



HAL
open science

Peeking on the campaign : online Voting Advice Applications : challenges and prospects for electoral studies in the digital era

Thomas Vitiello

► To cite this version:

Thomas Vitiello. Peeking on the campaign : online Voting Advice Applications : challenges and prospects for electoral studies in the digital era. Political science. Institut d'études politiques de paris - Sciences Po, 2018. English. NNT : 2018IEPP0001 . tel-03419538

HAL Id: tel-03419538

<https://theses.hal.science/tel-03419538v1>

Submitted on 14 Dec 2021

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Institut d'études politiques de Paris
ECOLE DOCTORALE DE SCIENCES PO
Programme doctoral Science politique, mention Politique comparée
Centre de recherches politiques de Sciences Po (CEVIPOF)
Doctorat en science politique

Peeking at the campaign

*Online Voting Advice Applications: Challenges and prospects
for electoral studies in the digital era*

Thomas Vitiello

Thesis supervised by Pascal Perrineau, Professeur des Universités, Sciences Po

Defended on 12th January 2018

Jury:

Mr Martial FOUCAULT, Professeur des Universités, Sciences Po

Ms Fabienne GREFFET, Maître de conférence, Université de Lorraine

Mr André KROUWEL, Universitair Hoofddocent, Vrije Universiteit Amsterdam (rapporteur)

Mr Arnaud MERCIER, Professeur des Universités, Université Panthéon-Assas (rapporteur)

Mr Pascal PERRINEAU, Professeur des Universités, Sciences Po

Ms Sylvie STRUDEL, Professeur des Universités, Université Panthéon-Assas

ABSTRACT

The advent of the Internet facilitates the diffusion of political information within mass public, providing citizens with the opportunity to obtain extensive information about politics at any time. Against this background of information abundance, agencies of different kinds (such as media, universities, NGOs, governmental agencies) have developed online Voting Advice Applications (VAAs) that may assist citizens in taming the flood of political information that is at its peak during elections. Online VAAs are websites or online applications that show voters which party or candidate is closest to their own political ideas based on how they mark their positions on an ample range of policy issues. The party or candidate positions are extracted from a content analysis of their campaign manifestos. In addition to providing voters with reliable information in a structured manner, VAAs are an innovative data-collection tool on issue positions and on a wide set of other indicators. The very large number of daily users makes VAAs a unique tool to gather data on numerous and different voters during an electoral campaign.

The main scope of this dissertation is to use VAA-collected data to learn about online information exposure during campaigns across media systems. Building on the *realistic view* of the Web's political potential and its impact on the public, this dissertation tests the hypothesis that VAA use by different voter groups (partisan, doubting and undecided voters) varies across media systems. I argue that the impact of new information technology on politics needs to be assessed by looking at the actors involved in the process and at their power relationship as defined by the institutional framework in which they evolve, here the media system. The analyses of VAA-collected data in seven electoral democracies across three different types of media systems (Democratic Corporatist, Liberal, and Polarized Pluralist) show that media systems are key mediators to explain online information exposure.

In Democratic Corporatist media systems, VAAs consistently and successfully reach out to non-partisan voters, thus spreading political information beyond sophisticated users; while they do so less consistently or not at all in other media systems. In Liberal media systems, where the media have been left primarily to market forces, VAAs outreach is strongly influenced by national circumstances (such as VAA-media partnership, party competition). Finally, in Polarized Pluralist media system the partisan media environment leads to the perpetuation online of politics as usual, mimicking the inequalities of resources

and access to politics that we observe in offline political practices. What sets Democratic Corporatist media systems apart is the strong public service orientation of their journalistic culture. The media structure in such systems is set in order to reach out to politically disadvantaged groups, favouring online VAAs spread within the whole electoral body. In other media systems, a more active VAA promotion is necessary in order to reach the same outcome.

The second scope of this dissertation is to use VAA-collected data for the sake of electoral analysis. There are two features that set VAA data apart from traditional survey data. First, the ‘voter recommendation’ provided to each user is computed through an issue-based distance calculation between the user and each of the parties or candidates included in the tool. This originality allows political scientists to exploit the data to study issue voting and congruency between voters and parties or candidates. Second, VAA data share a certain number of attributes with data collected through rolling cross-section surveys and, therefore, are a potential rich source of information about campaign effects on voting behaviour. While traditional rolling cross-section surveys must limit themselves to aggregate analysis due to the few number of daily respondents, VAA data allow for statistical analyses with large daily samples in order to measure the individual determinants of voting behaviour. Several analyses are carried out using data collected by the French VAA of *La Boussole présidentielle* in the presidential elections of 2012 and 2017, and in the ‘primary of the right and the centre’ of 2016.

Ultimately, samples collected through VAAs suffer from important biases, such as self-selection bias, unobserved heterogeneity and misreporting. Since these early criticisms of VAA samples were formulated, the VAA literature has strengthened its data cleaning procedures and has shown that the relationship between key explanatory variables of voting behaviour are well informed and measured in VAA samples. Hence, building on these developments, this dissertation shows that VAA samples, despite being non-probabilistic, can serve as a very informative tool for the study of political and communication processes during electoral campaigns if integrated within an appropriate research framework and with the use of proper statistical adjustment.

RÉSUMÉ

L'avènement de l'Internet a engendré à une échelle sans précédent la diffusion d'informations politiques auprès du public. Les citoyens peuvent désormais s'informer à tout moment sur la politique et les politiques publiques. Dans ce contexte d'abondance de l'information, de multiples acteurs (comme des médias, des universités, des associations ou encore des agences gouvernementales) ont développé, en ligne, des Systèmes d'Aide au Vote (SAV) qui aident les citoyens à dompter le flot d'information des campagnes électorales. Ces SAV comparent, sur des enjeux variés, les positions des utilisateurs avec celles des partis ou des candidats qui sont établies à partir d'une analyse de contenu de leur programme électoral. En bref, un SAV fournit de manière centralisée, condensée et interactive une quantité relativement importante, mais pas forcément suffisante, d'informations sur les positions des candidats sur les enjeux saillants de la campagne.

En plus de permettre aux électeurs de comparer leurs positions à celles des candidats sur les enjeux saillants de la campagne, les SAV sont également un outil d'analyse novateur à usage des politistes. En effet, les SAV permettent aux politistes de récolter des données empiriques nouvelles à grande échelle tout au long d'une campagne électorale. Non seulement les électeurs visitant un SAV doivent se positionner sur une liste de 30 enjeux afin de se voir proposer un « conseil électoral » personnalisé mais ils répondent aussi, de manière facultative, à des questions sociodémographiques et à des questions portant sur leurs attitudes politiques. Ainsi ces données nous permettent d'interroger certaines questions centrales de la science politique et des sciences de la communication.

L'objectif principal de cette thèse est d'utiliser les données collectées par les SAV afin d'analyser la diffusion d'un site Web à caractère informatif et politique, i.e. les SAV, auprès des internautes dans des systèmes médiatiques différents. En s'appuyant sur la *vision réaliste* du potentiel politique de l'Internet et de son impact sur le public, cette thèse teste l'hypothèse selon laquelle l'utilisation des SAV par différents groupes d'électeurs (électeurs partisans, hésitants et indécis) varie selon les systèmes médiatiques. Je soutiens que l'impact des nouvelles technologies de l'information et de la communication sur les pratiques politiques doit être évalué en examinant les acteurs impliqués dans le processus et leur rapport de force, tel que défini par le cadre institutionnel dans lequel ils évoluent, ici le système médiatique. Les analyses des données collectées par des SAV dans sept démocraties électorales

représentant trois différents types de systèmes médiatiques (*Democratic Corporatist*, *Liberal*, et *Pluralist Polarized*) montrent que les systèmes médiatiques structurent les comportements et influent sur le degré d'exposition à des informations politiques en ligne.

Dans les systèmes médiatiques *Democratic Corporatist*, les SAV atteignent avec succès et systématiquement les électeurs non partisans, diffusant ainsi l'information politique au-delà des internautes les plus politisés. Alors que dans les autres types de systèmes médiatiques, les SAV éprouvent plus de difficultés à atteindre un public hétérogène, voir n'y arrive pas. Dans les systèmes médiatiques *Liberal*, où les médias sont principalement une émanation d'acteurs privés et du libre marché, la pénétration des SAV au sein de la population est fortement influencée par les circonstances nationales (comme l'existence d'un partenariat SAV-media ou encore la compétition partisane propre au pays); et dans les systèmes médiatiques *Pluralist Polarized*, la forte politisation des médias mène à la perpétuation en ligne des inégalités de ressources et d'accès à l'information politique comme on les observe dans les pratiques hors-ligne. Ce qui distingue les systèmes médiatiques *Democratic Corporatists* des autres systèmes médiatiques est l'existence en son sein d'une forte culture de service public. Cette particularité a façonné la structure du système médiatique de la sorte à diffuser l'information à l'ensemble des groupes sociaux de la société y compris ceux qui s'intéressent le moins à la politique. Cette structure médiatique favorise donc la diffusion des SAV auprès d'un corpus hétérogène du corps électoral ; alors que dans les autres systèmes médiatiques, une promotion plus active du SAV est nécessaire pour espérer atteindre le même résultat.

Le second apport de cette thèse est l'utilisation des données collectées par un SAV pour l'analyse électorale. Les données SAV se différencient des données collectées par les méthodes d'enquêtes traditionnelles de deux manières. Premièrement, le « conseil électoral » fourni à chaque utilisateur est le résultat d'un calcul de distances entre les positions sur enjeux de l'utilisateur et les positions des partis ou des candidats inclus dans l'application. Cette originalité permet aux politistes d'exploiter ces données afin d'étudier notamment le vote sur enjeux et la congruence entre les électeurs et les partis ou les candidats. Deuxièmement, les données SAV partagent un certain nombre d'attributs avec des données collectées à travers des enquêtes de type *rolling cross-section* et, par conséquent, constituent une riche source d'informations sur les effets de la campagne électorale sur le vote. Alors que traditionnellement, en raison du faible nombre de répondants quotidiens, les enquêtes *rolling cross-section* se limitent à des analyses agrégées, les données SAV permettent quant à elles

d'effectuer des analyses statistiques au niveau individuel. Plusieurs analyses sont réalisées dans cette thèse à partir des données recueillies par le SAV français de *La Boussole présidentielle* lors des élections présidentielles de 2012 et 2017, et lors de la « primaire de la droite et du centre » de 2016.

In fine, les échantillons collectés par les SAV souffrent de biais non-négligeables, comme le biais d'auto-sélection, le risque de l'hétérogénéité non observée et le risque de déclarations erronées. Depuis que ces critiques ont été formulées, les politistes travaillant sur les SAV ont mis au point des protocoles de nettoyage des données et ont démontré les mécanismes entre le vote et les facteurs qui l'influencent sont bien renseignés et mesurés dans les échantillons SAV. Ainsi, dans la continuité de ces avancées, cette thèse montre que, bien qu'étant non-probabilistes, les échantillons SAV sont très informatifs pour l'étude des processus politiques et communicationnels à l'œuvre lors les campagnes électorales à condition d'être intégrés dans un cadre de recherche approprié et d'ajuster les biais statistiques.

ACKNOWLEDGMENTS

This dissertation is the result of a process that started in September 2009 when I began Graduate School at Sabanci University in Istanbul. I would like to warmly thank Ali Çarkoğlu for recruiting and welcoming me as part of the ELECDEM project ¹ for the first three years of my doctoral journey. It is during this time that I first learnt about online Voting Advice Applications (VAAs) through my encounter with André Krouwel.

Dear André, from our first discussion on that bus ride to Sabanci University on a rainy day of the spring of 2010, you have been nothing but kind to me. You have immediately welcomed me in your academic collaborations and in your VAA projects. Through the years, whether in Amsterdam, Cairo or Naples you have supported me in any way you could. You have opened the doors of Kieskompas and of the VAA world to me, and offered me indispensable guidance through the long and challenging path of being a doctoral candidate. It is hard to find words to express my gratitude for all you have done in those last years. Maybe the best way to do so is to look ahead and to realize that this has only been the beginning of a productive professional collaboration and of a close personal relationship.

I also would like to express my warmest thanks to Bruno Cautrès and Pascal Perrineau who have encouraged me to apply to the Doctoral school at Sciences Po and who have supported me academically, professionally and administratively during these years. Thank you for having been my gatekeepers in the projects I undertook during my PhD, and in particular for making it possible for me to lead the making of *La Boussole présidentielle* since 2014. Even though my dissertation is not about French politics per se, the development of several VAAs for French elections (presidential, primaries and European) has placed the topic at the centre of my intellectual growth in these last years. I cannot thank Vincent Martigny enough for having shared with me his knowledge of French politics from the day he recruited me as his teaching assistant. French politics plays an important part in my professional life nowadays and it would have not been possible without his experience and friendship.

To succeed as a PhD candidate, one not only needs professional guidance but also the support of his loved ones. My dearest Linh, words cannot describe how thankful I am to have you in my life. You have given me the utmost level of care and support during all these years and I am looking forward to soon becoming officially your partner for life. I would like to

¹ European Commission Marie Curie Intensive Training Network (ITN) in Electoral Democracy

express my love to my mother and my father who in both good and bad times have been indistinguishably related to the person I am nowadays. I am extremely grateful for that. I also would like to express all my affection to Andrea for being a third parent to me and for all the support he has shown me during my difficult times.

In this PhD period, I have made many friends and some of these encounters have matured in beautiful friendships. Pieterjan, you are the first and best friend I made in those years. Our friendship has passed the test of time and place (ELECDEM BABY!), I thank you from the bottom of my heart for standing by my side in my times of need and for all the fun times we had and that we will still have! Ann-Kristin, from the moment I met you I had the feeling I had known you since a long time, the scarcity of our meetings makes them more special, but from now on let's try to meet more often! My deepest thank for proofreading a large part of my dissertation. Etrit and Ondër, my dear Istanbul flat mates, you made the last months of my stay in the city fantastic, I miss our talks, I miss the grilled sardines and I miss you. Even if it was for a short period of time, thank you for having been my Istanbul family.

Many more friends and colleagues have mattered in the making of this dissertation. To name a few, I would like to thank Oscar for his friendship and for the hard work he put in the development of *La Boussole présidentielle* from the Kieskompas office in Amsterdam; I would like to thank Sylvie Strudel for being a member of the “dream team” and for opening the door of her master course to me; I would like to thank Pavlos for inspiring one of the analyses included in this dissertation; and I would like to thank Haley for proofreading parts of this dissertation. Finally, I would like to thank all the persons who have been there and shared a moment of their kindness, empathy and generosity with me.

TABLE OF CONTENT

ABSTRACT	4
RÉSUMÉ	6
ACKNOWLEDGMENTS	10
TABLE OF CONTENT	12
TABLE OF TABLES	17
TABLE OF FIGURES	21
INTRODUCTION	25
The rise of online Voting Advice Applications in the post-modern campaign	29
The importance of the media environment for information exposure	32
The contributions of comparative analysis	34
Outline of the dissertation	35
<i>I. Online Voting Advice Applications from a political science perspective.....</i>	<i>39</i>
CHAPTER 1 – LITERATURE REVIEW	41
A - Emergence and success of VAAs	41
B - State of the Art	44
1) Methodological debates	44
a) Issues selection and statements formulation	45
b) Answer categories	47
c) Methods of party positioning	48
d) Matching parties with voters on issues' positions	51
2) Voters and VAAs	52
a) The profile of VAA users	53
b) The dimensionality of a political space	54
c) The effect of VAAs on users	55
3) Assessing the VAA literature	57
4) The Media System Approach	59
5) The Electoral Campaign Approach	62
CHAPTER 2 – VOTING ADVICE APPLICATIONS AS CAMPAIGN ACTORS: MAPPING VAAS' INTERACTIONS WITH PARTIES, MEDIA AND VOTERS	65
A – A model of VAAs' interaction during electoral campaigns	65
B – The Party Dimension: on the inclusion of parties and the resolution of conflicts of interest and opinion.	67
C – The media dimension: models of VAA promotion	71

1) Neither media partnership nor mini-campaign	73
2) No media partnership, but a mini-campaign	73
3) Media partnership, but no mini-campaign	74
4) Media partnership and a mini-campaign	75
5) VAAs and Media - Conclusions	75
D – The Voter Dimension	77
E – Conclusion	80

II. « La Boussole présidentielle »: development, evaluation and analyses 81

CHAPTER 3 – THE METHODOLOGY BEHIND LA BOUSSOLE PRÉSIDENTIELLE 83

A - Locating parties or candidates in a common political space	83
B - Selection of relevant parties or candidates: Who’s in and who’s out?	84
C - Selecting and analysing relevant party documents	86
D - Issue identification and selection: Determining what’s at stake in the election	88
E - Framing and ‘scaling’ the issue propositions	89
F - Placing the parties: first round of placements and generation of text snippet database	92
G - Contacting the parties for self-placement: Reaching agreement	95
H - Comparing Voter and party positions: Agreement or proximity approach?	97
I - Developing a multidimensional ‘map’ of party competition	99
J - To conclude	102

CHAPTER 4 – AN EVALUATION OF LA BOUSSOLE PRÉSIDENTIELLE 105

A – The socio-demographic and political profile of La Boussole présidentielle’s users	105
B – Are we asking the right questions?	111
1) VAAs’ issue statements and the validity of measuring political preferences	111
2) Evaluating the validity of <i>La Boussole présidentielle</i> issue statements according to users’ political sophistication	115
3) Results	122
4) A new method to improve VAAs’ validity measurement	128

CHAPTER 5 – LA BOUSSOLE PRÉSIDENTIELLE AND ELECTORAL ANALYSIS 131

A – Data collection and the study of French national elections	131
B – Assessing VAA data for electoral research	133
C – Congruence between voters and candidates in the political landscape of La Boussole présidentielle	136

D – The second round of French Presidential elections: which candidate is the most convening?	142
1) “Downsian” vs. “directional” theory of issue voting in the second round of the 2012 Presidential election	142
2) New cleavage, old issues: the second round of the 2017 Presidential election	146
E – Issue voting, image voting: La Boussole présidentielle and the primary of the right and the centre	151
1) The users of <i>La Boussole présidentielle</i> during the primary of the right	152
2) The evolution of vote intentions better measured by “ <i>La Boussole présidentielle</i> ” than by opinion polls.	155
3) Aggregate-level analysis: a campaign dynamic triggered by the candidate image rather by issues agreement	157
4) Individual level analysis and the longitudinal effects of the campaign: image effects and polarisation between the candidates.	161
F/ Conclusion	168

III. Media use and information flow in the digital era: the case of online VAAs in electoral campaigns 169

CHAPTER 6 – INFORMATION FLOW IN CONTEMPORARY MEDIA SYSTEMS	171
A - A framework for media systems’ analysis	171
1) The Four Dimensions of a Media System	173
a) The Structure of Media Markets	173
b) Political Parallelism	174
c) Professionalization	176
d) The Role of the State	177
2) Three Models of Media Systems	178
a) The Mediterranean or Polarized Pluralist Model	178
b) The Democratic Corporatist Model	179
c) The Liberal Model	180
B - Transformations in media and political communication	183
C - Information, media environment and politics	186
D - Internet, journalism and information openness	189
E - Flow of information and electoral campaign	193
1) Electoral campaigns as information campaigns	193
2) Voters, information and media	194
3) Structure of the analysis	198
4) VAA data as comparative data	200

CHAPTER 7 – NEW MEDIA, OLD PRACTICES: THE USE OF ONLINE VAAS BY PRESS JOURNALISTS	203
A - From “political observatories” to “data-driven journalism”	203
B - The openness of media systems	205
C - Country cases	206
D - VAAs as a data-driven journalistic source	209
E - Participants	210
F - Study design	210
G - Perception and use of VAAs as journalistic news source	211
1) The Netherlands	211
2) Turkey	212
3) France	214
H - Exploring differences between and within countries of VAAs’ journalistic practices	215
I - Conclusion	217
CHAPTER 8 – THE IMPACT OF MASS MEDIA ON VAA USE (I): TURKEY, POLITICAL PARALLELISM AND VOTERS’ PARTISANSHIP	223
A - The context of the 2011 Turkish parliamentary elections	223
B - The Turkish media system and political parallelism	225
C - Users’ description	227
1) Socio-demographic characteristics	227
2) Through which web channel did the users access oypusulasi.org?	231
D - Type of voters and VAA use	233
E - Assessing the impact of mass media on VAA use	238
F - The individual determinants of VAA use by voter types	242
G - Conclusion	249
CHAPTER 9 – THE IMPACT OF MASS MEDIA ON VAA USE (II): FRANCE? VOTER TYPES AND COMMERCIAL MEDIA	251
A - The context of the 2012 French Presidential election	251
B - The French press between partisanship and commercialism	253
C - Users’ description	256
1) Socio-demographic characteristics	256
2) Through which web channel did users access <i>laboussolepresidentielle.fr</i> ?	259
D - Type of voters and VAA use	259
1) The political tendencies of <i>La Boussole présidentielle</i> users	259
2) Why and when do voters visit a VAA?	262
E - Assessing the impact of mass media on VAA use	267
F - Individual determinants of VAA user by voter types	269
G - Conclusion	276

CHAPTER 10 – A COMPARISON OF VAA USE ACROSS MEDIA SYSTEMS	279
A – Hypotheses of VAAs use across media systems	279
B – Measuring voters’ decision-making process in relation to the campaign process	281
C - Cases Selection	283
D - Results	284
1) The distribution of voter types among VAA users	284
2) The evolution of voter types among VAA users during the campaign	287
E - Conclusion	298
CONCLUSION	301
Annexes	307
Bibliography	327

TABLE OF TABLES

Table 2.1. Communication of the VAA team with parties/candidates during the development of the VAA.....	67
Table 2.2. Sources used by VAA teams for developing issue statements	68
Table 2.3. Information used by the VAA team to position the parties/candidates on the issue statements of the application.....	70
Table 2.4. Management of discrepancies between expert and party issue placements.	70
Table 2.5. Promotion and media strategies of VAA practitioners.....	76
Table 4.1. Socio-demographics distribution of La Boussole présidentielle’s users (first and second round users).....	107
Table 4.2. Socio-demographics distribution of La Boussole présidentielle’s users who answered the pop-up questionnaire (first and second round users)	108
Table 4.3. Political profile of La Boussole présidentielle’s users who visited the application before the first round.....	110
Table 4.4. Political profile of La Boussole présidentielle’s users who visited the application between the two rounds	110
Table 4.5. Socioeconomic issue statements of La Boussole présidentielle 2012 classified according to Carmines and Stimson’s taxonomy.....	117
Table 4.6. Conservative-progressive issue statements of La Boussole présidentielle 2012 classified according to Carmines and Stimson’s taxonomy	118
Table 4.7. Socioeconomic issue statements of La Boussole présidentielle 2017 classified according to Carmines and Stimson’s taxonomy.....	119
Table 4.8. Conservative-progressive issue statements of La Boussole présidentielle 2017 classified according to Carmines and Stimson’s taxonomy	120
Table 4.9. Factor analysis of socioeconomic items according to level of political sophistication – La Boussole présidentielle 2012.....	123
Table 4.10. Factor analysis of socioeconomic items according to level of political sophistication	124

Table 4.11. Descriptive statistics of socioeconomic items' loading per user groups tested - 2017.....	124
Table 4.12. Factor analysis of authoritarian-libertarian items according to level of political sophistication – La Boussole présidentielle 2012.....	126
Table 4.13. Factor analysis of authoritarian-libertarian items according to level of political sophistication – La Boussole présidentielle 2017.....	127
Table 4.14. Descriptive statistics of authoritarian-libertarian items' loading per user groups tested.....	128
Table 5.1. Correlation coefficients between the propensity to vote scores and the Euclidian distance between users of La Boussole présidentielle and candidates	140
Table 5.2. Vote intention for the second round of La Boussole présidentielle's users according to their declared vote in the first round (2012 French Presidential election).....	143
Table 5.3. Importance of issue dimensions according to the vote declared in the first round (average scores)	145
Table 5.4. Vote intention for the second round of La Boussole présidentielle's users according to their declared vote in the first round (2017 French Presidential election).....	147
Table 5.1. Socio-demographic distribution of the sample	153
Table 5.2. Linear regression models (OLS) predicting the propensity to vote scores of candidates.....	167
Table 2.2. Pattern of Variation in Four Media System Dimensions	183
Table 6.2. McAllister's (2002) typology of voters	196
Table 8.1. Vote intention of Oypusulasi users.....	231
Table 8.2. Channel of access to the Oypusulasi site.....	232
Table 8.3. Newspaper Items Covering the Oypusulasi website.....	234
Table 8.4. Media Items as Interruptions for the MITS Analysis	240
Table 9.5. Results of the MITS analysis on VAA advice.....	241
Table 8.5. Logistic regressions	242

Table 9.1. Recap of vote intention’s amplitudes in polls for the five main candidates of the 2012 French presidential election 253

Table 9.2. La Boussole présidentielle sample and the French electorate 258

Table 9.3. Channel of access to La Boussole présidentielle site 259

Table 9.5. Results of the MITS analysis 269

Table 9.5 Individual determinants of voter types among VAA users..... 272

Table 10.1. Cases Selection 284

Table 10.2. Distribution of voter types per country among VAA users 286

Table 10.3 Summary of main findings 298

TABLE OF FIGURES

Figure 2.1. Dimensions of interaction between VAAs and actors of political communication: 1. the party dimension, 2. the voter dimension, 3. the media dimension.....	66
Figure 2.2. Screenshots of ‘euprofiler.eu’ and ‘egypt.bosala.org’ VAA pages allowing users to weight or filter issues used in their comparison output.	79
Figure 3.1. The ‘Recalculate Your Position’ button allows users to select which issue areas are considered in their output.....	92
Figure 3.2. Output displaying text justifying a single issue coding (note hyperlink to source document at the bottom of this text)	94
Figure 3.3. The position of an user in the political landscape of La Boussole présidentielle 2012.....	100
Figure 3.4. An example of single issue output on the question ‘Richer people should pay more taxes than poorer people’ (translation); with voter ‘neutral’.	101
Figure 5.1. Congruence between La Boussole présidentielle’s users and the candidates of the 2012 French Presidential election based on the average Euclidian distance between users and candidates in the bi-dimensional political landscape and the PTV scores expressed for each candidates (0-10 scale).....	141
Figure 5.2. Congruence between La Boussole présidentielle’s users and the candidates of the 2017 French Presidential election based on the average Euclidian distance between users and candidates in the bi-dimensional political landscape and the PTV scores expressed for each candidates (0-10 scale).....	142
Figure 5.3. Euclidian distances between La Boussole présidentielle’s users and second round candidates according to their declared vote in the first round (Bayrou, Dupont-Aignan and Le Pen).	144
Figure 5.4. Euclidian distances between La Boussole présidentielle’s users (2017) and second round candidates according to their declared vote in the first round (Mélenchon, Hamon, Fillon and Dupont-Aignan).....	149
Figure 5.5. Euclidian distances between La Boussole présidentielle’s users (2017) and second round candidates according to their vote intention in the second round (Blank voters, abstainers and undecided voters).	150

Figure 5.1. Distribution of “La Boussole présidentielle” sample	155
Figure 5.2. Vote intentions for the first round of the primary – Opinion polls	156
Figure 5.3. Vote intentions of users sure to go vote in the first round of the primary – La Boussole présidentielle (weighted data & smoothed average scores over 7 days).....	157
Figure 5.4. Evolution of image traits and propensity to vote scores for the main candidates (average values – scale from 0 to 10)	159
Figure 5.5. The evolution of issues agreement scores between La Boussole présidentielle users and the main candidates of the primary of the right and the centre.....	161
Figure 2.1. Relations of Individual Cases to the Three Models	182
Figure 7.1. Relation of the Selected Cases to the Three Models	209
Figure 8.1. Proportion of Women among Users	228
Figure 8.2. Median Income of Users	229
Figure 8.3. Proportion of 15-24 years old Users per Regions	229
Figure 8.4. Number of Connections and Publication of Newspapers Items.....	234
Figure 8.5. Evolution of the PTVs (scale 0-10) expressed on the Oypusulasi website	236
Figure 8.6. Distribution of the Advices Given in favour of BDP and CHP by the Oypusulasi Website	237
Figure 8.7. Distribution of the Advices Given in favour of AKP and SP by the Oypusulasi Website	237
Figure 8.8. Distribution of the Advices Given in favour of BBP and MHP by the Oypusulasi Website	238
Figure 8.9. Predicted effects of the column published in Radikal on the party advices in favour of CHP, BDP and MHP on Oypusulasi.....	247
Figure 8.10. Predicted effects of the column published in Hürriyet on the party advices in favour of AKP and CHP on Oypusulasi	247
Figure 8.11. Predicted effects of the column published in Bursa Gerçek on the party advices in favour of BDP, MHP and BBP on Oypusulasi.....	248

Figure 8.12. Predicted effects of the column published in Zaman on the party advices in favour of AKP and BDP on Oypusulasi	248
Figure 8.13. Predicted effects of the column published in Vatan on the party advices in favour of SP on Oypusulasi.....	249
Figure 9.1 Evolution of the PTVs (scale 0-10) expressed on La Boussole présidentielle website.	260
Figure 9.2. Distribution of the advices given in favour of left-wing candidates	261
Figure 9.3. Distribution of the advices given in favour of left candidates.....	261
Figure 9.4. Distribution of the advices given in favour of conservative and right wing candidates.....	262
Figure 9.6. Number of connections and media coverage of La Boussole présidentielle.	262
Table 9.4. Distribution of voter-types among La Boussole présidentielle users	265
Figure 9.7. Distribution of the four types of voters among La Boussole présidentielle users (3 days moving average)	266
Figure 9.8. Distribution of the four types of voters among La Boussole présidentielle users (count).....	266
Figure 9.9 Average marginal effects for the socio-demographic variables of the MLNM model.....	273
Figure 9.10 Average marginal effects for the left-right self-placement variable of the MLNM model.....	274
Figure 9.11 Average marginal effects for the vote intention variables of the MLNM model.....	275
Figure 9.12 Average marginal effects for the media event variables of the MLNM model..	275
Figure 9.13 Average marginal effects for the week variables of the MLNM model.....	276
Figure 10.1 Evolution of the distribution of voter types among VAA users during the campaign.....	288
Figure 10.2. Odds ratio for each voter type to visit a VAA during the campaign (reference = Week 1).....	293

INTRODUCTION

There has always been an intimate connection between mass communication and the conduct of politics, in whatever kind of regime. In totalitarian or authoritarian societies, ruling elites use their control of the media to ensure conformity and compliance and to stifle dissent by one means or another. In democracies, the media have a complex relationship with sources of power and the political system. On the one hand, they usually find their *raison d'être* in their service to their audiences, to whom they provide information and views according to judgements of interest and need. In order to perform this service, they need to be independent of the state and of powerful interests. On the other hand, they also provide channels by which the state and powerful interests address the people, as well as platforms for the views of political parties and other interest groups. They also promote the circulation of news and opinion within the politically interested public (Manin, 1997; Norris, 2000, 2004; McQuail, 2005).

