect on these parties on these policy issues

Note that Hypothesis 4 suggests an across-the-board effect of the content of the debates on all voters, including those who did not watch the debates. We expect that the content of the debates is both replicated (the same parties are likely to emphasize the same issues throughout the campaign, not just during the debates<sup>1</sup>) and dispersed (the election debates are discussed subsequently) in other media and in personal communication. Debates are probably a good proxy of parties' media campaign messages and voters that follow the campaign closely can learn about those issue positions via other channels. Nevertheless, the learning effect should be more pronounced for debate viewers (H5).

*Issue Profiling-Debate Hypothesis (H5):* The effect in H4 is stronger among voters who are more exposed to the campaign and the televised election debates

#### *The Need to Take Voter and Media Characteristics into Account*

When studying learning effects it is important to take voter' characteristics into account, if only because political knowledge is distributed unequally among the general population (Delli Carpini & Keeter, 1996; Jerit, Barabas, & Bolsen, 2006; ). Especially higher educated are better able to process political information from the media (Eveland & Scheufele, 2000; Tichenor, Donohue, & Olien, 1970). However, when political issues become salient in the news in an information-rich environment, the knowledge gains between higher and lower educated citizens begin to fade (Jerit et al., 2006). Election campaigns are therefore exceptional, because the political communication flow becomes so dense that even less educated or less aware citizens get informed. Conventionally, knowledge gains are invoked by cognitive abilities as well as motivation and interest. Yet, the context of a campaign can be so omnipresent that political information spreads across the board and political interest loses its explanatory power.

To single out the effects of debates on party specific issue learning, we control for respondents' overall exposure to specific news media, which suffices to eliminate party specific issue news in these news media. Media play a non-trivial role in the transmission of the issue positions of parties (e.g. Kleinnijenhuis & De Ridder 1998). Voters learn different things from different types of media (Druckman, 2005). In addition to the classical distinction between newspapers and television, the European context requires us

to distinguish between public and commercial television. Although in the Netherlands the content of commercial and public news hardly differs during election time (De Vreese 2008; Van Praag & Van der Eijk 1998), Aarts and Semetko (2003) showed that watching television news on the public service channels has positive effects on knowledge, whereas regularly opting for commercial television news has negative effects.

## **Data, Operationalization, and Model Estimation**

### *The Dutch Case*

The Dutch multidimensional, multiparty system allows us to examine campaign learning effects. In the 2010 campaign 18 parties competed; 10 were able to get representation in parliament. Although these parties largely fall apart into two ideologically rather distinct blocks, electoral competition takes place not only within but also between these blocks (van der Meer, Lubbe, van Elsas, Elff, & van der Brug, 2012).

Obtaining knowledge on parties' positions on specific policy issues is more demanding in a multiparty system like the Netherlands than in a two party system: there are more and mostly small differences between parties' policy positions.<sup>2</sup> While in a bipartisan system any issue positioning of both parties is very likely to also be the correct sequential ordering (thus conflating voters' confidence to position parties or candidates with their ability to position them correctly), accurate ordering requires a lot of simultaneously correct comparisons in a multiparty system. Hence, we separate ability from accuracy.

Dutch electoral campaigns are relatively short, especially compared to the US presidential elections. After Dutch government coalition broke down, elections were announced for June 9th, 2010 on February 23rd. The 'long campaign' (Norris et al. 1999) can be argued to have started soon after, most notably when the PvdA announced Job Cohen (then mayor of Amsterdam) as its candidate on March 12th. However, the intensive 'short campaign' only started early May (5 to 6 weeks before election day), after parties finalized their election manifestos and politicians flocked to the streets. In these short Dutch election campaigns, televised election debates are considered the most important events: they have been part of Dutch campaigns since 1963 and nowadays attract millions of viewers<sup>3</sup>.

### *Survey Data: LISS*

We set up a representative two-wave panel survey conducted by CentERdata, as part of the larger LISS (Longitudinal Internet Studies for Social Sciences) online panel survey.<sup>4</sup> This panel is based on a true probability sample of 5000 households (comprising more than 8000 individuals) drawn from the population register by Statistics Netherlands. Two questionnaires were presented to this panel, one before the Election Day on June 9<sup>th</sup> and one afterwards. The time span between the two waves differs for different respondents. The first questionnaire was presented to 8190 panel members between 3 May and 26 May and had a response rate of 69%. Between 10 June and 30 June the second questionnaire was presented to 7685 panel members and resulted in a response rate of 65%. 4407 panel members filled in both questionnaires. However, to identify the direct effect of the televised election debates we excluded the 760 respondents who first participated after the first election debate was broadcast. This leaves us with a net sample of 3647. The LISS panel guarantees a representative sample (drawn from population data by Dutch Statistics) and limits panel attrition (Scherpenzeel & Das, 2010). This is reflected in the representativeness of the voting behavior of our panel members, which almost perfectly reflects the actual 2010 election outcome.<sup>5</sup>

The survey included questions on demographic characteristics, media exposure, campaign exposure and questions on the issue positions perceived by the voters.

### *Dependent variable*

We distinguish between two aspects. First, knowledge requires the ability to actually position parties' positions on these issues. Second, knowledge about the correct position is assessed through the rank-order of party positions based on a comparison of the official position held by parties according to their manifestos and statements in vote advice applications.

We base these aspects on respondents' perceptions of the positions of the 8 largest Dutch political parties represented in parliament<sup>6</sup> on three different policy issues on a 7-point scale: taxation (preservation vs. abolishment of mortgage interest deduction), health care (stable vs. rising health care contribution) and migrant integration (preservation of

own culture vs. adaptation to the Dutch culture by immigrants). Appendix 1 describes the exact wording of each statement. While we were able to formulate concrete policy proposals on the issues of taxation and health care, the statement on integration was less specific as it lacked a concrete, salient policy proposal. The three policy issues cover different fields that would be relevant during the campaign. Moreover, the three issues cover the most important dimensions in the Dutch party system, both at the electoral (Van der Meer et al. 2012) as well as at the party level (Pellikaan et al. 2007).

