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Agree or Not Agree

An Analysis on the Accuracy of Issue Priorities and Party Positions in Voting Advice Applications

Master Thesis

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Agree or Not Agree: An Analysis on the Accuracy of Issue Priorities and Party Positions in Voting Advice Applications.

Use of online voting advice applications (from here on referred to as VAA's) has been on the rise in elections. Their popularity has increased over the years, with their user base increasing steadily. This increase in popularity has made them relevant for political science studies (Fossen & Anderson, 2014). Since VAA's attempt to help voters, it is important to know if their advice is accurate and if this advice is being used by voters. As a result, the academic literature on VAA's has been increasing. However, due to the relative new nature of VAA's, many questions are yet to be answered (Rosema, Anderson, & Walgrave, 2014, p. 240). One of the aspects that is yet to be evaluated is the accuracy of VAA's in reflecting party programs in second order elections, such as elections for the European parliament. This research paper will focus on this topic, specifically the following research question:

To what degree are voting advice applications s an accurate reflection of issue priorities and party positions in the Netherlands during the 2009 European Parliament elections?

In this research question, accuracy will be conceptualized as a combination of two factors. The first factor is one of saliency of policy issues. A voting advice application is accurate if it prioritizes the same issues as political parties and voters. The second factor is one of positions. A voting advice application is accurate if it portrays the issue positions of political parties in the same way as political parties present themselves.

By researching and answering the research question, the accuracy of VAA's in elections for the European Parliament will be evaluated. This is important to research for two reasons. First, information about the accuracy of VAA's is needed in order to do research on the answer data of VAA's. Research on voter answers to VAA's could be of great value for research on voter positions and the importance of issues for voters. However, before this data

can be used the accuracy and validity of VAA's will need to be established first (Andreadis, Wall, & Krouwel, 2015, p. 1). Second, the current literature has only researched data regarding voting advice application for national elections. Data from research on applications for second order elections, such as the European elections, could be used to further expand the current insights on the value of VAA's. Third, it is important to know if these VAA's give out accurate advice to the electorate. Voters generally possess less knowledge about issues and part positions on a European level (Rapeli, 2014). The salience of the advice of VAA's becomes therefore even higher. For voters, it would be very important to know if they can trust the advice these applications hand out so they do not wrongly follow advice that actually should not apply to them. This is relevant because voters have been shown to both use VAA's in great numbers and to take the advice of applications into consideration. In countries like the Netherlands, applications have been estimated to be used by millions of people (Djouvas, Gemenis, & Mendez, 2015, p. 1)

Theory

All VAA's share a common goal. Their aim is to inform voters based on the voters' preferences compared to political party programs. In order to do this, VAA's rely on short multiple choice questionnaires. The questions in these questionnaires refer to relevant issues for the next elections. When all the questions have been answered, the application will compare the answers to the data about party positions. The voter then receives advice and is shown how much their preferences align with the positions of all the parties participating in the elections (Wagner & Ruusuvirta, 2012, p. 421).

The first VAA's became available in the 1980s as pencil and paper forms. They were not very popular at first. However, the introduction of online VAA's proved to be a very big step. In 2014, the number of users has exceeded a quarter of the electorate in various countries, including the Netherlands, Belgium, Germany, Finland and Switzerland. For this reason

VAA's have been receiving a lot of attention in times of elections (Gemenis & Rosema, 2014, p. 281).

Most VAA's have the explicit goal of informing voters about the policy position of political parties participating in the elections (Schultze, 2014, p. 47). By presenting the policy positions on different issues, voters get a comparative overview of what sides different parties take on these issues. Another effect that VAA's may have is to highlight the relevant issues. Especially for people that are not very invested in politics, participating in a VAA may give them information about what issues are currently under debate in politics (Schultze, 2014, p. 47). Research on the German VAA Wahl-O-Mat has indicated that participating in VAAs might increase both political knowledge and political participation. Significant effects were found for political knowledge for groups that participated in Wahl-O-Mat compared to control groups that did not. Participants in the first group also showed higher amounts of political participation than the group that did not. The researchers theorized that this effect can be attributed to the increase in information on relevant issues. In order to engage in political participation and political discussion, information about party policies on relevant issues is necessary. VAA's might therefore play an important role in increasing political participation (Schultze, 2014, p. 62).

Research has suggested that the way a voting advice application is designed can matter greatly. In particular, the number of questions spent on certain issues makes a large difference. Research has shown that parties with a clear position on a certain issue profit more from multiple questions on this issue than parties with a less clear position do. What this means is that center oriented parties do less well in general when faced with particular issues, while far right or far left parties profit. The best way to deal with this problem would be to increase the total amount of questions. This way, the chance of unintended selection bias is decreased. However, a large questionnaire requires too much from the attention span of a user and is

therefore not a desirable trait for VAA's. The result is that voting advice application creators should be very cautious when selecting the right amount of questions per issue in order to remain accurate (Lefevere & Walgrave, 2014, p. 261).

In research with the Belgian VAA *Doe de StemTest!* , the effect of different types of questions was researched. The researchers had created a VAA with 50 potential questions, of which 36 were randomly chosen per respondent. Respondents were further divided into one group with weighted questions and one which did not. A random sample of 1000 Belgian citizens was then instructed to complete the VAA (Walgrave, Nuytemans, & Pepermans, 2009, p. 1169). The researchers found that different questions can have a great effect on the final recommendations of the VAA. Although the statistical difference between the different question sets was significant but not overly large, the differences between which parties were recommended were significant and very large. For example, for some question sets the average amount of recommendations that CD&V-N-VA received was 5%. For another question set, the average was 32%. For Vlaams Blok, recommendation averages fluctuated between 4% and 26%. Weighted and non-weighted question sets did not change these findings, as both groups received different recommendations based on the type of question set (Walgrave, Nuytemans, & Pepermans, 2009, p. 1177). The researchers therefore concluded that VAA creators should exercise extreme caution when selecting their questions. During the selection of questions, VAA creators should be just as cautious as political scientists designing a survey are (Walgrave, Nuytemans, & Pepermans, 2009, p. 1178).

The necessity of accuracy is highlighted by findings that voters take the results of VAA's' advice into account. Even for voters that have already decided on their vote, VAA's can make a difference. Eight percent of voters with a predetermined preference are willing to change their preference if the voting advice application provides them with a reasoned alternative (Alvarez, Levin, Mair, & Trechsel, 2014, p. 235). For voters that have not decided

on a party preference yet, the findings are even stronger. In research on the 2011 Swiss national elections, it was found that as much as two thirds of the users of the smartphone voting advice application took the advice into account. One third indicated that they used the advice to change or decide on their vote (Pianzola, 2014, p. 651). The combination of subjectivity in selecting application questions and voters' willingness to listen to application advice means the accuracy of the VAA's is of great importance during elections.

VAA's being accurate is also important for scientific research, as the questions in VAA's could be used in surveys and other scientific research. An example of this is research on party candidate cohesiveness in Denmark in 2011. In this research, party candidates running for the 2011 elections were tested on their individual cohesiveness to fellow candidates of the same party and to the average party line. The researchers used questions from 2011 Danish VAA's as their survey questions (Hansen & Rasmussen, 2013, p. 189). In their discussion section, the researchers suggest that using VAA questions in scientific research might be developing further in the future, as VAA's are developing in more countries and have potential for new areas of research. For example by measuring the political knowledge of political parties and party members (Hansen & Rasmussen, 2013, p. 190). Research of this kind makes clear that VAA's need to be accurate in order to produce valid results. With both the rate of VAA's and research that includes questions and results from VAA's rapidly increasing, this need for accuracy will become even further relevant over time (Hansen & Rasmussen, 2013, p. 191).