Today, political systems and political communications systems are dynamic, constantly evolving, never settled. In his influential book on the principles of *representative government*, his term for the form of government in Western liberal democracies, Bernard Manin (1997: 247-303) argues that democratic systems of government have changed profoundly. According to Manin, after the classical parliamentarianism of the nineteenth century and the party democracy that was established at the beginning of the twentieth century, representative government currently takes the form of an “*audience democracy*”. The characteristics of this latest form of government include personalization of elections and the rise of experts in political communication, increasing vagueness of political offers, the omnipresence of public opinion, and the transfer of the political debate from the backrooms of parliamentary committees and the central offices of parties and associations to the public sphere.

Similarly, party researchers point to the decline of the ideologically oriented and structurally-rooted mass party, characteristics of party democracy, and the rise of the “electoral professional party” (Panebianco, 1988) or the “cartel party” (Mair, 1997). This transformation has led, on the one hand, to the declining importance of the traditional party apparatus and of party militants, and, on the other hand, it has reinforced the importance of the party leaders and of the much more independent electoral audience (McAllister, 2007;

Karvonen, 2010). Media researchers note that political communication is no longer focused on parties but on the media (Swanson and Mancini, 1996). They observe the increasing independence of the mass media from political parties. Finally, they speculate about the arrival of a third age of political communication (Blumler and Kavanagh, 1999), where the public possesses greater autonomy with regard to the media. Characteristics of this new style of political communication include the multiplication of the means of communication, an affluence of communication channels, increasing commercialization, and further acceleration of the speed with which political information becomes accessible for a significant part of the public.

In addition to a grip on mass media, political parties used to also have a grip on groups of voters. Not in the sense that they controlled the electorate, but rather that specific social groups used to loyally vote for the political party representing, or even embodying, their class interests. As a matter of fact, the most developed and traditional voting analysis perspectives regard the study of predispositions, sociological roots and ideological allegiances in voting behaviour. The Columbia School (Lazarsfeld, Berelson and Gaudet 1948), with its focus on social variables (socio-economic status, religion and area of residence), followed by the Michigan school (Campbell et al., 1960), with its focus on partisan identification, both stressed the existence of relatively stable latent attitudes that play a role in the formation of ideological orientations, the evaluation of the political system, and the way elections and voting are perceived. These approaches underline the centrality of political socialization, family transmission and political heritage in explaining voting behaviour (Percheron, 1993; Muxel, 2001). If stability is emphasized, under specific electoral contexts over the course of an individual's "voting career", changes and realignments are possible.

The early studies on campaigns found that these existing information and predispositions that voters possess made it rare for campaigns to change voters' minds. This view originates with the early studies of the Columbia School (Berelson et al., 1954; Lazarsfeld et al., 1948), emphasizing the reinforcing effect of campaigns: "political communication served the important purposes of preserving prior decisions instead of initiating new decisions. It kept the partisans "in line" by reassuring them in their vote decision; it reduced defection from the ranks" (Lazarsfeld et al., 1948: 87). In other words, rather than persuading voters to change their vote, campaigns were seen as "activating" preferences.

From the 1970s onwards, the act of voting started to be increasingly seen as the result of an informed individual decision rather than as the result of the expression of socially or politically homogeneous groups. Rising levels of education among Western electorates, the weakening of party allegiance and the emergence of new issues in the public debate have progressively modified voters' behaviour (Lavau, 1986). The "new" informed voter (Nie et al., 1976) is more likely to be electorally mobile, is said to be a rational individual agent that bases its voting decision according to issues. Issue voting refers to the assumption that vote choice is determined by the individual voter's proximity/distance to/from the position of parties on salient issues (Downs, 1957). In order to link their policy preferences to party positions, voters need not only to have preferences, but also a sufficient amount of information available regarding the policy stances of the parties contesting the election (Carmines and Huckfeldt, 1996). However, this cost/benefit calculus is time and energy consuming, and with the multiplication of media outlets and with the spread of the Internet, the amount of accessible election-related information has grown exponentially in these last decades. Against this background of abundant information, sorting, selecting and processing information has turned into an even more pressing problem for voters than in the past. Voting behaviour analysts have adapted to this environment through low-information rationality theories according to which the individual-level probability of casting a vote is inversely proportional to the effort required to gather enough information (Delli Carpini and Keeter, 1996). Voters are expected to cut the cost of voting by relying on whatever "free" or inexpensive information can be picked up (Popkin, 1994); hence their increasing reliance on cues to compensate for an increasingly sophisticated media environment. This literature stresses voters' ability to take shortcuts rather than construct complex and systematic schemas of knowledge. Pre-existing attitudes and preferences, as well as motivations for processing the information have a bearing on the selection, perception and acceptance of messages. The political reasoning that leads to a vote is an instance of "motivated reasoning" (Lodge and Taber, 2000). From this perspective, campaign images play an important role in voters' behaviour, especially because once voters have created an initial image of a candidate, they incrementally revise their representation of that candidate in a process that updates the information stored in their memories (Redlawsk, 2002).

Hence, the key question of the study of voting behaviour has become whether voters' opinions on issues, parties and candidates who run for office "are derived from latent traits and stable psychologies, or whether actual processes of political judgment formation operate,

under the influence of information produced during the campaign” (Cautrès and Muxel, 2011: 32). How are long-term predispositions translated into an “electoral decision” under the influence of the election campaign? American political scientists who have been carrying out research into these questions for some time have concluded that the final voting decision is the result of voter arbitration between different elements present in the processing of information: the affects generated by the various candidates, the candidate’s “image” but also “by all the information made available throughout the electoral campaign, notably the candidates’ policy proposals, the main issues of the campaign, and the way in which they are publicly debated” (Cautrès and Muxel, 2011: 36).

Contemporary campaign studies have refuted the minimal effects model, developed in the early campaign literature, by showing that “campaign effects are neither large nor minimal in an absolute sense, but sometimes large enough to be politically important” (Campbell, 2000: 188). In particular, campaign events, such as party conventions and debates, do shift opinion by effect “of persuasion – or at least of voters’ shifting from indecision to preference” (Brady et al., 2006: 7; Holbrook, 1996). Bartels even demonstrated that in arenas where predispositions like party identification are useless, such as primaries, campaigns have substantial effects (Bartels, 1987, 1988). In particular, campaign activity and its attendant media coverage confer viability on candidates. More recently, European political scientists produced an important amount of studies in the 2000s about the impact of media coverage on voters’ attitudes and behaviour during campaigns. They have showed how media coverage, in particular during European Parliamentary elections and during referenda on EU treaties, played a significant role in shifting attitudes towards the EU, and vote choice in the case of a referendum (de Vreese and Semetko, 2004; de Vreese and Boomgarden, 2006a, 2006b; Maier and Rittberger, 2008). These effects are mediated through certain variables, such as the level of political sophistication of voters or the media environment in which information circulates; in fact, a one-sided message flow is more likely to have effects than a two-sided message flow (Zaller, 1992).

Although election campaigns are relatively difficult to interpret, it is clear that they have an impact on voters’ behaviour. After all, campaigns are the moments in political life when representatives and the represented interact most energetically. As voters are listening and learning, campaigns can affect what they know, whether they will vote, whom they will vote for and why they will vote for that person or party. This environment explains the

increasing study of electoral campaigns and of how voters process campaign-related information.

The rise of online Voting Advice Applications in the post-modern campaign

These deep transformations – autonomization and individualization of behaviours – of the relationship between voters, political actors and the media has resulted in an important evolution of how electoral campaigns are carried on. In the book *A Virtuous Circle: Political Communications in Post-industrial Societies*, Pippa Norris (2000) develops a typology of the evolution of political campaigns. Electoral campaigns are a democratic phenomenon that arose with the emergence of political parties and mass politics, hence from the second half of the nineteenth century onwards. Norris identifies three ideal-types of campaigns: *the pre-modern campaign* from the emergence of mass parties to the 1950s, *the modern campaign* from the early 1960s to the late 1980s, and *the post-modern campaign* from the 1990s onwards.

Pre-modern campaigns are characterized by three characteristics: “the campaign organization is based upon direct forms of interpersonal communications between candidates and citizens at the local level; (...) in the news media the ‘partisan press’ acts as core intermediary between parties and the public; and the electorate is anchored by strong party loyalties” (p.137). *Modern campaigns* are campaigns that are coordinated by a centralized party organization embodied by political leaders advised by external professional consultants like opinion pollsters: “In the news media, national television has become the principal forum for campaign events, and the electorate has become increasingly decoupled from party and group loyalties” (p.139). Finally, *post-modern campaigns* are defined as campaigns in which, despite of the national coordination of the campaign, an increasing number of decentralized operations are taking place. This change is due to a news media system that has fragmented into a more complex and incoherent environment of multiple channels, outlets, and levels, and to an electorate that has become more de-aligned in their voting choices. A peculiarity of the post-modern campaign environment is that “the new channels of communication potentially allow greater interactivity between voters and politicians” (p.140).

These changes have made political and communication systems more open than in the past. In this context, new non-partisan actors have emerged with an attempt to play a role in party politics, especially during electoral campaigns: interest groups, NGOs, e-citizens, and so on (Farrell and Schmitt-Beck, 2008). Among these, agencies of different kinds (universities, governmental agencies, media organizations) have developed online Voting Advice Applications (VAAs). Online VAAs are websites or online applications that show voters which party or candidate is closest to their own political ideas. VAA users are prompted to fill in a web-questionnaire marking their positions on an ample range of policy statements (e.g. “Taxes for the wealthiest people should be increased”, “France should replace its nuclear power plants with other sources of energy” or “Immigration in France should be more restricted”). After the user has positioned himself on the issue statements, a VAA compares these answers with those of each party or candidate on the same statements. The party or candidate positions are extracted from a content analysis of their campaign manifestos. Finally, “the application produces a result in the form of a rank-ordered list or a graph displaying which party or candidate stands closest to the user’s policy preferences” (Marschall and Garzia, 2014: 1).

By comparing the user’s position on a variety of issues with that of parties or candidates, VAAs provide users with readily accessible information about the parties’ and candidates’ stances and the extent to which these match their own political preferences. In line with the cognitive processes underlined earlier on the way individuals make decisions with little information, VAA sites are, fundamentally, heuristic-generating instruments. “The heuristics that they create for their users are most analogous to endorsements (with each individual given a specific party endorsement by the site), but they also have an element of ideological heuristic content (because voters are given a simplifying indication of their overall issue-based similarity to the competing parties or candidates)” (Wall et al., 2014: 418). However, the particularity of this endorsement or recommendation is that rather than being the result of the opinions of any particular group, the output of the site is presented as reflecting the user’s own opinions, making it unique for each VAA user.

It is generally assumed that if their methodology is sound, VAAs can be seen as strengthening the democratic process. Anderson and Fossen (2014: 217) claim that “VAAs are often intended to enhance the democratic process by one or all of the following: informing voters about the policy standpoints of political parties or individual candidates, increasing

voter turnout”, and “increasing the extent to which elected representatives mirror or are congruent with the views of the electorate” (p.223).

To the extent to which one views democratic electoral systems as premised on voters knowing what they are voting for, the potential appears large for a problematic competence gap between how well informed voters are and how well informed they would need to be for the electoral process to function “properly”. This is particularly true when voters need to sort out the positions of parties and candidates in multiparty systems, by going through party programs and sorting out the claims and counterclaims made about what the contenders’ positions really are. Thus, “even assuming wide-spread access to information and high levels of literacy, the level of political knowledge presupposed by this conception of a democratic electoral system can exceed what most citizens have (or take time to develop)” (Anderson and Fossen, 2014: 219). So assuming the presence of competence gaps, VAAs aim to close them by leveraging voters’ limited knowledge and time (Garzia, 2010). VAAs are also presented as lowering the cost of political participation and are presented as an antidote to voter disengagement. The usage of VAAs potentially reduces the cost of getting informed about politics and political parties, thereby increasing the chances of voting *vis-à-vis* abstention. Marschall (2008) has even argued that VAAs can increase voter turnout by heightening users’ awareness of differences between parties and thus of how much is at stake in the election. “For those who don’t vote because the parties all seem to be the same, VAAs can provide an additional motivation by sharpening the perceived differences” (Anderson and Fossen, 2014: 221). Finally, VAAs aim to strengthen democracy by increasing the policy congruency between VAA users and the party or candidate for whom they will cast their ballot. This VAA dimension echoes the minimal requirement, according to normative democratic theory, according to which in a representative democracy there should be some linkage between the interests of citizens and the public policies enacted by their representatives (Pitkin, 1967). The emphasis on issues is something VAA developers frequently mention as a way of encouraging voters to engage with matters of substance, rather than distracting candidate images and campaign sound bites (Krouwel et al., 2012; Walgrave et al., 2008).

Hence, VAAs can potentially strengthen three fundamental traits of democratic regimes: transparency, political participation and accountability (Fivaz and Schwarz, 2007). This optimistic view on the impact of VAAs on democracy echoes the positive view of the public sphere’s potential of the Internet. In fact, many hopes regarding the renewal of political participation came along with the development of the Internet. Its network architecture

promoting interactivity and its inherent capability to spread information is seen as more likely to promote greater inclusion of citizens in the political process. The more optimistic scholars considered that the Internet would lower the threshold for citizens' participation into the public debate, and so a greater share of citizens and groups could voice their concerns and be heard in return (Castells, 2002). The Internet would also provide an opportunity for all members of modern information societies to be equally informed (Rheingold, 2000). At the same time, pessimistic observers have warned against the risk of perpetuating "politics as usual" online, mimicking the inequalities of resources and access to politics that we observe in offline political practices (Wright, 2012), and even fear that the Internet could increase digital divide problems, resulting in even larger gaps between the information rich and poor (Miller, 2001). If, for those with access to computers, the Internet is a valuable resource for political participation, access to the Internet does not guarantee increased political activity or enlightened political discourse (Papacharissi, 2002). With respect to electoral campaigns, there is debate if the information flow mobilizes or normalizes political participation. On the one hand, the volume of information flow intensifies during an electoral campaign, both in mass media and in online media, reaching broader segments of the electorate than in off-campaign periods, and thus *mobilizing* political participation. On the other hand, the least politically interested voters mostly rely on mass media for exposure to political information and hence, the ones who mainly use the Internet for political purposes are engaged and active citizens. Such practices tend to *normalize* political participation (Hargittai, 2002, 2010).

The importance of the media environment for information exposure

If it has been repetitively shown that the average VAA user fits the profile of the politically interested citizen (a young male with a university degree; for a review see Marschall, 2014), several studies have shown that the least politically interested voters tend to use a VAA in the latter stages of the electoral campaign (Hooghe and Teepe, 2007; Van de Pol et al., 2014; Vitiello and Krouwel, 2015), suggesting that VAA usage is not homogeneous during a campaign. *One of the main purposes of this dissertation is to examine more systematically how different voter groups use a VAA during the campaign.* VAA developers agree that the way in which traditional mass media promote these applications is a key to understanding the popularity of VAAs and the profile of VAA users (Çarkoğlu et al., 2012; Ruusuvirta, 2010; Walgrave et al., 2008). We, therefore, need to analyse VAA use in

relationship to the traditional media environment in which these applications are launched. A media environment is defined “by the media available to people at a particular place and time and by the properties of these media” (Prior, 2007: 9). Many scholars have already argued that the media environment affects political behaviour (Converse, 1962; Fiorina, 1990; Zaller, 1992), “because different media environments offer different opportunities to obtain free information as a by-product” (Prior, 2007: 6). By-product learning refers to the fact that people often learn politically relevant facts as a by-product of non-political routines. Online VAAs are sites including sophisticated content about politics, but their interactive and recreational design makes them accessible to the average voter. Downs (1957) identifies two paths to by-product learning: the first one being that free information is sometimes obtained from entertainment-seeking behaviour, and the second one being that people may acquire political information in the course of making consumption decisions, for instance learning about inflation while grocery shopping. *The core of this dissertation is about the first path: about obtaining political information as a by-product of the media environment in which one is embedded.*

In order to maximize its utility for the democratic process, one of the concerns of VAAs is to reach floating voters: “voters whose decisions are not noticeably influenced by a stable ideology or a strong adherence to a party” (Downs, 1957: 6). Unfamiliar with ideological debates, floating voters – if they vote – decide based on candidate images or the controversy of the day. That is why according to Converse (1962: 591): “the volume of information flow can be seen as an important governor upon the magnitude of oscillation in party fortunes”. Because if the “stimulus” is not strong enough to inform less interested citizens, many of them may not be sufficiently motivated to vote as they perceive few differences between the political alternatives; while a strong “stimulus” should encourage higher turnout (Key, 1966). Similarly, Prior (2007: 9) argues that “if media messages reach committed voters, but are easy for less interested floating voters to miss, elections should become increasingly dominated by partisan considerations”. These arguments emphasize that the intensity and amount of political information that floating voters encounter affect their political behaviour, and “the set of available media thus affect who follows the news, who learns about politics and who votes – in short, [the media environment] affect[s] ‘the distribution of political power in a democracy’” (p.6). Thus, the purpose of this dissertation is to examine more systematically VAA use in a comparative perspective by answering the

following research question: *how do media systems affect VAA use during electoral campaigns?*

The contributions of comparative analysis

“Comparative analysis is valuable in social investigation, in the first place, because it sensitizes us to variation and to similarity” (Hallin and Mancini, 2004: 2). Most of the literature on VAAs is highly ethnocentric, in the sense that it refers only to the experience of a single country. If the European elections of 2009 and 2014 have led to the coordinated collection of data across European countries leading to comparative research on party positions and electoral cleavages in Europe (Bright et al., 2016; Kleinnijenhuis and Krouwel, 2009), national VAAs are almost never used for comparative analysis. Hence, we decided to make use of the abundance of data collected by VAAs in different countries to explore the possibilities that VAA data provide for comparison. Comparative research forces us to conceptualize more clearly what aspects of VAA use actually require explanation. Important aspects of a VAA’s popularity are assumed to be “natural”, such as the level of Internet penetration within a country, the fragmentation of a political system, or the promotion of a VAA by traditional media (Walgrave et al., 2008). Through this method we hope to draw attention to systemic aspects of a media environment that explain VAA use that “may be difficult to detect when the focus is on only one national case” (Blumler and Gurevitch, 1975: 76). Then, “the second reason comparison is important in social investigation is that it allows us in many cases to test hypotheses about the interrelationships among social phenomena” (Hallin and Mancini, 2004: 4). For many years, empirical research in communication was almost synonymous with the media effects paradigm, which was not concerned with larger media structures but with the effects of particular messages on individual attitudes and beliefs. For instance, in the growing body of comparative media effects research, a recent conclusion is that the quality of the news outlet – such as public service broadcasters in comparison to commercial broadcasts, or quality news outlets in comparison to tabloid outlets – influences how informed voters are (Aarts and Semetko, 2003; Curran et al., 2009; Soroka et al., 2013). If such analyses are sometimes carried out across countries to reach a larger pool of individual cases (Banducci et al., 2017), they do not incorporate the macro-level of analysis in their theoretical framework, and thus have the limit of failing to sort out relationships between media systems, their social and political settings, and individual behaviours. Hence, in this

dissertation we use individual-level data collected through online VAAs in several countries to make inferences about the effect of macro-level structures on individual behaviours. As suggested by Émile Durkheim (1965) in his seminal book “*The Rules of Sociological Method*”, researchers should demonstrate that one phenomenon causes another one by comparing the cases where these two phenomena are simultaneously present or absent.

Outline of the dissertation

Part I of this dissertation will focus on the state of the art on VAA research. In the assessment of the VAA literature (CHAPTER 1), I show that by aiming to examine more systematically how media systems affect VAA use during electoral campaigns, this dissertation aims to fill two gaps in the literature: the media dimension and the campaign dimension of VAA research. In fact, the current state of the VAA literature shows that researchers working on these applications mostly focus on three lines of research: the methodology of VAAs, the effects that VAAs have on voters, and the party dimension of VAAs. As VAAs are used by millions of voters across electoral democracies, it is crucial that “in order to contribute sustainably to the good functioning of democracy, VAAs should be open, transparent, impartial and methodologically sound” (article 1.1 of The Lausanne Declaration on Voting Advice Applications in Garzia and Marschall, 2014: 227). Therefore, it is praiseworthy that a major stream of VAA research has focused on the consistency, validity and reliability of selecting issue statements, matching algorithms and establishing party positions. Similarly, the hopes for a renewal of political participation through the Internet, and the fact that the voting recommendation produced by VAAs is a cue as any other, have logically led to a great deal of research on the effects of such applications on political participation and voting behaviour. Finally, the very large number of parties’ issue positions coded across time and space by VAA developers can easily contribute to our understanding of new cleavage lines that structure the party room, overcoming or supporting the left-right dichotomy. Instead, the media dimension of VAAs has been “substantially neglected by research so far” (Garzia and Marschall, 2012: 215), and the same can be said about the use of VAA data to better understand campaign dynamics and the flow of information.

VAAs do not only collect data during electoral campaigns, they are also what Schmitt-Beck and Farrell (2008) have labelled a “non-party campaign actor”. As VAAs are an attempt to centralize information concerning party positions on salient issues and to help voters to

tame the flow of information during campaigns, they are located at the intersection of the communication flows between citizens, parties and media. They do make it their mission to enhance the information base on which voters draw when casting their votes. For the users of such websites, VAAs “belong to the media repertoire individuals have at their disposal in order to gather information about politics, parties and policies” (Garzia and Marschall, 2012: 216). From the perspective of both political actors and journalists, VAAs are frequently seen as a campaign actor that can influence the opinion of voters (Walgrave et al., 2008). Therefore, to improve our understanding of how VAAs interact with political communication actors, we will map such interactions in CHAPTER 2. The goal of this chapter is to stress the linkage between VAAs and the social and political actors of the system in which they evolve, since VAAs, beyond being studied ethnocentrically for what they are, how they function and what effect they have, need to be considered within a broader framework of political communication processes.

As VAAs are a recent topic for European political science and an even newer one for French political science, Part II of this dissertation will focus on the development, evaluation and analysis of the French VAA, *La Boussole présidentielle*. *La Boussole présidentielle* is the first VAA developed by a French academic team, launched for the first time during the 2012 presidential election, and replicated for the 2016-2017 presidential sequence. It is important that before studying the linkage between the individual-level data collected through VAAs and the macro-level structure of media systems, we start with an in-depth assessment of a VAA, in order to lay the ground for VAA research in French political science. *La Boussole présidentielle* has been developed by the Centre for Political Studies of Sciences Po (Cevipof) and the Dutch social enterprise Kieskompas – a major European VAA developer – in partnership with several media: the regional newspaper *Ouest France*, the free daily *20Minutes*, and the media consortium *MSN News-M6-RTL* in 2012, and with *20Minutes* only in 2017.

VAAs are a tool of “applied political science” in the sense that they are a practical application for citizen use based on content extracted following a scientific method and existing scientific knowledge on political cleavages, party competition and issue voting. Therefore, our first concern in the presentation of *La Boussole présidentielle* is to introduce the methodology that was used to develop it (CHAPTER 3). We will then move toward an evaluation of the VAA (CHAPTER 4) by providing a descriptive analysis of its users and by assessing a key methodological assumption of VAAs, namely the fact that voters hold a large

number of coherent policy preferences on most issues of the campaign. Methodological inquiries into VAAs have surprisingly neglected to test whether the issue statements included in the applications measure coherently held opinions or “non-attitudes” (Converse, 1964). Hence, we propose a simple analysis in order to evaluate the validity of issue statements included in such applications and suggest that this validity test should be used as a benchmark to improve the quality of further VAA questionnaires.

Finally, Part II includes a chapter on the use of VAA data for electoral analysis and the study of campaign dynamics. Despite the fact that VAA collected data share many features with rolling cross section surveys, there are almost no analyses conducted with VAA data that analyse campaign dynamics and voting choice. Moreover, Fournier et al. (2015) have shown that the relationship between keys explanatory variables of voting behaviour are well informed and measured in VAA samples. Hence, we consider that VAA data should be taken seriously for electoral analysis and we do so by exploring the congruence level between VAA users and candidates, issue voting and issue proximity in presidential elections, and the determinants of campaign dynamics in the context of the 2016 primary of the French right and the centre (CHAPTER 5).

The comparative dimension of our analysis will be the object of Part III of this dissertation, in which I will shed light on how media systems matter for the use and diffusion of VAAs. As we approach VAAs as an informational tool within society, Part III will develop a theoretical framework on the working of democratic politics and the role of information in such processes. The role and place of online VAAs within these broader developments is progressively introduced (CHAPTER 6). The core of this theoretical framework is to stress the existence of three media system ideal-types – Democratic Corporatist, Liberal and Polarized Pluralist (Hallin and Mancini, 2004) – and that the conditions of information flow differ from one system to another. Not only do different voter groups, such as partisan or undecided voters, access VAAs at different moments of the campaign, but they also do so differently across media systems: for instance undecided voters access a VAA in different amount and at different times of the campaign in a Democratic Corporatist media system than in a Liberal one. The case selection of the analyses to come will reflect the diversity of media systems as stressed in the theoretical framework. In order to consistently examine the difference in VAA use across media systems, I will process by a three steps analysis.

First of all, I rely on semi-structured interviews of press journalists who reported about online VAAs in order to identify the established epistemologies within different

journalistic cultures and the embedded assumptions of online VAAs as an informational and data source (CHAPTER 7). The term “epistemology” is used here with reference to journalists’ knowledge claims about the empirical world. My intent is not to say whether those claims are valid or not, but rather to identify the norms that make them justifiable beliefs for journalists (Ettema and Glasser, 1987). The comparative analysis of epistemologies among press journalists across media systems shows that the journalist’s conception of his own role in society, whether as some sort of representative watchdog of the public’s interest or as being the mouthpiece of a group of some kind, is central in explaining how VAAs are perceived by each journalistic culture. A journalistic model more focused on elite sources rather on the play of public opinion is likely to provide less space for online sources of information such as VAAs.

Due to these differences across journalistic cultures, we expect media systems to have a direct impact on VAA use. In order to explore this assumption in more detail, I focus on two study cases: Turkey and France. We collected media coverage data about two VAAs that were launched in these countries: *Oypusulasi* that run during the 2011 Turkish Parliamentary elections and *La Boussole présidentielle* that run during the 2012 French Presidential election. Media coverage data of these two VAAs allow us to test and to show the aggregate and individual effect of media promotion on VAA usage. We could thus analyse, on the one hand, VAA use in a highly partisan media system in Turkey (CHAPTER 8), and on the other hand, VAA use when such type of application is promoted by commercial media in the French case (CHAPTER 9).

The observations made in the comparative study of journalistic epistemologies and in the two study cases led us to the formulation of overall hypotheses regarding the use of VAAs by different groups of voters – partisan, doubting and undecided voters – across media systems. Thus, we test these hypotheses through a comparative analysis of VAA users in seven electoral democracies (CHAPTER 10). Our results show that indeed, media systems matter in order to explain VAA use and, therefore, information flow during electoral campaigns.

I. Online Voting Advice Applications from a political science perspective

CHAPTER 1 – LITERATURE REVIEW

With the emergence of the Internet and online communications, agencies of different kinds – universities, governmental institutes, media organizations and NGOs – have engaged voters by developing web applications, among other tools, which offer to help voters making their choice (Farrell and Schmitt-Beck, 2008). Despite being a relatively recent and successful phenomenon (section 1), a good amount of literature has been published on VAAs. VAA research has mostly focused on the methodology behind such tools (section A) and on the relationship – use and effect – between VAAs and voters (section B). An assessment of the VAA literature leads to the observation that the political communication dimension is the most under-developed area of VAA research (section C). Therefore, I propose two directions that will enrich our understanding of VAA use – through a media system approach (section D) – and expand the usage that researchers can do of VAA collected data – through an electoral campaign approach (section E).