The first dependent variable, *Ability to Position*, is a dummy variable indicating whether the respondent felt able to position the party on the issue scale (1=Yes; 0=No) for each of the 24 party issue combinations (1=Yes; 0=No) in wave 1 and 2.<sup>7</sup> The variable is constructed on the basis of the 48 questions in the panel data set that asked the respondents to place 8 parties on the 3 policy scales in wave 1 and wave 2. The answers option I do not know (0) was recoded as No and the positions (1 to 7) were recoded as Yes. This measure gives us a first indication on whether voters felt sufficiently certain to be able to position each party throughout the campaign. Fundamentally, this dependent variable is thus a characteristic of both the respondent and the issue-party combination.

The second dependent variable, *Accuracy of Positions*, is assessed through the ordering of parties according to those respondents that had been able to position all relevant parties in the first wave of the survey. The ordering according to the respondent is compared to the ordering of parties according to party manifestos and according to positions that parties took on statements in the two major vote advice applications of the campaign. These rank-order positions are derived using the confrontational method (Pellikaan et al. 2007). The relative placement of the parties is a more valid and reliable indicator of knowledge than the absolute placement: the scales are by nature ordinal rather than absolute.

On each dimension we only categorized those parties that had taken up a clear stance, based on the direction in which they wanted to pull governmental policy (to the left pole or to the right pole), mirroring the poles in the survey questions. On each policy issue this categorization offered two groups of parties (left and right), in line with the original survey questions. Those parties that could not be grouped on a policy dimension

(for being insufficiently outspoken or outright inconsistent) were left out of the analysis of that policy dimension: we do not demand voters to assess unclear party positions.

In their manifestos and in the vote advice application tools, all parties had taken up a clear position on the issue of mortgage interest tax deduction, either in favor of preservation (CDA, PVV, VVD) or in favor of limitations (CU, D66, GL, PvdA, SP). On the issue of migrant integration, some parties were in favor of multiculturalism (D66, GL, PvdA), others in favor of cultural adaptation (CDA, CU, PVV), whereas two (SP and VVD) gave mixed or no indications of their ultimate position on this issue. Finally, on the issue of health care contribution two parties (SP and PVV) clearly opposed a rise, three parties allowed a rise (CDA, CU, VVD), whereas three others (D66, GL, PvdA) gave vague or mixed indications of their ultimate position.

We placed a relatively relaxed demand on the voters.<sup>8</sup> A perfect correct placement of all parties requires that respondents had the same two groupings. In other words, the ordering of parties *within* these groups is irrelevant, as the accurate positions are determined by the correct ordering (P) of each party in one group compared to those in the other group. The share of correct and erroneous party positions is thus based on the number of combinations of parties in the first group to those in the other. For instance, in the case of mortgage interest tax deduction there are 3 parties in the first group and 5 in the other; the total number of party combinations is  $3*5=15$ . The accuracy of party positions is calculated as the percentage of these combinations that is ordered correctly, ranging from none (0%) to all (100%). Fundamentally, therefore, this dependent variable measures knowledge on the party system (all relevant party combinations), rather than knowledge on individual parties.<sup>9</sup>

Although we could tease out variation between parties in more detail, we put this relatively relaxed demand on voters. First, most debates in the Netherlands pit parties of opposing party groups against each other, rather than parties with rather similar ideas on how to deal with the status quo. The dichotomous ordering thus does more justice to the setup of Dutch televised debates. Second, parties did not take up a position that outright opposed their original outlook. They may change their outspokenness on these issues, but that itself is a prime focus of our analyses. Third, voters find it difficult to position parties

correctly. If we would demand voters to assess differences within party groups correctly as well, our resulting measures would be highly skewed.

### *Modeling Learning Effects: Autoregression*

To assess whether respondents have learned, we employ the autoregressive models that are common in this literature (cf. Hansen & Pedersen 2014): we use respondents' ability and accuracy in the first wave to predict their ability and accuracy in the second wave. Subsequently, we introduce additional variables to explain the residuals in the model, i.e., the learning effect. The coefficients in auto-regressive models only reflect short-term effects (impact since the first wave, not total impact) (Keele & Kelly, 2006). The autoregressive model controls to a large extent for between-person variance. This control, however, is incomplete and sensitive to bottom and ceiling effects. Therefore, we checked the robustness of our findings using growth curve models,<sup>10</sup> which led to fundamentally similar findings.<sup>11</sup>

The two dependent variables call for different data structures. The *Ability to position* is based on 3647 respondents who each gave positioned 8 parties on 3 issues. By stacking the data, resulting in 87,528 (3647\*8\*3) answers per wave, we analyze all this information simultaneously. These observations are evidently not independent, but nested in two ways: in the individual respondents that gave these answers, and in the 24 issue-party combinations. There are thus 3 levels of analysis: answers (at level 1), respondents (at level 2a), and issue-party combinations (at level 2b). This data structure calls for cross-classified multilevel analysis. Because the sample size at level 2b (24) is about the bare minimum in multilevel analyses, the test of hypotheses 4 and 5 will be rather conservative. We employ multilevel analysis (MCMC estimation with a burn-in length of 2,500), using the MLWin 2.30 package. Multilevel models allow us to study to what extent the campaign learning effects are conditional on characteristics of the respondent and/or of the issue-party combination simultaneously. Most alternatives would underestimate standard errors at one of these levels. As the dependent variable is binary (placement or not), logistic models will be estimated.

The *Accuracy of positions* is based on fewer observations. On each of the issues, it only covers those respondents that were able to position the relevant parties on that

dimension in the first wave, in order not to conflate *Accuracy* and *Ability*.<sup>12</sup> We estimate separate models for each policy issue.<sup>13</sup> As the dependent variable is a percentage, ultimately based on the number of accurate combinations, logit models will be estimated; the outcomes are substantially robust to linear and negative binomial multilevel models.