Unfortunately, VAA's face a number of hazards that might undermine their accuracy. For most applications, information on both party positions and issue saliency is collected by asking parties for their positions and opinions. This means the opinion of voters is not included. In other words, the number of questions for each issue might be misaligned with the saliency of this issue from the voters' point of view. This misalignment could threaten the

accuracy of the applications (Andreadis, Wall, & Krouwel, 2015, p. 2).

A second hazard is the problem of issue saliency from the parties' point of view. The problem here is that a choice has to be made between the relevancy of broad, long time issues or short time issues that are important at the time of the election. Political parties are inclined to put issues that are currently being debated as a high priority. However, one might question whether this is a good approach for the accuracy of the application. The application is supposed to give advice for a parliament that will exist for the next five years, but the parties prioritize issues that are of importance right now. Most application creators rely on the opinion of (representatives of) political parties to decide on the saliency of issues. This means that there is likely to be misalignments between issue saliency in the applications and in party documents. This would hurt the accuracy of the VAA's (Van Camp, Lefevere, Walgrave, 2015, p. 6).

A third hazard is the tendency of voting advice application creators to focus on differences between parties. To the creators, questions are most useful when the parties have different opinions about issues. If most parties agree on being in favor or opposed to a certain issue statement, this does nothing for computing the differences between voters and varying parties. Application creators would therefore have a reason to interpret party positions liberally and make differences between parties bigger than they actually are, which would skew the party positions compared to how they are in the party programs. This tendency to enlarge differences could threaten the accuracy of the VAA's (Van Camp, Lefevere, Walgrave, 2015, p. 6).

The final hazard concerns the motivations of parties to provide the right information about their positions. This is important because most applications rely on parties themselves to estimate party positions. However, parties might have reasons to deviate from the information in their party programs. First, parties might want to avoid being put on

unfavorable ends on controversial issues. Previous research has shown that parties are very willing to express themselves on issues that they consider to be to their advantage, but they are reluctant to express themselves on issues that might be disadvantageous to them electorally. Parties would therefore have reason to express themselves more moderate or even opposite on controversial issues compared to what their party's position actually is. Second, parties might have an incentive to provide positions that are popular and would therefore improve their advice ratio in the applications. Parties would therefore be inclined to provide popular positions rather than their actual positions. These controversial and strategic concerns could harm the accuracy of the VAA's (Gemenis & Van Ham, 2015, p. 2).

One of the ways VAA's try to deal with the task of providing balance issue priority in a limited amount of questions, is to include the option to assign weights to questions. This process works similar for most VAA's. The concept of weighting questions will be explained by an example of the Stemwijzer 2009 VAA. After all thirty questions have been answered, the respondent is shown a screen of thirty boxes. Short titles of one or two words are placed next to the boxes. For example, the question *De Europese Centrale Bank (ECB) moet meer taken krijgen, zoals stimulering van de werkgelegenheid* (translated: The European Central Bank should be assigned more tasks, such as stimulating employment rates) is shortened to *Taken ECB* (Tasks ECB). The respondent can then fill out as many boxes as he or she wants. The respondent is instructed that the questions whose boxes have been filled out will receive relatively high priority, compared to questions that are not filled out whose boxes receive relatively low priority. There are multiple problems with this approach.

First, presenting thirty items to the respondent at once, resulting in a high amount of cognitive load. Research on cognitive load has shown that the memory span of the human brain is limited. Memory span is the average amount of items that a human can reproduce without rehearsing techniques (Johnson & Proctor, 2004, p. 101). The degree to which

humans can memorize lists of items differs from person to person, but has generally been estimated to be around seven items with differences ranging from around two items more or less (Mathy & Feldman, 2012, p. 1). This is relevant to VAA's, because they present the respondent with a list of 30 items with the expectation that the respondent is able to evaluate these 30 items against one another. However, the research on cognitive load suggests that no more than seven items can be kept in mind simultaneously, which makes it impossible for the average respondent to make a valuable judgment on 30 items. More recent research on cognitive load has suggested that by making use of a process called 'chunking', humans are able process more than the average seven items simultaneously. Chunking is defined as the process of grouping similar items together based on similar characteristics. Research has shown that humans are able to process an average amount of four chunks, with differences ranging from around one chunk more or less (Mathy & Fieldman, 2012, p. 2). This idea seems applicable to the VAA's, because some of the questions deal with similar subdomains. However, the questions of the VAA's detail too many subdomains for chunking to be effective. Stemwijzer's 30 questions are distributed over 25 different subdomains, while Kieskompas' 30 questions are distributed over 26 different subdomains. This means it is not possible for humans to process the distribution of priority for 30 items at the same time.

The second reason is that the abbreviated titles of the questions put a strain on the memory of the participants. The titles reflect the topic that the questions was about, but do not reflect the actors or measures in the questions. For each abbreviated title, the respondent would have to either use his memory to remember the phrasing of the question, or go back to the questions section to reread the question. Both options require engaging in another task than processing the relative priorities. Research has shown that engaging in multiple cognitive tasks limits the effectiveness of the memory span (Johnson & Proctor, 2004, p. 326). In other words, the use of abbreviated titles puts the process of evaluating relative priorities even more

under pressure.

The third reason is of a methodological nature. Respondents are allowed to assign priority to the questions, but do not have any influence over how much priority they are assigning. Filling out the boxes gives the respondents only two options: one option to assign priority to a question, and one option to not assign priority to a question. This does not allow the participants to assign further priorities to boxes that have already been filled out as high priority. This means that all the questions that are assigned high priority will receive the same priority, while all questions that are not assigned high priority will also receive the same priority. Because the respondent is only allowed two levels of priority, the effectiveness is limited.

The shortcomings of the weight pages of the VAA's mean that the weight pages are not sufficient to capture the priorities of the respondents on their own. VAA's can therefore not rely on this feature and should make sure that the amount of questions per subdomain can already provide an accurate reflection on its own.

The hazards to accuracy in the theory lead to three different hypotheses for this study:

Hypothesis 1: VAA's and party programs have different issue priorities.

Hypothesis 2: VAA's and the electorate have different issue priorities.

Hypothesis 3: Some issue positions differ between party programs and VAA's.

Methods

To research the hypotheses, data from the European Parliament Elections in 2009 in the Netherlands were chosen. The rise of VAA's has occurred foremost in Europe and the Netherlands can be considered to be at the center of research. The first electronic VAA was

developed in the Netherlands and a large part of the studies on VAA's have included Dutch VAA's (Garzia & Marschall, 2012, p. 203).

Two VAA's exist in the Netherlands, Stemwijzer[1] and Kieskompas[2]. Both have had their respective 2009 version included in the study. The European Parliament Elections in 2009 were specifically chosen because of the two differences between the two VAA's. For Stemwijzer, the 2009 version (StemWijzerEuropa 2009) was produced by ProDemos and is accessible at http://europa.stemwijzer.nl/. ProDemos is a Dutch institute, partially funded by the Dutch government, that aims to provide information about a wide variety of politics to the public. Examples of this include giving lectures, hosting debates and creating digital information sites (ProDemos, 2015). For Kieskompas, the Dutch version of their 2009 VVA (EU Profiler) was produced in cooperation with the European University Institute[3] and NCCR Democracy[4], and is accessible at http://www.euprofiler.eu/. The European University Institute is an international research institute, with one of its departments focusing on political science (EUI, 2015). By including these VAA's, both a VAA with a societal background and a VAA with a scientific background were represented. Both Stemwijzer and Kieskompas have made clear that their primary function is to inform citizens about relevant issues. Stemwijzer is moderate specific in their criteria for relevancy. They consider issues that are important in the campaign, issues that are most dominant in political discussions leading up to the elections, issues that are high up the political agenda, and issues that are high up in public opinion (Van Camp, Lefevere, & Walgrave, 2015, p. 3). By doing so they show a desire to reflect both the priorities from the parties as well as the electorate. Kieskompas is less specific, considering issues that are relevant in politics and society, and issues that are important (Van Camp, Lefevere, & Walgrave, 2015, p. 3). While neither VAA is especially clear on their criteria for

[1] http://www.stemwijzer.nl/
[2] http://home.kieskompas.nl/
[3] http://www.eui.eu/Home.aspx
[4] http://www.nccr-democracy.uzh.ch/

the priority of issues, both VAA's consider reflecting issues important in politics and in society.