A - Emergence and success of VAAs

The first VAA was created in the Netherlands at the end of the 1980s through the collaboration between several public institutes² and the University of Twente. As its goal was to promote civic education among high-school students, this first VAA was called *StemWijzer* (“Voting Wiser”) and consisted in a book and a diskette including 60 issue statements (De Graaf, 2010). With the emergence and expansion of digital information and of Internet access, this publicly funded VAA became extremely successful in the 2000s in the Netherlands, one of the countries with the highest level of Internet penetration within society. For the 2002 Parliamentary elections, more than 2 million voting recommendations have been issued by the VAA, making *StemWijzer* the most visited website in the Netherlands during the electoral campaign. In 2003, *StemWijzer* received the Machiavelli prize delivered every year in the Netherlands in the area of governmental communication because “‘[i]n a time of the on-going mediatizing, dramatization and personalization of politics in general and election issues, *StemWijzer* offered a program-content-based politics to counter-balance the above trends”” (De Graaf, 2010: 46, emphasis in original). This success has led to the apparition of

² The Centre of Documentation on Dutch Political Parties (*Documentatiecentrum Nederlandse Politieke Partijen – DNPP*) and the Citizen Foundation (*Stichting Bergerschpskunde – SBK*).

competing VAAs, including *Kieskompas* (“Vote Compass”) initiated by journalists and university professors contesting the methodology behind *StemWijzer*. During the 2006 Parliamentary elections, together these two VAAs produced 6.2 million voting recommendation, amounting to 49.6% of the number of voters registered to vote in the Netherlands at the time (Garzia and Marschall, 2012).

In Finland, the first VAA appeared during the first European election that took place in the country in 1996. An employee of the Finnish public broadcasting was inspired by a game he saw on the website of the American broadcasting CNN. This experience inspired him to develop a tool to help Finnish citizens to access information on the candidates running for the European elections and to help them choose among the candidates (Ruusuvirta, 2010). Although this first VAA experience attracted only 8,000 users, since then VAAs have grown into “a permanent fixture in the Finnish electoral landscape” (p.47): many Finnish media have started developing and hosting similar applications on their websites. In the 2003 Parliamentary elections, 12 different VAAs were developed in the country. In the 2006 Presidential election, *Vaalikone* (“Choose your candidate”), the most popular VAA in the country, delivered 1 million voting recommendations, equivalent to 23% of the Finnish electorate (Garzia and Marschall, 2012).

After these first successes, the VAA phenomenon expanded to other electoral democracies. Following the *StemWijzer* model, the German Federal Agency for Civic Education (*Bundeszentrale für politische Bildung*³) which aims “to foster Germany’s democratic culture” (Marschall and Schmidt, 2010: 66), launched the VAA *Wahl-O-Mat* (“Electoral Application”) for the 2002 Federal elections. It generated 6.7 million voting recommendations corresponding to 11% of the German electorate (Garzia and Marschall, 2012), reaching even 13 million user sessions in the 2013 Federal elections. In Switzerland, a team of researchers from the National Centre of Competence in Research (NCCR) developed the VAA *Smartvote* for the 2003 Legislative elections. *Smartvote* was conceived with the intent to help Swiss voters to orientate themselves regarding the different electoral levels and the many candidates running for office (Ladner, Felder and Fivaz, 2010). In 2007, *Smartvote* delivered 1 million voting recommendation amounting to 20% of the registered Swiss voters.

One of the characteristics of the cases presented so far is the diversity of the actors involved in the development of VAAs. The Dutch *Stemwijzer* and the German *Wahl-O-Mat*

³ Attached to the Ministry of Domestic Affairs.

were developed by governmental agencies, the Finnish *Vaalikone* is linked to private media and the Swiss *Smartvote* is connected to a research centre. In addition to those, there are other actors who participate in this VAA phenomenon, for instance the British non-governmental organization *Unlock Democracy* developed *VoteMatch* for the 2010 Parliamentary elections; but we also find entrepreneurs or e-citizens among VAA developers as it has been the case for two French VAAs developed for the 2012 Presidential election: *Politest* and *Qui Voter* (“Who to Vote”). In some cases, VAAs are the product of the collaboration between several of those actors. For example, researchers and media collaborated in order to develop the Swedish *Aftonbladets Valkompas* (“Aftonbladets Vote Compass”) and the French *Boussole Présidentielle* (“Presidential Compass”).

These illustrations show how VAAs have quickly spread worldwide. In 2007, Walgrave et al. (2008) counted at least 15 European countries that had seen the development of VAAs for a national election. At the end of the 2000s, VAAs even spread outside of Europe to Brazil, Canada, Israel and the United-States among others. This trend continued in the following years with VAAs appearing in Egypt, Ghana, Morocco, Tunisia, Turkey, but also in Latin and Central America such as in Mexico, Peru and Venezuela. Visibly VAAs have been developed for all types of electoral systems and electoral levels. Whereas most VAAs are developed for national elections, we find VAAs developed for local and regional elections in Canada, Germany, Greece, the Netherlands, Turkey and Switzerland. Finally, supranational VAAs, such as *EU Profiler* in 2009 and *EUVOX* and *VoteMatch Europe* in 2014 among others, were developed for the European Parliament elections in all Member States and in some neighbouring countries.

The reasons of VAAs’ success have often been discussed. In theory, VAAs have their place in any electoral democracy but certain factors have an impact on the emergence and the success of a VAA. The first factor to consider is naturally the increasing Internet penetration within contemporary societies (Hooghe and Teepe, 2007). On the one hand, technological progress of the digital economy made VAAs simpler and cheaper to produce, and on the other hand the growing Internet access worldwide has multiplied exponentially the number of potential VAA users. Second, a strong electoral volatility and a high number of undecided voters is a good indicator of a VAA’s success. The weakening of social classes and the decline of partisanship as elements structuring voting behaviour explain why voters are looking for information during electoral campaigns and visit VAA websites to help them in

their decision making process. It is in the countries where the electoral volatility is the highest that VAAs are the most successful (Garzia and Marschall, 2012).

A third factor is the partisan system. For instance, in a bipartisan system, the positions of the two main parties are more distinct and party identification is more stable than in a multi-party system. In fact, VAAs are more popular in (strongly) fragmented partisan systems (Walgrave et al., 2008). Fourthly, the electoral system also matters. Electoral contexts based on proportional principles favouring the presence of multiple relevant parties within representative institutions are a fertile ground for VAAs. In addition, if the ballot is being cast through an open-list system, as it is the case in Finland and Switzerland, voters are likely to express preferences for several candidates. This more complex decision-making process is conducive to VAA use.

Finally, the relationship between traditional media, i.e. television, radio and press, is essential to grasp the extent of VAAs' popularity in some countries, and within the same country the extent of some VAAs' popularity compared to others. Sometimes VAAs are being funded and/or promoted by public and/or private media. Without this advertising window, VAAs would have troubles attracting users.

B - State of the Art

1) Methodological debates

VAAs' popularity and their potential impact on their users require a sound and transparent debate about the methodology followed in the conception stage of a VAA development. To this end, "it behoves VAA developers and other scholars to investigate the quality, reliability and the validity of the outputs that VAA sites provide to their visitors" (Krouwel et al., 2012: 225). Therefore, to ensure transparency and scientific reproducibility many publications present and discuss the methodology of VAA-making (Costa Lobo et al., 2010; De Graaf, 2010; Krouwel et al., 2012; Nuytemans et al., 2010; Trechsel and Mair, 2011). Out of these methodological debates, we can identify several lines of cleavage between the main "VAA models".

a) Issues selection and statements formulation

As mentioned earlier, VAAs ask their users to position themselves on a certain number of issues formulated as statements. Here are some examples taken from the 2012 French VAA *La Boussole présidentielle*: “Taxes that burden companies should be decreased”, “Offenders should be punished more severely”, “Homosexual couples should have the right to get married”, “Taxes for the wealthiest people should be increased”. The method of issue selection and statement formulation varies among VAAs. Sometimes the statements are directly extracted from party and candidates’ manifestos, in some cases representatives of parties develop them, and in other political scientists formulate them (Krouwel et al., 2012).

This stage of development is crucial because “the topic, the exact wording, the direction, and the formulation of the statements may all produce differences in answers. Some statements may benefit some parties, while other statements may work to the advantage of others” (Walgrave et al., 2009: 1162-1163). In order to test the impact of issues selection on the voting advice produced by VAAs, Walgrave et al. (2009) asked a random sample of 1,000 respondents to position themselves on 50 statements (compared to the usual amount of 30 issue statements). Then they analysed the voting recommendations produced by 500,000 random samples of 36 statements. The results reveal a central tendency in the statements: “there is variation in the distribution of advice but the variation is clustered around a dominant mean”. This finding suggests that “an indiscriminate batch of statements has an inbuilt tendency to favour certain parties in contrast to others. Although statistically speaking the variation in results seems not too large, in political terms the dispersion of the advice is substantial” (Walgrave et al., 2009: 1176).

While analysing the validity of the statements used by the Dutch VAA *StemWijzer* in 2002, Groot (2003) proposes several evaluation criteria. First of all, the content of the statements needs to reflect the content of the electoral campaign. If an issue such as the privatisation of public services, which was a salient issue of the 2002 campaign, is not included in the application, then it is legitimate to have validity concern about the fact that the tool will be able to grasp political cleavages as they are expressed during the campaign. Then, two additional criteria need to be considered when selecting issues and statements: the non-overlap of party positions’ distribution, and the discriminant power of issues. If the party positions’ distribution on two statements, even completely different from each other, is exactly the same then we are dealing with a case of “overlap”. Groot (2003) underlines that overlap of party positions’ distribution limit the range of issues that allow distinguishing

parties from each other. As a consequence, “additional issues of controversy between parties could be included while they are not” (Groot (2003: 5). In a VAA, the main task of the issue statements is to allow for sufficient differentiation between the parties included in the tool (Groot, 2003; Krouwel et al., 2012). For instance during the preliminary selection of issues in the 2012 French VAA *La Boussole présidentielle*, one of them was about the establishment of a public investment bank in order to tackle the economic crisis⁴. However, on this particular issue, all the candidates would have been positioned on the answers categories “totally agree” or “somewhat agree”, leaving the other three answer categories on a five-points Likert scale empty. Such a distribution of the candidates’ positions would have not enabled to significantly distinguish among them. Henceforth, this statement has been discarded in the final version of the VAA.

Thus, the issues selection needs on the one hand to be as exhaustive as possible, and on the other hand to favour issues that grasp existing cleavages among political parties and among the electorate. However, this inherent logic of a VAA to simplify the complexities of contemporary societies to a limited number of issues may also lead to problematic formulations. Gemenis (2012: 5-11) warns us about the usage of double-barrelled statements and of statements using quantitative terms.

Analysing the VAA *EU Profiler* launched for the 2009 European Parliament election, Gemenis (2012: 5-6) identified several double-barrelled statements, including the following: “Social programmes should be maintained even at the cost of higher taxes” and “Governments should reduce workers’ protection regulations in order to fight unemployment”. As these examples show, double-barrelled statements are statements that include the reference to two distinctive issues. In the first example, the presence and association of two issues, i.e. social programmes and taxes, is acceptable because it is sometimes necessary to present the compromise inherent to a certain type of public policy. Here, the fact that certain types of expenses are tied to an income: if one does not mention that the sustainability of some social programmes are, in some cases, connected to the increase of taxes, some respondents would be willing “to spend more money for more or less any public policy” (Hansen, 1998: 513). However, the second example “cannot be legitimised by the same methodological logic and should therefore be reformulated in two separate statements” (Gemenis, 2012: 6).

⁴ The exact statement was: “To tackle the financial crisis, the State should establish a public bank”.

Finally, when a Likert-scale is used as form of answer categories to the statements, Gemenis (2012: 7-9) suggests that a vocabulary implying a scale should be avoided in the phrasing. For instance, let's consider the statement "Offenders should be punished more severely", "does the respondent who disagrees with the statements about criminals being punished more several thinks that criminals should be punished less severely or as severely as they are currently punished?" (p.8). The statements including a quantitative vocabulary may lead to the confusion between a quantitative dimension (more/less) suggested by the statement and a degree dimension (agree/disagree) suggested by the answer categories.

Hence, as a general rule VAA-developers should avoid this type of formulations even if in some circumstance double-barrelled statements are acceptable.

b) Answer categories

Answer categories are another essential element in the process of measuring the positions of political parties and of voters. The first wave of VAAs used binary answer categories ('yes'/'no', or 'agree'/'disagree') expanded by the answer category 'don't know'. However, analysing the parties' positions in the Dutch VAA *StemWijzer* in the 2002 Parliamentary elections, Groot (2003: 8-9, 24) has shown that binary answer categories do not allow neither to parties nor to voters to qualify their positions and produces a de facto wrong (self)-placement of parties on some issues. In fact, binary answer categories are making it hard or even impossible to distinguish among parties' positions, especially when the parties belong to the same side of the political spectrum. It is because of this pitfall that the majority of VAAs relies on 5 or 7 points Likert scale going from the answer categories 'totally agree' to 'totally disagree', complemented by the option 'no opinion' (Wagner and Ruusuvirta, 2011: 5-7). Nevertheless, some VAAs rely on a 3 points scale such as the German VAA *Wahl-O-Mat* (Marschall and Schmidt, 2010), or a 20 points scale such as the Irish VAA *Pick your Vote* in 2007 (Wall et al., 2009).

The use of a Likert scale is considered as the most commonly used scale to measure bi-directional attitudes: agreeing or disagreeing on an issue, the middle category being labelled as 'neutral' (Alwin, 1992; Sturgis and Roberts, 2014). Like for traditional surveys, it is legitimate to wonder if VAA users interpret the middle answer category as a way out in order not to take a position on an issue or rather in order to effectively express a neutral stance toward the selected statement. Baka et al. (2012) conducted a study among 71 students to

whom they asked to position themselves on the 30 statements of the Greek VAA *Helpmevote*, and later they interviewed them asking, among other points, to explain why they opted for the ‘neutral’ answer category when they did. Their findings reveal that in about 75% of the cases, the ‘neutral’ answer category was “not used to convey lack of knowledge or lack of formulated opinion, rather the respondents used it “to convey either dilemmas or strongly held attitudes that object to the way in which the core theme of the question was formulated” (p.256). However, their study also shows that “technical questions are more often associated with the choice of mid-point when this is constructed to express lack of knowledge” (p.257), hence becoming a way out without expressing their attitude.

c) Methods of party positioning

In order to allow voters to compare their positions to those of the parties (or candidates) running for office, VAAs need to collect parties’ positions on the issues and statements included in the application. Gemenis and van Ham (2014: 34-38) distinguish four methods used by VAA-developers in order to accomplish this task.

Parties self-placement

Several VAAs (*Manobalsas*-Lithuania, *Smartvote*-Switzerland, *StemWijzer*-the Netherlands, *Vaalikone*-Finland, *VoteMatch*-UK, and *Wahl-O-Mat*-Germany) ask political parties directly to position themselves on the issues included in the tool. This method consists simply in sending a questionnaire to each party, or to each candidate, asking them to position themselves on the statements and to provide a brief justification of their placement. In electoral contexts in which VAA-developers have to deal with hundreds of individual candidates, such as in Finland, Luxembourg, Lithuania and Switzerland, this method is faster and more intuitive, nevertheless such party positioning method raises major problems. First of all, “while political parties are often willing to reveal their positions on issues which they ‘own’, they are less likely to reveal their positions on controversial issues which they consider to be non-salient or electorally damaging” (Gemenis and van Ham (2014: 34). The fact that only 103 out of the 274 (37.6%) of the parties included in the VAA *EU Profiler* have sent back the questionnaire that the VAA team sent out to them suggests that many parties are reluctant to provide their exact positions on many issues (Trechsel and Mair, 2011: 15).

Another problem raised by this method is the possible manipulation of the positions by the parties and candidates themselves. VAA-developers that follow this party positioning method do not necessarily verify the exactitude of the positions they receive. For instance, based on the Lithuanian VAA *Manobalsas*, Ramonaité (2010) has shown that in the context of electoral dealignment and political cleavages recomposition among parties and the electorate, VAAs favour populist parties. The latter can manipulate their positions in order to follow the trends within public opinion instead of trying to convince voters of the validity of their positions. Therefore, if parties and candidates' positions are not verified by VAA-developers, it could lead to some strategic manipulations by the formers.

Experts survey

The second method to position parties on relevant issues is to rely on expert surveys: a questionnaire including the issue-statements of the VAA is sent to political scientists who then position the parties or candidates. For instance, *PickYourParty* (Ireland), *HelpMeVote* (Greece) and *Votematch* (Italy) have used this method. Many political scientists have discussed the validity and reliability of expert surveys (Benoit and Laver, 2006; Budge, 2000; Hooghe *et al.*, 2010; Steenberg and Marks, 2007). Those studies reach ambivalent conclusions on the quality of the data collected through such method, leading Gemenis and van Ham (2014: 35) to suggest: “the switch from party self-placement to an expert survey does not necessarily imply an absence of bias. The parties' strategic manipulation of self-placement may be replaced by implicit bias coming from political scientists own partisan sympathies and levels of expertise”.

The Kieskompas method⁵

In order to overcome the problems linked to party self-placement and survey experts, Krouwel et al. (2012) propose a hybrid method including elements of both methods. This methodology is used by all the VAAs developed by the social enterprise *Kieskompas* (see www.kieskompas.nl for a complete list of VAAs using this method). The main principle of the *Kieskompas* method is to ask simultaneously parties to position themselves on the issues, as well as a small team of political scientists to position the parties of those issues on the basis of political manifestos and other public documents produced by parties. Then, VAA-

⁵ The *Kieskompas* method is presented at length in Chapter 3 as it is the method that has been followed to develop the French VAA of *La Boussole présidentielle*, and as the author of this dissertation contributed to its formalization.

developers compared both set of answers and in case of mismatch between the two they ask parties to reconsider the positions provided. After several exchanges of points of view, the percentage of match between the positions provided by the parties and those provided by the experts increases from 70-80% to 95% (Krouwel and van Elfrinkhof, 2014). If the mismatch persists, then the VAA-developers decide on the final party positions.

Gemenis and van Ham (2014) welcome the development of this method as an important improvement on the validity and the reliability of party positions, but underlines that this method also encounters some pitfalls. First of all, the *Kieskompas* method requires a full cooperation of parties and candidates, which is not always the case. In fact, in the making of the French VAA *La Boussole présidentielle*, only three out of ten candidates provided their issues' positions (Vitiello, 2014). And second, Gemenis and van Ham (2014) argue that there is a lack of transparency in the coding process of party positions by the experts: for instance, how are disagreement between experts taken into account and how are they resolved?

The Delphi method

The problems related to the disagreements between experts have led to the development of the *Delphi method* (Gemenis and van Ham, 2014). The consortium *Preference Matcher* has developed this method and used it for the making of several VAAs: *Choose4Greece* (Greece), *XmanLevi* (Georgia), *VotulMeu* (Romania), *Choose4Cyprus* (Cyprus), and *EUVOX* (2014 European Parliament elections). This method consists in using an online platform in which a group of panellists made out of experts with different levels of seniority (for instance professors, assistant professors, post-docs, PhD candidates and students) position parties on issues. This process is characterized by two elements. First, the coding of party positions on the platform and their justification is anonymous. Second, in case of disagreement, the platform moderator invites all panellists to consult the coding and justification of the other coders, and provide them with the option of reconsidering their own coding. Thus, the impact of the experts' personality, seniority and political bias is minimized. The main inconvenience of the *Delphi* method is its costs both in financial terms, (compensation of the panellists), and in time. Implying two or more rounds of coding in a short period of time may be a challenge when many parties or candidates are running for office, such as in multi-party systems.

d) Matching parties with voters on issues' positions

In order to match parties and voters on issues' position, most VAA models typically fall into two categories: "agreement"-based matching and "proximity"-based matching. Most party profilers use the "agreement" matching, in which the user's responses to the statements generate a ranked list of parties based on an additive scale of voter-party similarity. On each issue, the user is compared to each party's position, leading to an overall "agreement" score and agreement level per party. The results can then be displayed in two different ways: a simple ranking representing the overall percentage of agreement with each party, or a *spidermap* visualisation showing the degree of agreement per party according to policy dimensions, such as values, law and order, social policy, foreign policy, and so on. The rational assumption is that citizens will vote for the party with which they have the highest level of agreement. This approach is appealing because of its straightforwardness and clarity but its major shortcoming lies in the lack of information provided on where parties and users agree. The *spidermap* visualization allows the user at least to identify the policy areas in which the user most agree and disagree with each party.

In his work on spatial voting theory, Downs assumes that "political parties in any society can be ordered from left to right in a manner agreed upon by all voters" (1957: 142). Therefore, it becomes essential to take into account the n -dimension existing in a political space in the advice given to the users. Hence, 'proximity based' VAAs show voter positions relative to parties or candidates in a multidimensional policy space, whereby all the issues included are aggregated over two dimensions (Costa Lobo et al., 2010; Krouwel et al., 2012). In most countries, 'proximity based' VAAs utilise a "material" socio-economic Left-Right dimension and a moral-cultural, non-material dimension. The first dimension refers to the traditionally dominant economic aspect of party competition and voters concern: unemployment, wages, pensions, taxes, the welfare and public finance. The other dimension incorporates issues that conceptually do not fit in the economic left-right axis, purporting instead to matters such as values, identity, the environment, immigration, law and order, foreign policy, among others. This later axis aggregates the topics, which Marks et al. (2006) have denominated as Green-Alternative-Libertarian (GAL) versus Traditional-Authoritarian-Nationalist (TAN). The use of a two-dimensional political space according to those two axes makes it possible to represent modern polities in the face of the changes undergone since several decades (Inglehart, 1997). Thus, this matching method shows users the relative

distance between them and the different parties but also where they are located in the bi-dimensional political landscape of their country.

Some ‘proximity based’ VAAs that use a bi-dimensional political landscape also visualise the extent to which users’ spatial position is made uncertain due to ideological inconsistency (i.e., the extent to which their answers deviate from the logical pattern anticipated by our scaling procedure) via an ellipse which is drawn around the user’s issue position – based on the standard deviation of their answers on each of the two axes. The ‘position’ of the user is not one single point but an approximate area which will be wide for ideologically inconsistent voters, whose answers are a mixture of left and right, progressive and conservative, and narrow for voters whose answers point consistently in the same ideological direction.

The visual representation of an approximate area also allows the users to observe their relative position within the overall dimensions represented. This is an important addition because the distance between the voter and parties signifies different things according to which theory is being tested. While equal distance between two parties means an equal propensity to support a party in the ‘agreement based’ comparison, the ‘proximity based’ comparison implies that it does not. What matters is the relative position of party and voter on the dimensions in question, and the saliency that each user attributes to the different issues (Evans, 2004). In the same logic as the ‘directional’ theory integrates an affective element to the cognitive process of spatial models of voting (Rabinowitz and Macdonald, 1989), having an area of collocation in the output produced by the VAA allows the users to position themselves on one side or another of the ellipse. This positioning allows reflecting the strength of the affective intensity that they feel on a dimension or issue.

2) Voters and VAAs

VAAs aim to be an online tool at the service of citizens who wish to inform themselves on political parties’ positions. Because VAAs are online applications, they also represent a remarkable data collection tool. By using log files, the users’ positions on the issue statements and their answers to any additional questions are recorded and stored. This process creates vast and innovative datasets for the study of electoral behaviour and issues voting. We can classify the existing work in this area according to three categories: studies on

the profile of VAA users, studies on the dimensionality of political spaces, and studies on VAA effect.

a) The profile of VAA users

The success of VAAs has led political scientists to investigate who are the users of such applications. Almost all socio-demographic studies reveal that VAA users are in majority young urban men who have a higher level of education than the average of the population (Çarkoğlu et al., 2012; Dumont & Kies, 2012; Hirzalla et al., 2010; Hooghe & Teepe, 2007; Ladner & Pianzola, 2010; Marschall & Schultze, 2012; Vitiello, 2014; Wall et al., 2009). However, in countries where VAAs are well established in the campaign landscape and where Internet penetration within society is high, the gap between socio-demographic groups decreases. The socio-demographic profile of VAA users also evolves during the electoral campaign; the closer to Election Day the more the pool of VAA users is representative of the whole electorate (Hooghe and Teepe, 2007). This trend is explained by the fact the media and voters' interest for campaign related activities grows as Election Day approaches. If traditional media mention the VAA, they will push a more heterogeneous sample of users toward the site than the one found naturally online.

Van de Pol et al. (2014) established a typology of VAA users in the Netherlands through a data-driven classification analysis by including the following attitudinal variables: vote certainty, the reason why users visited the VAA, campaign interest, and internal and external political efficacy. Their research identifies three groups of VAA users that they labelled 'doubters', 'seekers', and 'checkers'. Both the 'doubters' and the 'seekers', as their name suggest, do not know for which party to vote for and are therefore using the information provided by the VAA to help them in their decision-making process. What mostly distinguishes the members of these two groups is their level of external political efficacy. Doubters are politically more cynical and do not believe their voice is heard by political elites, while seekers are more optimistic about the empathy of political leaders. Finally, the 'checkers' are more likely to be partisan voters who have already decided which party to vote for and are only using the VAA to 'check' if the VAA will match their already established preference.

b) The dimensionality of a political space

Users' positions on the issue statements allow researchers to study latent electoral dimensions and to pinpoint voters' positions on these dimensions depending of their party affiliation. This component of VAA data is most interesting when included in a comparative analysis. Using the data collected in 27 countries through the VAA *EU Profiler* for the 2009 European Parliament elections, Kleinnijenhuis and Krouwel (2009) have identified five common dimensions in the political spaces of European countries: an economic dimension 'green left vs. right market' including issues such as public transportation, social security, renewable energy, healthcare privatization, and taxes among others; an European integration dimension; a nationalist dimension including issues such as EU enlargement, migratory policies, and law and order issues; a progressive/conservative dimension including issues such as religious values, public freedoms and minority rights; and finally an "authoritarian" dimension. Wheatley (2012) carried out a comparative study of political dimensions with data collected through VAAs in Brazil, Cyprus, Peru and Scotland between 2010 and 2011. In the four countries, we find a 'socio-economic left right' dimension and a 'GAL-TAN' dimension. However, in Brazil and in Scotland, a third dimension appears: an additional economic dimension related to international economics for the former and a dimension related to the independence in the latter. Shikano and Küntzler (2013) have used data collected by the German VAA *Wahl-O-Mat* at national, regional and local elections in order to investigate new cleavages at the level of the German *Länder* created by the emergence of new parties such as the Pirate party and the right-wing parties NPD and AfD.

In addition, party policies' positions can be used to measure the congruence between their positions and those of their voters. In fact, representative democracy rests on the link of varying intensity between the interests of citizens and the policies pursued by their representatives. By combining the Euclidian distance between the voter and the parties included in VAA based on the issues' positions and the propensity to vote for a given party (PTV), Çarkoğlu et al. (2013) have tested the congruence between voters and parties' positions in five Middle-Eastern countries (Egypt, Israel, Morocco, Tunisia and Turkey) with data collected between 2011 and 2013 during the respective elections that took place in those countries. In accordance with their hypotheses, the authors show that Israel and Turkey, the two most consolidated electoral regimes of the region, are the countries where they find the strongest congruence between voters' preferences and parties' positions.

c) The effect of VAAs on users

After a first wave of studies on the profile of VAA users and on the different VAA methodologies, political scientists have started to investigate the potential impact of VAAs on voting behaviour.

The decline of social based variables in order to explain voting behaviour in Western democracies has led to the emergence of alternative explanatory variables, such as the personality of candidates (McAllister, 2007) or issue voting (Butler and Stokes, 1969; Franklin et al., 1992; Nie et al., 1976). While personality voting does not require any particular level of political sophistication, issue voting does. In order to be able to establish a link between their position and the ones of parties, voters need first of all to formulate their own preferences on an issue or several ones and then inform themselves on the positions hold by parties on those same issues. Gathering such information is a process that requires time and energy (Carmines and Huckfeldt, 1996).

Studies that analyse cognitive processes used by voters when they have to make a choice in a situation of limited information, show that voters use “heuristics” or “cognitive shortcuts” in order to make a choice that would have been similar to the one made in a situation of detailed investigation of an issue (Lupia, 1994; Lupia and McCubbins, 1998). Walgrave et al. (2008) suggest that the first effect that VAAs have on their users is a cognitive one: because VAAs aim at reducing the cognitive costs involved in the process of issue voting. Contemporary societies are increasingly complex and voters are exposed to an abundance of information daily. In such an environment the time and energy costs of searching, finding and incorporate new information into one’s decision making-process are very elevate. These costs are the highest in fragmented and multidimensional party systems. Walgrave et al. (2009) argue that “the fact that VAAs are the most popular in countries with a fragmented, and therefore complex, party system, such as in the Netherlands, shows that the cognitive/informative dimension of VAAs is central”.

A VAA is essentially an application that creates an electoral heuristic for its users, in the form of a personalized voting recommendation. This peculiarity is of particular importance here because the fact that the voting recommendation is formulated based on the users’ positions and not based on the parties’ or any other organisation’s positions bestow to the advice a stronger persuasive factor. Thus, Garzia (2010) emphasizes that the cognitive and behavioural effects of VAAs on political participation comes both from the exposition to the

information provided by the tool and from the incitation that users receive for additional research after using it. A post-electoral study among users of the Swiss VAA *Smartvote* reveals that 86.5% of them declared that *Smartvote* had been important or rather important in order to obtain information on candidates during the electoral campaign (Ladner, Felder and Fivaz et al., 2010).

Behavioural effects of VAAs are two-fold: they increase turnout, and seldom have they a direct effect on party preferences. In an online study among the users of the German VAA *Wahl-O-Mat*, 11% of respondents declared that they had been motivated to go vote because of their VAA usage (Marschall and Schmidt, 2010). A post-electoral survey made among users of the Dutch VAA *Kieskompas* shows that the VAA helped 9.2% of the respondents to choose among several parties and the VAA convinced 1.1% of the respondents to vote for a party that they had not consider voting for before (Wall et al., 2014). In the same survey, 30.2% of the respondents declared that the VAA had confirmed their vote intention and 29% that the site had no impact on their vote choice. These data show that the potential of VAA effect on vote choice lies in the fact that they confirm the vote preferences of users.