We build up our models and test our hypotheses in a stepwise procedure. Our first three models are random intercept models. The first two models estimate the time effects of hypotheses 1 and 2 at level 1 (answers). Model 3 adds the voter characteristics (at level 2a) and debate characteristics (at level 2b) to assess hypotheses 3 and 4. The final model is a random intercept, random slope model, that allows the learning effect at level 1 to vary with voter characteristics to assess the main effect and cross-level interaction effects to test hypothesis 5.

*Independent variables: Respondent characteristics*

At the first level of the model the answers provided by the respondents we estimate three independent variables. The first determinant at this level is, evidently, the score on ability or accuracy in wave 1, which we use to predict the score in wave 2. Additionally, we control for *Number of Campaign Days* (the number of days after the first wave up to the elections) and *Number of Days After the Election* (the number of days since Election Day until the respondent takes part in wave 2). The first is used to assess learning effects (more days of campaign should invoke more learning) and ‘forgetting effects’ (more days after the elections should induce forgetfulness as voters are no longer primed to retain information). Moreover, we interact both variables with ability and accuracy in wave 1, as the former will be a worse predictor when there is more time between the two waves.

At the individual level we also examine the effect of Campaign Exposure on the ability to position parties. Campaign Exposure is measured by three independent variables. The most central variable to this study is *Watch Television Debates*, which measures the extent to which the respondents has been exposed to the television debates during the campaign (1= Not at all; 3= I watched one or multiple debates completely). *Read Campaign News in Paper* measures whether the respondent would read about the campaign in the newspaper (1= Never; 4= Almost always). *Campaign Attentiveness* measures the extent to which the respondent has been exposed to the overall campaign by

asking the respondent to what extent he has followed the campaign (1= Not at all; 4= Very Intensively).

Finally, our analyses control for respondent characteristics that might affect their ability and accuracy. To control for general media exposure we use five separate indicators of exposure (e.g., Price & Zaller, 1993; Fraile & Iyengar 2014). The variable *Read a Newspaper* measures how often the respondent reads newspapers, which runs from 1 Never to 4 Daily. The variable *Read Domestic News in Paper* measures the extent to which the respondent reads in the newspaper about domestic political, the answer categories run from 1 Never to 4 Almost Always. The two variables *Watch Public News (NOS)* and *Watch Commercial News (RTL)* gauge how often in the week the respondent watches news on public or commercial broadcast channel (1= Less than once a week; 4= Daily). The last variable is *Surfing the Internet for News* that looks at the frequency that a respondent visits webpages that cover societal and political topics (1= Less than once a week; 4= Daily).

Lacking factual information, we operationalized Political Sophistication in two separate variables *Level of Education* (1=Primary Education; 6= Academic Education) and *Political Interest* (1= No interest at all; 7= Very much interested). Finally, we control for two socio-demographic variables, namely dummy variable *Gender* (1=Man; 2=Woman), and *Age* expressed in years.

Much of the impact of the control variables on ability and accuracy will already be captured by the autoregressive components in our models: their influence will largely have been exerted before the first wave of our analysis. Nevertheless, they may also exert short-term effects due to (daily) shifts in news content. Our models control for such short-term effects. Absence of effects may indicate that there was no media impact, but also that there was an impact across the board.

#### *Independent variable: Debate profile*

To measure the actual information flow of each party on each of those issues we analyzed the three main televised election debates between the party leaders: the debate organized by the public broadcaster the evening before Election Day and the two election debates aired by a commercial broadcast channel earlier in the campaign. We conducted manual

content analysis on the basis of the transcripts of these debates: We have counted the number of words spoken by the parties about these issues relative to the total number of words spoken by the parties in these debates.<sup>14</sup> Overall, the three issues under study received a fair amount of attention in the three debates. The participants used the most words to discuss the increase of the health care contribution (14%), followed by the interest mortgage reduction (11%) and the issue of the adaptation of immigrants to the Dutch culture (10%). We hired assistants for an intercoder reliability check, which was more than satisfactory: Fleiss' Kappa is 0.76 when we leave out the role of the debate moderator, 0.87 when we include it. See Appendix 2 for more detailed figures of the debate analyses.

We constructed our variable *Debate Profile* on the basis of this content analysis. It measures the degree to which each of the parties have discussed each of the three policy issues during the three election debates in the three separate debates combined, weighted on the basis of the debate's number of viewers.

We can only use this variable as a determinant of *Ability* but not of *Accuracy*: the latter dependent variable (correct ordering) is not a party characteristic but a group characteristic, leading to three categories.

### **Results I: Ability**

To what extent have voters learned about the issue positions of parties during the parliamentary election campaign of 2010 in the Netherlands? First we present our results on the ability to position the parties on the issues, regardless whether this position is correct. Figure 1 illustrates that the overall share of respondents that feels sufficiently confident to position parties on these three issues is higher after the elections than before. This increase differs across parties and across issues. Yet, the figure obscures that next to the large group of voters that became sufficiently confident to position parties, there is also a group of voters that became more hesitant to position parties after the campaign.

[FIGURE 1 SOMEWHAT HERE]

Table 1 shows the models of the ability to position parties. Model 1 tests the Learning Effects Hypothesis. There is a strong, positive and significant effect of pre-election ability. In combination with the intercept they signal learning effects. This relationship is unaffected by the inclusion of voter characteristics and party issue characteristics in subsequent. All in all, we find support the *Learning Effect Hypothesis (H1)*.