Regarding the selection of parties, all parties that submitted a party program and won seats in either the 2004 or 2009 elections have been included. This concerns the CDA, PvdA, VVD, SP, D66, GroenLinks and ChristenUnie/SGP (Rijksoverheid, 2009). The PVV party won seats in the 2009 elections, but could not be included because the program submitted consisted of a short list of seven statements (PVV, 2009). This made for a combined total of seven parties.

Separate data were collected for all three hypotheses. For the first hypothesis, issue priority for both party programs and VAA's had to be established. Before doing this, it was necessary to identify different issue domains. Issue domains were identified according to the Euromanifestos Coding Scheme III (EMCS III), which was used by the Euromanifestos Project to code political party programs (Braun, Mikhaylov, & Schmitt, 2010, p. 34-46). The EMCS III is divided into nine different domains, which are further divided into subdomains. A short overview of the nine domains and their subdomains can be found in Appendix A.

For the collection of data for the political party programs, an existing dataset from the Euromanifestos Study was used. Specifically, the European Election Study 2009: Manifesto Study (EES 2009) (Braun, Mikhaylov, & Schmitt, 2010). This study analyzed the 2009 political party programs of all political party programs holding seats in European Parliament. They looked at all sentences in the document (headings and subheadings excluded) and categorized them according to the nine issue domains of the EMCS III. Large sentences were split up into quasi-sentences and categorized separately. Readers interested into the quasi-sentence procedure are referred to pages 19-23 of the Manifesto Study document (Braun, Mikhaylov, & Schmitt, 2010). The Euromanifesto Project then further categorized the sentences according to being phrased in a positive or negative wording towards the relevant

issue. Finally, the sentences were categorized to be at a national, European, global or unspecified level.

This dataset was used to collect data for hypotheses one and three. For the first hypothesis, data had to be collected on the amount of words each document used for each of the nine issue domains. The EES 2009 dataset contained information on this in the form of variables that reflected specific subdomains, positivity/negativity and level. Each subdomain therefore contained eight variables. The variables consisted of a percentage that reflected the amount of quasi-sentences spent in the document on that particular subdomain, either positive/negative and that specific level. The percentages could be used to calculate the proportion of the document spent on each of the nine domains. To do this, specific variables had to be made that combined the positive/negative scale and the level scale into one value. In other words, the percentages for each subdomain's variables were added together. This created one percentage for each subdomain. Next, the percentages for the nine domains had to be calculated. This was done by merging the percentages of the subdomains that were categorized together in one domain. For example, the percentages of the subdomains 'multiculturalism' and 'traditional morality' and others were merged into one percentage for the domain 'fabric of society'. This created a total of ten percentages, which reflected the nine issue domains and one extra percentage for quasi-sentences that did not fit into one of the nine domains. Percentages for the seven Dutch parties were isolated from the dataset, which created a dataset of 70 percentages for 7 parties. These percentages were taken as the numbers reflecting issue priority for the political parties.

Next, the issue priorities for the VAA's had to be determined. This was done by analyzing the 30 questions from Stemwijzer and the 30 questions from Kieskompas according to instructions from the EMCS III. Each question was coded as being part of one of the nine issue domains or a tenth leftover domain, creating ten variables. The value of the variables

was determined by the amount of questions that corresponded to a particular domain. For example, three questions spent on the domain 'Political System (EU)' would be reflected as three in the priority variable for that domain. This resulted in all questions of Stemwijzer and Kieskompas being coded and calculated into a total number for each of the issue domains.

The resulting dataset was one of ten variables reflecting issue domains and nine parties/VAA's (seven parties and two VAA's). Before comparisons could be made, the numbers for the VAA's had to be recalculated into percentages. This was done by creating ten separate variables in which the question numbers for the issue domains would be divided by the total number of questions (30 in both VAA's). For example, three questions in the domain 'Political System (EU)' would be recalculated into the percentage ten. This allowed for comparisons to be made between the percentages of the political party programs and the VAA's. To do this, independent samples t-tests were carried out. One group was the party group, including the seven parties. The other group was the VAA group, including Stemwijzer and Kieskompas. This made it possible to analyze differences for each of the ten issue domains.

For the second hypothesis, issue priorities for the political party programs and the electorate were compared. The method to obtain the data for the political party programs has already been described. For the electorate, data was obtained from the Voter Study 2009 (VS 2009), which was carried out by the Euromanifesto Project also responsible for the EES 2009 (EES, 2013). In the VS 2009, participants from all European countries were asked a number of questions regarding the upcoming European elections. Three questions relevant for this study were "What do you think is the most important problem facing The Netherlands today?", "And what do you think is the second most important problem facing The Netherlands today?" and "And what do you think is the third most important problem facing The Netherlands today?". Answers to these questions were open ended and later encoded into

147 general issue domains (not the same as the EMCS III subdomains). To make these data usable for the research, first the 147 issue domains had to be recoded into the nine issue domains of the EMCS III. EMCS III instructions were used to recode the 147 domains into the nine EMCS III domains. If domains were not able to be recoded into one of the nine issue domains, they were recoded into a tenth leftover domain. The dataset was subsequently recoded so that answering to one of the 147 domains would be equal to answering to one of the EMCS III domains. For example, both answers to the domains 'Constitutionalism' and 'Constitution' would be recoded as answers to the domain 'Freedom and Democracy'. This created a dataset in which each participant mentioned one of the ten domains three times. The frequency of domains mentioned, was then compared to the priority of domains in the political party programs. This comparison was split in three different ways. In the first comparison, the total number of times domains were mentioned was calculated into percentages (by dividing by the total number of answers), and then compared to the percentages of the political party programs. In the second comparison this procedure was performed for only the first question (the most important issue according to respondents). In the third comparison, the frequency was calculated of a domain being mentioned at least once. This comparison was done to exclude the effect of domains being mentioned multiple times by the same respondent. For example, if a respondent had answered 'Military' to the first question and 'Relations with the USA' to the second question, he would mention the domain 'External Relations' twice. By looking at which domains were mentioned at least once, the effect of domains being mentioned multiple times by the same respondent was filtered out. To create the data for this, dummy variables were created that reflected whether or not a domain was represented in either the first, second or third question. For example, for the first domain External Relations three dummy variables were created. Dummy variable D1-Q1 would code 1 for the first domain being mentioned in the first question, while it would code 0

if the domain was not mentioned in the first question. Dummy variable D1-Q2 would do the same for the second question, and variable D1-Q3 the same for the third question. This process was repeated for all ten domains. Next, nine 'at least once' variables were created that would consist of all three variables of a domain put together. For example, the 'at least once' variable of the External Relations domain would put the values of D1-Q1, D1-Q2 and D1-Q3 together. This would result in a value ranging from 0 to 3, depending on how many times the domain was mentioned in the three answers. Finally, this number would be recoded into 1 if the variable had a value of 1, 2 or 3, signifying that the domain had been mentioned 1, 2 or 3 times. The number would be recoded into 0 if the variable had a value of 0, signifying that the domain had not been mentioned in the three questions. The recoded numbers were then recalculated into percentages (dividing by the total number of respondents) and compared to those of political party programs.