VAA effects also depend on users' socio-demographics and conative characteristics. For instance, Hirzalla et al. (2010) have shown that VAAs reach both politically and non-politically interested young voters pushing both groups to inform themselves and increase their level of political participation, while among older voters, VAAs only seem to reach the already politically informed and interested citizens. Marschall and Schultze's (2012) findings support the existence of a mobilization effect among VAA users. Based on a representative sample of VAA users in Germany, they underline that "the observed mobilising power of the *Wahl-O-Mat* is not a statistical artefact of the specific socio-demographic characteristics of the typical VAA users; it emerges as an independent effect on the intention to vote, which seems to work even if controlled for relevant variables that can usually explain voter turnout". In addition, they found that this effect reaches both citizens already mobilised in the campaign and apolitical citizens. On the other hand, Wall et al., (2014) have shown that the VAA effect on vote intention is conditional to the pre-existing propensity to vote scores of each user. For instance, the voting recommendation has a stronger impact if the user is already strongly contemplating to vote for the recommended party. In contrast, the effect is weak or null if the user considers very unlikely his propensity to vote for the said party or if he contemplates voting for one party only. In short, users follow the VAA advice only they were already considering it (Kamoen et al., 2015).

3) Assessing the VAA literature

Recently, Garzia and Marschall (2012) evaluated the VAA literature and proposed a research agenda for VAA scholars in the fields of political behaviour, party politics, political communication and democratic theory.

Studies trying to assess VAA effects on voters suffer from weaknesses that have led Vassil (2011: 5) to affirm that “ignoring the poor quality of the data appears to be an ‘industry standard’ in VAA research”. These studies rely for most of them on a self-selected sample, or even a double self-selected sample. In fact, in addition of not being a representative sample of the electorate, VAA users decided voluntarily to visit a VAA, and again voluntarily to answer questions to panel and post-electoral surveys about VAA usage and effect. Besides, answers to post-electoral surveys made off VAA users need to be used carefully. Wall et al. (2014) have shown that half of the respondents (53.8%) to their post-electoral surveys of *Kieskompas* users remembered incorrectly the voting recommendation received by the VAA. In order to cope with the problem of data quality, Garzia and Marschall (2012: 213) suggest three solutions:

- To implement advanced statistical techniques (e.g. Heckman models) in order to “account for the non-random event of individual participation in the post-test survey” as already advocated by Vassil (2011).
- To test the results in experimental settings in order to isolate the individual-level effect and to cope with the discrepancy between reported intention to change vote choice and the actual changes in voting behaviour;
- And to work in the context of representative surveys, i.e. having questions on VAA usage and effect as part of national election studies. However, this design may be possible only in countries where VAAs have achieved a high level of popularity, as in the Netherlands. The 2006 Dutch Parliamentary Election Study included items on VAA use that led to the finding that “we do indeed observe a mobilising effect for the use of VAAs” on turnout (Gemenis and Rosema 2014: 286).

With regard to party politics, Garzia and Marschall (2012) invite scholars to use the party positions datasets created by VAA practitioners as party manifestos data for comparative analysis and the identification of new cleavages as attempted by Kleinnijenhuis

and Krouwel (2009) in the context of the European Parliament elections. In addition, they also call for an investigation of VAA effects on intra-party decision making when parties are asked to position themselves on the issues included in a VAA. Such research agenda would first require a mapping of VAA-parties interactions, and then a full transparency and accessibility to parties' decision-making process, these latter conditions being hard to meet.

The “media dimension” of VAAs has been substantially neglected by research so far. For instance, what relationships exist between the use of VAAs and other channels of information? As VAAs are becoming a campaign actor and therefore an object with news values, they are objects of coverage by the traditional media. Such fact raises the question of how are VAAs discussed in newspapers, radio and TV broadcasting? Finally, VAAs are accompanied by public relations strategies in order to promote the application. Are these PR efforts successful and if so, under which circumstances?

Lastly, Garzia and Marschall (2012) invite political theorists to explore the normative presuppositions associated with the social conception of democracy behind VAAs, in particular about the forms of competence required for ‘good citizenship’. Fossen and Anderson (2014) have answered the call by identifying three types of VAAs with different democratic assumptions: the *matching VAA*, the *deliberative VAA* and the *contestatory VAA*. By far the most prominent VAA model is concerned with matchmaking between voters and parties, mapping the users' preferences onto parties' positions on the issues, thereby transforming users into well-informed political shoppers (Fossen and Anderson, 2014). The aim of a *matching VAA* is thus to increase users' ability to vote well by informing them conveniently, efficiently and by focusing on aggregating given preferences. While from the matching VAA perspective citizens do not know the position of parties on issues and therefore need to be informed on the matter, the deliberative approach to VAAs takes a different stance on the form of citizen incompetence. For the latter voters' competence gap lie in their failure to think through what policies ought to be adopted. Hence, the aim of a *deliberative VAA* is for citizens to reflect critically and deliberate on the question of how best to respond to various issues. Such type of VAA would include a great deal of information on each issue, would allow for preferences' reconsideration and especially would allow for greater interaction between users. Finally, the *contestatory VAA* perspective considers that “even carefully designed VAAs structure political information in a way that is informed by the developers' presuppositions” (p.248). This includes the selection of issues, parties, but also “the contingent and framed characters of the political landscape as it is presented in

VAAAs” (p.249). Forms of a *contestatory VAA* would be applications aimed at making clear that behind elections there are many other forms of political actions, at rendering visible some of the political choices inherent in mainstream VAAs, or “exaggerating and ridiculing certain of its characteristics, for instance by emphasizing framing effects of campaigns and even of VAAs” (p.249). Examples include a VAA with a purposely extremely long list of issues, a VAA that presents pictures of party leaders and asks users to evaluate their looks, and so on.

Among the above listed research areas, the most under-developed is the political communication dimension one. As we will show in the next two sections, a political communication perspective on VAAs can build upon from two different approaches: a media system approach and an electoral campaign approach.

4) The Media System Approach

According to the conventional view, modern political communication is shaped by some transnational trends that have led to structurally similar but by no means identical consequences in each country. This applies especially to countries that have advanced media systems. The underlying process is one of adaptation, where national institutions and practices shape in locally appropriate ways the manner in which transnational trends become manifest in each country. National studies reveal, among other things, how the practices of political communication always reflect particular political cultures, institutions, actors, histories, and circumstances. This section briefly introduces a framework of research to compare media systems as developed by Hallin and Mancini (2004) in their book *Comparing Media Systems. Three Models of Media and Politics*, which will be more extensively presented in Chapter 6.

Their study is based on a “most similar systems” design. As Lijphart (1971) stresses, one of the greatest problems in comparative analysis is the problem of “many variables, few cases.” One of the principal means of solving that problem, he notes, is to focus on a set of relatively comparable cases, in which the number of relevant variables will be reduced. This approach will reduce the number of cases, which is a benefit in a field such as communication research where the literature and the data available have been rather limited until recently. And it is also a benefit in the sense that it is impossible for analysts to handle competently more than a limited number of cases. Hallin and Mancini (2004) limit themselves to North America and Western Europe, in a way that they are dealing with systems that have relatively comparable levels of economic development and much common culture and political history.

The authors build their work on the agenda set out by Siebert, Peterson and Schramm in *Four Theories of the Press* (1956) where the authors defend the thesis that “the press always takes on the form and coloration of the social and political structures within which it operates” (pp.1). Thus, the scope of Hallin and Mancini (2004) is to attempt to show how different media models are rooted in broader differences of political and economic structures. They argue that “one cannot understand the news media without understanding the nature of the state, the system of political parties, the pattern of relations between economic and political interests, and the development of civil society, among other elements of social structure” (Hallin and Mancini 2004, 8). However, they wish to distinguish themselves from Siebert et al. on one specific point. In *Four Theories of the Press*, Siebert et al. seem to assume that the media will always be the ‘dependent variable’ in relation to the ‘system of social control’, which it ‘reflects’. Hallin and Mancini (2004) argue that if in many cases it may be reasonable to assume that the media system ‘reflects’ other aspects of social structure – the party system, for example – there is good evidence that media institutions have an impact of their own on other social structures.

This position takes up on the belief that the media have become an important exogenous variable affecting other political institutions. It is also one of the reasons why scholars in comparative politics have begun to pay attention to media institutions they previously ignored. Recently, this is beginning to change, due in part to a growing feeling that the media are less ‘reflective’ than they once were. Sometimes this change may actually be exaggerated. For instance, media scholars often tend to have a professional bias toward overstressing the independent influence of media. Much speculation in comparative politics about ‘*videocracy*’ (Mazzoleni, 1995) might be an example here⁶.

Hallin and Mancini’s work is an attempt to replace the four theories with “a new set of models, better grounded empirically but sharing something of the parsimony of the originals” (2004: 10). Their ideal type models, which will be further elaborated in Chapter 6, are the Liberal Model, which prevails across Britain, Ireland and North America; the Democratic Corporatist Model, which prevails across northern continental Europe; and the Polarized Pluralist Model, which prevails in the Mediterranean countries of southern Europe. The Liberal Model is characterized by a relative dominance of market mechanisms and of commercial media; the Democratic Corporatist Model by a historical coexistence of

⁶ The idea that communication and political marketing techniques coupled with media dominance are sufficient to win an election.

commercial media and media tied to organized social and political groups, and by a relatively active but legally limited role of the state; and the Polarized Pluralist Model by the integration of the media into party politics, weaker historical development of commercial media, and a strong role of the state. It should be stressed that the primary purpose of those ideal types is not the classification of individual systems, but the identification of patterns of relationship between system characteristics.

How does this framework may apply to VAAs and to research in political communication applied to VAAs? With the spread of the Internet, there has never been as much new political information available as today. New technologies provide citizens and social groups with unprecedented means of making their voice heard. This new environment also provides journalists with easy to reach information, sources and data. Consequently, a growing number of scholars are interested in understanding how the availability and use of such information and ecological environment of the Internet era have changed the journalistic news production process, as well as the journalistic profession as a whole (for a review see Lecheler and Kruikemeir, 2016). Journalistic practices are the result of an interaction between the means of communication at the journalists' disposal and the professional norms of the journalistic *champ* (Barnhurst and Nerone, 2009). While the former progressively spread across countries, the latter is peculiar to each media system. "Most Western countries institutionalized journalism under the professional model in the twentieth century" (Barnhurst and Nerone, 2009, 21) but variations within this model exist regarding different areas: the degree of autonomy from existing authorities as well as from market and party influences, the professional norms shared by journalists, and the extent to which journalists pursue a public service orientation in their work.

These different settings are likely to have an impact on the media coverage of VAAs and on the public relations strategy pursued by VAA developers to promote the application. VAAs are not applications exempted of normative implications. In fact, they aim to be neutral in regards to the established party competition, and advocate transparency and accountability with regards to political parties' issue positions. These values resonate positively with the idea of public service media, i.e. "a commitment to impartiality and disinterestedness in terms of information that is generated and made available, and a self-perception motivated by a vocational calling to serve the commonweal" (Webster, 2011: 25). How do media actors perceive VAAs in media systems that differ essentially from their normative conception of journalism? VAAs are available for all citizens, but their target audience is politically

uninformed voters. Keeping that in mind, what impact does a media system have on VAAs use and diffusion? If a country's media system is characterized by high level of media partisanship, undecided and volatile voters may be harder to reach as they tend to expose themselves to non-partisan media outlets, making it harder to attract a large audience for VAA makers. As one of its contribution, this dissertation will shed light on how media systems matter on the use and diffusion of VAAs.

5) The Electoral Campaign Approach

In our modern democracies, electoral campaigns are the most intense time for interaction between political elites and citizens over matters of public policy (Kriesi, 2008; Manin, 1997). Political parties and leaders seek to inform voters about their platforms and the media cover and relay these messages. For voters, electoral campaigns represent the opportunity to access political information and to gather new relevant information that can help them make informed decisions (Bartels, 1996; Popkin, 1994). The literature on voters and campaigns has, among other perspectives, analysed voters' behaviour in terms of the timing of their voting decision: before or during the campaign (Fournier et al., 2004; Lazarsfeld et al., 1948; McAllister, 2002; McGregor, 2012). But from a democratic perspective, important questions are how campaigns affect voters' access to political information (Converse, 1962; Zaller, 1992; Prior, 2007), and when voters access this information during the campaign process.

Nowadays, online VAAs “belong to the media repertoire individuals have at their disposal in order to gather information about politics, parties and policies” (Garzia and Marschall, 2012: 216). These websites are also potentially resourceful tools for researchers as they allow them to collect an important amount of data on voters' preferences during the campaign in a quick and cheap manner. Moreover, as the data collected through VAAs are time-stamped, they inform us on when during the campaign different groups of users access the political information contained in the tool. Therefore, we are able to investigate when different voter types visit such online sites during the campaign and study the influence of mass media and the Internet on spreading political information among the least politically interested voters. On the one hand, the volume of information flow intensifies during an electoral campaign, both in mass media and in online media, reaching broader segments of the electorate than in off-campaigns period, and thus *mobilizing* political participation. On the

other hand, the least politically interested voters mostly rely on mass media for exposure to political information and hence, the ones who mainly use political Internet applications are engaged and active citizens; practices that tend to *normalize* political participation (Hargittai, 2002, 2010). Can online applications, such as VAAs, reach out to the least interested voters during electoral campaign? What relationship is there between mass media mobilization and exposure to political information online? Therefore in addition of investigating the structural effect of media systems on VAA usage and diffusion, this dissertation also aims to explore the individual level reach of VAAs among different segments of the electorate during electoral campaigns.

CHAPTER 2 – VOTING ADVICE APPLICATIONS AS CAMPAIGN ACTORS: MAPPING VAAS’ INTERACTIONS WITH PARTIES, MEDIA AND VOTERS

As tools that are designed to assist citizens in taming the flood of political information that they encounter during campaigns, VAAs are located at the intersection of the communication flows between citizens, parties and media. For the users of such websites, VAAs “belong to the media repertoire individuals have at their disposal in order to gather information about politics, parties and policies” (Garzia and Marschall, 2012: 216). From the perspective of both politicians and journalists, VAAs are frequently seen as a campaign actor that can influence the opinions of voters (Walgrave et al., 2008).

This chapter contributes to the growing literature on VAAs by exploring the nature of their relationships with the traditional key actors in political campaigns: parties, voters, and mass media. As outlined in the next section, the goal of this chapter is to establish not just how VAAs influence these actors, but also how these actors influence VAAs. We support our conceptual discussion with a descriptive analysis of a dataset based on responses to a survey of VAA practitioners; out of 28 VAA teams contacted, a total of 15 responded to this survey.

A – A model of VAAs’ interaction during electoral campaigns

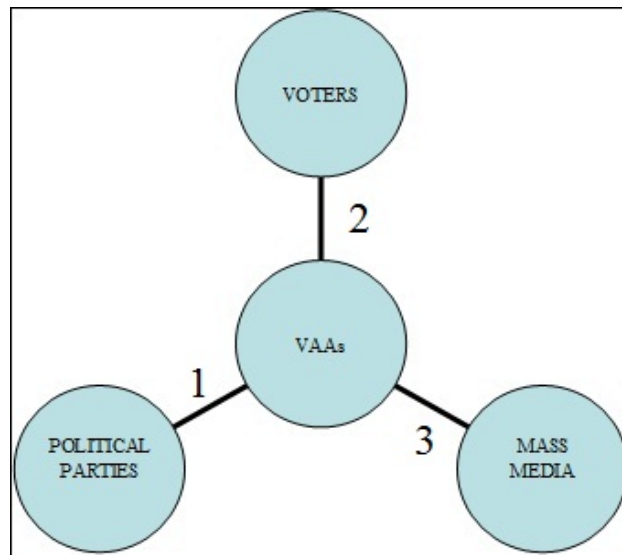
As the goal here is to examine VAAs’ relationships with parties, citizens, and media, this chapter is thus informed by extant research regarding how these actors interact during political campaign. For instance, several studies have noted that the attempts of political parties to set the agenda and to frame issues is filtered through media coverage, while, conversely, it has also been observed that media coverage of politics can be driven by the communication strategies of parties (Asp, 1983; Brandenburg, 2002; Hopmann, et al. 2012; Walgrave and van Aelst, 2006). Other analyses have focused on the fact that media play a crucial role in increasing public awareness of issues and/or contributing to public issue perceptions of how issues should be understood (McCombs and Shaw, 1972; Scheufele and

Tewksbury, 2007). Political parties and the media play a particularly essential role in informing the public on issues that are technically complex (Popkin, 1994).

The interaction between public opinion and party behaviour is another major theme within political science (Hellström, 2008). Empirical evidence demonstrates that two types of linkages simultaneously exist between the public and parties: a top-down linkage in which public opinion is receptive to the policy ideas of political parties, and a bottom-up linkage whereby parties adjust their policies to public opinion (Wlezien, 2005; Stimson, 2004).

All of the above-discussed research points to the existence of important and dynamic relationships between media, parties and voters. It also appears that, while they may often be somewhat unbalanced, such relationships are not unidirectional. The argument here is that VAA projects can be conceived in this manner, and that VAAs vary in terms of the depth and reciprocity of their relationships with all three of these actors. The existence and reciprocity of these relationships are visualised in Figure 2.1.

*Figure 2.1. Dimensions of interaction between VAAs and actors of political communication:
1. the party dimension, 2. the voter dimension, 3. the media dimension*



We argue that VAAs have a direct effect on parties because the content analysis of the platforms that is performed in order to develop a VAA site may reveal ambiguous or vague propositions in parties' policy stance, 'forcing' the political parties to clarify their positions.

However, this relationship can be reciprocal to varying degrees – some VAA projects involve parties in the design stage, while most depend on some form of party co-operation to maximise data quality when measuring party positions.

VAAAs have been found to influence both participation and vote choice among site users, albeit with major variation across studies in the extent of influence observed. The question of reciprocity in the VAA-voter relationship is central as VAA projects depend on users to both promote the site and to enter high quality data. Finally, VAAAs can exert an ‘effect’ on media coverage of a political campaign (by making new information on parties and voters available to media outlets). However, VAA producers are typically more dependent on mass media to boost user numbers than mass media are dependent on VAAAs to produce data. Various media strategies adopted by VAA designers are also presented.

B – The Party Dimension: on the inclusion of parties and the resolution of conflicts of interest and opinion.

Since the main purpose of VAA websites is to help voters pick the party or candidate that is closest to their own political preferences, VAA developers need information from parties on their issue stances. Table 2.1 reports the results of the survey of VAA practitioners regarding patterns of VAA-party interactions.

Table 2.1. Communication of the VAA team with parties/candidates during the development of the VAA.

VAA teams contacted parties/candidates:	Yes	No
At any time during the development	12	3
In order to obtain their political manifestos	7	5
At the stage of issues selection and statement formulation	5	7
At the stage of their calibration on the issue statements	9	2

A first striking trend revealed in Table 2.1 is that communication with parties at some point in the VAA development process is the dominant norm – with 12 out of 15 respondents

indicating that they did so. This engagement may begin early in the site’s development, during the issue selection and statement development stages (Krouwel et al., 2012). We can see from Table 2.1 that this is the case with 7 of the 12 individuals who responded to this question. The Dutch VAA *Stemwijzer* is an example of a VAA team that engages in this practice (Schuszler et al., 2003). In other cases, contact with parties is only established after the issue statements have been formulated (as in the *Kieskompas* VAA methodology, see Krouwel et al., 2012). We can see from Table 2.2, however, that party policy platforms are the most common source for the development of issue statement lists – so the parties can exert an indirect influence over the development of VAA statements by emphasizing issues in their platforms.

Table 2.2. Sources used by VAA teams for developing issue statements⁷

Party platforms	13
Experts/journalists	12
Journalists	7
Newspaper content analysis	9
Parliamentary debate content	7
Other	8

Since the selection and framing of the statements included in a VAA is crucial for its quality and influential for the ‘advice’ given (Walgrave et al., 2009), the methodology by which statements are developed and selected matters greatly. Moreover, as parties have a vested interest in putting certain issues on the agenda, while keeping others off the table, providing parties influence at this stage opens avenues for strategic and manipulative behaviour by party leaders and campaign managers (van Praag, 2007).

Parties can be resistant to exclusion from the statement formulation stage of the process: some will request that they should be allowed to reformulate or delete certain questions, while others (usually small or new parties) may not even have issue positions on all issues that VAA developers ask them to place themselves. The question format also triggers

⁷ Several developers reported using multiple sources.

different responses from parties, as some VAA frame questions in a binary yes/no format, while others use five point Likert items.

Another important moment of VAA-party interaction is the measurement of parties' positions the selected issues. Table 2.2 looks at the findings of the expert survey regarding the sources used to measure party position. Again, we find a norm of some form of VAA-party communication and interaction, with only one respondent using expert coding with no party input. A review of 51 VAA websites revealed that half of them (26 out of 51) explicitly mention that they asked parties for a self-placement. Of course, parties differ in their response to such requests for collaboration and some refuse to respond, while others allow members of their campaign team who provide the answers. Depending on political culture and party type, VAA developers must decide whom to contact within the party organisation.

Naturally, some parties attempt to manipulate their issue placements on VAAs in order to optimise their chances of being recommended to site users. The best-documented case of a successful manipulation is the 2006 version of the Dutch *Stemwijzer* VAA. A Dutch Christian Democratic Party (CDA) spin-doctor decided not to give the party's issue positions according to the official manifesto, but choose to instead provide the answer that was most likely to be popular in order to boost the likelihood of winning more vote advices (van Praag, 2007). These events triggered a robust debate on the quality and methodology of VAAs in The Netherlands (Groot, 2003; Krouwel and Fiers, 2008), illustrating the importance of managing VAA-Party interactions for practitioners.

VAA developers differ in their methodological approach to extracting issue positions from parties or candidates and thus vary in their level of interaction with party elites. Some developers simply use publicly available sources, such as party platforms or websites, without having actual contact with the party leadership. Other VAAs interact more closely with parties. This is particularly the case for those developers who seek to combine party self-placement with expert coding. For instance, *Kieskompas* combines party auto-positioning with coder calibrations, when these sources clash, *Kieskompas* does not automatically accept the self-placements of parties, but enters into an extensive interaction with parties in order to clarify the party's position (Krouwel and Elfrinkhof, 2014).

Since there are many methodologies to determine the ideological or policy positions adopted by parties or candidates (Benoit and Laver, 2006; Gemenis, 2012), having a baseline 'reality check' of parties' auto-positioning against official party documentation is a useful bulwark against error (Krouwel et al., 2012). We can see in Table 2.3 that the most prevalent

approach (9 out of 15 respondents) to coding party positions involves a combination of self-placement and expert coding.

Table 2.3. Information used by the VAA team to position the parties/candidates on the issue statements of the application.

Only self placement of the parties/candidates	5
Only expert coding	1
Both self placement of the parties/candidates and expert coding	9
Total	15

Table 2.4 describes how developers using both expert coding and party self-placement have managed their relationships with the parties that they seek to locate when the experts and the party disagree about a placement. This process can impact on parties: in cases where the party and coding team disagree, the confrontation of parties with texts that were found by the coders can lock parties into a substantive policy debate which can serve to clarify issue stances. However, only 2 practitioners report to engage in such discussions in Table 2.4.

Table 2.4. Management of discrepancies between expert and party issue placements.

VAA teams that used text sections from the political manifestos to justify the position of the parties/candidates on the issue statements	9
VAA teams that checked for discrepancies between the self-placement of parties/candidates and the content of their political manifestos	8
<i>VAA teams that settled discrepancies by:</i>	
Discussing them only within the academic team of the application	7
Discussing them with the parties/candidates	2
VAA teams that pointed to sections of political manifestos in discussing discrepancies	4
VAA teams that reached full agreement with all parties/candidates	7

Often party leaders, campaign staff and spin-doctors are unhappy that VAA developers do not automatically accept their auto-positioning. Party representatives have argued that VAAs reduce the complexity and multidimensionality of their stances too much, and thus blur their policy positions instead of clarifying them. Yet, overall, the interaction is constructive, levels of initial agreement are high (with 7 out of 9 respondents in Table 2.4 reporting that they were able to reach full agreement with all parties/candidates) and most discrepancies can be resolved quickly.

In conclusion, VAA developers can influence the behaviour of parties substantially in that they require them to clarify their policy positions. In some cases, VAA development has actually widened the scope of issues on which parties take a position. Parties have also learned to cope with VAAs and have sometimes seized the opportunity for propaganda or sheer manipulation. Through issue selection and question framing, VAA developers may impact on how parties are able to communicate their stances, which is sometimes perceived by the parties as manipulation of the public debate by VAA makers.

In countries where VAAs draw large numbers of users, party campaigns have adapted to them. The output provided by VAAs may alter the public perception of certain parties, especially if some of their policy positions were previously unclear. New and smaller parties – often neglected in the public debate - are usually very eager to participate, as VAAs provides them with an opportunity to reach voters and be seen on equal footing with the dominant parties.

C – The media dimension: models of VAA promotion

It is acknowledged that VAAs are dependent on mass media to attract high volumes of users (Walgrave et al., 2008). The example of the ‘EU-Profiler’, which was launched in 30 countries for the 2009 European Parliament elections, illustrates this point. The site generated 919,422 advices (Trechsel and Mair, 2011), however, 45% of these users were located in only two countries: Sweden and The Netherlands. These countries were the only instances in the EU-Profiler project where there was a promotional partnership with a national newspaper (*Aftonbladet* in Sweden, and *Trouw* in The Netherlands).

Such media-VAA partnerships are based on a mutual exchange of services. The media fund (or partly fund), the VAA and promote the tool on their different outlets – most prominently by according it a place on their webpage. In exchange, the VAA developers provide an application that can help to drive site traffic, as well as furnishing the media partners with analyses of voters’ and parties’ issue positions, shifts in leadership evaluations and prospective voter behaviour on the basis of the data collected through the application during the campaign. Ideally, each media story based on such analysis further promotes the tool among the electorate, attracting further users and closing the feedback loop.

However, not every VAA project has established media partnerships, nor do all media partnerships fully incorporate analyses based on VAA data into their campaign coverage. Out of the VAA teams that answered to our practitioner survey, two out of three established a media partnership. Among those VAA teams that established such a partnership, 90 per cent provided analyses using VAA data to their media partners and 70 per cent relied on the media partner for funding.

Instead of media partnerships, or in addition to them, some VAA developers devise their own public relations strategies. VAA makers may issue press releases; organize promotional events, such as ‘launch parties’ or street events, with the aim of instigating media coverage of the tool; they may also invest in advertisement. Over 90 per cent of the VAA practitioners whom we surveyed engaged in such activities and 80 per cent tried to promote their application in the mass media (TV or radio appearances, and newspaper publications). Since, for the most part, the individuals behind VAA projects are scholars, they may be invited to participate in radio or television debates, and can promote their sites through such channels.

VAA developers may also send data analysis reports to targeted journalists, in the hope that they will use such analysis in their campaign coverage, and cite the VAA as a source. Lastly, VAA teams can promote their site via social media: more than 70 per cent of the VAA teams surveyed did so on Facebook and Twitter.

Therefore, many VAA developers run what Abold (2008) has called ‘mini election campaigns’ in order to reach users, but not all VAA teams do so. Out of these two variables – media partnership and mini-campaign – it is possible to identify four different configurations of VAA-media relationship, as illustrated below.

1) Neither media partnership nor mini-campaign

Some VAA sites are not involved in any formal media partnership and do not try to attract users beyond the personal networks of its developers. A single person or a group of e-citizens usually makes such sites. The 2012 French Presidential election saw the emergence of several VAAs of this kind, such as: ‘Politest’, ‘Je Vote Qui en 2012’, ‘Pour Qui Voter en 2012’ and ‘Qui Voter’.

Such VAAs are typically launched several months before the actual electoral campaign. Some may ‘go viral’ through social media sharing and thereby gain access to traditional media coverage, but most have very low numbers of users.

The ‘EU Profiler’ site, developed by universities, is also an example of a VAA that featured, for the most part, neither media partnership nor mini-campaign, except in two countries (Sweden and The Netherlands). The result is that, once we take out these two countries, across the remaining 28 countries covered by the site, ‘only’ half a million citizens used ‘EU Profiler’.

2) No media partnership, but a mini-campaign

Some institutionally based VAAs, such as the German ‘Wahl-O-Mat’ or the Dutch ‘Stemwijzer’, receive coverage in national and local newspapers, however there appears to be no formal exchange or cooperation between the media and the VAA team. Therefore, we do not consider such media support as a partnership. However, such sites do actively promote their sites through press releases and media events. For instance, since 2002, ‘Stemwijzer’ has participated in several television and radio programs where guests on the show – celebrities, journalists, and political leaders –take the test (de Graaf, 2010). The audience is also invited to participate by taking the test and to interact with the show by email or SMS. In 2006, 526 media references (national and local newspapers, newswires and magazines) were made about ‘Stemwijzer’, and the site delivered 4.7 million vote advices.

The German ‘Wahl-O-Mat’ VAA’s mini-campaign involved advertisements in popular computer and video games, and posting videos on a YouTube channel during the

2009 federal election campaign.⁸ Despite only 57 media references during the 2009 campaign, ‘Wahl-O-Mat’ delivered 6.7 million vote advices.⁹ The institutional setting in which ‘Wahl-O-Mat’ is developed may help to explain its success. ‘Wahl-O-Mat’ is produced by the German Federal Agency for Civic Education¹⁰, a government agency whose civic education projects are designed to inform and mobilise voters (Marschall and Schultze, 2012). This agency actively engaged in a PR campaign to promote the application. Similarly the ‘Stemwijzer’ was developed as a collaborative project involving non-partisan organisations supported financially by the Minister of Interior Affairs (de Graaf, 2010).