Additionally, Model 1 shows no linear effect for the variable Number of Campaign Days, indicating that voters who were exposed to the election campaign for a longer time span were not more able to position these eight parties on these three specific issues. We therefore reject the *Campaign Length Hypothesis (H2)*. Interestingly, however, model 1 shows evidence of a post-election decay effect: the longer after Election Day voters filled in the second questionnaire, the less able they felt to position the parties. Thus, the increased confidence to position parties during the campaign proves not to last long after the elections.<sup>15</sup>

Next, Model 2 includes two interaction effects as methodological controls in our autoregressive model. Indeed, the pre-election ability to position is a worse determinant of subsequent ability when a longer time span separates the two.

#### TABLE 1 SOMEWHAT HERE

In Model 3 we include the direct effects at the respondent level (2a) and at the issue-party level (2b). Here, we focus solely on those relationships that we had hypothesized: campaign exposure and the content of the debate.

Voters who were exposed more to campaign news in newspapers and election debates were better able to position parties after the elections. Concurrently, voters' (subjective) campaign attentiveness also boosts their post-election ability to position parties. These campaign exposure effects are in addition to our controls for background characteristics, political sophistication, and general media use. Our findings are in line with our *Debate Exposure Hypothesis (H3a)* and *Campaign Attentiveness Hypothesis (H3b)*. Note, however, that we cannot exclude the possibility that the direction of this relationship is reversed, namely that those voters who learned during the campaign therefore conclude that they have followed the campaign intensively.

Model 3 also tests the effect of Debate Profile. We expected voters to learn more on those issue-party combinations that got most emphasis in the debates. Model 3 shows that this effect is not significant ( $Z=1.6$ ). This implies that there is no overall effect on all voters. We thus fail to find support for our *Issue Profiling Hypothesis (H4)*. This may be for three reasons. First, the statistical power of this specific test is rather small (only 24 issue-party combinations, in a complex cross-nested, multilevel model). Second, the autoregressive analysis may suffer from ceiling effects (as those parties that got most attention were already well known before the campaign): indeed, we find stronger effects in our growth curve model. Third, the effect in Model 3 is unconditional: one would expect the strongest effects among voters who actually watched the debates. Among non-viewers, we may only expect indirect effects, as the gist of the debates gets dispersed via other media.

Model 4 shows evidence for hypothesis 5: the effect of Debate Profile is conditional. First, the interaction effect between Debate Profile and Watching the television debates is significant: the Debate Profile effect is stronger to the extent that respondents watched the debates more intensively. Second, the marginal effect of Debate Profile is positive and significant among those respondents who followed the campaign and debates most intensively. All in all, the significant marginal effect implies that there is a direct effect of the content of the televised debates (on the viewers), whereas the insignificant overall effect suggests that there is no evidence for indirect effects (on non-viewers via dispersion through other media).

## **Results II: Accuracy**

Next, we turn to the accuracy of party positions by voters. Figure 2 sets out the share of correctly ordered party-combinations by the share of respondents. To ease comparison, equal shares of correct orderings are shaded similarly. The figure shows that the percentage of respondents that correctly ordered at least one combination of parties had increased slightly (mortgage interest; migrant integration) or substantially (health care contribution) after the elections. The percentage of respondents that correctly ordered all combinations of parties (the bottom black bars) increased for mortgage interest and health care. This seems to indicate that voters learned from the campaign.

However, the increase in accuracy is quite less substantive than the increase in ability that we found earlier.

#### FIGURE 2 SOMEWHAT HERE

Table 2 analyzes only those voters that had been able to position all the relevant parties in the first wave. We had to split the table in three, as the denominator in our logit analyses differ with each policy dimension.

While the autoregressive component in Model 1 provides evidence for the *Learning Effect Hypothesis (H1)*, respondents' exposure to a larger *number* of days of campaign does not linearly lead to a more accurate placement of parties on mortgage interest tax deduction, healthcare or migrant integration. Hence, we reject the *Campaign Length Hypothesis*. Model 1 shows additional evidence that as the elections move further into the past, voters tend to order parties less accurately on the all three issues. We find weaker decay effects on the issue of migration. This is hardly surprising, as it is a much broader, less technical issue in the Dutch political context, and reflected as such in the formulation of the survey item.

Models 2 include interaction effects to the autoregressive model. The pre-election accuracy functions as a worse determinant of post-election accuracy when a longer timespan divides the two waves. However, we find no evidence for this on the issue of migrant integration. Again, this may be explained by the broad and rather ideological scope of the issue in comparison to the others.

Finally, models 3 test to what extent respondents who watched the debates or are attentive to the campaign in general learned more. The results are rather mixed. We find no significant effects of reading campaign news in the newspapers, but do find effects of watching television debates and of subjective campaign attentiveness. Both stimulated post-election accuracy of party positions on mortgage interest tax deduction. We find a significant effect of watching television debates on the issue of healthcare, but not on the issue of migration. Vice versa, campaign attentiveness has a significant effect on migration but not on healthcare. All in all, we find support for the *Debate Exposure*

*Hypothesis (H3a)* and the *Campaign Attentiveness Hypothesis (H3b)*, although this support is mixed.

It is remarkable that we find more consistent effects on mortgage interest tax deduction than on the other two issues. While it did not receive more attention in the debates than, for instance, the issue of health care, the discussion of mortgage interest tax deduction was the most clear-cut of the three, especially in the last weeks of the campaign. Notably, these clear divisions appeared once Christian-democrat (and prime minister) Balkenende labeled the reduction of mortgage interest tax deduction non-negotiable on May 21st 2010 - in an attempt to outbid his main electoral rival VVD and thereby ending the years-long ambivalent stance of his party.<sup>16</sup> This implies that campaign learning effects may not only depend on the relative share of attention to each party-issue combination, but also on the clarity of the divisions in the party system.