For the third hypothesis, issue positions of political parties in political party programs and VAA's were compared. Data about the political party programs was collected by making use of the dataset of the EES 2009. The quasi-sentences were coded in subdomains, positivity-negativity and level, which made for a dataset that contained eight variables for each subdomain. These eight variables per subdomain contained information about the combination of positivity-negativity and level for that subdomain. For example, a subdomain would have a percentage number for variable negative on the national level, then another for the variable negative on the European level, and so on. In order to make these data usable for the hypothesis, the data had to be rearranged. First, percentage for all levels were added together. For example, if a particular subdomain had 1.23% on its positive level 1 variable, 1.56% on its positive level 2 variable, 0% on its positive level 3 variable and 0% on its level 4 variable, then these would be added together to create a percentage of 2.79%. This reduced the number of variables to two for each subdomain: One variable reflecting the percent of

positive quasi-sentences and the other reflecting the percent of negative quasi-sentences. Second, the percent of negative quasi-sentences was subtracted from the amount of positive quasi-sentences. For example, if a subdomain had a positive percentage of 0.26% and a negative percentage of 2.79%, its total percentage would be -2.53. This number would reflect the position of a party on that subject. A positive number would reflect a favourable position towards that subject, while a negative number would reflect an opposing position. This created a dataset with a position number for each of the subdomains. Next, position numbers for the VAA's had to be coded. These numbers were extracted from the answer sheet provided by the VAA's. The answer sheets are identical to the method that the respondent has to use in order to establish their positions. Stemwijzer uses a method that is based on three potential outcomes: Agree, neither agree nor disagree, and disagree. Similarly, the answer sheet consists of a list of the parties including their positions on this three-point scale. Kieskompas on the other hand uses a method that is based on five potential outcomes: Strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree. Like Stemwijzer, the positions of the parties in the answer sheet are presented in the same way that the respondent has to indicate theirs. The coding of these answer sheets took the shape of a five point scale. For Kieskompas, strongly disagree would be coded into a value of 1, disagree into a value of 2, neither agree nor disagree into a value of 3, agree into a value of 4, and strongly agree into a value of 5. For Stemwijzer the same scale was used, although its more limited answer sheet meant two values had to be excluded. Disagree was coded into a value of 1, neither agree nor disagree into a value of 3, and agree into a value of 5. After this, a phrasing variable was created to code the direction of a question. A question could be phrased positively or negatively. An example of a positive phrasing would be: There should be more financial support for child care. An example of a positive phrasing would be: There should not be more financial support for child care. A positive phrasing was coded as 1 and a

negative phrasing was coded as 2. Next, the position values were recoded based on the phrasing variable. Values for questions with positive phrasing would remain the same. Values for questions with negative phrasing would have their values reversed. For example, for a negatively phrased question, a position code of 1 would become 5. 5 Would become a 1 and 3 would remain 3. The result was a dataset that contained 420 values: one value for each of the seven parties for each of the sixty questions. The next step involved combining the issue positions of the programs with those of the VAA's. Before this could be done, all questions of the VAA's had to be coded in order to know to which issue subdomain they belonged. Using instructions from the EMCS III, all questions were categorized into one of the subdomains or into a leftover domain. The values of the party programs were then copied and pasted next to the values of the questions, according to the subdomain that they belonged to. For example, if a question was categorized as 'Competences of the European Parliament', the dataset would then contain seven values on a five point scale for each of the seven parties according to the VAA's, followed by seven values for each party according to their party programs. This made comparisons possible between the position on each issue in the party programs and in the VAA's. Comparisons would be coded as 'consistency' or 'inconsistency'. A comparison would be coded as consistency if the values for a party in program and VAA did not contradict each other. For example, if for a specific issue a party would have a positive quasi-sentence percentage of 1.37% in the program and their answer in the VAA would be coded as 5 in the database, their position in program and VAA would both be in favour of that issue. This comparison would be coded as 'consistency', since values in program and VAA are coded in the same direction (in favour of the issue). If for example the party would have a negative quasi-sentence percentage of -2.14% in the program and their answer in the VAA would be coded as 5 in the database, their position in program and VAA would differ from one another. This comparison would be coded as 'inconsistency'. The resulting variable gave

an overview of the amount of consistencies and inconsistencies between programs and VAA's. These results were then tested with a t-test to test for differences between VAA's. In this t-test, one group consisted of the amount of inconsistencies per party in Stemwijzer, while the other group consisted of the amount of inconsistencies per party in Kieskompas. Finally, content analysis was performed on the program-VAA combination that were coded as inconsistencies. By analyzing the program, the inconsistency was either categorized as 'no contradiction' or 'contradiction'. If the combination was coded as a inconsistency but the specific policy point position in the VAA was not misaligned with the specific quasi-sentences on that point in the program, the combination would be coded as 'no contradiction'. If the quasi-sentences spoke against the position in the VAA, the combination was coded as 'contradiction'. This gave an overview of not only differences in positions between programs and VAA's in terms of potential misconceptions (differences in general subdomain positions), but also contradictions (the program text being misaligned with the specific issue position taken in the VAA).

Results

Table 1. Comparisons of issue priority percentages of party programs and VAA's.

	t	Sig. (2-tailed)	Mean Difference
External Relations	-,258	,803	-,00820
Freedom & Democracy	3,394	,033	,08083
Political System (General)	2,585	,036	,10816
Political System (EU)	-2,875	,024	-,06663
Economic Structure	,018	,986	,00042
Economic Policy & Goals	-1,730	,127	-,05459
Welfare & Quality of Life	1,907	,098	,08459
Fabric of Society	-1,133	,295	-,04441
Social Groups	-,166	,873	-,00266
Other	-32,829	,000	-,09751

For the first hypothesis, issue priority of party programs and VAA's had to be compared. An independent samples t-test was conducted on seven party programs and two VAA's in order to search for differences in the percentage means. The result of the t-test can be found in Table 1. Since the hypothesis was stated non-directionally, a significance level of lower than .05 would be necessary in order to provide evidence for a significant effect. Of the ten dimensions, four dimensions qualified for a significance level of lower than .05, and one other dimensions came close to this number. Specifically, subdomains 'Freedom & Democracy', 'Political System (General)', 'Political System (EU)' and 'Other' showed significant differences. Political System (EU) showed a negative mean difference, which

meant that VAA's (M = .117, S = .024), showed a higher priority for this domain than party programs (M = .05, S = 0.030). Similarly, the tenth domain 'Other' also showed a negative mean difference. VAA's gave much more priority (M = .100, S = .000) than party programs (M = .003, S = .004). Of note is that the questions coded into the 'Other' domain were not on general issues that fell inside the scope of the EMCS, but mostly comprised very specific short term issues. For example question 30 of Kieskompas: *Er moet een Europees verbod op roken in de horeca komen* (translated: There should be a European ban on smoking in the food service industry). Furthermore, 'Freedom & Democracy' and 'Political System (General) showed mean differences. In Freedom & Democracy a positive difference could be established, which means party programs (M = .131, S = .045) prioritized Freedom & Democracy more than VAA's (M = .050, S = .025) did. For political System (General) a positive difference could be found, which meant Political System (General) showed a higher priority in party programs (M = .125, S = .056) than in VAA's (M = .017, S = .024). Some of the domains showed a smaller effect. In terms of positive mean differences , Welfare & Quality of Life was prioritized higher in the programs (M = .15, S = .06) than in VAA's (M = .07, S= .05). Fabric of Society showed a negative mean difference, with the domain being lower in priority in programs (M = .09, S = .13) than in VAA's (M = .05, S = .05). For economic Policy & Goals a negative was established as well, priority in programs (M = .16, S = .03) being lower than in VAA's (M = .22, S = .07) The last three domains, 'External Relations', 'Economic Structure', and 'Social Groups', showed only very small mean differences of less than .01. Mean differences were significant for four domains. These four domains were Freedom & Democracy (p = .03), Political System (General) (p = .04), Political System (EU) (p = .02) and the tenth Other domain (p = .00). Some domains did not meet the .05 criterion of significance, but approached significance. These domains were Economic Policy & Goals (p = .13) and Welfare & Quality of Life (p = .10). Finally, four domains were

far away from showing a significant difference. These domains were Fabric of Society (p = .30), External Relations (p = .80), Economic Structure (p = .99) and Social Groups (p = .87). In total, four out of ten domains showed significant (p < .05) mean differences.