An absence of media partnership may be the result of a deliberate strategy, but may also be the product of media refusal to engage in partnership with a tool that makes explicit political recommendations. The developers of the Turkish VAA ‘Oy Pusulasi’ experienced this difficulty in the 2011 parliamentary elections. That VAA team was able to promote the tool through appearances in television news programs and to send analysis report to targeted journalists, which resulted in several columns in national and local newspapers. In the four weeks of the election campaign, this strategy attracted about 200.000 users to ‘Oy Pusulasi’. Among the VAA teams surveyed, 9 out of 10 promoted the application in newspapers and on the radio, and 2 out of three also did so on TV.

3) Media partnership, but no mini-campaign

The main objective of establishing a media partnership is to attract large numbers of users to the VAA. Some media may simply host the tool on their website, while others use VAA data to generate content-based stories. For example, the 2012 Italian VAA *Itanes-Votematch* was hosted for several weeks on the website of the national newspaper *La Repubblica*, however only one article was written that referred to the site, which simply presented the tool and explained its inner-logic. The lack of the publication of additional articles by the newspaper may be related to the fact that *Itanes-Votematch* was not launched during a ‘live’ electoral campaign.

8 Press release describing several of the public relation strategies of the ‘Wahl-O-Mat’ team: <http://www.bpb.de/presse/50105/du-hast-die-wahl>, accessed on April 22nd, 2013.

9 Media references data have been collected through the search engine LexisNexis on a period of four weeks prior to Election Day.

10 *Bundeszentrale für politische Bildung*

The 2012 French *La Boussole présidentielle* VAA was involved in a partnership with multiple media outlets: the largest French newspaper, *Ouest France* (which is also a regional newspaper), a free daily, *20 Minutes*, and an online platform (*2012 et vous*) which combined coverage from the television channel *M6*, the radio station *RTL*, and the online news site *MsnNews*. On a regular basis during the campaign, journalists from these media outlets received VAA data analysis reports, covering the position of the candidates in the political landscape, the issue profiles of VAA users, the images of candidates according to the VAA users, and so on. Hence, over a 6 week campaign, the newspaper partners published 14 articles using VAA data analysis, mentioned the website in 37 other articles and hosted the tool on their own website as well. Approximately 750,000 vote advices were produced by *La Boussole présidentielle*.

4) Media partnership and a mini-campaign

The Dutch VAA *Kieskompas*, which was first launched for the parliamentary elections of 2006, enjoys multiple media partnerships (with the newspapers such as *Trouw* and *Volkskrant*, with magazines such as *Elsevier*, *HP De Tijd* and with radio stations, such as *Radio 1* and *RNW*), and also actively engages in a mini-campaign with media events and appearances to promote the tool during each electoral campaign. *Kieskompas* provides analyses of the party positioning data and user data to generate interest in key issues and party stances. In 2010, the year of its second most successful implementation with 1.5 million advices, *Kieskompas* was mentioned 181 times in the Dutch media (newspapers, magazines and newswires) among which 36 articles in *Trouw* based on data analysis from the VAA.

5) VAAs and Media - Conclusions

Whether and how mass media report on VAAs depends on their news value and efforts of the VAA teams. Their novelty, the climate of the election campaign, the fragmentation of the political offer, and the indecisiveness of the electorate influence VAAs' news value. Considering all of these factors, one may ask: How are VAAs influencing election coverage in newspapers, radio and television? A possible preliminary answer is that a distinction must be made between reporting coming from a VAA-media partnership that

includes data analysis, and reporting from other media, which discuss or simply mention the VAA. These two types of coverage are evidently very different in nature and content.

Table 2.5. Promotion and media strategies of VAA practitioners

Type of VAA promotion	
Media partnership	66.7%
Team promotion in the media	80.0%
Launching events	93.3%
	<i>n=15</i>
Media involvement in the making of the VAA	
Media gave input on VAA content	30.0%
Media financially contributed to the VAA	70.0%
Academic team provided analyses to the partners	90.0%
	<i>n=10</i>
How did the media promote the application to users?	
Hosting the application on the media partner's website	90.0%
Printed articles in media outlets	100.0%
On TV (ads or stories)	70.0%
On radio (ads or stories)	50.0%
	<i>n=10</i>
VAA team promotion in the media	
TV shows	66.7%
Radio	91.7%
Newspapers	91.7%
Magazines	16.7%
	<i>n=12</i>
VAA team promotion on social media	
Facebook	73.3%
Twitter	71.4%
Other (Google +, MSN)	26.7%
	<i>n=15</i>

As we have seen, the interactions that take place between media and VAAs are multiple and diverse. While some VAAs can attract many users without mass media partnerships (see the *Wahl-O-Mat* case), traditional media coverage is usually a key element of discrimination between successful and less successful VAAs. While it is difficult to identify a ‘perfect’ media strategy, it seems quite straightforward that a media partnership is very important in order to attract VAA users. This is especially true for newcomers in the VAA market, only well-established VAAs, such as *Stemwjizer* and *Wahl-O-Mat*, are able to

attract a very large number of users without formal media partnerships. Table 2.5 summarises the campaign strategies of respondents to our survey of VAA practitioners.

D – The Voter Dimension

The political effects that VAAs exert on their users have been extensively studied. As research on VAA effects on voters is reviewed in Chapter 1, we simply note that scholars have amassed a wide array of evidence indicating that VAA use does influence at least some users – both in terms of their levels of political participation and their choice of party when voting. The extent to which this relationship is reciprocal, however, is currently underexplored in the literature.

Generally, voters exert very little influence over the content of VAA sites. As discussed in the ‘VAAs and Parties’ section, the design and selection of statements is usually carried out by VAA developers, in most cases with some form of interaction with political parties. One striking exception to this pattern is the German *Wahl-O-Maht* site, where first and second-time voters are included in the site’s editorial board (Garzia and Marshall, 2012). Another example of voter-influenced VAAs are the small-scale sites developed by individual (non-expert) citizens, such as ‘Qui Voter’ in France.

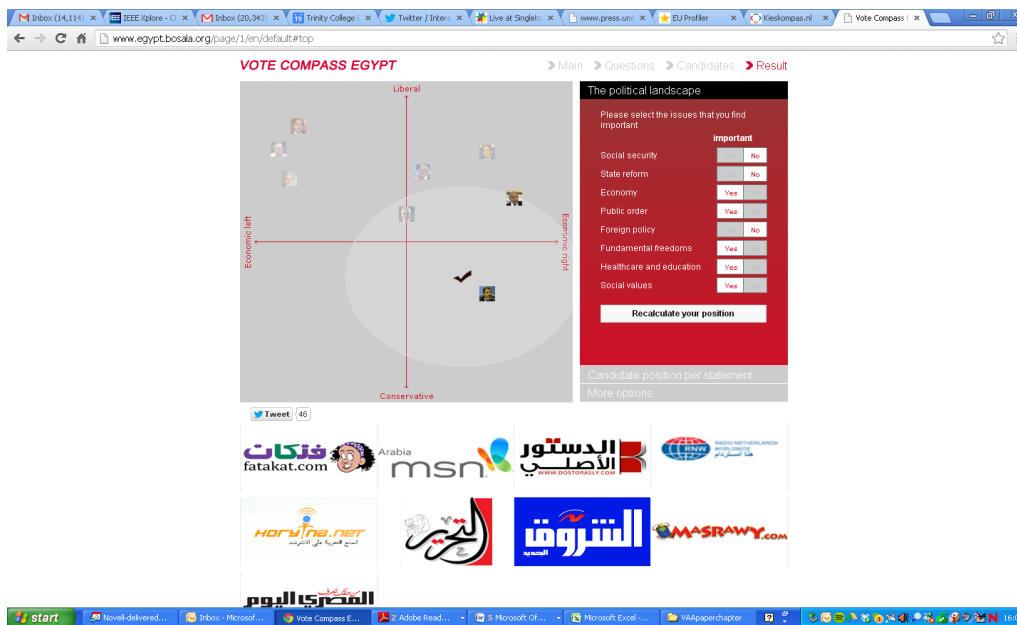
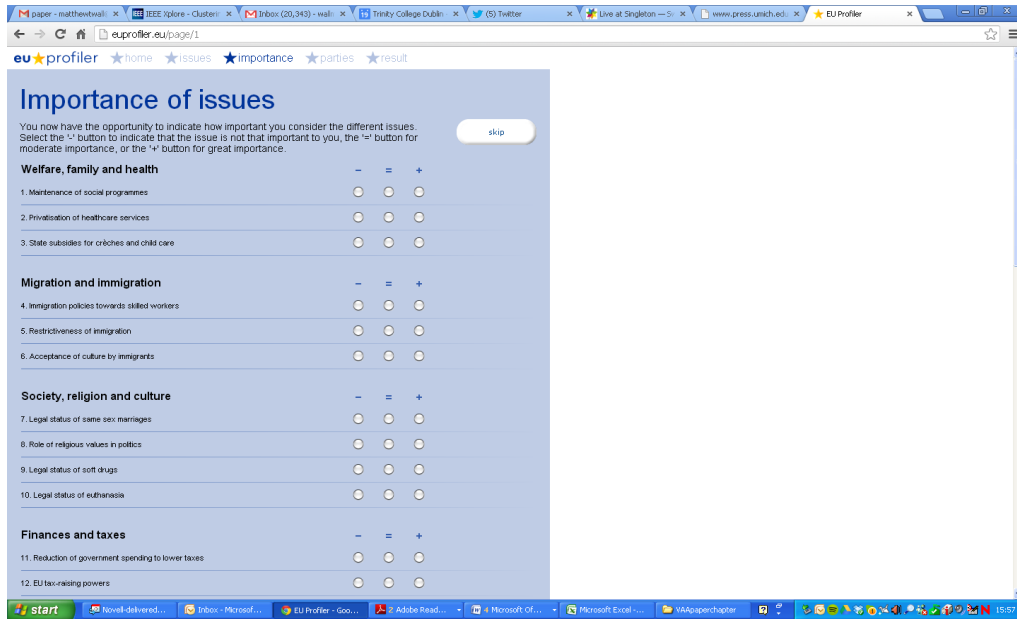
There is also limited scope for users to provide feedback on any aspect of VAA design once such sites are live. In some instances, such as the Canadian *Vote Compass* site, large numbers of users provided such feedback on the ‘Comments’ section of the media partner’s (CBC) website. Also, in some instances voters send messages and comments to the developers through the contact details provided on the website. However, Twitter and Facebook messages, as well as blogs provide a rich source of feedback on the statements and various other features of VAAs.

Ultimately, VAA projects are dependent on the actions of users for their success. Most obviously, VAAs require users to visit the site. In addition, many VAA developers seek to exploit users’ social networking presences by encouraging them to post their outputs on Twitter or Facebook. The expert survey of VAA practitioners indicated that over 70 per cent provided a facility for sharing results on Facebook or Twitter (see Table 2.5). More recently, VAA practitioners have begun to think about whether a collaborative filtering approach could be developed that would base output on data entered by other, similar users, rather than (or

additionally to) a user-party comparison (Katakis et al., 2014). Furthermore, VAA developers who employ VAA data for academic analyses depend on users to provide quality data. Users who visit the site enter responses of varying quality to the policy questions that are posed, with one indicator of quality being the time spent by users on each question (Andreadis, 2014).

Finally, many VAA site designs allow users to manipulate the type of feedback that they receive. In some cases, voters can decide how their policy positions are compared to those of parties - for instance the, *EUProfiler* VAA site allowed users to select an analysis from various comparison algorithms. In other cases such as *Kieskompas*, the site design allows users to choose a sub-set of issues that are taken into account when comparing users to parties (Krouwel et al., 2012). A review of 51 VAA sites indicates that 58 per cent allow users to weight issues or issue areas for their outputs. Figure 2.2 shows two page designs that allow users to weight or filter the issues that are considered in their output.

Figure 2.2. Screenshots of 'euprofiler.eu' and 'egypt.bosala.org' VAA pages allowing users to weight or filter issues used in their comparison output.



E – Conclusion

VAAAs have the potential to deepen their relationships with parties, citizens and media. Parties, and particularly small parties, may use VAAAs to both clarify and publicise their stances on issues. Voters may find in VAAAs a useful time-saver for comparing parties' positions to their own, and this relationship could be bolstered by a more inclusive approach to considering the views of voters in VAA implementation. In order to maximize its utility for the democratic process, one of the concerns of VAAAs is to reach undecided voters. To reach this target group, the strategies of VAA promotion and the choice of media-partnership are essential. Another concern is to reach as many political groups as there are in society to have data capturing a range of opinion and issue positions as broad as possible. As we will see in the Chapter 6, this task may be problematic in media systems where there exists a high level of political parallelism within the media system, and VAA developers should be aware of this.

More generally, scholars studying VAAAs should take into account all interactions described in the framework provided in Figure 2.1 when seeking to conceptualise the 'effects' that VAAAs may exert on key political actors and when considering their role in political campaigns. Practitioners involved in developing such sites would benefit from considering this framework in order to plan their engagement with voters, parties and media.

II. « *La Boussole présidentielle* »: development, evaluation and analyses

CHAPTER 3 – THE METHODOLOGY BEHIND LA BOUSSOLE PRÉSIDENTIELLE

A - Locating parties or candidates in a common political space

La Boussole Présidentielle VAA has been developed following the methodology established by *Kieskompas.nl*. *Kieskompas.nl* is a VAA that was first developed for the 2006 Dutch parliamentary election using a novel approach to calibrate political parties on salient issues and issue-dimensions by analysing their official policy documentation. The purpose of this chapter is to describe the *Kieskompas* methodology, which involves eight key steps:

1. Selecting the most relevant political parties or candidates to be included.
2. Selecting authoritative sources – party platforms, policy documents, websites, debate transcripts and campaign material - from which party positions can be extracted, as well as creating a hierarchical order among different types of sources (should any two sources provide alternative positioning) for party placement.
3. Identifying the salient issues in a specific election year, i.e., selecting the issues on which political parties will be positioned, and on which voters will be compared to parties.
4. Framing propositions about these salient issues that give ‘ideological’ direction to the proposition and determine it’s ‘loading’ on one of the deeper cleavage dimensions that demarcate the political landscape.
5. Searching the selected sources (as identified in step 2) and extracting specific text snippets that justify the calibrations of parties or candidates on an issue. Having selected these snippets, a party coding on each issue is decided by the coding team. Each specific coding decision at this stage is thus accompanied by the text snippets upon which that decision is based.
6. A process of party authorisation of coding decisions. This process begins with sending out the blank questionnaire to parties to collect their self-placements. The VAA team then compares their hand-coded placements on issues with the self-placements of the political parties. The team then undertakes a process of interaction with the parties until the maximum possible amount of agreement is reached over the coded position of the party (though the coding team retain discretion over the final coding decisions).
7. Comparing voters’ opinions to issue positions of parties, i.e., summarising the voter-party comparison rules that drive the site’s output.

8. Developing a multidimensional ‘map’ of party competition (determining the salient cleavages underpinning party competition, and how the individual issue items load on these cleavages).

In the subsequent sections, we discuss each of these steps in turn, and outline some of the advantages and trade-offs inherent in the Kieskompas methodology.

B - Selection of relevant parties or candidates: Who’s in and who’s out?

VAAAs can include all parties or candidates that participate in an election, however more typically they include only a selection of the most relevant parties. In multi-party systems with large numbers of parties registering for an election, filtering out micro parties that do not stand a chance of gaining parliamentary representation reduces the complexity of output for users. To avoid exclusion of electorally relevant parties, the Kieskompas method uses two key criteria for inclusion: (1) all parties with one or more seats in parliament that enter the elections are automatically included; (2) parties that do not have any seats in the outgoing parliament but which consistently poll at least one seat in a number of opinion polls are also included. In candidate-based elections such as the US presidential elections (see www.electoralcompass.com), candidates were included when they consistently ended up in opinion polls as serious candidates with a genuine chance of winning the party’s nomination or – adapting Sartori’s (1976) notion of ‘blackmail potential’ – if they could take away the nomination from another candidate. In the French presidential elections, for instance, candidates included polled at least one per cent in opinion polls, while in Mexico all four candidates could be included. In countries with no electoral history or reliable opinion polling, such as in the founding elections of Egypt and Tunisia, where a wide variety of new parties exist, criteria for party selection must be adjusted. Common criteria in such contexts include: having formal recognition and legal status; fielding candidates in a sufficiently large number of constituencies to be nationally relevant; and being considered viable contenders by experts. In general terms, the trade-off in party selection is between the risk of over-inclusion (leading to an artificially crowded political landscape) and over-exclusion (leading to potentially relevant parties being excluded). As the latter is a more troubling outcome, the

exclusion rules employed by Kieskompas only seek to exclude parties who are highly unlikely to receive meaningful parliamentary representation.

In the context of the French presidential election, the Constitutional Court announces in the third week of March the official list of candidates¹¹. However, considering the time required to develop a VAA, in particular the amount of time required to identifying salient issues (section D), frame the issue statements (section E) and to position candidates on these issues (section F), the academic team could not wait for the official list of candidates to be known. Therefore, in 2012, a list of 12 candidates, that regularly polled above 1 per cent of vote intention and who seemed likely to gather the 500 sponsorships in order to run, were pre-selected in order to move forward with the candidates positioning. In the end, only 10 candidates ran for the 2012 presidential election, so the 2 additional candidates that were initially included in the VAA were removed before the official launch of it¹².

In 2017, the 11 candidates that had been pre-selected by the academic team were the same 11 official candidates that run for president. This process was more linear in 2017 than in 2012 for two reasons. First of all, the main candidacies were known at an early stage of the campaign. For instance Marine Le Pen and Jean-Luc Mélenchon announced it more than a year before the election, similarly Emmanuel Macron did so more than five months before the election. In addition, there had never been as many primaries as there had been in the 2017 presidential campaign: in the fall of 2016 on the one hand the ecologists and on the other the main parties of the centre and the right organized a primary, and early 2017 the centre left parties did so as well. This primary period that preceded the presidential campaign led to an important simplification of the list of potential candidates. Furthermore, in February 2017 the ecologist candidate, Yannick Jadot, withdrawn from the race by supporting the socialist candidate, Benoit Hamon, that had won the primary a few weeks before. The second reason why the process of candidate selection was made easier in 2017 is that every three days, between 1 March and 18 March, the Constitutional Court published an updated list of the political figures who had received sponsorships in order to run for the presidency. Therefore, the academic team could follow almost day by day the chances of each of the plausible candidates to receive the 500 sponsorships. For instance by 10 March, 7 out of the 11

¹¹ In 2012, the list of official candidates was published on 19 March; and in 2017, on 18 March.

¹² These two candidates were Corinne Lepage and Dominique de Villepin.

candidates who ran had already received the required number of sponsorships¹³. The first of the potential candidates who did receive the 500 sponsorships was Rama Yade who on 14 March, four days before the deadline set by the Constitutional Court, only had 217 sponsorships, which made it extremely unlikely to reach the 500 threshold.

C - Selecting and analysing relevant party documents

Once the relevant parties or candidates are selected, VAA developers need to decide which sources provide authoritative information on issue positions and reveal the most salient issues on which parties compete. The most stable cross-time source for this is official documentation that parties or candidates themselves produce in order to communicate their policy positions (Budge, 2000; Laver and Garry, 2000; Marks et al., 2007; Mikhaylov et al., 2012). In most advanced democracies, such positions are formally documented in a manifesto that is especially written for the upcoming election. However, manifestos also have several drawbacks for VAA designers, and, indeed, for political scientists in general: they are often strategic (i.e., designed to please large groups of voters, rather than explain a party's true policy stances); they differ in terms of length and topics addressed across parties (important issues are not always addressed in all manifestos as parties tend to de-emphasise issues that can hurt them electorally); and the manifestos of government parties systematically differ from those of non-government parties, the latter being less constrained by recent track records and possible future (coalition) government participation (Marks et al., 2007). In addition, new parties may not even have a formal manifesto and even if they do have such a document, it may not reveal a policy position on all relevant issues. Indeed, some parties focus heavily on a single or a very limited number of issues. Even well established parties, which have agreed positions on a range of issues, may only release their formal manifestos late in the electoral campaign, often too late to be useful for VAA designers – as VAAs are typically launched at the start of the formal campaign.

Thus, party manifestos are important, but they are not the sole source of party stances on issues. Party websites usually provide more extensive information on policies and additional information, including statements by leaders, press releases, motions officially accepted at party conferences and even full policy documents on specific topics, all of which

¹³ <https://presidentielle2017.conseil-constitutionnel.fr/les-parrainages/parrainages-par-candidat/> last accessed on 28 October 2017.

helps VAA developers to pin down a party when an issue position is either ambiguous or not mentioned in the party manifesto. Additionally, the reactions of party leaders and representatives in the media can be a source for party positioning on issues. Party leaders' policy statements can be carefully planned speeches that are timed and targeted at specific voter groups or to get media attention. In addition, debates on radio and TV often serve to introduce new positions, to clarify stances taken or to sharpen the distinction between competitors.

If VAA developers use multiple sources, they need to determine which sources are relatively most authoritative and establish a hierarchy among them. This hierarchy may differ from country to country and even from party to party in the same country. Within traditional mass parties, the manifesto will outweigh any policy statement made by an individual party representative, whereas a declaration by the leader of a populist party may override the official party programme. A general rule for the relative weight of sources is that more recent sources should be given precedence; so current manifestos outweigh previous manifestos, recent speeches by the leader outweigh those made in the past, and so on. This hierarchy of documents should be formalised (*i.e.*, a rank ordering of sources should be written up for the coding team) and integrated into the coding template. With certain sources, some prudence is required. In parliamentary debates, for example, representatives of government parties may not express the official position of the party, but the government's position on the issues, or at least they may formulate their contribution to the debate in a manner that is acceptable to coalition partners. Even more caution is required with the statements of party leaders when such leaders are also government ministers. VAA developers should be very careful in distinguishing in what capacity and setting political statements are made. Even during debates, parties that are often in government will make declarations with current and future coalition bargaining in the back of their heads. As a consequence of their coalition potential, such 'governmental' parties are much more difficult to position on issues than minor, more extreme and permanent opposition parties. This is why it is advisable to enter into an authorisation process with the parties themselves, which will be discussed below.

D - Issue identification and selection: Determining what's at stake in the election

The selection of the issues to be included in the VAA is the most crucial choice to be made in the construction of the application. Walgrave et al. (2009) ran a large number of simulations in which a subset of issue statements was taken from a larger pool of items on which the positions of parties and users were known. They found that the statistical dispersion of the matches observed between party and voter is relatively narrow, but they also underline that in real political terms these differences are really substantial, concluding that issue-selection dramatically affects site output. At the moment, a major problem for VAA designers is that there is no current consensus among political scientists as to how salient issues can be identified. In order to limit political mismatches, issue identification should be the result of a process involving several methods and actors.

Although extant methods for statement development differ substantially, most party profilers start by drawing up a list of relevant issues, and subsequently narrow down this list to a final selection (Krouwel and Fiers, 2007). Statements can be extracted from the party programmes or websites, using automated text analysis or careful reading, but can also be drawn up by country experts and/or journalists. The Kieskompas method combines a computer assisted text analysis with expert opinion¹⁴. Kieskompas collects the relevant party platforms and website content and then uses large corpus text analysis methods to extract salient issues in terms of frequency. For the 2012 Dutch legislative elections, issue extraction from manifestoes was complemented by an analysis of relative lemma frequencies within the full content of main newspapers over the last legislative period (2010-2012). For this extraction, the entire text corpus of media-content was lemmatized and tagged and the relative frequency of each lemma was compared to a reference corpus, using Latent Dirichlet Allocation (LDA). LDA can be seen as a latent variable model, with the latent parameters being the topics per document (Blei, et al., 2003; Griffith and Steyvers, 2004). This method extracts latent factors (clusters of topics) that indicate which issues were dominant in the public discourse and how these issues were discussed. These computer-generated issue-lists are complemented with two further issue lists, one produced independently by the country experts and one by journalists. Kieskompas asks academic country experts to carefully read the party programmes and other relevant text sources to identify salient issues, not simply by

¹⁴ For the development of *La Boussole présidentielle*, we only relied on expert opinions in order to select the salient issues of the campaign.

their frequency, but on a scale of ‘urgency’ or ‘strength’ of the issue. This approach prevents the exclusion of issues that are mentioned less frequently but are phrased in very strong terms, and can therefore be considered important for a party. Journalists compile a list of the most relevant issues based on their day-to-day observation of national politics. Both experts and journalists are asked to indicate the core of the political dispute at stake, information that is used in framing the proposition.

All issue lists are then compared and the most frequently mentioned and the most strongly emphasized issues are included in a list of roughly 35 to 50 issues, drawn up in multiple sessions with the country experts. Although Kieskompas normally uses 30 issues, parties and candidates are positioned on a wider range of by the coding team in order to allow experts exclude issues on which party positions cluster too much to usefully discriminate positional differences. The selected 30 issues need to be salient for political competition, address a wide range of relevant policy fields in order to prevent a bias towards specific parties that ‘own’ certain issues and, to make the final cut, they must be able to differentiate between parties. Issues on which parties broadly have shared goals should be avoided. These ‘valence issues’ or ‘empty signifiers’ touch on such broad and primary issues where parties only differ on the ways to achieve the same goal (Walgrave, 2008). The involvement of numerous experts for selecting salient issues combined with computer-assisted content analysis is designed to minimise bias in the issue selection and is a substantive empirical improvement over *a priori* selection of issues and bipolar policy dimensions. However, the absence of a universally agreed process for statement selection remains troubling for VAA practitioners, particularly in the light of Walgrave et al.’s (2008) research findings.

E - Framing and ‘scaling’ the issue propositions

One of the most contested issues in VAA design is how to frame the issue propositions in such a manner that they can be used to elicit voter and party positions without introducing bias. VAAs differ considerably in their approaches to the development of specific propositions. Some VAAs take the statements directly from the party platforms or invite party representatives to co-develop the statements during workshops, while others only involve experts in the formulation process. The framing of these statements also depends on the answer categories and whether their propositions need to be scaled to deeper-lying issue dimensions.

While many VAAs use binary answer categories (such as ‘yes/no’; or ‘agree/disagree’), Kieskompas uses Likert items with five response levels. The answer categories can vary, so that also propositions can be framed towards a five-point scale ranging from strongly agree to strongly disagree; from much more to much less; from much lower to much higher, etc. The Likert item format was adopted after studies found that Dutch VAA *Stemwijzer*’s binary answer categories (‘agree’ versus ‘disagree’, as well as a ‘don’t know’) denied parties and voters the opportunity to adopt nuanced positions and resulted in incorrect (self-) positioning of parties on multiple propositions, which distorted the voting advices given (Groot, 2003). Dichotomous answer categories also reduce the discriminatory power between parties belonging to a similar political orientation as well as of centre parties (Groot, 2003; Kleinnijenhuis and Krouwel, 2007, 2008). With Likert items, parties and users can indicate the direction of their attitude, as well as the intensity to which they (dis)agree with the proposition. This allows for a more nuanced differentiation between parties, even when they belong to the same political ‘camp’. The labelled five point scales also offer users and parties a centrist position. For political parties this is important, as the centre is a real existing political position. When VAAs like *Stemwijzer* and *Smartvote* do not use the middle category, they force parties and voters to take sides, even when they are actually centrist or neutral on the issue. Nonetheless, the decision to use Likert response scales, and especially the provision of a ‘neutral’ midpoint, implies some trade-offs, especially for particularly controversial political issues where a ‘neutral’ response may be a safe haven for satisficing voters, or for parties who do not wish to engage with an issue (Gemenis, 2012). How the middle category is interpreted by users, which statements drive respondents to the middle category, whether the midpoint indicates a non-attitude or a centrist attitude and what the best label is for this mid-point is still fiercely debated (Baka et. al 2012).