TABLE 2 SOMEWHAT HERE

### **Conclusion and Discussion**

This study set out to answer three research questions. First, voters learned throughout the election campaign, even in the complex setting of a multiparty system: after the elections voters are not only more able to position parties on three policy issues, but are also more accurate in doing so. However, this acquired information decays with time: voters are less able to position the parties as Election Day moves further into the past. The persistence of learning effects is thus limited (Lanoue, 1991; Hill, Lo, Vavreck, & Zaller, 2013). Campaign learning is generally stimulated by campaign exposure.

Second, there is a differential impact of election debates and campaign exposure on ability and accuracy. Any form of campaign exposure makes voters more likely to position the parties on three issues. However, it does not consistently contribute to the accuracy of the party placements. The increased ability to position parties may not reflect knowledge but merely the boost in self-confidence among voters. A feeling of certainty to position candidates does not need to simultaneously decrease the perceptual error of that position (Koch 2008). Although we lack a more fine-grained measure of confidence, our findings imply that ability/certainty and accuracy do not always go hand-in-hand.

Third, the content of televised election debates contributes to learning. We found evidence that campaign learning effects are contingent on the issue-party specific information put forward in election debates. The more any party addresses a certain issue in the debates, the more likely viewers of these debates are able to position that party on that specific issue. Debates do not have an effect across the board, but only influence voters who closely follow the debates.<sup>17</sup> This effect may even be underestimated due to ceiling effects: those issue-party combinations that were emphasized the most in the debates were already well-known beforehand.

It seems especially interesting to speculate why watching election debates proved relevant to learn accurately about positions on some issues and not about others. The lack of consistent effects is unlikely to be caused by a short time span in our study, as the data collection covers the whole month before the typically short Dutch election campaign, and we control for days of exposure. Rather, the lack of consistent effects on accuracy may reflect the complexity of election debates in Dutch multiparty system. They are rarely straightforward discussions between two candidates like in the US presidential context. In the 2010 televised Dutch election debates the number of participants ranged from four to eight, making the debates highly complex interactions.

A closer look at the debates reveals that parties do not always make it easy for voters to pick up the correct positions. Parties need not even change their position to create confusion. Rather, the debate format with four to eight politicians is likely to incur misunderstandings. Even ideologically similar parties attacked each other, making it more problematic for voters to get a clear overview of the party landscape. It is striking how often party leaders in the debates discussed and interpreted specific aspects of the program of their competitors in a way that is in turn contested by the leader of the addressed party. Strategic behavior of party leaders during the debates may then hinder voters to learn about where parties stand (cf. Kleinnijenhuis & De Ridder 1998).

Although we could not directly test the effect of specific issue-party information on accuracy, we have strong indications that this effect does not merely depend on the amount of information but also of the clarity of the positions taken by the parties. We find the most consistent effects of campaign attentiveness on the issue of mortgage interest tax deduction. Directly before the 2010 campaign, the two least outspoken parties

– the social-democrats and the Christian-democrats – took up a firm position on the issue. In an attempt to outbid their electoral rivals, the Christian-democrats even labeled their position as ‘non-negotiable’, thereby forcing other parties into a clear dichotomous divide. There are direct parallels to findings from earlier studies that campaigns and debates only contribute to knowledge when politicians present correct (Maier & Reinemann, 2006) and clear (Franklin, 1991) information. However, our findings suggest that the effect of clearly communicated party positions is also contingent on the clarity of the positional differences between candidates and/or parties on the issue dimension as a whole. In other words, the effect of issue-party-specific content in media and debates on the accurate understanding of party positions is likely to depend not only on voters’ campaign attentiveness but also on the clarity of the positional differences between parties.

The study of campaign learning effects in multi-party systems has taken a flight in recent years (e.g. Hansen & Pedersen, 2014; Kleinnijenhuis & Walter, 2014). This has opened up new ways to stringently test longstanding theories on the mechanisms behind campaign learning in general. Campaign learning is less evident due to the relatively large number of actors that cover a wide range of policy positions. Yet, multiparty systems allow a more meaningful distinction between ability and certainty to attribute policy positions on the one hand and accurate attributions on the other. Issue-party-specific media content - such as the discussions during televised election debates in our study – matters, but may be conditional on the clarity of the policy divisions in the party system as a whole.

On a more fundamental level, though, this study confirms most of the US literature in a multiparty context: during campaigns people learn more about what parties stand for. Viewers’ knowledge of the standpoints of parties on specific issues is boosted not only by media use in general (cf. Hansen & Pedersen, 2014), but more specifically by the content of these media, at least as discussed in televised election debates. This, by itself, is a crucial aspect of modern-day representative democracy. Although the learning effect is modest and temporary, it goes against the somewhat cynical popular idea that campaigns are merely about strategy and horse-race.