The results indicate that VAA's are to some degree accurate in reflecting the issue priorities of party programs, but some domains are over or under represented. VAA's over represent questions that detail the Political System of the EU. Furthermore, they very significantly over represent the 'Other' dimension. This means that VAA's give relatively high priority to short-term issues on the short term, which are not recognized by the EMCS III as important or salient issues. In terms of positive differences, VAA's give lower priority to the domains of Freedom & Democracy and Political System in General. All other domains do not approach significance and their priorities seem to be aligned well with the priorities of the party programs. However, the low sample size has to be kept in mind. It is possible that with larger sample sizes, more than four domains show significant mean differences.

Table 2. Percentages of questions spent in Stemwijzer and Kieskompas.

	Percent	Percent Stemwijzer	Percent Kieskompas
External Relations	18,3	22,3	13,3
Freedom & Democracy	5,00	3,3	6,7
Political System (General)	1,7	3,3	0,0
Political System (EU)	11,7	10,0	13,3
Economic Structure	6,7	6,7	6,7
Economic Policy & Goals	21,7	26,7	16,7
Welfare & Quality of Life	6,7	3,3	10,0
Fabric of Society	13,3	10,0	16,7
Social Groups	5,00	3,3	6,7
Other	10,00	10,0	10,0

For the second hypothesis, issue priority for VAA's and the electorate had to be compared. In Table 2 an overview can be found of the issue priority for VAA's in percentages. Economic Policy & Goals was the domain that had the highest priority, using 21.67% of the questions. External Relations and Fabric of Society followed behind with 18.33% and 13.33%. Noteworthy is the low percentage of Political System (General), which was only at 1.67%. These are the percentages that were used in the comparison.

Table 3. Percentages of answers given over the three questions in Voter Study 2009.

		Valid percent
Valid	External Relations	,4
	Freedom & Democracy	,5
	Political System (General)	3,3
	Political System (EU)	,3
	Economic Structure	,2
	Economic Policy & Goals	39,9
	Welfare & Quality of Life	8,8
	Fabric of Society	20,7
	Social Groups	5,7
	Other	20,3
	Total	100,0

Percentages for the electorate can be found in tables 3, 4 and 5. The Voter Study 2009 dataset provided the answer sheets of 1005 Dutch citizens. Of these 1005 respondents, 942 answered to the three questions about important issues, creating a response rate of 93.7%. The three questions should have created a total amount of 2826 answers. However, some respondents were unable to answer with a second most important or third most important issue, creating missing data of 587 answers. The first comparison of the VAA's and the electorate only took the answers into account and ignored the missing data. The second and third comparison compensated for the first comparison by analyzing only the first question (without missing data) and by analyzing which domains were mentioned at least once by each respondent (which takes the missing data into account).

Table 3 shows the total amount of answers and frequencies for the three questions and

their answers. The domain Economic Policy & Goals was clearly the most frequently mentioned, encompassing 39,9% of all answers. This was in line with the VAA's, except that the electorate seemed to prioritize Economic Policy & Goals even more than the VAA's. More interesting were the large contrasts in priority. External Relations and Political System (EU) proved to be of low priority for the respondents, comprising only .4% and .3% of all answers respectively. The VAA's on the other hand displayed relatively high scores for these domains, with External Relations comprising 18.3% of the questions and Political System (EU) comprising 11.7% of the questions. In general, respondents in the Voter Study displayed low priority for most of the domains identified by the EMCS III. Only four domains accounted for percentages larger than 3.3% (excluding the Other domain) and only two did for more than 8.8%.

Table 4. Percentages of answers given over the first question in Voter Study 2009.

		Percent
Domain	External Relations	,5
	Freedom & Democracy	,4
	Political System (General)	3,7
	Political System (EU)	0
	Economic Structure	,1
	Economic Policy & Goals	57,1
	Welfare & Quality of Life	2,5
	Fabric of Society	17,0
	Social Groups	3,9
	Other	14,6
	Total	100,0

An overview of answers on the first question can be found in Table 4. The first question was answered by all 942 respondents and shows similar numbers to those of Table 3. Economic Policy & Goals continues to be highly prioritized, while most of the domains do not extend a few percent, with Political System (EU) not being mentioned by a single respondent as the most important domain.

Table 5. Percentages of answers given at least once in Voter Study 2009.

		Percent
Domain	External Relations	1,0
	Freedom & Democracy	1,2
	Political System (General)	7,5
	Political System (EU)	,7
	Economic Structure	,4
	Economic Policy & Goals	75,5
	Welfare & Quality of Life	19,2
	Fabric of Society	42,0
	Social Groups	12,2
	Other	41,3
	Total	100,0

Finally, Table 5 displays an overview of the frequency and percentages of answers that were given at least once over the three questions. Again the patterns are similar to previous results. Economic Policy & Goals was mentioned by over three quarter of the respondents (75.5%). Five domains were mentioned by 1.2% or less of all respondents. The contrasts of issue priority between the VAA's and the electorate seem to be large, and this is in most part due to the focus on Economic Policy & Goals. While some of the other domains seem relatively comparable between VAA's and the electorate, four of the nine domains as identified by the EMCS III were not highly prioritized by the electorate at all. The results seem to indicate that voters were mostly interested in a limited number of issue domains, and rarely prioritized domains such as External Relations and Political System (EU) highly.

Table 6. Frequencies of consistent (C) and inconsistent (I) issue positions in party programs and VAA's.

Party	C-Stemwijzer	I-Stemwijzer	C-Kieskompas	I-Kieskompas
CDA	15	12	19	8
PvdA	16	11	24	3
VVD	20	7	23	4
SP	20	7	23	4
D66	22	5	24	3
GroenLinks	20	7	24	4
CU/SGP	15	12	22	5
Total	128	49	159	31

For the third hypothesis, political party positions between VAA's and party programs had to be compared. Even though most positions in the VAA's were consistent with the coded positions in the programs, there were multiple cases of inconsistencies. The amount of consistencies and inconsistencies can be found in Table 6. The table seems to imply that there are a large amount of contradictions between the political programs and the VAA's. However, one should exercise caution in analyzing these results, as the numbers represent inconsistencies rather than contradictions. Many programs spent quasi-sentences on both supporting and opposing a certain issue. It is possible that a party spent a large amount of quasi-sentences supporting a subdomain and a small amount of quasi-sentences opposing a subdomain, but the question in the VAA's targeted the content in the small amount of quasi-sentences. Further content analysis of the inconsistencies was necessary in order to determine if contradictions existed. The table nonetheless displays that VAA's may not be very accurate in displaying the overarching policies in the program, but merely display specific policy

points.