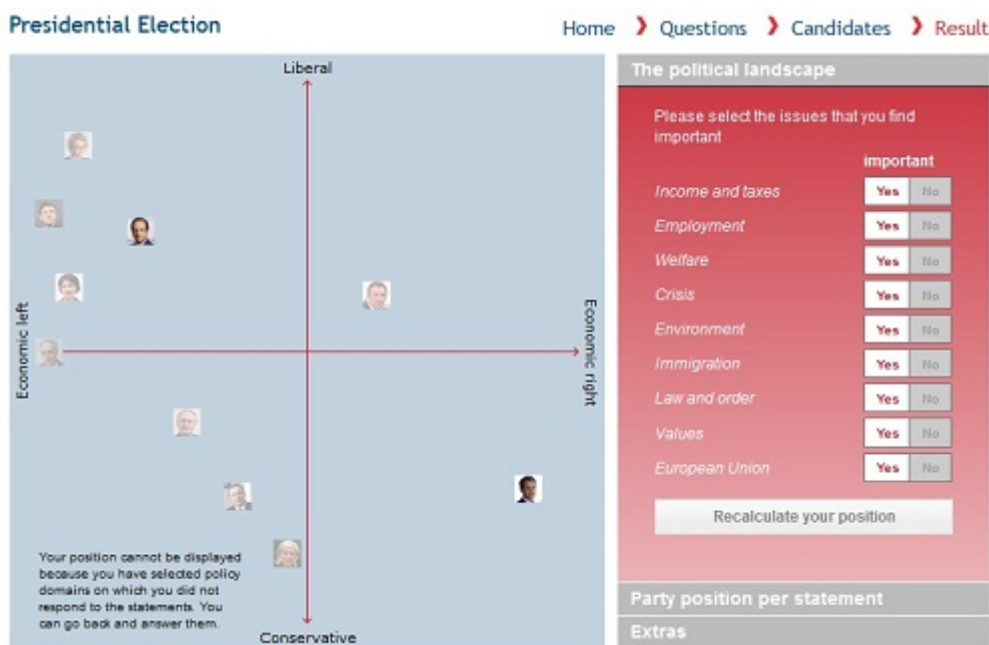
One obvious advantage of using Likert items over binary answer categories is that issue propositions can be considered items of more profound political dimensions, such as the left-right or conservative-progressive divides. Locating parties or candidates in a common political space brings us to the problem that there is no consensus over the number and type of salient cleavage dimensions, let alone on which issues belong to which deeper-lying ideological dimension. When issues are scaled towards cleavage dimensions, two problems need to be addressed. First, determining to which dimension an issue needs to be scaled and secondly the weight of each issue on this dimension. To avoid bias towards one ideological

orientation, party or candidate, propositions in a VAA need to be framed in different ‘political directions’. The entire set of propositional statements must be ‘balanced’ in terms of subjective framing. Some VAAs balance the propositions by taking an equal number from all party platforms. Within the Kieskompas method, roughly a quarter of the questions will have ‘rightist’ framings, a quarter ‘leftist’, a quarter ‘progressive’ and a quarter are formulated in the ‘conservative’ direction. As such, each proposition is scaled towards one of the four poles of the political landscape. The total set of propositions is also grouped into broader issue clusters or topics, such as healthcare, environmental policy, welfare state, foreign policy, etc. Within such broader topics, several propositions are thus ‘framed’ in a variety of ‘ideological directions’ in order to reduce the danger of acquiescence bias, ‘pushing’ the voter towards a certain response (Evans et al., 1996). Also, clustering multiple propositions reduces the effect of the selection of specific issues and allows for more subtle levels of differentiation between parties, particularly when they are in the same political block or in the crowded political centre. Both the selection and directional framing of issue propositions are vital to the functionality and fairness of the tool – however, we must acknowledge that issue selection and proposition framing are human work. Even if it is done in the most rigorous manner possible, it remains a qualitative and interpretive process. However, bias can be minimised by using a range of diverse sources and multiple experts who balance the issue selection and framing to prevent design pitfalls of proposition formulation (van den Berg et al., 2002). A further difficulty of dimensional framing is that occasionally questions are framed in a double-barrelled manner, as observed by Gemenis (2012). However, in many instances, such phrasing is necessary to convey the interdependency of dimensional issues – for instance, the necessity to pay for promised increases in public spending with increases in government tax take. For example, while the statement ‘Social programmes should be maintained even at the cost of higher taxes’ from the 2009 EU Profiler site may be double barrelled, this type of formulation is necessary to convey the trade-off between taxation and social spending.

With regard to weighting, VAA-developers could opt to simply weigh all issues as 1, or assign a relative weight to each issue. For this relative weighting, as well as determining if the issue is scaled to the correct dimension, data can be used from previous iterations or from elections studies and surveys that included questions on the concerned issues. While VAA designers have typically used *apriori* dimensional assignment (according to the judgement of country experts), both the dimension to which an issue scales and the weight of its loading to the deeper-lying dimension can be determined through factor analysis (Kleinnijenhuis and

Krouwel, 2008). VAA developers could also opt to scale an issue to two dimensions. Experiments are currently being carried out (van der Linden et al., 2012) employing inductive dimensional analysis of public opinion data to construct weightings that are based on the extent to which individual items scale on a given factor. This represents a promising approach as Gemenis (2012) provides evidence that inductive dimensional analysis often points out that often items that are scaled to a dimension *a priori* by coding teams do not scale well empirically. An alternative approach allows voters to exclude issue categories from their output calculation (i.e., giving items that fall into such issue areas a zero weighting) an example of this approach can be seen in Figure 3.1 below.

Figure 3.1. The ‘Recalculate Your Position’ button allows users to select which issue areas are considered in their output¹⁵



F - Placing the parties: first round of placements and generation of text snippet database

Political scientists devote considerable time, effort and expense to the study of parties’ policy stances and they have developed several methods to determine the ideological or policy positions adopted by parties. Examples of such methods include: expert surveys;

¹⁵ Example from the 2012 French Presidential Vote Compass: www.laboussolepresidentielle.fr

surveys of placement of parties by voters; surveys of the political parties themselves; roll-call behaviour of politicians; and content analysis of party manifestos (for a detailed discussion, see Benoit and Laver, 2006, pp.123-153). VAA developers use various methods to calibrate parties on the issues (Gemenis, 2012). One method (used for example by Dutch VAA *Stemwijzer*) is simply to allow parties to position themselves on the issues. A second method is to let experts position parties or candidates on the issues, either with or without analysing party documents. A third method is automated coding of the political texts by computer programs to determine party positions (Benoit and Laver, 2003, 2007). There are, however, major methodological problems with automated text-analysis. When ‘word-based’ techniques are used and the distribution and patterns of words in text are analysed, this does not tap into the connotation of words in their context – crucial in political communication – and they chunk texts into words, negating semantic, grammatical and discursive structures and frames that give meaning. Moreover, automatic text analyses are incapable distinguishing positive or negative direction in a text, which is crucial for identifying relative party positions on issues. Considering the importance of VAAs we have to accept that hand coding is an interpretive approach, which is very labour-intensive, expensive to replicate or change and sensitive to individual errors of interpretation and low inter-coder reliability (see Budge et al., 1987; Klingemann et al., 1994).

Letting parties position themselves is a method that is susceptible to manipulation by political parties (van Praag, 2007), while experts can also be biased if no control mechanism is included. In 2006, Kieskompas developed a method that combines expert judgements based on text-analysis with self-placement of parties, including an interactive process with the parties. An important improvement on previous experts’ surveys and safeguard against bias is that experts base their judgements on thorough text analysis (instead of general interpretations) and fully document and justify each positioning on an issue with text snippets from official party documentation. Thus, unlike most expert surveys and VAAs – Vote Compass is completely transparent with regard to source texts and coding. In order to maximise transparency, all text extracts underpinning the party calibrations are made available to each user with a simple mouse-click, allowing voters to also enter into a debate on the position of the parties on these issues. Improving further on expert surveys, the Kieskompas method fully documents and justifies each positioning of parties or candidates with text snippets from official party documentation. Thus, unlike traditional expert-surveys, the Kieskompas method leads to a database of party positions on salient issues in which each

position attributed to the party is justified by a reference and hyperlink to a text snippet from an authoritative party document. All text snippets that are used as evidence for the calibration of parties' positions are added to the Vote Compass website and made accessible with hyperlinks, so that the positioning of parties and candidates is completely transparent, also to the user. In addition, Vote Compasses provide hyperlinks directly to the *original* document that was used to position the party. The manner in which this information is displayed in Figure 3.2, and it is important to note that each text snippet is accompanied by a hyperlink that allows the user to examine the original source document (and thus to check whether the snippets may have been taken out of context).

Figure 3.2. Output displaying text justifying a single issue coding (note hyperlink to source document at the bottom of this text)¹⁶



Notwithstanding elaborate safeguards in the various methods applied, pure objective party calibration will remain impossible as language production and interpretation is necessarily inter-subjective. The calibration of parties and candidates is also complicated by other problems. Sometimes no position can be found in official texts for some parties. If then the party does not want to identify its stance on the issues by self-placement (see next section), the party is coded as 'no opinion', for want of a better solution. Another problem encountered by VAA developers is that parties are not always unitary actors. When parties are

¹⁶ Example taken from Mexican 2012 Vote Compass: <http://www.brujulapresidencial.mx>

internally divided into factions, it may happen that individual members or different documents of the same party state dissimilar policy positions. In such cases, Vote Compass usually opts to show all the different positions, including the text-snippets, in order of the ‘official’ or ‘dominant’ position first, followed by the deviant positions. Thus, there may be controversy over which and how many text sections should be included, as well as where to cut off the text snippet. In short, there are many reasons why positioning parties or candidates may be less than straightforward. In the next section we describe the process of authorisation, which involves contacting the parties or candidates and locking them into a clarification of their stances.

G - Contacting the parties for self-placement: Reaching agreement

Kieskompas brings an important innovation to party profiling methods in that it adds a self-placement by each party or candidate to the text-based coding by experts. Country experts contact actors within each party who are authorised to assess that party’s stance on a given issue. For some parties, the party leader will fill out the self-placement questionnaire, while in others authorised party spokespeople or campaign leaders will fill out the form. In some countries, parties now even assign a team with the task of reacting to the various VAA-requests. Self-assessment of their issue position gives parties the opportunity to challenge expert-coding decisions. Each party is provided with the blank propositions at an early stage and are also asked to position themselves and provide appropriate text snippets from their manifestos or other official documents to substantiate and justify their self-placement. Self-placements are then compared with the hand-coded positioning data and well-considered adjustments can be made. Discrepancies between the self-placement and coder positioning are communicated to the parties, as well as the text-snippets that the coders used as a justification. Parties are subsequently asked – in extensive direct communication - to indicate what they consider to be incorrect about the disputed expert judgement and are allowed to provide alternative text-snippets on order to substantiate their self-placement. This interactive process with parties is generally (with a few important exceptions) constructive and leads to clarification where issue positions were unclear. For example, in the Dutch elections of 2006 the hand-coded calibrations of Kieskompas corresponded with 82 per cent of the party self-placements, while after two rounds of contact this level of agreement increased to 92 and 99 per cent respectively (Krouwel and Fiers, 2008). Indeed, most of the disagreement is related

to the intensity of the calibration, not of the direction. Usually, after a first round of discussion the agreement-level increases to over 90 per cent, while multiple rounds usually result in only very few propositions remaining disputed between the expert and the party itself. Willingness to participate in the self-placement procedure varies across countries (Wagner and Ruusuvirta, 2011), and depends on the authority of the expert(s) contacting the party and the number of iterations and success of previous VAAs. *Kieskompas* usually achieves compliance from a majority of parties, while a cross-national project during the EU elections in 2009 showed lower levels of participation (Krouwel and Fiers, 2008; Trechsel and Mair, 2011). In the 2012 French presidential election, the academic team reached out to the campaign teams of the ten candidates running for office. Only three of them engaged in a process of discussion with us¹⁷. This low number of answers is probably due to the novelty of VAAs in French politics and of this type of interactions between political scientists and candidates, by the limited reach of these applications within the voting population compared to other countries (see Chapter 4 for a descriptive presentation of percentage of voters reached by *La Boussole présidentielle*); but also by the news that happened the week we contacted the campaign teams¹⁸. Regarding the suggestions to change of some of their own candidate positions that we received from the three campaign teams that answered, the academic team has accepted 50 per cent of the suggestions (when appropriate documentation was provided to justify the change) and rejected the other half considering that the campaign teams were trying to be strategic in their candidate placement.

In fact, a major difficulty with asking parties to self-place is that parties face strategic incentives to misrepresent their issue positions in order to ‘game’ popular VAA sites (Ramonaité 2010; Wagner and Ruusuvirta, 2011). However, the methodology described above seeks to control against much manipulation firstly by requiring parties to provide formal texts justifying their self-placement, and secondly by leaving the final coding decision in the hands of the VAA team for unresolved coding disputes with parties. The process of engagement with parties is highly beneficial as they are the actors who find their political positions being assessed by VAA designers. The process is designed to deal with arbitrary

¹⁷ In front of this low level of response rate in 2012, and considering the time-consuming feature of such procedure, the campaign teams were not contacted during the 2017 presidential campaign.

¹⁸ The campaign teams of the candidates have been contacted on 19 March 2012, the day of the terrorist attack against the Jewish school Ozar Hatorah in Toulouse in the South West of France. Following this event, all candidates have paused their electoral campaign for a few days.

expert judgments and allows parties to respond to potential miscoding without handing them complete discretion over their placement.

H - Comparing Voter and party positions: Agreement or proximity approach?

While there are many ways to compare voters and party attitudes (Wall et al. 2011), most VAA models have typically fallen into two categories: ‘agreement’-based comparisons and ‘proximity’-based comparisons. Most party profilers use the ‘agreement’ approach, in which the user’s responses to the propositions generate a ranked list of parties, based on an additive scale of voter-party similarity. On each issue, the user is compared to each party’s position, leading to an overall ‘agreement score’ and agreement level per party. The Dutch ‘*Stemwijzer*’ and the Irish ‘Votomatic’ VAA sites employed this type of approach.

The rational assumption is that citizens will vote for the party with which they have the highest level of agreement. This approach is appealing because of its straightforwardness and clarity, but its major shortcoming lies in the lack of information provided on where parties and users agree. Users are often not given information whether they ‘match’ with the party in the realm of economics, welfare, justice, or another aspect of the political competition. In his work on spatial voting theory, Downs assumes that ‘the political parties in any society can be ordered from left to right in a manner agreed upon by all voters’ (1957, p.142). Therefore, it becomes essential to take into account in the advice given to the users the n -dimension existing in a political space. Hence, ‘proximity based’ profiling sites show voter positions relative to parties or candidates in a multi-dimensional policy space, whereby all the issues included are aggregated over two dimensions.

In the debate concerning which method has to be used to compare voters and parties’ positions, Louwerse and Rosema (2014) indicate that the advice given depends strongly on the spatial model adopted (see also Wall et al. 2012). By using the data produced by *Stemwijzer*, a VAA proposing 3 answer items to its users and using a one-dimensional space (left-right) to position voters and parties, they test the data with 7 other spatial models to demonstrate that the choice for a particular spatial framework affects the outcome at both the individual and the party levels. In order to deal with those discrepancies, they underline the need to focus on two aspects of VAAs: how the result is presented to the users, and with which spatial model in mind the statements are selected and framed. On the former, they

suggest that using a two-dimensional spatial model in which user and parties are represented is a more appropriate way to present the advice than merely providing the name of a single party. A clear advice for a single-party “may suggest more precision and objectivity than what can be substantiated” (Louwerse and Rosema, 2014, p.305). And on the latter point, they argue that statements should be selected and framed according to which spatial model VAA makers are going to use for representing the positions of users and parties. In case the VAA team opts for a spatial model, such as in ‘proximity’-based VAAs, “it may preferable to use a more fine-grained mechanism for capturing answers to statements, such as the four- or five-point scales” (Louwerse and Rosema 2011, p.24). The Kieskompas method addresses both issues raised by Louwerse and Rosema (2011, 2014).

In determining a common political space the most important decision is to extract the number and content of relevant issue-dimensions (Benoit and Laver, 2012). Journalists and commentators often describe party politics as a one-dimensional game, yet research shows that parties and candidates in most advanced democracies operate in a multidimensional political space. There are several methods to estimate the latent multidimensional ideological space that represents how people think about politics and how this abstract space is linked to party positions on salient issues (Çarkoğlu and Hinich, 2006; Evans, 2004). Salient issue-dimensions differ per country and can be adapted to the national political cleavage structure. When constructing a multi-dimensional space, Vote Compass applications use academic studies on salient issue-dimensions. In most countries, Vote Compass utilises a ‘material’ socio-economic Left-Right dimension and a moral-cultural, non-material dimension. The first dimension refers to the traditionally dominant economic aspects of party competition and voters’ concern: unemployment, wages, pensions, taxes, the welfare and public finance. The other dimension incorporates issues that conceptually do not fit in the economic left-right axis, purporting instead to matters such as values, identity, the environment and foreign policy, among others. These axes aggregate the topics, which Marks et al. (2006) have denominated as Green-Alternative-Libertarian (GAL) versus Traditional-Authority-Nationalist (TAN). The use of a two-dimensional political space according to those two axes makes it possible to represent modern polities in the face of the changes undergone since several decades (Inglehart, 1997).

Note that the computation of averaged or summated positions on the two dimensions depends on a priori considerations, both with respect to the question to which of the two dimensions an issue belongs, and with respect to which end of a dimension it leans. Since the

Kieskompas method assigns all to only one dimension, it means that for each issue we need to decide whether it is material or moral, and whether the most positive score (totally agree) indicates the left or right stance, or the progressive or conservative stance. The averaged positions for parties and VAA users with respect to a set of specific propositions function as the coordinates of parties and voters on the political map (Kleinnijenhuis and Krouwel, 2007). Visualization of the political landscape is thus an important part of the tool, and this is made possible by the aggregation of multiple issues over two underlying dimensions. The proximity approach shows to the site users not just how close they are to each party; it also shows where they stand in terms of major structural dimensions of political competition in their country. This method assumes that, “other things being equal, the voter will choose the party which, in policy terms, is least distant from them” (Evans, 2004, p.100). We discuss the process by which ‘maps’ are generated in the next subsection.

I - Developing a multidimensional ‘map’ of party competition

Using confirmatory factor analysis and Mokken scaling analysis, we check whether each issue can be scaled to the overarching dimensions. If an issue does not ‘scale’ on either dimension, it can be excluded from the algorithm used to generate the political ‘map’ and users can be encouraged to consider this issue in isolation. The formal Vote Compass calibration procedure computes the summated positions $\sum_k P_{ojk}$ of each party o and averaged positions of the voter $\sum_k I_{jk}$ on the two dimensions j_1 and j_2 , before distances along each of the axes are computed. The averaged positions of the parties and the user are presented graphically along the two dimensions, thus giving rise to Euclidean distances between a voter and a party.

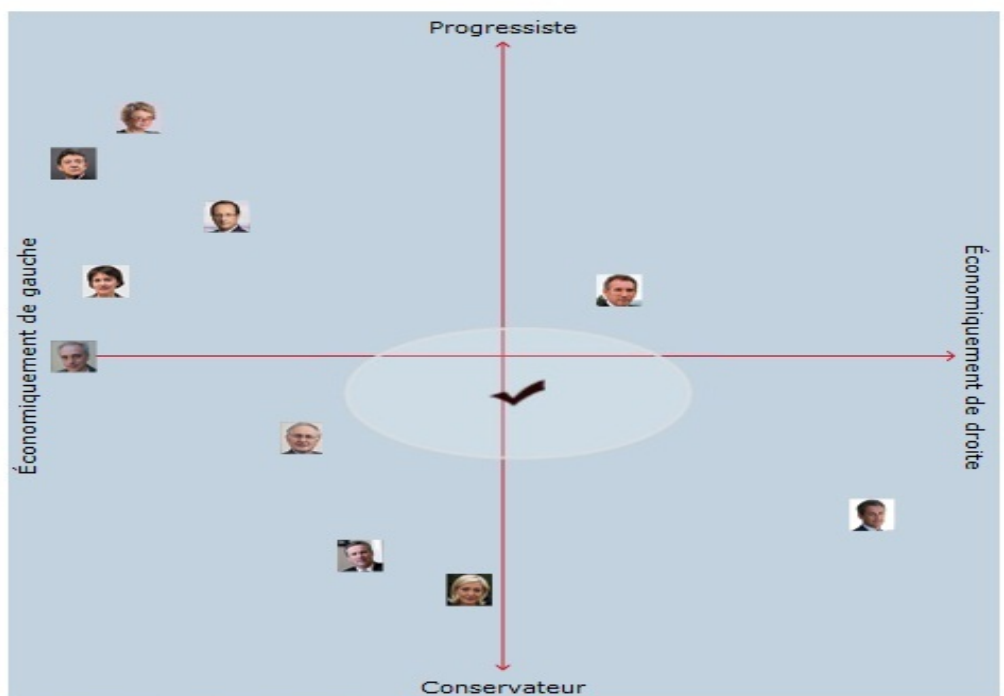
$$A_o = - [\sum_j | \sum_k P_{ojk} - \sum_k I_{jk} |^2]^{1/2}$$

The site also visualises the extent to which users’ spatial position is made uncertain due to ‘ideological inconsistency’ (i.e., the extent to which their answers deviate from the logical pattern anticipated by our scaling procedure) via an ellipse which is drawn around the user’s issue position – based on the standard deviation of their answers on the x and y axes. This is a deliberate addition, and a critical component of the placement of VAA users in a political space. The ‘position’ of the user is not one single point, but an approximate area which will be

wide for ideologically inconsistent voters, whose answers are a mixture of left and right, progressive and conservative, and narrow for voters whose answers point consistently in the same ideological direction.

The visual representation of an approximate area also allows the users to observe their relative position within the overall dimensions represented (see Figure 3.3). This is an innovative element of the tool because the distance between the voter and parties signifies different things according to which theory is being tested. Whether in the ‘agreement’-based comparison equal distance between two parties means an equal propensity to support a party, the ‘proximity’-based comparison implies that it does not. What matters, is the relative position of party and voter on the dimensions in question, and the saliency that each user attributes to the different issues (Evans, 2004). Such as the ‘directional’ theory integrates an affective element to the cognitive process of spatial models of voting (Rabinowitz and Macdonald, 1989), having an area of collocation in the output produced by the VAA allows the users to position themselves on one side or another of the ellipse according to the strength of the affective intensity which they feel on a dimension or issue.

Figure 3.3. The position of an user in the political landscape of La Boussole présidentielle 2012



While both the ‘agreement’ and the ‘proximity’ approaches have their pros and cons, Vote Compass nevertheless opted for the proximity approach as this reduces the distorting effect of proposition selection. The aggregation of responses into two deep-level ideological dimensions – under the assumption that most issues can be scaled on either the material or the moral dimension – allows us to assume that deleting or adding issues would not dramatically affect the overall positioning of either users or parties. Thus, in order to counterbalance the problematic nature of issue selection, user and the party’s positions should be aggregated in a manner that is assumed to be robust to changes to the specific set of selected issues. However, any system used to generate an overall ‘result’ inevitably involves a simplification of the complex realities of political competition within a country. It is also important to point out that well-designed VAAs facilitate multiple outputs – and their central idea is to encourage voters to examine party policy positions. As well as the political ‘map’ and ‘closeness’ outputs, Kieskompas sites also allow users to compare their responses with party positions on each individual issue measured by the application. Thus, while producing a 2 dimensional summary of the political space, the Kieskompas design also seeks to cater for users who are interested in a given single issue or in only a subset of issues. Figure 3.4 displays this issue-by-issue output.

Figure 3.4. An example of single issue output on the question ‘Richer people should pay more taxes than poorer people’ (translation); with voter ‘neutral’.¹⁹



¹⁹ Example taken from Mexican 2012 Vote Compass: <http://www.brujulapresidencial.mx>

J - To conclude

This chapter reflects on the Kieskompas method of VAA design and party/candidate calibration, developed in 2006 and used for the development of the French VAA of *La Boussole présidentielle*. By building such sites ourselves, analyse the data and conduct experiments, we hope to contribute to the academic debate around VAAs. The Kieskompas method outlines how a combination of expert-judgement based on textual analysis of party political documentation, and self-placement by political parties may result in more robust and valid estimates of party positions than any one of these methods could achieve on their own (Hooghe et al., 2010). Incorporating multiple coders and broad consultation of experts in selecting issues and formulating the propositions reduce bias, arbitrariness and error. The variety of official documents used as source of information and the transparency of their origin constitute safeguards against bias. Introducing a labelled five-point Likert scale improved our discriminatory power between centrist parties and parties on one end of the political spectrum, compared to pre-existing VAAs. Also, the scaled positioning of parties and candidates allows us to plot voters and parties/candidates in a common political space, reducing the effect of issue selection.

Nevertheless, the selection of relevant issues and calibration of political parties on each of the issues is still done manually, albeit with many checks and safeguards. While developing a hierarchy of documents is a step forward, the Vote-Compass method can still not take away the ambiguity and uncertainty of some party positions, especially when parties are internally divided or intentionally vague on politically ‘dangerous’ issues. It is also extremely difficult to code brand new parties that lack well-defined policy positions, and solutions should be sought in text analyses for markers of more general, ideological positions. Furthermore, the aggregation of multiple textual data sources into one single position on a five-point scale remains reductive. More should be done to show the complexity and richness of the text snippets that underpin each calibration in a Vote Compass site. The large number of experts involved also makes the Kieskompas method highly labour-intensive, which is expensive and impractical, particularly with snap-elections.

Vote Compass is also developing ways to give users greater control over their output by allowing them to determine what issues are included and excluded in the algorithm that draws their ‘political map’. Meta-data show that a substantial number of visitors indeed use

these alternative weightings to analyse their alignment with different parties. Yet, no matter how high-tech these representations are, voters should always be able to see an issue-by-issue analysis, treating each issue as separate and independent, as this is the core of party voter comparisons. And they should be able to easily access the justification of all party placements as full transparency and maximum accuracy is crucial in order to maintain credibility and integrity.

Recently, as scholars have begun to publish and debate VAA research, there has been a notable movement away from focusing on ‘recommending’ parties to voters, and towards seeing VAA sites as a tool for informing and encouraging voter engagement with political issues – in this conception, the real value of VAAs is their capacity to offer voters structured information on party positions during election campaigns, and to facilitate discussion, debate, and, ultimately to facilitate a deeper understanding of issues and party motivation for policies among the electorate.

CHAPTER 4 – AN EVALUATION OF *LA BOUSSOLE PRÉSIDENTIELLE*

This chapter covers two issues traditionally associated with the early studies on VAAs: the first is the profile of *La Boussole présidentielle*'s users (section A), and the second is the validity of the items used to measure users' political preferences (section B). This chapter starts as a 'health check' of *La Boussole présidentielle* but then continues by drawing a new method to check the validity of the items included in the VAAs. Hence, in addition of going beyond VAA-centric studies in the next chapters, this dissertation also contributes to the existing VAA literature, in particular its methodological dimension. Moreover, this chapter includes the first attempts to assess the validity of the French VAA of *La Boussole présidentielle*.

A – The socio-demographic and political profile of La Boussole présidentielle's users

Without any surprises the socio-demographic profile of *La Boussole présidentielle*'s users, whether in 2012 or in 2017, displays the same biases that have been identified by the early studies on VAAs (see Table 4.1). *La Boussole présidentielle*'s users are more male, young and highly educated. We observe precisely the same type of socio-demographic biases in the two samples. As VAAs are an opt-in web questionnaire, attrition of the number of respondents is high, in 2012 about 625,000 users received a "voting recommendation" but only about 110,000 users answered the pop-up questionnaire that appears after the VAA users have received their "voting recommendation"; in 2017, these numbers are about 445,000 and 75,000 respectively (see Table 4.2). The socio-demographic composition of these second samples differs from that of the whole user population. The "pop-up" samples are more male and older than the whole user population. This is probably due to the fact that to keep answering questions about politics in an opt-in web questionnaire one needs to be interested in politics, hence leading to the increased percentage of men and to the lowering percentage of young respondents in those "pop-up" samples. With regards to the level of education of respondents in the "pop-up" samples, in 2012 the bias in favour of highly educated respondents declines while it increases in the 2017 sample. We do not have elements of

answer about this different trend in the two “pop-up” samples. However, what is clear is that VAA samples are consistent in their socio-demographic biases, and therefore specific statistical adjustments are required if one aims to build a representative sample or if one aims to control for the socio-demographic variations within the daily collected samples (see Chapter 5 for this specific issue).

Whether the high users’ figures of *La Boussole présidentielle* represent clearly two very large datasets, when comparing these data with other European countries, the percentage of the French voting population who visited *La Boussole présidentielle* is very low: 1.4 per cent in 2012, and 0.9 per cent in 2017. Among the 16 countries in which Marschall (2014) has collected data on the number of VAA users and compared these data to the number of voters who turned out to the voting booth France would rank among the bottom three countries of this ranking: in 2012 the number of *La Boussole présidentielle* users amount to 1.7 per cent of the total number of votes casted in the election, this number is of 1.2 per cent in 2017. In Marschall’s ranking (2014: 96), 11 countries have registered a number of users higher than 5 per cent of the voter turnout, among which 8 countries higher than 10 per cent, and 3 countries higher than 30 per cent, namely Finland, Germany, and the Netherlands.

Table 4.1. Socio-demographics distribution of La Boussole présidentielle's users (first and second round users)

		2012 users	2017 users
Gender	Woman	45.8	47
	Man	54.2	53
Age	18-24	24.4	25.5
	25-34	30	30.2
	35-49	24.4	27.1
	50-64	15.4	12.3
	65<	5.8	4.4
Level of education			
	No degree	3.9	3.4
	Lower than high school	17.7	11.5
	High school degree	23.4	21
	College education	19.6	19.6
	University degree	35.2	44.6
N		627,647	447,483

Table 4.2. Socio-demographics distribution of *La Boussole présidentielle*'s users who answered the pop-up questionnaire (first and second round users)

		2012 users	2017 users
Gender	Woman	44.2	39.5
	Man	55.8	60.5
Age	18-24	15.3	22.7
	25-34	21.2	28.8
	35-49	27	28
	50-64	25.9	14.9
	65<	10.6	5.6
Level of education			
	No degree	3.9	2.6
	Lower than high school	23.4	10.5
	High school degree	21.8	18.5
	College education	19.7	20
	University degree	31.2	48.5
N		111,674	77,422

If we now turn to vote intention, we observe that the 2012 users were more strongly supporting Mélenchon (+7.6 per cent) and Bayrou (+4.7 per cent), and were less likely to declare their support for Sarkozy (-8.1 per cent), Hollande (-2.9 per cent) and Le Pen (-2 per cent). In 2017, *La Boussole présidentielle* users were more strongly supporting Macron (+7.8 per cent), Mélenchon (+6.9 per cent) and Hamon (+4 per cent), and were less likely to declare their support for Le Pen (-10.6 per cent) and Fillon (-7.9 per cent). Overall, and in particular in 2017, we observe an overrepresentation of left wing and centrist voters among VAA users and an underrepresentation of conservative and right wing voters. In 2017, this political bias is probably due to the fact that a business university – Audencia – strongly promoted the

VAA among its networks of students and alumni, and that the only media partner in 2017 was the free daily *20Minutes* which is mostly an urban-based daily.