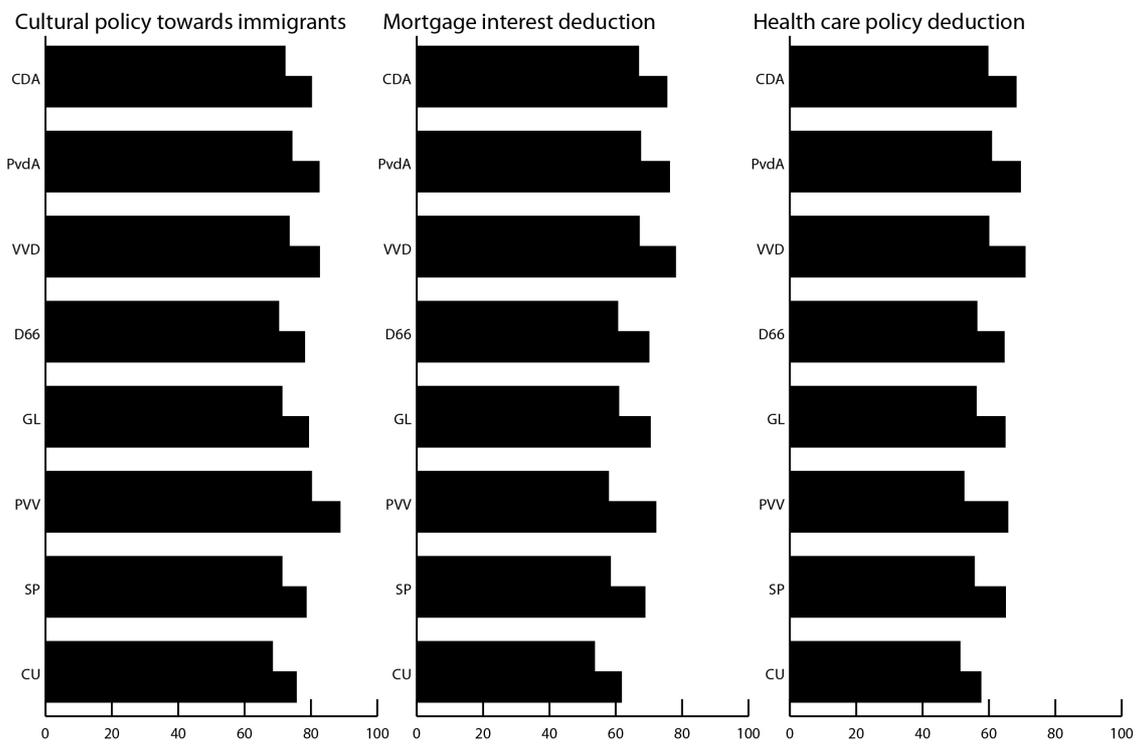
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*Figure 1. Ability to Position Parties on 3 Policy Issues Pre- and Post-Campaign (% respondents able to position each party)*

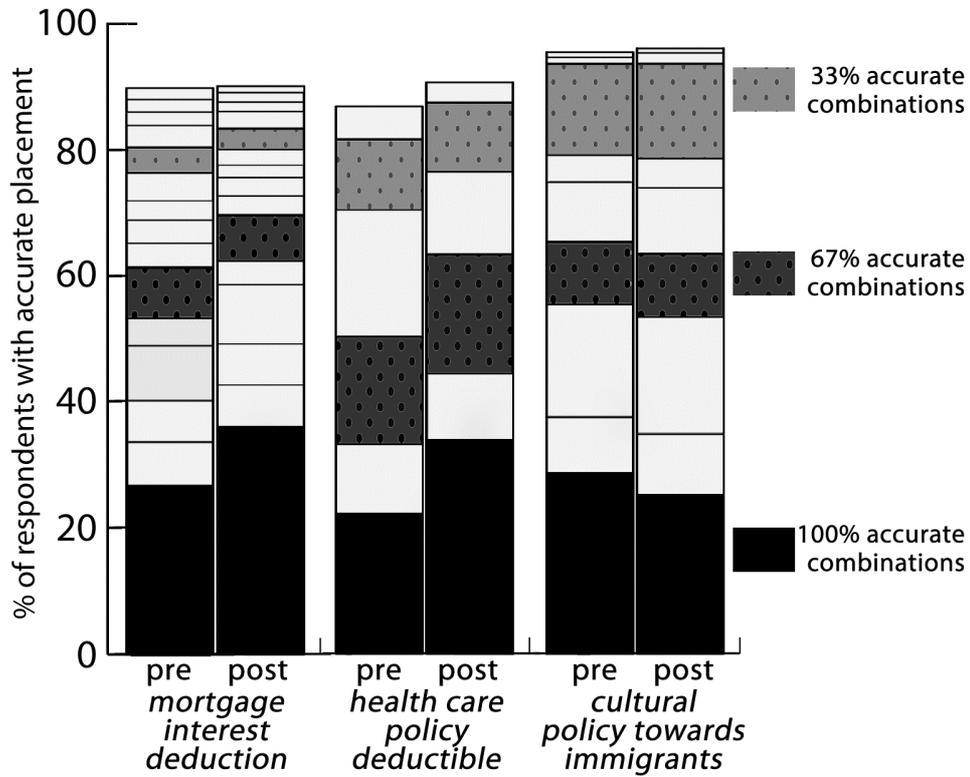


Figure 2. Accuracy of Party Positions on 3 Policy Issues Pre- and Post-Campaign (% respondents that ordered increasing shares of party combinations accurately)

**Table 1. Explaining the post-election ability to attribute issue positions (log odds, standard errors between brackets)**

	Model 1	Model 2	Model 3	Model 4
<b>Level 1: Answers</b>				
Ability pre-election	<b>2.15 (0.04)</b>	<b>2.03 (0.24)</b>	<b>1.74 (0.26)</b>	<b>1.66 (0.32)</b>
Number of campaign days	-0.00 (0.01)	0.01 (0.01)	<b>0.02 (0.01)</b>	<b>0.02 (0.01)</b>
Number of days after election	<b>-0.04 (0.01)</b>	<b>-0.02 (0.00)</b>	<b>-0.03 (0.01)</b>	<b>-0.03 (0.00)</b>
Ability pre-election * Number of campaign days		<b>-0.02 (0.01)</b>	<b>-0.02 (0.01)</b>	<b>-0.02 (0.01)</b>
Ability pre-election * Number of days after election		-0.00 (0.00)	0.00 (0.01)	0.01 (0.00)
<b>Level 2a: Individuals</b>				
<b>Sophistication</b>				
Level of education			<b>0.27 (0.08)</b>	<b>0.24 (0.06)</b>
Political interest			<b>0.57 (0.04)</b>	<b>0.46 (0.05)</b>
<b>Media exposure</b>				
Read a newspaper			0.06 (0.10)	-0.02 (0.10)
Read domestic news in paper			0.11 (0.10)	<b>0.25 (0.08)</b>
Watch public news (NOS)			0.09 (0.08)	<b>0.12 (0.06)</b>
Watch commercial news (RTL)			-0.09 (0.06)	<b>-0.08 (0.04)</b>
Surfing the internet for news			0.02 (0.08)	-0.03 (0.06)
<b>Campaign exposure</b>				
Read campaign news in paper			<b>0.55 (0.10)</b>	<b>0.72 (0.11)</b>
Watch television debates			<b>0.57 (0.13)</b>	<b>0.65 (0.11)</b>
Campaign attentiveness			<b>1.01 (0.17)</b>	<b>0.68 (0.17)</b>
<b>Level 2b: Issue-Party</b>				
Debate profile			0.32 (0.20)	<b>0.68 (0.25)</b>
<b>Cross-level interaction effects</b>				
Debate profile * Watch television debates				<b>0.10 (0.04)</b>
Debate profile * Campaign attentiveness				0.00 (0.04)

Cross-classified multilevel binary logistic regression analyses

Bold figures are significant at  $p < .05$ , one-sided tests

Models control for gender and age.