This can be best explained by an example of the PvdA's position in the subdomain Europe (General), which deals with the attitude towards the European Union / European Community and the idea of a more integrated Europe in general. Stemwijzer spent the following question on this subdomain: *De EU moet een politieke unie worden met één Europese regering, die door het Europees Parlement wordt benoemd en ontslagen* (translated: The EU should become a political union with one European government, chosen and dismissed by the European parliament). The PvdA answered with an opposing position. However, the position of the PvdA in the program was favourable with 4.40%. Going back to the dataset, the PvdA spent 6.23% of quasi-sentences in the program on supporting the subdomain Europe (General) and 1.83% of quasi sentences opposing the subdomain. In the program, the PvdA was mainly supportive about the European Union, its institutions and further integration of the European Union in the member states. This created the 6.23% of quasi-sentences. The 1.83% of quasi-sentences was used for warning against the possibility of a superpower Europe, in which individual member states have relatively little power. In other words, the position of the PvdA was coded favourable at 4.40% because the PvdA mainly talked supportive about the European Union and an integrated Europe and spent only some of its text on opposing an overdone version of an integrated Europe. The inconsistency existed because the question of Stemwijzer targeted the small portion of the PvdA text that was opposing the Europe (General) subdomain. Some of the inconsistencies can be explained by the questions of the VAA's targeting specific policy points rather than overarching positions in the subdomains. This is a problem, because the limited amount of 30 questions means that most subdomains receive no questions or one questions. A question might target a policy point that a party opposes, while it is actually mostly favouring the respective subdomain. This creates misconceptions about the party's overarching policy position. The results in

Table 6 showed that there are many cases in which misconceptions can take place.

The second finding is that Kieskompas seemed to contain less inconsistencies than Stemwijzer. For every party, the number of consistencies between the position values of programs and VAA's was higher in Kieskompas than in Stemwijzer. Similarly, the number of inconsistencies was lower in Kieskompas than in Stemwijzer. In regards to potential misconceptions it could be said that Kieskompas was more accurate in reflecting the issue domain policies. To test this a t-test was performed. The t-test confirmed that Kieskompas (M = 4.43, S = 1.7) contained less inconsistencies than Stemwijzer (M = 8.71, S = 2.87). The significance value for this test was p = 0.01, which further evidenced the mean difference between Stemwijzer and Kieskompas.

To analyze which of the inconsistencies were misconceptions and which were contradictions, further content analysis was necessary. The results indicate that some contradictions existed between positions in party programs and VAA's. The first contradiction concerned the subdomain of Traditional Morality. In this subdomain the position of the CDA in its program was inconsistent with that of Stemwijzer. In the final dataset, the CDA had a value of .94 regarding Traditional Morality. Since this value was positive, it meant the CDA had a favourable position towards Traditional Morality in its program. This was inconsistent with question 8 of Kieskompas, which stated: *De politiek moet meer respect tonen voor religieuze waarden en principes* (translated: Politics should show more respect for religious norms and principles)[5]. The position of the CDA was displayed as 'disagree', coded as 2 in the dataset. Further analysis of the party program confirmed that the party program did indeed seem to have a favourable position towards Traditional Morality, as indicated by the following text: *Het is de joods-christelijk traditie, die daaraan ten grondslag ligt. Deze idealen zijn ook een baken geworden voor de miljoenen*

[5] http://europa.stemwijzer.nl/#/stelling/8

mensen van velerlei herkomst en overtuiging die nu burger van de EU zijn. In elk tijdvak moeten die waarden vertaald worden naar een gezamenlijke cultuur en normen (translated: It is the Jewish-Christian tradition, that is its foundation. These ideals have become a beacon for the millions of people of various origin and conviction, who are now citizens of the EU. At all times those norms should be translated to a common culture and moral) (CDA, 2009, p. 5).

The second example concerned the subdomain of internationalism. In this case there was a contradiction between the program position and Stemwijzer position of the PvdA. Question 26 of Stemwijzer detailed: *Het buitenlands beleid moet veel meer op EU niveau worden vastgesteld* (translated: Foreign policy decision making should be more focused on the EU level)[6]. The PvdA's position in Stemwijzer was displayed as 'disagree', coded as 1 in the database. The PvdA's position in the party program however, was coded as 5.87. This meant the PvdA actually had a strong favourable attitude towards internationalism in its program. Upon further inspection of the program, the coding seemed to be correct. Throughout the document the PvdA put an emphasis on internationalism and cooperation in all kinds of areas including peace missions, support for development countries, fight against terrorism and connections with the NAVO. On the last page of the document, where the PvdA summarized its key points, the following phrase could be found: *In het buitenlands beleid minder overlaten aan de afzonderlijke grote landen zoals Frankrijk, Duitsland en Verenigd Koninkrijk en daarom meer met één stem spreken* (translated: In foreign policies there should be less reliance on large countries such as France, Germany and the United Kingdom, and therefore there should be a larger focus on speaking with one voice) (p. 28). Phrases such as these seemed to be in clear contradiction with the PvdA's oppositional position in the VAA.

The third example concerned subdomain 'Competences of the European Parliament'. In this case there was a contradiction between the program position and VAA position of the

[6] http://europa.stemwijzer.nl/#/stelling/26

VVD. Question 2 of Stemwijzer detailed: *Het Europees Parlement moet het recht krijgen om wetsvoorstellen in te dienen* (translated: The European Parliament should have the right to submit legislative proposals)[7]. The VVD answered in disagreement with this question, coded as 1 in the database. However, the VVD's position in its program was coded as positive with a value of .39. Further content analysis showed that the VVD did not spend many quasi-sentences on the competences of the European Parliament, but what it said was positive. This is evidenced by the following phrase: *Het is goed dat het Europees Parlement in het nieuwe verdrag meer*

bevoegdheden krijgt (translated: It is good that in the new treaty the European Parliament receives more competences) (p.3). Again it seemed that the answer to the VAA question was in direct contrast with the policy position as stated in the party program.

The fourth example concerned the subdomain 'Agriculture and Farmers'. In this case there was a contradiction between the program position and VAA position of GroenLinks. Question 4 of Stemwijzer detailed: *De EU moet veel minder geld uitgeven aan de ondersteuning van boeren* (translated: The EU should spend much less financial support on farmers)[8]. GroenLinks was in agreement with this statement, coded as opposing and as a value of 1 in the dataset. The program position of GroenLinks however showed a value of 2.11, indicating that GroenLinks was favourable towards Farmers and Agriculture in its program. This finding was repeated by content analysis of GroenLinks' program, which dedicates almost a full page to advocating for more financial support for farmers in order for them to adopt farming methods that benefit the environment and nature. One example of sentences illustrating this policy: *Maar maatschappelijke diensten als landschapsonderhoud en de berging van overtollig water worden niet beloond door de markt. Daarvoor moet de overheid boeren en andere grondbeheerders een vergoeding bieden* (translated: But

[7] http://europa.stemwijzer.nl/#/stelling/2
[8] http://europa.stemwijzer.nl/#/stelling/4

community services such as preservation of the landscape and storage of leftover water are not rewarded by the market. That is why the government should provide farmers and other landowners with financial compensation) (p.17). The position that GroenLinks took in the VAA, in which they opposed financial support for farmers, was inconsistent with the position they pursue in their party program.

The fifth example concerned the subdomain 'Anti-Growth Economy'. In this case there was a contradiction between the program position and VAA position of the CDA. The ninth question of Stemwijzer detailed: *De EU moet doorgaan met subsidies voor windmolens en zonnepanelen* (translated: The EU should continue to provide financial support for windmills and solar panels)[9]. The CDA answered in disagreement with this question, appearing opposing which was coded as 1. The program position on the other hand was coded as .24. Although the percentage of quasi-sentences supporting anti-growth economy was not very large, it was nonetheless in favour of the anti-growth economy, warranting further content analysis. This underlined that the CDA is very much in favour of windmills. On three occasions in the program did the CDA advocate that the EU should provide financial support for wind energy and other natural energy resources. These sentences are an example: *Het CDA vindt dat duurzame energie zoals zonne-energie, windenergie en energie uit afval sterk bevorderd moet worden. Europa moet daarbij een leidersrol gaan vervullen door te investeren in nieuwe milieuvriendelijke energiebronnen* (translated: The CDA is of the opinion that natural energy such as solar energy, wind energy en energy from litter should be promoted. In this there is a leadership role for Europe, by investing in new environment-friendly energy resources) (p. 24). The repeated mentions of support for wind energy stood in contrast with the opposing position towards wind energy in the VAA.