The vote intention data collected in-between the two rounds are less biased than those collected prior to the first round. In 2012, *La Boussole présidentielle* users who visited the application in-between the two rounds were more likely to vote for Hollande than the overall voting population (+4.5 per cent) and less likely to vote for Sarkozy. And, in 2017, it is Le Pen's supporters who are overrepresented among *La Boussole présidentielle* users in-between the two rounds (+2.4 per cent) to the expense of Macron's supporters. It is worth noticing that in the 2017 sample there is a strong surge in the intention to cast a blank vote or to abstain; blank and null ballots will amount to more than 4 millions in the second round of the 2017 presidential election, representing about 8.4 per cent of the voting population, a record level under the French 5th Republic.

Online VAAs do not aim to be used as polls and therefore these political biases in the sample collected are not problematic per se. However, they do emphasize the consistent difficulty that VAAs encounter to attract older, less educated and rural voters, which leads to the consistent underrepresentation of conservative and right wing voters in these French VAA samples. Nevertheless, the high number of respondents still allows VAA researchers to analyse the individual mechanisms of voting behaviour in each voting group, as we will see in Chapter 5. But we must first assess the validity of what *La Boussole présidentielle* and other VAAs aim to do: measuring users' latent political preferences by asking them to express their policy preferences on a wide range of issue statements.

Table 4.3. Political profile of La Boussole présidentielle's users who visited the application before the first round²⁰

	2012			2017	
	Users	Results		Users	Results
Nathalie Arthaud	0.4	0.6	Nathalie Arthaud	0.3	0.6
Philippe Poutou	1	1.1	Philippe Poutou	1.2	1.1
Jean-Luc Mélenchon	18.7	11.1	Jean-Luc Mélenchon	26.5	19.6
Eva Joly	3.2	2.3	Benoît Hamon	10.4	6.4
François Hollande	25.7	28.6	Emmanuel Macron	31.8	24
Jacques Cheminade	0.3	0.2	François Fillon	12.1	20
François Bayrou	13.8	9.1	Nicolas Dupont-Aignan	3.7	4.7
Nicolas Sarkozy	19.1	27.2	Marine Le Pen	10.7	21.3
Nicolas Dupont-Aignan	1.9	1.8	François Asselineau	2.4	0.9
Marine Le Pen	15.9	17.9	Jacques Cheminade	0.1	0.2
			Jean Lassalle	0.9	1.2
N	90,568			119,235	

Table 4.4. Political profile of La Boussole présidentielle's users who visited the application between the two rounds

	2012				2017		
	Users	Results	Results		Users	Results	Results
François Hollande	47	56.1	51.6	Marine Le Pen	25.8	36.3	33.9
Nicolas Sarkozy	36.9	43.9	48.4	Emmanuel Macron	45.2	63.7	66.1
Do not know	6.6			Do not know	8.3		
Blank vote	7.6			Blank vote	15.3		
Abstention	1.9			Abstention	5.4		
Total	100	100		Total	100	100	
<i>N</i>	20,205			<i>N</i>	15,143		

²⁰ The vote intention question was the first question of the pop-up questionnaire that appeared after the VAA users had visualize their “voting recommendation”, and was phrased as follows: “If the first round of the presidential election would be today, for which candidate would you vote?”

B – Are we asking the right questions?

This section aims to contribute to the methodological assessment of VAAs by focusing on some of the normative principles within these online tools. These “vote helpers” are seen as valuable resource for undecided voters seeking authoritative information on the issue positions of parties (Farrell and Schmitt-Beck, 2008). A latent hypothesis of VAA designers is that voters, and especially uninformed voters who are the target group of these applications, hold a large number of coherent policy preferences and priorities on most issues of the campaign. We argue that not all items are equally useful when designing a VAA as some of them fall short of reflecting the latent preferences of politically unsophisticated users. Particularly, the inclusion of attitude measurement on technical issues such as economic policy fall short at helping users match their preferences to the ones of the parties and candidates.

1) VAAs’ issue statements and the validity of measuring political preferences

Nowadays, with the help of online VAAs, millions of voters around the globe have matched their political preferences with those of parties and candidates running for office.

Two principles lie in the DNA of these “vote helpers”. First, the idea of civic education, that is helping citizens to learn about the positions of political parties on salient issues and policies. In fact, before the era of Internet communication, the first VAAs were made out of a floppy disk or a booklet as tools to foster civic education in high schools (see Chapter 1). Nowadays, VAA users are asked to position themselves on more or less 30 campaign issues. Once the questionnaire filled, users receive a “voting recommendation” and can compare their positions on each issue with the ones attributed to the parties. And the second idea is to foster content-based political debates to counter-balance the trend toward an increasing personalization and dramatization of politics, and particularly political campaigns. VAAs are regularly sponsored and/or developed by actors (public institutions, NGOs, e-citizens) which objective is to increase turnout, to stimulate political debate, and to raise awareness about parties’ positions on key policy issues (Fivaz and Schwarz, 2007; Marschall and Schultze, 2012).

The majority of VAAs implicitly adopt a specific view of the “competence gap” that plagues contemporary electoral practices: citizens lack sufficient knowledge of the policy

programs of political parties running in an election (Anderson and Fossen, 2014). According to this diagnostic, “VAAs reduce the voters’ costs for surveying and processing relevant information, thereby making the participation in elections on the basis of an optimized cost-effectiveness ratio more probable” (Garzia, 2010: 19). Thus, by reducing the costs for collecting and processing information, VAAs are likely to increase political participation (Marschall and Schmidt, 2010; Marschall and Schultze, 2012). Given their focus on issue voting, VAAs do expect citizens to have fairly stable policy-preferences and based on an aggregation of these preferences offer them a “voting recommendation”. Hence, the assumption that this political match can mirror their preferences as closely as possible also brings forward the idea to increase the congruence between voters’ preferences and public policies through VAAs.

The emergence and success of VAAs have sparked substantive methodological debates about the validity and reliability of their matching procedure. The inherent simplification of the complexity of modern societies to 30 issue statements raises concern about “the topic, the exact wording, the direction, and the formulation of the statements” which “may all produce differences in answers” (Walgrave et al., 2009: 1162-1163). However, the goal of VAAs is not to favour a particular outcome but to strengthen the electoral process in itself. In fact, VAA developers commit to “proceduralist neutrality” (Anderson and Fossen, 2014: 225), that is a form of neutrality in the VAA making process that does not aim to privilege a particular opinion or set of views among the plurality found in an election. The commitment to this “neutrality is reflected in efforts to avoid manipulation and bias, as well as in striving for methodological soundness and validity of the tool”.

For instance, it means that the issue statements included in a VAA should be representative of the content of the political campaign (Groot, 2003) and that they should allow to implicitly differentiate between parties (Krouwel et al., 2012). Similarly, measurement scales should allow for the expression of a range of positions as broad as the ones existing within the political sphere (Groot, 2003; Wagner and Ruusuvirta, 2011; Baka et al., 2012). The source and procedure used to position parties also matter a great deal in the matching procedure as different biases can intervene in the coding process. Gemenis and van Ham (2014) discuss biases related to the party self-positioning and the expert survey methods, and praise the ones involving several actors in the coding method and an iterative procedure for reaching agreement as these methods maximise the validity of party positions. Finally, the reliability of the voting advice is also discussed in the VAA literature, as translating answers

from the statements into a voting advice is what users are coming for on the tool (see Louwse and Rosema 2013 for a discussion of the main methods of party-users comparison). These methodological debates are essential in order to improve the scientific soundness of VAAs but also in order to offer the best possible match to VAA users. As mentioned earlier, the assumption behind these applications is that parts of the electorate are ill informed and will find in VAAs a tool that reduces the costs for collecting and processing information, and that highlights the differences and thus help to distinguish between the parties.

Since the seminal studies of Philip E. Converse, the image of an informed voter who holds crystallized and coherent political opinions in alignment with her interests and predispositions has been repeatedly challenged (Converse 1964, Zaller 1992, Delli Carpini and Keeter 1996, Bartels 2005). Holding a coherent opinion on an issue implies a basic knowledge of the issue, the comprehension of what is at stake and some basic information over the arguments for and against the policy proposal in question. Past research on the coherence and stability of political attitudes has revealed that not all citizens have clear and consistent attitudes. This fact is simply revealed when asked in public opinion surveys: Converse famously argued that the political attitudes of a considerable number of citizens are in fact “non-attitudes” exhibiting no consistency across time (1964, 1970). The widely accepted Receive-Accept-Sample (RAS) model has illustrated that most citizens do not have stable, meaningful political attitudes but rather respond in public opinion surveys based on considerations they are exposed to more often or most recently (Zaller 1992).

It should be noted that the lack of coherence in political attitudes does not necessarily point to the existence of an apolitical public. During the last decades a large number of surveys have shown that citizens hold meaningful ideological predispositions, often termed as political values in the literature. These political values stem from socialization processes (Rokeach 1968), personality traits (Carmine et al. 2008, Mondak and Halperin 2009, Gerber et al. 2009, Mondak et al. 2010) or even genetic factors (Alford et al., 2005; Verhulst et al., 2012); and tend to exhibit a fair degree of consistency in repeated surveys (Inglehart 1985, Heath, Evans & Martin 1994). Hence, according to the value interaction hypothesis, “instead of maintaining separate political attitudes over diverse questions respondents need only assess the relevance of the questions to a relatively limited set of values” (Alvarez and Brehm, 2002: 18). A large number surveys have provided strong empirical evidence that confirm the connection of deeper held values with several dimensions of political behaviour such as political preferences (Hurwitz & Peffley 1987, Feldman 1988, Zaller and Feldman 1992,

Pollock et al., 1993), candidate evaluations (Feldman 1988) or electoral behaviour (Evans et al., 1996, Knutsen and Kumlin 2005). However, it has been repeatedly shown that the extent to which citizens can make a connection of their political values with a policy issue depends on two key factors. The first criterion refers to the extent to which they possess the necessary political information to realize this link (Zaller 1992, Delli Carpini and Keeter 1996, Bartels 2007). Past research has repeatedly shown that, on the one hand, politically sophisticated individuals possess the cognitive skills and contextual information to recognize the value implications of a political message and accept or reject it based on their deeper held political predispositions. Whereas on the other hand, political novices often fail to realize this connection ending up supporting policies with which they would disagree had they had more political information (Zaller 1992, Bartels 2007). This aspect is crucial for the validity of VAAs. Since the VAA algorithm translates political preferences into a voting advice, the voter will end up with a wrong recommendation if the policy preferences expressed in the VAA do not match his predispositions.

A second key parameter for the connection of predispositions with specific issues regards the difficulty of the policy issue in question (Pollock et al. 1993, Johnston and Wronski 2013). Not all types of issues are of the same cognitive complexity. What is more, some issues are discussed more prominently in the political discourse, central in the electoral campaign and discussed more extensively than others. According to the classic taxonomy developed by Edward G. Carmines and James E. Stimson (1980: 80), easy issues are those that are “symbolic rather than technical [...] deal with policy ends rather than means” and have been discussed on the political agenda for a long time. In turn, choosing sides on these issues becomes easier for a voter regardless of his level of political engagement and sophistication, eliciting “gut responses” on the part of the citizens. In Carmines and Stimson’s own words, easy issues are those where “a gut response is elicited equally from well-informed and ill-informed, from interested and uninterested, from active and apathetic voters” (p. 80). Hence, examples of easy issues are attitudes toward the restriction of immigration or the right for same sex marriage, where citizens need no details to make a connection with the policy proposal and their latent attitudinal predispositions (see also Johnston and Wronski, 2013) but decide on the basis of their likeness for the group in question (Sniderman et al., 1991). On the other hand, hard issues are those that deal with policy means rather than ends, have not been long in the public agenda, and are of a technical, non-symbolic nature.

For example, issues in the 2012 French Presidential election like the additional taxation of overtime hours for employers, the change of the French Value Added Tax (VAT) or the replacement of nuclear power plants by other sources of energy are considered as hard issues. Similarly in the 2017 French Presidential election, issues such as the fact to stop granting unemployment benefits to an unemployed person who refuses a job or the introduction of proportional representation in the National Assembly are considered as hard issues. When dealing with such issues the connection of deeper held predispositions with specific attitudes becomes easy to miss and citizens are more likely to accept messages that contradict their deeper held values and predispositions (Zaller, 1992; Lau and Redlawsk, 2006). This point is again crucial for designing a valid and reliable VAA.

To sum up, we anticipate that the coherence of users' responses to the VAA will not be uniform across issues. For easy issues, both political sophisticates and novices will be able to connect the policy items used in VAAs with their political predispositions. For hard issues, however, political novices will fail to grasp this connection and in turn the voting advice generated by the VAA will be most meaningful and accurate only for the politically aware. We move on to test these hypotheses using data from the French VAA of *La Boussole présidentielle* that collected data during the 2012 and 2017 French presidential elections.

2) Evaluating the validity of *La Boussole présidentielle* issue statements according to users' political sophistication

As previously mentioned, *La Boussole présidentielle* asks users to position themselves on 30 issue statements. In order to test the hypothesis according to which the level of political sophistication condition the fact of holding structured and stable attitudes over a large range of political issues, it is necessary to classify the items according to Carmines and Stimson's taxonomy of "easy" and "hard" issues. Two criteria can be distinguished for classifying issues as easy or hard. First, the familiarity of voters with an issue, which is determined by the duration it has been discussed in the political agenda. If an issue is present in the political discussions only since a few years it is unlikely that the majority of voters have well-structured attitudes toward it. For instance, the issue of forcing the government to limit the public deficit appeared in the political agenda only a couple of years before the 2012 election within the broader context of the European public debt crisis. Whereas, the argument according to which companies are paying too many taxes and therefore tax-cuts should be

implemented is an issue that exist in the public debate since the 1980s and the spread of neo-liberal policies.

And second, we make the distinction between symbolic issues that rather deal with policy ends and technical issues that rather touch upon policy means. However, the symbolic nature of an issue may also be country-specific. For instance, because of the weight of the public sector and of public welfare service in French politics, some items that related to these issues are symbolic even if the statement wording appears rather technical. It is the case for the statement “The legal working week should remain at 35 hours” or “People should be able to retire at 60 without financial penalties” which deal with labour market reform and pension reform – symbolic issues in the French political debate – but phrased with technical words. Thus, in order to be classified as “easy”, an issue has to be present in the political agenda for a long time and symbolic in nature, while the issues classified as “hard” are rather young on the political agenda and are technical (see Table 4.5, Table 4.6, Table 4.7 and Table 4.8 for a classification of the issues included in the analyses). However, not each item is meeting both criteria for being “easy” or “hard”, few issues are classified as “mixed”. For example, the statement “An universal income should be installed” deals with an issue that has emerged in the public debate just several months before the 2017 presidential campaign; hence despite being a symbolic issue cannot be considered as an “easy” issues as voters did not have time to form a stable policy preference about this issue that would reflect their latent preferences. Another example is “Taxes that burden companies should be decreased”, this issue is regularly in the political agenda since the mid-1980s but touches upon a technical aspect of taxation. Whether they are technical or young on the political agenda, these “mixed” issues should display similar results in the analysis than for “hard” issues.

Table 4.5. Socioeconomic issue statements of *La Boussole présidentielle 2012* classified according to Carmines and Stimson's taxonomy

	Items	Policy domains	<i>Long time in the agenda</i>	<i>Technical vs. Symbolic</i>	Carmines and Stimson's Taxonomy
1	The state should take measures to increase wages	Income and taxes	Yes	Symbolic	Easy
2	To guarantee good quality public services, the number of civil servants should be increased	Employment	Yes	Symbolic	Easy
3	People should be able to retire at 60 without financial penalties	Welfare	Yes	Symbolic	Easy
4	Taxes for the wealthiest people should be increased	Crisis	Yes	Symbolic	Easy
5	Taxes that burden companies should be decreased	Employment	Yes	Technical	Mixed
6	The legal working week should be allowed to exceed 35 hours	Employment	Yes	Technical	Easy
7	To better support the poor, certain social benefits should be increased	Welfare	Yes	Technical	Mixed
8	Employees should not pay tax on income from overtime hours	Income and taxes	No	Technical	Hard
9	The state should set maximum rent levels	Income and taxes	No	Technical	Hard
10	Sales tax (VAT) should be increased to finance part of social security spending	Income and taxes	No	Technical	Hard
11	Due to the social security deficit, sick people should pay a larger part of their healthcare expenses	Welfare	No	Technical	Hard
12	Banks should be forbidden to invest private citizens' savings in the financial markets	Crisis	No	Technical	Hard
13	The government should be forced to limit the public deficit	Crisis	No	Technical	Hard
14	Social benefits received by young offenders' families should be withdrawn	Welfare	No	Technical	Hard

Table 4.6. Conservative-progressive issue statements of *La Boussole présidentielle 2012* classified according to Carmines and Stimson's taxonomy

	Items	Policy domains	<i>Long time in the agenda</i>	<i>Technical vs. Symbolic</i>	Carmines and Stimson's Taxonomy
1	Foreigners who live in France for a long time should be able to vote in local elections	Immigration	Yes	Symbolic	Easy
2	Foreigners that live in France legally should be accepted as they are, without trying to change their culture	Immigration	Yes	Symbolic	Easy
3	Immigration in France should be more restricted	Immigration	Yes	Symbolic	Easy
4	Offenders should be punished more severely	Law and Order	Yes	Symbolic	Easy
5	Homosexual couples should have the right to get married	Society issues	Yes	Symbolic	Easy
6	France should leave the Euro	EU	Yes	Symbolic	Easy
7	France should go further with the European integration process	EU	Yes	Symbolic	Easy
8	France should protect its welfare state against European rules	EU	Yes	Symbolic	Easy
9	A severely sick person that no longer wants to live, should have the right to be assisted in ending his or her life	Society issues	No	Symbolic	Mixed
10	In France today, we pay too much attention to right and not enough to duties	Society issues	No	Symbolic	Mixed
11	To increase birth rate, the state should help families regardless of their income	Society issues	No	Technical	Hard
12	The President should not appoint the directions of public radio and television	Law and Order	No	Technical	Hard
13	Downloading from the Internet should be punished more severely	Law and Order	No	Technical	Hard
14	France should replace its nuclear power plants with other sources of energy	Environment	No	Technical	Hard
15	The state should help farmers, even those that pollute the environment	Environment	No	Technical	Hard
16	The European Union should reinforce its control over member states' budgets	EU	No	Technical	Hard

Table 4.7. Socioeconomic issue statements of *La Boussole présidentielle 2017* classified according to Carmines and Stimson's taxonomy

	Items	Policy domains	Long time in the agenda	Technical vs. Symbolic	Carmines and Stimson's Taxonomy
1	The state should take measures to increase wages	Income and taxes	Yes	Symbolic	Easy
2	The number of civil servants should be decreased	Employment	Yes	Symbolic	Easy
3	The legal working week should remain at 35 hours	Employment	Yes	Symbolic	Easy
4	The State should intervene as little as possible in the economy	Public spending	Yes	Symbolic	Easy
5	The retirement age should be brought back to 60 years old	Public Spending	Yes	Symbolic	Easy
6	An universal income should be installed	Income and taxes	No	Symbolic	Mixed
7	Taxes that burden companies should be decreased	Employment	Yes	Technical	Mixed
8	Companies should be further controlled in their firing procedures	Employment	No	Symbolic	Mixed
9	The decrease of public deficit should be the priority of the next government	Public spending	No	Symbolic	Mixed
10	The wealth tax should be suppressed	Income and taxes	Yes	Technical	Mixed
11	A person unemployed who refuses a job that fits his qualification should stop receiving unemployment benefits	Employment	No	Technical	Hard
12	French companies should have the priority for State related purchase orders	Public spending	No	Technical	Hard

Table 4.8. Conservative-progressive issue statements of *La Boussole présidentielle 2017* classified according to Carmines and Stimson's taxonomy

	Items	Policy domains	Long time in the agenda	Technical vs. Symbolic	Carmines and Stimson's Taxonomy
1	Immigration in France should be more restricted	Immigration	Yes	Symbolic	Easy
2	Foreigners who live in France for a long time should be able to vote in local elections	Immigration	Yes	Symbolic	Easy
3	Foreigners that live in France legally should be accepted as they are, without trying to change their culture	Immigration	Yes	Symbolic	Easy
4	Offenders should be punished more severely	Law and Order	Yes	Symbolic	Easy
5	It is acceptable to limit public freedoms in the name of the fight against terrorism	Justice and Institutions	Yes	Symbolic	Easy
6	France should leave the Euro	EU	Yes	Symbolic	Easy
7	France should go further into European integration	EU	Yes	Symbolic	Easy
8	France needs the EU to protect its citizens from the negative effects of globalization	EU	Yes	Symbolic	Easy
9	France needs the EU to pull its weight in shaping globalization	EU	No	Symbolic	Mixed
10	Military conscription should be re-established in France	Justice and Institutions	No	Symbolic	Mixed
11	Homosexual couples should not have the right to adopt children	Values	No	Symbolic	Mixed
12	In France today, we pay too much attention to rights and not enough to duties	Values	No	Symbolic	Mixed
13	A very sick person should be able to have the right to end his life in his own terms	Values	No	Symbolic	Mixed
14	Russia should be considered a full partner for France	Foreign Policy	No	Symbolic	Mixed
15	Nuclear power plants should be replaced by renewable sources of energy	Environment	No	Technical	Hard
16	Farmers should convert their production toward organic farming	Environment	No	Technical	Hard
17	Political parties should be represented in the National Assembly proportionally to their electoral results	Justice and Institutions	No	Technical	Hard
18	Multinational companies should be taxed at the European level	EU	No	Technical	Hard

In order to assess the utility of each item for the extraction of the total scale, we employ factor analysis, a method that has been deemed suitable for assessing the usefulness of single items in measuring a latent variable. In accordance with the methodology and the algorithm used by *La Boussole présidentielle* that position user preferences are structured according to two latent dimensions, as represented by the two dimensional political landscape (socio-economic left-right and conservative-progressive) (Vitiello, 2014; Vitiello and Krouwel, 2015; see also Chapter 3 of this dissertation), we use two separate confirmatory factor analyses extracting one factor for each scale: one factor analysis using all the socio-economic items and one factor analysis using all the progressive-conservative items. The decision to extract only one factor per scale is based on both a theoretical argument and a methodological argument. Theoretically, as we are testing the validity of summarizing users' preferences on two dimensions, respondents should display attitudinal consistency on each of those dimensions. That is answers to socio-economic items should correlate with each other as they aim to measure the same underlying dimension; the same applies to conservative-progressive items. Methodologically, Cattell (1966) suggested that the 'right' number of factors to extract can be determined by looking at the drop in amount of information, measured by the eigenvalue²¹, across successive factors. And because each factor, after the first, is extracted from a matrix that is a residual of the previous factor's extraction, the amount of information in each successive factors is less than in its predecessors. Thus to estimate, the 'right' number of factors one needs to observe the magnitude in eigenvalue drop from one factor to the next observed in the scree plot. "Ideally, the progression of factors will have a point at which the information drops off suddenly, with an abrupt transition from vertical to horizontal and a clear 'elbow'" (DeVellis, 2016: 129) shape in the plot line. Cattell's criterion calls for retaining those factors that lie above the elbow of the plot. In Annex 4.1 and Annex 4.2, we display all the scree plots for the factor analyses included in this chapter and all of them but one²² confirm that extracting one factor per scale is

²¹ An eigenvalue represents the amount of information captured by a factor. An eigenvalue of 1.0 corresponds to $1/k$ of the total variance among a set of items, where k represents the number of items. So a factor that achieves an eigenvalue of 1.0 contains the same proportion of total information than the typical single item, and as the goal of factor analysis is to arrive at a smaller number of variables, the factors should contain more information than the original single items.

²² According to Cattell's approach (1966), in the 2017 sample, the factor analysis on the socio-economic dimension for novice users shows that there are two factors extracted embedded with meaningful information about how the socio-economic items correlated with each other. However, as the analysis undertaken here is concerned with the connection of predispositions with specific issues following the bi-dimensional assumption of the VAA landscape, i.e. one factor per scale, we will not explore what this second factor on the socio-economic dimension means for novice users.

empirically confirmed by the scree plots; thus implying that the items included in the 2012 and 2017 VAA of *La Boussole présidentielle* did tap in two underlying dimensions of the French political landscape.

In order to investigate our central hypothesis (that hard items are of little use for citizens without extensive levels of political knowledge) we divide the sample between political sophisticates and novices. This is achieved by combining levels of education with levels of political interest, two variables that are valid proxies of political sophistication (Dalton, 2007). Hence, respondents who have a level of education higher than the high-school diploma, i.e. any sort of university degree²³, and declare that they are “somewhat” or “very” interested in politics are coded as sophisticates, while users who hold a high-school diploma or lower²⁴ and are “not much” or “not at all” interested in politics are coded as novices.

3) Results

Tables 4.9, 4.10, 4.12 and 4.13 report the results of the factor analyses for socio-economic left-right and conservative-progressive values respectively. For each presidential election and for each of the two dimensions of the political landscape, three separate analyses have been performed: one including the whole sample, one including only sophisticated users, and one including only novice users. Loadings over |0.5| are highlighted in bold.

Starting with the socio-economic left-right dimension (Tables 4.9 and 4.10) overall results illustrate that in 2012, 5 out of a total of 14 items (or 35.7%) fail to load for the whole sample, and in 2017 1 out of 12 items (or 8.5%) fails to do so. In alignment with our expectations, 5 out of 6 of these items are hard items according to the Carmines and Stimson’s typology (1980); the remaining item is a mixed item. Is however this finding triggered by an inability of novice users to connect their predispositions with specific attitudes or perhaps they indicate an alternative dimension? Our results suggest that it is the former. In fact, among politically sophisticated the percentage of items that load in the expected direction rises to 78.6 per cent in 2012 (11 out of 14 items) and 91.6% in 2017 (11 out of 12 items). On the other hand, among politically unsophisticated users only 21.4 per cent (3 out of 14) of items have a factor loading over 0.5 in 2012, and only 42 per cent in 2017 (5 out of 12

²³ DEUG, BTS, DUT, first or second year of undergraduate programmes, *Licence*, *Maîtrise*, M1, M2, DEA, DESS, *Grandes Écoles*, PhD.

²⁴ BEPC, BEP, CAP, *Certificat d’Études Primaires*, *Baccalauréat*.

items). In particular, in 2012 the items that load are all easy issues including “taxes for the wealthiest people should be increased”, “the number of civil servants should be increased”, “the state should take measures to increase wages” and that “people should retire at 60 without penalties”; and in 2017, three of the items that load are easy items and two of them are mixed but symbolic in nature such as the instalment of an universal income and the further control of companies in their firing procedures. Table 4.11 summarizes and compared the 2012 and the 2017 results which lead to the following conclusion: political sophistication plays an important role on the number of items that load successfully.

Table 4.9. Factor analysis of socioeconomic items according to level of political sophistication – La Boussole présidentielle 2012

	Items	Whole sample	Sophisticated users	Novice users
1	The state should take measures to increase wages	.668	.668	.697
2	To guarantee good quality public services, the number of civil servants should be increased	.715	.764	.568
3	People should be able to retire at 60 without financial penalties	.726	.741	.705
4	Taxes for the wealthiest people should be increased	.607	.645	.498
5	Taxes that burden companies should be decreased	-.468	-.586	-.072
6	The legal working week should be allowed to exceed 35 hours	-.662	-.734	-.446
7	To better support the poor, certain social benefits should be increased	.513	.585	.363
8	Employees should not pay tax on income from overtime hours	-.046	-.212	.394
9	The state should set maximum rent levels	.547	.595	.466
10	Sales tax (VAT) should be increased to finance part of social security spending	-.559	-.591	-.430
11	Due to the social security deficit, sick people should pay a larger part of their healthcare expenses	-.567	-.606	-.413
12	Banks should be forbidden to invest private citizens' savings in the financial markets	.407	.460	.312
13	The government should be forced to limit the public deficit	-.372	-.514	.044
14	Social benefits received by young offenders' families should be withdrawn	-.306	-.435	.108
	Variance explained	29.33%	35.72%	19.48%
	N	89,047	35,046	12,850

Table 4.10. Factor analysis of socioeconomic items according to level of political sophistication

	Items	Whole sample	Sophisticated users	Novice users
1	The state should take measures to increase wages	-.575	-.577	.571
2	The number of civil servants should be decreased	.713	.750	-.490
3	The legal working week should remain at 35 hours	-.678	-.693	.671
4	The State should intervene as little as possible in the economy	.512	.579	-.121
5	The wealth tax should be suppressed	.624	.668	-.369
6	An universal income should be installed	-.598	-.630	.525
7	Taxes that burden companies should be decreased	.615	.669	-.243
8	Companies should be further controlled in their firing procedures	-.679	-.693	.631
9	The decrease of public deficit should be the priority of the next government	.543	.603	-.117
10	The retirement age should not be brought back to 60 years old	-.690	-.710	.663
11	A person unemployed who refuses a job that fits his qualification should stop receiving unemployment benefits	.533	.580	-.314
12	French companies should have the priority for State related purchase orders	-.048	-.062	.061
		35.04%	39.08%	20.47%
	N	106,214	36,061	6,250

Table 4.11. Descriptive statistics of socioeconomic items' loading per user groups tested - 2017

	Socio-economic items	Whole sample	% of statements loading	Sophisticated users	% of statements loading	Novice users	% of statements loading
2012	Easy	4/4		4/4		3/4	
	Mixed	2/3		3/3		0/3	
	Hard	3/7		4/7		0/7	
	Total	9/14	64.3%	11/14	78.6%	3/14	21.4%
2017	Easy	4/4		4/4		3/5	
	Mixed	6/6		6/6		2/5	
	Hard	1/2		1/2		0/2	
	Total	11/12	91.5%	11/12	91.6%	5/12	42%
Difference (2017-2012)			+27.2 pts.		+13 pts.		+20.6 pts.