**Table 2. Explaining the post-election attribution of issue positions, ordering P (standard errors between brackets)**

	Mortgage tax deduct			Healthcare			Migrants		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
<b>Time</b>									
Accuracy pre-election	<b>2.04 (0.04)</b>	<b>4.21 (0.25)</b>	<b>4.12 (0.21)</b>	<b>1.53 (0.08)</b>	<b>1.75 (0.32)</b>	<b>1.67 (0.60)</b>	<b>0.14 (0.01)</b>	<b>0.12 (0.03)</b>	<b>0.10 (0.04)</b>
Number of campaign days ^	0.03 (0.03)	0.00 (0.05)	<b>-0.11 (0.04)</b>	-0.04 (0.04)	0.09 (0.09)	0.10 (0.08)	0.00 (0.03)	-0.01 (0.03)	<b>0.05 (0.03)</b>
Number of days after election ^	<b>-0.17 (0.02)</b>	<b>0.11 (0.03)</b>	<b>0.14 (0.05)</b>	<b>-0.21 (0.04)</b>	<b>-0.18 (0.05)</b>	-0.07 (0.11)	<b>-0.07 (0.02)</b>	<b>0.06 (0.03)</b>	-0.03 (0.03)
Accuracy pre-election * Number of campaign days ^		0.06 (0.07)	<b>0.02 (0.01)</b>		<b>-0.24 (0.13)</b>	<b>-0.27 (0.13)</b>		-0.01 (0.01)	0.00 (0.01)
Accuracy pre-election * Number of days after election ^		<b>-0.05 (0.01)</b>	<b>-0.05 (0.00)</b>		-0.10 (0.07)	-0.13 (0.13)		0.00 (0.01)	0.00 (0.01)
<b>Sophistication</b>									
Level of education			<b>0.20 (0.01)</b>			0.03 (0.02)			<b>0.13 (0.01)</b>
Political interest			<b>0.07 (0.02)</b>			<b>0.10 (0.03)</b>			<b>0.11 (0.02)</b>
<b>Media exposure</b>									
Read a newspaper			<b>0.16 (0.03)</b>			0.00 (0.05)			-0.04 (0.03)
Read domestic news in paper			0.02 (0.02)			0.05 (0.04)			0.01 (0.03)
Watch public news (NOS)			-0.00 (0.02)			0.02 (0.04)			0.01 (0.02)
Watch commercial news (RTL)			<b>-0.11 (0.01)</b>			-0.01 (0.02)			<b>-0.07 (0.02)</b>
Surfing the internet for news			<b>0.03 (0.02)</b>			0.02 (0.03)			0.01 (0.02)
<b>Campaign exposure</b>									
Read campaign news in paper			-0.02 (0.03)			-0.05 (0.04)			0.03 (0.02)
Watch television debates			<b>0.10 (0.03)</b>			<b>0.23 (0.04)</b>			-0.04 (0.03)
Campaign attentiveness			<b>0.08 (0.03)</b>			0.06 (0.05)			<b>0.10 (0.04)</b>

Binomial regression analyses with logit link;

Bold figures are significant at  $p < .05$ , one-sided tests

Models control for gender and age

^ indicate effects that are reported with a factor of \*10, to illustrate effect size

## **Appendix 1: Policy Issue Questions Asked**

**Adaptation Immigrants Dutch Culture:** Some parties in the Netherlands think that immigrants should be able to live in this country with preservation of their own culture. Other parties think that they should adapt completely to the Dutch culture. Where would you place the following parties on a line of 1 to 7, where 1 means preservation of their own culture and 7 that they should adapt completely?

**Abolishment Mortgage Interest Deduction:** Some parties in the Netherlands think that people should not be able to deduct mortgage interest from their taxes any longer. Other parties think that this deduction should remain. Where would you place the following parties on a line of 1 to 7, where 1 means preservation of the complete mortgage deduction and 7 that this deduction should be completely abolished?

**Rise Own Health Care Contribution:** Some parties in the Netherlands want to save by increasing the own contribution to health care. Other parties think that the own contribution to health care should not or barely increase. Where would you place the following parties on a line of 1 to 7, where 1 means preservation of the present own health care contribution and 7 that this contribution should be increased?