The sixth example concerned the subdomain 'Immigration'. In this case there

[9] http://europa.stemwijzer.nl/#/stelling/9

was a contradiction between the program position and VAA position of D66. The 11th question of Stemwijzer detailed: *Afzonderlijke EU-landen kunnen groepen migranten of asielzoekers een verblijfsvergunning geven (generaal pardon). Dat moet zo blijven* (translated: Individual EU member states should be able to assign residence permits to groups of immigrants or asylum seekers (general pardon))[10]. D66 answered in favour to this question, which was coded with a value of 5 in the database. The program position on the other hand was coded as very slightly opposing with a value of -.08. Content analysis of the program resulted in the finding of a contradiction. D66 was actually favouring an integrated asylum policy instead of separate member states dealing with asylum issues. This example is even more contrasting because the program position was not the only inconsistency to establish a contradiction, the contradiction could be found in Stemwijzer itself. When one clicked on the *toelichting* (translated: explanation) for D66 on this question, Stemwijzer displayed the following argument: *Vrij verkeer van personen betekent verder bouwen aan een gemeenschappelijk Europees asielbeleid en betere afspraken over bijvoorbeeld een generaal pardon. Een generaal pardon voor asielzoekers in één land heeft immers gevolgen voor andere landen. Mensen en middelen moeten we delen* (translated: Free movement of people means building further on common European asylum policies and better agreements on for example a general pardon. After all, a general pardon in one country has consequences for other countries. People and measures should be shared). In their explanation, D66 put emphasis on developing a common European policy, warning that the actions of one country have consequences for other countries. This seemed at odds with D66's supportive position on the question of whether separate member states should decide on general pardons. D66's position in the VAA contradicted their position in the program, but even within the VAA D66's answer and explanation seemed inconsistent.

[10] http://europa.stemwijzer.nl/#/stelling/11

The seventh example concerned the subdomain 'Economic Orthodoxity'. In this case there was a contradiction between the program position and VAA position of the PvdA. Question 18 of Stemwijzer detailed: *Het begrotingstekort van een EU-land mag niet meer dan 3 procent bedragen, ook niet als er sprake is van hoge werkloosheid* (translated: The budget deficit of an EU country may not exceed three percent, not even if unemployment rates are high)[11]. The PvdA was in disagreement with this statement, coded as 1 in the database. The party position in the program was coded supportive at 1.28 percent. Content analysis of the program established that the PvdA actually supported the 3 percent rule then, and even more so in the future. The PvdA program section on economic policies included the following phrases: *Tot nu toe werden landen vooral afgerekend op de normen voor het begrotingstekort en de staatsschuld in het Stabiliteits- en Groeipact. Zonder het Pact los te laten, maar juist om het straks na het indammen van de recessie weer verstevigd te kunnen hanteren, moet nu een gezamenlijke strategie van verantwoorde bestedingen en investeringen worden uitgezet* (translated: Until now countries were harshly evaluated on the norms for the budget deficit and the state debt in the Stability and Growth Pact. Without moving away from the Pact, but actually to reinforce it after the recession, there should be a common strategy of responsible expenses and investments) (p.20). In the program the PvdA did not only mention support for the Stability and Growth Pact (of which the three percent rule is part of (European Commission, 2012, p. 3)), but also mentioned a desire to strengthen it further. The position in the VAA contradicted these desires, and sent the wrong message about the position of the PvdA towards the Stability and Growth Pact.

The eighth example concerned the subdomain 'European Currency'. In this case there was a contradiction between the program position and VAA position of the CDA. Question nineteen of Stemwijzer detailed: *Achttien EU-landen hebben de euro. Voorlopig mogen*

[11] http://europa.stemwijzer.nl/#/stelling/18

andere landen de euro niet invoeren (translated: Eighteen EU member states have the Euro. For the time being, other countries are not allowed to install the Euro)[12]. The CDA answered supportive to this question, resulting in a coding of 1 for an opposing position towards the European currency subdomain. However, the CDA's position in the program was coded as supportive with a value of .59. After content analysis, the program seemed to indeed be favourable towards the European currency, as evidenced by for example the following part of the text: *Het CDA vindt het Stabiliteit- en Groeipact een voorwaarde voor een sterke en stabiele Euro. De Europese Commissie moet toezien op een strikte naleving hiervan. Tevens moet de Europese Commissie het invoeringsproces van de euro in niet-eurolanden actief ondersteunen, met zorgvuldige inachtname van de criteria* (translated: The CDA thinks that the Stability and Growth Pact is a requirement for a strong and stable Euro. The European Commission has to oversee that it is followed to the letter. The European Commission also has to actively support the entry process of the Euro in non-Euro countries, while carefully taking the criteria into account.) (p. 11). The contradiction between the positions in the program and the VAA was clear. While in Stemwijzer the CDA did not agree with introducing the Euro to non-Euro countries, in their program the CDA advocated strong support for introducing the Euro to non-Euro countries.

Seven out of eight contradictions found originated from Stemwijzer, while only one could be found in Kieskompas. This implies that in terms of accuracy on positions, Kieskompas was the more accurate VAA. One of the reasons for this contrast could be the way Stemwijzer and Kieskompas chose to explain the party's positions. When one navigates to the explanations page in Stemwijzer's results, Stemwijzer displays relatively short explanations. These explanations consist of at most a few, and often no more than one sentence. This information was provided by the party, but exact origin is unknown and no

[12] http://europa.stemwijzer.nl/#/stelling/19

source is provided. Kieskompas on the other hand made use of relatively lengthy explanations, often providing quotes and always providing sources.

Discussion

This paper researched the accuracy of issue priorities and VAA's. Specifically, an answer was sought to the following research question: To what degree are voting advice applications an accurate reflection of issue priorities and party positions in the Netherlands during the 2009 European Parliament elections?

Research on the accuracy of VAA's is needed for a few reasons. Multiple studies have provided evidence for the idea that people take the recommendations of VAA's seriously and take them into account when casting their vote during elections (Alvarez, Levin, Mair, & Trechsel, 2014, p. 235; Pianzola, 2014, p. 651). VAA's have also been shown to increase participants' knowledge on political issues, getting them more involved in the political process and in political participation (Schultze, 2014, p. 62). The accuracy of VAA's is therefore of great importance, as the recommendations and info VAA's give are used in both elections and other political areas. Scientific research also benefits from VAA's being accurate. Research that uses the format and data from VAA's is already carried out and looks to become even more popular in the future (Hansen & Rasmussen, 2013, p. 191). VAA's need to be accurate in order for this research to produce valid results.

Seven parties and two VAA's from the Netherlands during the European Parliament elections in 2009 were put under research. Results for the first hypothesis indicated that issue priorities of political parties are not all reflected well in VAA's. The domain Political System (EU) and the tenth Other domain proved to be overrepresented in the VAA's compared to the priority that parties gave them. Different domains, like Freedom & Democracy and Political System (General) proved to be underrepresented compared to the amount of questions that

VAA's spend on them. There are a number of conclusions that can be drawn from these findings.

First, VAA's did not seem to represent the priorities of political parties very accurately. Some domains differed significantly from each other, which means some domains could use improvement in the amount of questions spent on them. An example could be to spend less questions on the domain 'Political System (EU)', since that domain receives relatively little attention in political party programs and instead give higher priority to domains such as 'Freedom & Democracy' and 'Political System (General). By doing so, VAA's would come closer to their original goals. Their original goals, informing the citizens about relevant political issues, are not met when issue domains low in party priority (such as 'Political System (EU)') receive high amounts of attention or when issue domains high in party priority (such as 'Freedom & Democracy' or 'Political System (General') receive relatively low amounts of attention.

Second, the difference on the 'Other' domain between VAA's and political parties was very significant. This means VAA's gave relatively high attention to incidental issues that do not play a role in the long term. This is a problem, as the goal of informing citizens is not met when citizens are educated on issues that are mainly useful on the short term, while citizens should be educated mainly on the long term. A recommendation could be to use less questions that relate to issues that have short-lived relevancy during the times of elections, and instead focus more on issues that last for moderate to long times.

Results for the second hypothesis indicated that the accuracy between the issue priorities of VAA's and the electorate seemed to be very low. Throughout all comparisons, some issue domains received very high priority from the electorate (such as 'Economic Policy & Goals', 'Fabric of Society' and the 'Other' domain), while some domains received close to no attention from the electorate. This is a problem as it contrasts with the goal of VAA's to

represent issues relevant in society. A suggestion could be to look at the data from both party priorities and electorate priorities and see which issue domains could be represented better. A good example of this is the 'Political System (EU)' domain. The data indicated that this domain was over prioritized in VAA's compared to parties, and respondents in the voter study gave almost no priority to this domain. In other words, the issue domain is not high enough in priority in political debate or in society. Limiting questions such as about competences in the European Parliament or voting procedures in the Council could therefore help to improve accuracy.

For the third hypothesis, issue positions between political parties and VAA's were compared. Results suggested that there is a large amount of inconsistencies, of which a small amount are contradictions. The high amount of inconsistencies can be explained by the fact that parties spend both positive and negative quasi-sentences even within the same subdomain. For example, when a party spends 70% of its quasi sentences in support of a subdomain and 30% opposing a subdomain, its overall policy position can be described as supportive. However, a VAA question can target a specific point in the 30% of quasi-sentences, creating the suggestion that a party is opposing to that subdomain. This is a problem, as most subdomains receive only one or no questions. This means that misconceptions about subdomains are easily created. The result is that often the wrong impression is created about a party's overall policy position on a subdomain. VAA creators should therefore take care to phrase questions in a way that appears moderate in order to avoid as much misconceptions as possible.

Another finding concerning the positions was that Kieskompas contained significantly less inconsistencies than Stemwijzer. Not only did the mean differ, but for all parties Kieswijzer was more accurate in reflecting positions than Stemwijzer was. This study did not elaborate on differences between individual VAA's, but an explanation could be that

Kieskompas worked together with a research institute for which political scientists were involved in the creation of the VAA. This could be combined with the theory that formulation of questions in a VAA is just as important as formulation of questions in political surveys (Walgrave, Nuytemans, & Pepermans, 2009, p. 1178). The experience and skill of the political scientists with creating valid and reliable survey questions could have helped in creating more accurate VAA questions. A possibility for future research could be to analyze if people that have knowledge about creating valid and reliable survey questions perform better than non-scientists on creating accurate VAA questions.

The final finding concerned the existence of contradictions. A number of contradictions was found between party positions in Stemwijzer and party positions in party programs. The difference between Stemwijzer and Kieskompas could be explained by Stemwijzer relying on the political parties to give information about their positions, while Kieskompas also uses documented information to establish positions. This would be supported by the theory that political parties have an interest in supplying different positions to VAA's than the positions they take in their programs (Gemenis & Van Ham, 2015, p. 2). A different explanation could be that parties are not aware that they supply conflicting information. This was suggested by D66 supplying a position and explanation that were in conflict with one another on question 11 of Stemwijzer. The reason could be that different people work on positions, explanations and party documents and these people have different views on policies. Even party members running for parliament can have different opinions about policies (Hansen & Rasmussen, 2013, p. 190). Future research could therefore analyze if parties supply conflicting information to VAA's because of a strategic motive, or because of different views between individual party members.

Limitations of this study include the focus on the European Parliament elections in the Netherlands. Opportunities for future research could be to see if the results can be replicated

in other countries. This includes possibilities of using a wider arrange of VAA's, which would increase the sample size for comparisons. Another limiting factor was this study was the absence of a defining dataset for issue priorities of the electorate. A dataset that included a complete range of priorities rather than a maximum of three answers like in the Voter Study 2009, would have been preferable. Finally, the sample sizes were limited to seven parties and two VAA's. Future research could expand on this and take more parties and VAA's into account.

The main message is that VAA's seem very useful, but they are a long shot away from perfect accuracy. Criteria that VAA's set for relevant or important issues are unclear, and this results in issue priorities that do not always reflect the priorities of the parties, the electorate, and in some cases both. Meanwhile, party positions in VAA's are often inaccurate. This can be mostly attributed to VAA questions capturing specific policy points, while they should capture general policy positions. The larger amount of contradictions in Stemwijzer compared to Kieskompas suggested that position information only provided by parties might be inaccurate, while positions established by a combination of parties and research scientists might be more accurate. The conclusion is therefore that VAA's have room for improvement. VAA creators should further research what issues they should incorporate, try to keep questions general, and regarding positions never rely only on the input of political parties.

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Appendix A

Short overview of the domains and subdomains in the EMCS III (Braun, Mikhaylov, & Schmitt, 2010, p. 33)

Dimension 1: External Relations

Foreign Special Relationship General, FSR to Eastern European EU Countries, FSR to Eastern European non-EU Countries, FSR to Russia, FSR to the US, Anti-Imperialism, Military, Peace, Internationalism, Europe/European Community/European Union: General, Financing the EC/EU.

Dimension 2: Freedom and Human Rights

Freedom, Human Rights, Democracy, Institutionalism.

Dimension 3: Political System (General)

Decentralization General, Transfer of Power to the EC/EU, Executive and Administrative Efficiency, Political Corruption, Political Authority.

Dimension 4: Political System (EU)

Competences of the European Parliament, Competences of the Commission, Competences of the Council General, Voting Procedures in the Council, Competences of the ECJ, Competences of other EC/EU Institutions General, European Central Bank, EC/EU Enlargement General, Eastern Europe, Balkans, Membership of Turkey in the EU, Complexity of the EC/EU.

Dimension 5: Economic Structure

Free Enterprise General, Property Restitution, Controlled Economy General, Social Ownership, Mixed Economy, Publicly Owned Industry, Socialist Property, Economic Planning General, EC/EU Structural Funds, Nationalization General, Privatization, Corporatism, Market Regulation, Marxist Analysis.

Dimension 6: Economic Policies and Goals

Incentives, Keynesian Demand Management, Productivity, Technology and Infrastructure, Protectionism, Anti-Growth Economy, Economic Orthodoxity, Economic Goals General, Creating Jobs, Labour Migration, Single Market, European Monetary Union/European Currency.

Dimension 7: Welfare and Quality of Life

Environmental Protection, Culture, Social Justice, Welfare State General, WS Pensions, WS Health Care and Nursing Service, WS Social Housing, WS Child Care, WS Job Programs, Education.

Dimension 8: Fabric of Society

Multiculturalism, Traditional Morality, Law and Order General, Fight Against Terrorism, Social Harmony, National Way of Life General, Immigration, EU Integration, Cyprus Issue.

Dimension 9: Social Groups

Labour Groups, Agriculture and Farmers, Middle Class and Professional Groups, Underprivileged Minority Groups General, UMG Handicapped, UMG Homosexuals, UMG Immigrants and Foreigners, UMG Ethnic Minorities/Diaspora, Non-Economic Demographic Groups General, NEDG Women, NEDG Old People, NEDG Young People, NEDG Linguistic Groups.