## Appendix 2: Televised Election Debates

**Table A1: Election Debates Analyzed**

Air date	Broadcast channel	Participants	Moderator(s)	Number of viewers
23.5.2010	RTL (commercial)	Jan Peter Balkenende (CDA) Job Cohen (PvdA) Mark Rutte (VVD) Geert Wilders (PVV) <i>[other candidates not invited]</i>	Frits Wester	1.339.000
26.5.2010	RTL (commercial)	Jan Peter Balkenende (CDA) Job Cohen (PvdA) Femke Halsema (GL) Alexander Pechtold (D66) Emile Roemer (SP) André Rouvoet (CU) Mark Rutte (VVD) Geert Wilders (PVV)	Rick Nieman & Mariëlle Tweebeeke	1.520.000
8.6.2010	NOS (public)	Jan Peter Balkenende (CDA) Job Cohen (PvdA) Femke Halsema (GL) Alexander Pechtold (D66) Emile Roemer (SP) André Rouvoet (CU) Mark Rutte (VVD) Geert Wilders (PVV)	Ferry Mingelen & Dominique van der Heyde	2.690.000

**Table A2: Relative attention party leaders devoted to three issues in election debates<sup>a</sup>**

	Health care Contribution	Interest Mortgage	Immigrant Integration
Jan Peter Balkenende (CDA)	26.9	17.7	14.1
Job Cohen (PvdA)	18.1	12.9	23.1
Femke Halsema (GL) <sup>a</sup>	3.6	2.1	0.0
Alexander Pechtold (D66) <sup>a</sup>	1.8	13.3	0.0
Emile Roemer (SP) <sup>a</sup>	9.2	8.3	1.0
André Rouvoet (CU) <sup>a</sup>	8.0	8.2	0.0
Mark Rutte (VVD)	18.2	25.9	18.1
Geert Wilders (PVV)	14.2	11.6	43.7
Total	100	100	100

<sup>a</sup> Halsema (GL), Pechtold (D66), Roemer (SP), Rouvoet (CU) received less attention in general, because (a) they participated only in 2 out of 3 debates, and (b) agreed to less televised time during those debates.

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<sup>1</sup> Compared to the US, Dutch parties have a large influence on the topics to be discussed during the debates, and largely decide among themselves who partner up as rivals in one-on-one single-issue opening debates.

<sup>2</sup> However, Arcenaux (2006) shows that learning effects about ‘the fundamentals’ (economy and ideology) are bigger in party-list electoral countries because voters focus more on parties and less on candidates.

<sup>3</sup> The number of viewers for the 2010 election debates ranged between 1.3 (RTL) and 2.7 million (NOS) reaching a market share of almost 40% (see Appendix 2). This contrasts with the relatively minor role of televised election ads in the Netherlands (Walter & Vliegenthart 2010).

<sup>4</sup> Households that could not otherwise participate are provided with a computer and Internet connection.

<sup>5</sup> Support in the second wave differs marginally from the actual results, except for the support for PVV (that was similarly underestimated in opinion-polls during the 2010 campaign): CDA (-0.8ppt in LISS), PvdA (+0.9ppt), VVD (-1.1ppt), D66 (+0.1ppt), GL (+1.0ppt), PVV (-4.1ppt), SP (+0.9ppt), CU (+0.2ppt), SGP (-0.3ppt), PvdD (-0.2ppt).

<sup>6</sup> CDA (Christian Democrats), PvdA (Labour Party), VVD (Liberal-Conservatives), D66 (Democrats), GL (GreenLeft), PVV (Freedom Party), SP (Socialist Party) and CU (ChristianUnion). The two parties in parliament that were excluded did not take part in the main televised debates of this election campaign.

<sup>7</sup> Evidently, the dummy variable Ability to Position is a crude measure of voters’ perceptual certainty of parties’ issue positions. Ideally, we would have measured issue-party positions with a certainty scale (cf. Koch 2006). Nevertheless, this measure gives us a first indication on voters certainty in positioning parties: we assess within-person changes in positioning parties throughout the campaign.

<sup>8</sup> Hansen & Pedersen (2014) also assess dyads of parties but compare all party-dyads to the ‘true’ (i.e., mean) position in the sample. Their use of a single, overarching dimension allows this strong demand.

<sup>9</sup> Ideally, we would have estimated a dyadic model to explain the accuracy of each ordering of two parties. However, there are too few parties to estimate such a complex model on our panel data set.

<sup>10</sup> The growth curve model nests both waves within-persons, and includes a variable to model the learning effect (change from pre- to post-election wave). By making that variable conditional on media use and debate profile, we can assess both selection effects (if media usage and debate profile have an effect on ability and accuracy in the first wave) and socialization effects (if media usage and debate profile have a significantly stronger effect on the ability and accuracy in the second wave). Hence, the growth curve

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model focuses on differences rather than residuals. Downsides are that the growth curve model may be too conservative when using fewer than three waves (Singer & Willett 2003), and that the model gets complex very quickly, due to the large number of cross-level interaction effects and resulting covariances.

<sup>11</sup> On ability the growth curve model finds more robust evidence than the autoregressive model for campaign learning effects, on accuracy the growth curve model finds less evidence for campaign learning effects. This may be due to ceiling effects and bottom effects, respectively.

<sup>12</sup> 1431 respondents were able to position all relevant parties in both waves on mortgage interest tax reduction, 1795 respondents on migrant integration, 1225 respondents on health care.

<sup>13</sup> Consequently, we are not able to test hypotheses 4 and 5 on accuracy directly.

<sup>14</sup> The coding unit was each uninterrupted text unit of the candidates. The unit starts when the candidate begins to speak and ends when the candidate is interrupted. All the words within this unit were counted when the candidates spoke within this unit about one of the three issues. There were no units in which the candidate spoke about more than one of these three issues.

<sup>15</sup> The post-election decline is unlikely to be caused by the main post-electoral political event, coalition negotiations. These negotiations were ongoing (lasting until October 14th) and very closed procedures. Only the PVV explicitly announced a willingness to change positions on pensioning.

<sup>16</sup> The decline of ambivalent positions on the issue of mortgage interest tax deduction had been stimulated by the banking, housing, and government budget crises since 2008. Most notably, the two largest parties, and until 2010 coalition parties, PvdA and CDA took up less ambivalent positions in the 2010 campaign. Whereas PvdA proposed the partial abolishment of mortgage interest tax deduction, CDA did the inverse by calling that non-negotiable at the start of the campaign. Both changes created a clear divide and increased the salience of the issue during the campaign. These, in turn, are likely to stimulate accurate positioning of parties during the campaign.

<sup>17</sup> Growth curve models find an effect across the board, that is more outspoken for voters who watched the debate.