The respective analysis for conservative-progressive values (Tables 4.12 and 4.13) yields similar results regarding the difference between sophisticated and novice users, but we observe a strong gap between how the items of the VAA performed to measure the overall conservative-progressive dimension in 2012 and in 2017 (The main findings are summarized in Table 4.14). In fact, in 2012 for the whole sample only 6 out of 16 items yield a factor loading over $|0.5|$, that is a total of only 37.5% of the items; of those items 5 are easy items and one is a mixed item. Whereas in 2017, for the whole sample 12 out of 18 items yield a factor loading over $|0.5|$, that is precisely two third of the items, 8 of which are easy items and 4 of which are mixed items. In both years, whether they touch upon energy policy, institutional reform or EU policy, all hard items failed to load. We note that items that were included in the VAA in both elections loaded in 2017 but did not in 2012, those are EU items such as “France should leave the Euro” or “France should go further into European integration” or items regarding EU, national welfare protection, and globalization. How come these items loaded in 2017 but not in 2012? We believe the explanation needs to be found in the values that were mobilized by the main candidates running for President. In 2012, the EU issue was mostly phrased in socio-economic terms with the victorious candidate François Hollande promising to renegotiate the Lisbon treaty to provide France with more financial flexibility with regard to its public deficit. Hence, the EU items aiming at measuring the nationalist vs. supranational cleavage within the conservative-progressive dimension failed to do so. While in 2017, the EU was framed during the campaign precisely in those terms by the two runner-up candidates. Emmanuel Macron argued that the EU was the best level of governance to protect France in the context of international economic competition, and by Marine Le Pen argued that the national level was the best way to protect France from the negative effects of globalization. The mobilization of the EU through a value frame during the 2017 campaign would explain why 4 out of 5 of the EU items load successfully across all user groups in the 2017 sample while none of them did in 2012 despite the same formulation.

Finally if we compare the sophisticated and the novice users in both Table 4.12 and 4.13, we observe that for novice users only easy items but one mixed item (in 2017: “France needs the EU to pull its weight in shaping globalization”) yield a factor loading over $|0.5|$, while for sophisticated users almost all easy and mixed items yield a factor loading over $|0.5|$ (the results are best read in Table 4.14); hence, confirming that political sophistication discriminate in the accuracy of VAA items in reflecting latent preferences of users and of the “voting recommendation” produced.

Table 4.12. Factor analysis of authoritarian-libertarian items according to level of political sophistication – La Boussole présidentielle 2012

	Items	Whole sample	Sophisticated users	Novice users
1	Foreigners who live in France for a long time should be able to vote in local elections	.786	.802	-.714
2	Foreigners that live in France legally should be accepted as they are, without trying to change their culture	.696	.689	-.688
3	Immigration in France should be more restricted	-.822	-.821	.760
4	Offenders should be punished more severely	-.689	-.698	.544
5	Homosexual couples should have the right to get married	.607	.681	-.392
6	France should leave the Euro	-.416	-.322	.416
7	France should go further with the European integration process	.337	.249	-.427
8	France should protect its welfare state against European rules	-.002	.187	.358
9	A severely sick person that no longer wants to live, should have the right to be assisted in ending his or her life	.138	.280	.183
10	In France today, we pay too much attention to right and not enough to duties	-.623	-.673	.437
11	To increase birth rate, the state should help families regardless of their income	-.051	-.184	-.242
12	The President should not appoint the directions of public radio and television	.345	.435	-.068
13	Downloading from the Internet should be punished more severely	-.263	-.316	.126
14	France should replace its nuclear power plants with other sources of energy	.477	.576	-.251
15	The state should help farmers, even those that pollute the environment	-.140	-.211	-.127
16	The European Union should reinforce its control over member states' budgets	-.229	-.242	.097
	Variance explained	23.78%	26.46%	18.03%
	N	86,541	34,382	12,167

Table 4.13. Factor analysis of authoritarian-libertarian items according to level of political sophistication – La Boussole présidentielle 2017

	Items	Whole sample	Sophisticated users	Novice users
1	Immigration in France should be more restricted	.762	.774	.685
2	Foreigners who live in France for a long time should be able to vote in local elections	-.669	-.681	-.599
3	Foreigners that live in France legally should be accepted as they are, without trying to change their culture	-.657	-.667	-.643
4	Offenders should be punished more severely	.611	.640	.505
5	It is acceptable to limit public freedoms in the name of the fight against terrorism	.512	.511	.538
6	France should leave the Euro	.602	.568	.656
7	France should go further into European integration	-.570	-.564	-.537
8	France needs the EU to protect its citizens from the negative effects of globalization	-.560	-.555	-.557
9	France needs the EU to pull its weight in shaping globalization	-.597	-.568	-.648
10	Military conscription should be re-established in France	.458	.479	.395
11	Homosexual couples should not have the right to adopt children	.569	.607	.446
12	In France today, we pay too much attention to rights and not enough to duties	.503	.535	.375
13	A very sick person should be able to have the right to end his life in his own terms	-.139	-.209	.040
14	Russia should be considered a full partner for France	.550	.590	.414
15	Nuclear power plants should be replaced by renewable sources of energy	-.352	-.396	-.228
16	Farmers should convert their production toward organic farming	-.302	-.313	-.223
17	Political parties should be represented in the National Assembly proportionally to their electoral results	.221	.194	.295
18	Multinational companies should be taxed at the European level	-.110	-.190	.149
	Variance explained	26.89%	28.08%	22.86%
	N	101,443	34,590	5,858

Table 4.14. Descriptive statistics of authoritarian-libertarian items' loading per user groups tested

	Authoritarian -libertarian items	Whole sample	% of statements loading	Sophisticated users	% of statements loading	Novice users	% of statements loading
2012	Easy	5/8		5/8		4/8	
	Mixed	1/2		1/2		0/2	
	Hard	0/6		1/6		0/6	
	Total	6/16	37.5%	7/16	43.7%	4/16	25%
2017	Easy	8/8		8/8		8/8	
	Mixed	4/6		4/6		1/6	
	Hard	0/4		0/4		0/4	
	Total	12/18	66.6%	12/18	66.6%	9/18	50%
Difference (2017- 2012)			+29.1 pts.		+22.9 pts.		+25 pts.

4) A new method to improve VAAs' validity measurement

The goal of these factor analyses was two-fold: first testing whether VAA items, i.e. the issue statements from which the “voting recommendation” is calculated, are all equally helpful in matching users' preferences to the ones of the parties or candidates; second, proposing a new methodological procedure to test the validity of VAA issue statements to improve future VAAs.

In 2012, novice VAA users could not adequately connect their political preferences to the predispositions, which the two-dimensional political landscape aims to tap, neither through hard issues nor mixed items (no hard and mixed issues yield a loading higher than |0.5| among novice users in 2012), and did so with mixed results through easy items (7 out of 12 easy items). In 2017, there is an improvement as 11 out of 13 easy items yielded a loading higher than |0.5| among novices users, and a few of the mixed items did so as well (3 out of 11 mixed items), but still completely failed to do so on hard items. While for sophisticated users most easy and mixed items were helpful in positioning them in the political landscape, hard items were of limited usefulness (only 5 out of 12 in 2012, and only 1 out of 6 in 2017 yielded a loading higher than |0.5| among sophisticated users).

These findings have two implications. First, political sophistication plays an important role on the accurate measurement of latent preferences among VAA users. Second, hard items, i.e. issue statements that touch upon technical policy issues and that are rather recent issues in the public debate, do not significantly contribute to the validity of the “voting recommendation” provided. The development of *La Boussole présidentielle* for the 2017

presidential election built on the findings of the factor analyses carried out with the 2012 sample and tried to limit the number of hard items: in fact their number dropped from 13 in 2012 to 6 in 2017 out of a total of 30 issue statements. The last rows of Table 10.11 and Table 10.14 emphasize the improvement from 2012 to 2017 in the number of items that proved to be useful in order to assess voters' latent preferences by measuring their policy preferences. In 2012, 64.3 per cent of socio-economic items and 37.5 per cent of conservative-progressive items yield a factor loading higher than $|0.5|$ among the whole sample of users, while in 2017 the percentages rose to 91.5 and to 66.6 per cent, respectively. Strong disparities exist between the results for sophisticated users and for novice users, but the improved validity of the issue statements to measure what they aim to measure is substantive for all users' groups when comparing the two VAA samples.

In the end, the process of selecting and formulating issue statements leads to a trade-off between the precision of the "voting recommendation" produced by the VAA and the clarity and the simplicity of the content and formulation of those issue statements. The larger the number of items included in the VAA and the more specific the formulation of the statements, the more precise the voting advice will be. However, if the threshold of cognitive skills and political knowledge, to position oneself on the issue statements requires, is too high then the VAA fails at what it aims to do: to help undecided voters to match their political preferences to the policy positions of candidates or parties. Our analysis shows that to better measure the political preferences of politically unsophisticated voters, more easy items that ask about basic political values need to be included in VAA instead of hard items. For instance, more symbolic issue statements concerning redistribution ("Wealth redistribution is necessary to limit inequalities within society") should replace technical issue statements on the VAT or the wealth tax. Similarly, a symbolic issue statement on the protection of the environment ("We should do more to protect the environment") could replace the issue statements about energy policy and farming which aims to measure political preferences toward the environment.

CHAPTER 5 – LA BOUSSOLE PRÉSIDENTIELLE AND ELECTORAL ANALYSIS

A – Data collection and the study of French national elections

The study of French national elections has only recently been carried on a regular basis through survey data. While the American National Election Study or the British Election Study have been able to insure public funding in order to collect data on national elections for more than half a century, French Election Studies did not encounter the same positive circumstances and present a more scattered picture.

The first attempt at longitudinal data collection in the context of French elections took place as early as the birth of the Fifth Republic. Jean Dupeux, Alain Girard and Jean Stoetzel (1960) carried out a panel study for the referendum and the parliamentary elections of 1958; one of their main findings was to underline even at this point the importance of the “floating voter”. For the first Presidential election that involved direct voting, a two waves panel study was conducted in 1965 (for the presidential election) and 1967 (for the parliamentary election). However, this study covered only one electoral district, *Boulogne-Billancourt*, and involved 1,427 citizens in the first wave, among which 593 (41.5%) were successfully re-contacted in the second wave (Le Hay, 2009). In 1967, funded by American foundations, another panel study by Philip Converse and Roy Pierce (1986) was implemented for the parliamentary elections.

It is not until 1978 that we can speak of the birth of the French National Election Study. For the 1978 parliamentary elections, the Cevipof conducted a post-electoral survey with a representative sample made out of 4,507 individuals (Capdevielle et al., 1981). From this point onwards, the Cevipof conducted surveys for the Presidential elections from 1988 to 2017 and for the parliamentary elections from 1995 to 2017. However, until the early 2000s, the issue of funding would remain a major hurdle. For instance, in 1995 it was funding from the American National Science Foundation that allowed the research to be carried out. In 1997, a partnership with the national newspaper *Libération* made the research possible.

This precariousness of the French National Election Study came to an end in 2002, when the Minister of Domestic Affairs became a permanent co-funder of data collection endeavours aiming at understanding the electoral trends of the French voters (Nadeau et al., 2012). Since 2002, there is a resurgence of panel studies for the study of presidential and

parliamentary elections, which since 2002 have taken place 2 months apart from each other. Parallel to this progressive institutionalization of survey research, we observe a proliferation of electoral surveys of a different nature in order to measure public opinion and its evolution. For the 2007 elections, the Cevipof conducted three different electoral studies: the French political barometer (*Baromètre politique français*), which is a four wave study in the year before the start of the official campaign; a panel study (*Panel électoral français*) of four waves covering the 4 months of both presidential and parliamentary campaigns and elections; and lastly a post-electoral survey after the second round of the presidential election²⁵ (Nadeau et al., 2012). In 2012, the Cevipof and several partners²⁶ again conducted three electoral studies: a panel study (*Présidoscopie*) over a period of eight months with twelve waves of 6,000 voters each (Perrineau, 2013), a post-electoral survey after the second round of the Presidential election on a representative sample of 2,504 citizens, and an online VAA (*La Boussole présidentielle*) for the presidential election issuing more than 750,000 voting recommendations over a period of six weeks. Finally, in 2017 the Cevipof launched the *Enquête Nationale Électorale Française* (ENEF) which consisted in an online panel study of 17 waves interviewing 24,000 voters of which 14,000 have been interviewed in each wave, in collaboration with the newspaper *Le Monde* and the survey company IPSOS. This online panel study consisted in 16 waves of 17,000 citizens interviewed in each wave from November 2015 to June 2017²⁷.

The French electoral surveys of these last years show an evolution toward an increasing focus on the electoral campaign and the generated dynamics of campaigning within the electorate. The latest innovation among data collecting tools is the development of an online Voting Advice Application “*La Boussole présidentielle*”. In the light of an observed institutionalisation of French electoral studies, mostly through the realization of a panel study covering national elections, one may question the need for more data on the campaign processes. Most particularly: one could ask why VAA data?

²⁵ The *Baromètre politique français* interviewed 6000 voters in each wave, and the *Panel electoral français* interviewed 1846 voters (Cautrès and Muxel, 2009; Nadeau et al., 2012).

²⁶ The *Présidoscopie* study was funded by the Cevipof, the newspaper *Le Monde*, the foundation Jean-Jaurès and the foundation for political innovation (*Fondapol*). In 2012, *La Boussole présidentielle* was funded by the start-up *Kieskompas*, and the medias *20Minutes*, *Ouest-France*, and *Msn-M6-RTL*. In 2017, *La Boussole présidentielle* was funded by the free daily *20Minutes*.

²⁷ The ENEF was sponsored by the newspaper *Le Monde* and was carried out by the survey company IPSOS, www.enef.fr

B – Assessing VAA data for electoral research

Traditionally, campaign effects are measured through panel studies, which consist in interviewing the same individuals several times over a specific period, for instance before and after a campaign or before and after a television debate. This method allows to capture the dynamics of the voting decision-making process and to better assess its logics (Knight and Marsh, 2002). However, there are mostly two criticisms that are addressed to panel studies. The first is that this method cannot be used to assess the effects of unplanned campaign events, since the design of panel studies requires *ex ante* decisions about the choice of interviews dates in accordance with the event under study (electoral campaign, television debate, and so on). And the second is that respondents cannot all be interviewed on the same day, as a result of this technical constraints, the point of observation for a panel wave spreads over several days. Hence the data measured are more heterogeneous than if they would have been collected on the same day. This feature adds background statistical noise to the campaign effects and to the vote intentions measured: respondents interviewed at the end of the panel wave are exposed to campaign events to which respondents interviewed at the beginning of the panel wave are not.

It is mostly the second criticism that has led to the development of rolling cross-sections studies. This type of survey consists in daily cross-section surveys on smaller samples. The daily frequency of rolling cross-sections surveys allows researchers to approach “true causal inference” (Johnston and Brady, 2002: 283): “the potential fine ‘granularity’ of sample release facilitates causal attribution by making it possible to link campaign events directly with subsequent opinion change” (Brady and Johnston, 2006: 164). Therefore, the rolling cross-section design is particularly well suited for the study of campaign effects. However, as underlined by Brady and Johnston (2006), the small size of the daily samples leads to some limitations: the analysis of the opinion change during the campaign is rather observed at the aggregate level than at the individual level. VAA collected data share many features with rolling cross-sections surveys and can therefore be a fitting source for the analysis of campaign effects. Furthermore, VAA data produce large daily samples while traditional rolling cross-sections surveys do not, which allows for the individual level of analysis of campaign effects.

Besides the study of methodological issues related to the making of online VAAs, the electoral focus of VAA research has mostly focused on the potential effect of VAA use on

voters²⁸. There are only few studies that use VAA data to analyse voting behaviour or campaign dynamics (van de Pol et al., 2014; Vitiello and Krouwel, 2015). This atrophy is due to the double bias that characterises VAA data: a socio-demographic bias (young, educated and urban men) that echoes the biases of Internet access and of the political use of this technology; and a self-selection bias as VAA users voluntarily access the tool leading to a (strong) overrepresentation of respondents interested in politics. Despite these sampling weaknesses, VAA data also have advantages for the analysis of campaign dynamics, and in particular when compared to traditional survey techniques used for electoral analysis and notably in the context of primary elections.

First of all, *VAA*s collect data from a very large sample of respondents. VAA datasets includes between dozens of thousands and millions of respondents. In the countries where this type of applications is institutionalized, such as in the Netherlands, Switzerland or Germany, the percentage of the population that uses a VAA exceeds regularly 10% of the voting population (Garzia and Marschall, 2012; Marschall, 2014). In France, “*La Boussole présidentielle*” of 2012 has collected the responses of more than 600,000 voters (Vitiello and Krouwel, 2015). This very high number of respondents allows researchers to analyse more in details data regarding some sub-groups of the voting population, such as for instance voters of minor candidates, voters holding minority opinion, minorities, and so on. Moreover, VAA data provides daily large samples, which allows a fine-tuned analysis of campaign dynamics in particular the evolution of candidates’ images and of the probability to vote for each candidate or party during the campaign.

Secondly, as for other online surveys, *the self-administration of VAA surveys greatly reduces the cost of data collection, but also minimizes interviewer effects and social desirability effects, which increases the validity of the data collected*. Instead of answering to an interviewer, a VAA respondent rather answers to himself. In fact, whether the respondent engaged in the VAA for informative or recreational purposes, he does it because of his own personal interest and not because of an external solicitation. In addition, he has no interest in hiding some of his opinions because if he does he will not receive a honest “voting recommendation” from the VAA. Hence, there is a reward to provide honest responses. Despite this incentive to provide honest answers, researchers need to be able to identify users who would have not done so. Andreadis (2014) suggests to filter out respondents according to two criteria: the time the user took to answer questions and the distribution of his answers.

²⁸ See “Chapter 1 – Literature review”

Depending of the length of each issue statement, an answering time threshold can be established based on an unit of words per minute. If a respondent goes through the issue statements faster than the time necessary to read, comprehend and answer a statement then he is considered as not having positioned himself honestly on the issue statements. Then researchers should filter out respondents whose answers' distribution is linear, that is a respondent who would have answered to all issue statements in the same way. A linear distribution is symptomatic of incoherent answers if the VAA includes issue statements formulated in different ideological directions. For instance, the position "strongly agree" on issue statement A indicates a conservative position, while the same answer indicates a progressive position on statement B. A coherent respondent should on average change response from one statement to another. Finally, respondents can be filtered according to criteria proper to each study, as we will do in the following sections of this chapter.

Thirdly, despite the lack of representativeness of VAA samples, *the relationship between key explanatory variables of voting behaviour are well informed and measured in VAA samples*. As already underlined VAA data suffer from socio-demographics and attitudinal biases. Notwithstanding these biases, Fournier et al. (2015) compared the performance of VAA data to an online panel data (which sample followed the non-probabilistic quota method) and show that while the distribution of variables, such as voting intention, was biased in the VAA sample, the relationship between vote choice and its explanatory variables was measured almost to the same extent in both samples. In other words, a VAA does not provide a reliable representation of public opinion however it can explain it: "VAA data are likely to be reliable for the analysis of correlation between voting behaviour and the variables that influence it. One could therefore use VAA data to identify which type of voters supports each political party" (Fournier et al. 2015: 293).

Finally, last advantage of VAA data over other types of survey data is that *the self-selection bias of respondents becomes rather a bonus than a real bias* in the context of an open primary election. As a matter of fact the electorate of a primary election is characterised by the same double bias of VAA respondents. Exit poll realized during the 2011 French Socialist primaries and during the 2016 French primary of the right and the centre show that there is an overrepresentation of voters holding an university degree and who are interested by politics (De Luca and Venturino, 2015; ELABE exit poll of 20 November 2016). Thus, both VAAs and primary elections attract voters who feel concerned by such election. The self-selection bias of VAA respondents becomes in the peculiar context of a primary election a

sampling asset. Moreover, by attracting respondents who voluntarily take the initiative to use a VAA, VAA data avoid the bias due to the professional respondents of online surveys.

We will now proceed with three different electoral analyses realized with *La Boussole présidentielle* data. The first two (section C and section D) investigate rely on the main assumption of VAA, i.e. issue voting, to explore issue congruence between VAA users with the candidates of the first round of the 2012 and 2017 French Presidential elections and issue proximity with the two runners-up of the second round of the same elections. The third (section D) analyses the relative weight of issues agreement and candidate images in the campaign of the French primary of the right and the centre that took place in the fall of 2016.

C – Congruence between voters and candidates in the political landscape of La Boussole présidentielle

A minimal condition of representative democracy is that there is at least some form of connection between the interests of citizens and the policies pursued by their representatives. Democratic governance requires a level of government's responsiveness to what citizens' demand, and the latter are given the opportunity to react to what the former do (Pitkin, 1967). As it is during electoral campaigns that citizens and politicians interact the most about past and future policies, it is precisely at election times that the issue congruence between voters and political parties is most studied (Arnold and Franklin, 2012).

As online VAAs measured the positions of voters on many issues, 30 in the case of *La Boussole présidentielle*, and compare each user's positions to those of the candidates running for office, VAAs are by design a well-equipped research tool to study issue congruence between voters and candidates. We can do so by crossing two indicators provided by *La Boussole présidentielle*. The first one is the Euclidian distance between the voter and each of the candidate included in *La Boussole présidentielle* based on the 30 issue statements of the application, and the second one is the propensity to vote (PTV) for a given candidate.

For a long time electoral surveys have measured voting preferences by asking respondents to position themselves on an ideological continuum with a left-right scale or a progressive-conservative scale; and/or by asking respondents to declare whether they feel close or whether they identify with a party. In multidimensional and pluralistic political systems, are those questions enough to measure the structure of voters' preferences? How can such questions seize when a voter hesitate between several parties or candidates? How to

detect if the decision-making process of a voter follows a positive adhesion process to a candidate or rather a negative rejection of another candidate (choosing by adhesion or choosing by elimination)? According to Denni et al. (2012), the interest of PTV measures lies “in their capacity to shed light onto the decision-making process of voters” because such indicator allow to capture the hesitation of voters and “reveals the more or less complex map of voters’ preferences for several candidates”²⁹. Tiberj et al. (2013: 255) also argue that only answers to “PTV questions allow to capture the complexity of electoral choices”³⁰.

Until the evening of the first round of the French Presidential election, the users of *La Boussole présidentielle* could answer to the following question: “How likely are you to vote for each of the following candidates in the first round of the Presidential election? 0 means that you are not likely at all to vote for her/him, 10 means that you are sure to vote for her/him, in between you can temper your answer”.³¹ The question was then withdrawn after the first round because while this questionnaire item is meaningful when voters can choose between many candidates, it becomes less interesting when voters’ choice is limited to two candidates. In order to insure that VAA users have played ball when answering to the PTV questions by properly ranking their political preferences, we need to test some specific elements of the answers’ distribution. For instance, the answer category 10 that means the highest level of vote certainty should only be expressed once per user. Similarly, the answer category 0 should be the most used as expressing one’s preferences for one or more candidates lead to the elimination of others. With 10 candidates in 2012 and 11 candidates in 2017, expressing some preferences for 3 or 4 candidates leads to the elimination of the 7 others. Finally, the middle answer category 5 could be a way for respondents to avoid expressing their preferences; hence, to be valid, respondents should not abuse it.

Our data support these distribution hypotheses. Thus, among users who expressed some PTVs for the different candidates, the answer category 0 is by far the most answer given: in the 2012 dataset, 58.4% use it for at 6 candidates or more and 79.7% for 4 candidates or more, but only 0.8% use it for all the candidates; in the 2017 dataset these percentages are 71.5%, 86.7% and 1.5%. The middle answer category is often used (38.1% of users in 2012, 30.9% in

²⁹ Own translation.

³⁰ Own translation.

³¹ In the original language of the application: « Quelles sont les chances que vous votiez pour les candidats suivants au premier tour de l’élection présidentielle ? 0 signifie qu’il n’y a aucune chance que vous votiez pour lui/elle, 10 qu’il est certain que vous voterez pour lui/elle ; entre les deux vous pouvez nuancer votre réponse ».

2017), but 21.5% in 2012 and 18% in 2017 use it only for one candidate and 6.8% in 2012 and 4.9% in 2017 for three or more candidates. 38.3% and 31.6% of, respectively, the 2012 and 2017 users used the PTV of 10 and, in both cases, more than eight out of ten times, they did so only for one candidate. Finally, the other answer categories are much less frequently used in both datasets: depending of the answer categories, between 73.3% and 85.3% of users never use them. In a nutshell, we reach the same validity conclusions for this type of indicator than telephone surveys, that is PTV respondents “eliminate an important number of candidates”, “do not abuse of the middle answer category”, and “use all the scale options to temper their preferences toward the different candidates whose they did not eliminate” (Tiberj et al., 2013: 255).

In cases of advanced and institutionalized democracies, high levels of PTV imply congruence between the candidate/party and the voter (van Dijk, Krouwel and Boiten, 2013). Therefore by crossing PTV scores and Euclidian distances we can map VAA users and candidates congruence for the 2012 and 2017 French Presidential elections. According to the Downsian theory of spatial voting this computing the average distance between voters and candidates for each order of the PTV questions should suggest a negative correlation between the respondent’s likelihood to vote for a certain party and his/her distance to that party. In other words, the higher the likelihood of a respondent to judge a candidate positively with a high PTV score, the lower the respondent’s distance to that candidate on the spatial plane where we measure the policy preferences in two dimensions (the political landscape of *La Boussole présidentielle*).

The correlation coefficients between the two variables, displayed in Table 5.1 show that for all the candidates of the 2012 and the 2017 Presidential elections, the relationship between a voter’s propensity to vote for a candidate and the distance between his positions with those of the same candidate is negative. However, the detailed examination of the different coefficients for each candidate tempers our assertion. Figure 5.1 and Figure 5.2 display the graphical representations of the average Euclidian distances, between the positions of the VAA users and the candidates in the bi-dimensional political landscape, for answer category (0 to 10) of the PTV question.

Most bar charts show a gradual decline of the distance between voters and candidates in the political landscape of the VAA when the PTV scores expressed for the same candidates increase. The candidates of the major French political parties (PCF-FG, PS, UMP-LR, FN) display in both elections a correlation coefficient lower than -0.50. Mélenchon, Hollande,

Sarkozy and Le Pen in 2012, and Mélenchon, Hamon, Fillon and Le Pen in 2017 are the candidates for whose who observe the sharpest decrease of the Euclidian distance between voters who expressed a low PTV score and those who expressed a high PTV score in favour of these candidates. A decline, but not as sharp as for the candidates just mentioned, is also visible in the bar charts concerning Bayrou, Dupont-Aignan and Joly in 2012, and Asselineau, Dupont-Aignan and Macron in 2017. These data suggests that the issue statements included in *La Boussole présidentielle* have correctly measured political cleavages between these candidates and their respective electorates.

For the remaining candidates some issues arise. First of all, for some candidates – Cheminade in 2012 and 2017, and Lassalle in 2017 – we do not observe a decline in the average Euclidian distance when voters express a higher PTV scores for them: their bar charts evolve along a horizontal line. We can therefore claim that they are the less institutionalized candidates within the political landscape of these Presidential elections, and voters had the hardest time to rank their preferences for these candidates congruently with their actual distance from the issue positions of these candidates. Secondly, for the two extreme-left candidates of both elections, Arthaud and Poutou, we observe a sharp decline in the Euclidian distance from the PTV score of 0 to 1, then there is a linear but weak decrease in the Euclidian distance until the two third of the scale, followed by a stagnation for the few remaining PTV scores and by an increase in the distance on the highest PTV score. The stagnation of the distance in the last third of the PTV scale suggests that these voters are hesitating regarding their political preference toward these two candidates. As a matter of fact, in 2012 62.3% and 71.6% of *La Boussole présidentielle*'s users who expressed a high PTV (higher than 7 on the 0-10 scale) for Arthaud and Poutou, also did so for Mélenchon, and in 2017 the same numbers are of 66.8% and 75.3%³². Hence, the different pattern observed in the bar charts of the candidates Arthaud and Poutou indicates that the VAA users who expressed a high PTV scores in their favour are doubting between several candidates.

³² In 2012, there are 4,252 users who expressed a high PTV scores in favour of Arthaud, and 7,326 for Poutou. In 2017, there are respectively 1,981 and 6,035 users who did so as well.

Table 5.1. Correlation coefficients between the propensity to vote scores and the Euclidian distance between users of La Boussole présidentielle and candidates³³

2012		2017	
Arthaud	-0.24	Arthaud	-0.26
Poutou	-0.25	Poutou	-0.33
Mélenchon	-0.50	Mélenchon	-0.55
Joly	-0.37	Hamon	-0.55
Hollande	-0.50	Lassalle	-0.09
Cheminade	-0.07	Cheminade	-0.11
Bayrou	-0.31	Macron	-0.47
Sarkozy	-0.59	Fillon	-0.60
Dupont-Aignan	-0.22	Dupont-Aignan	-0.38
Le Pen	-0.54	Le Pen	-0.58
		Asselineau	-0.27

³³ For all coefficients, $p < 0,01$

Figure 5.1. Congruence between *La Boussole présidentielle*'s users and the candidates of the 2012 French Presidential election based on the average Euclidian distance between users and candidates in the bi-dimensional political landscape and the PTV scores expressed for each candidates (0-10 scale)

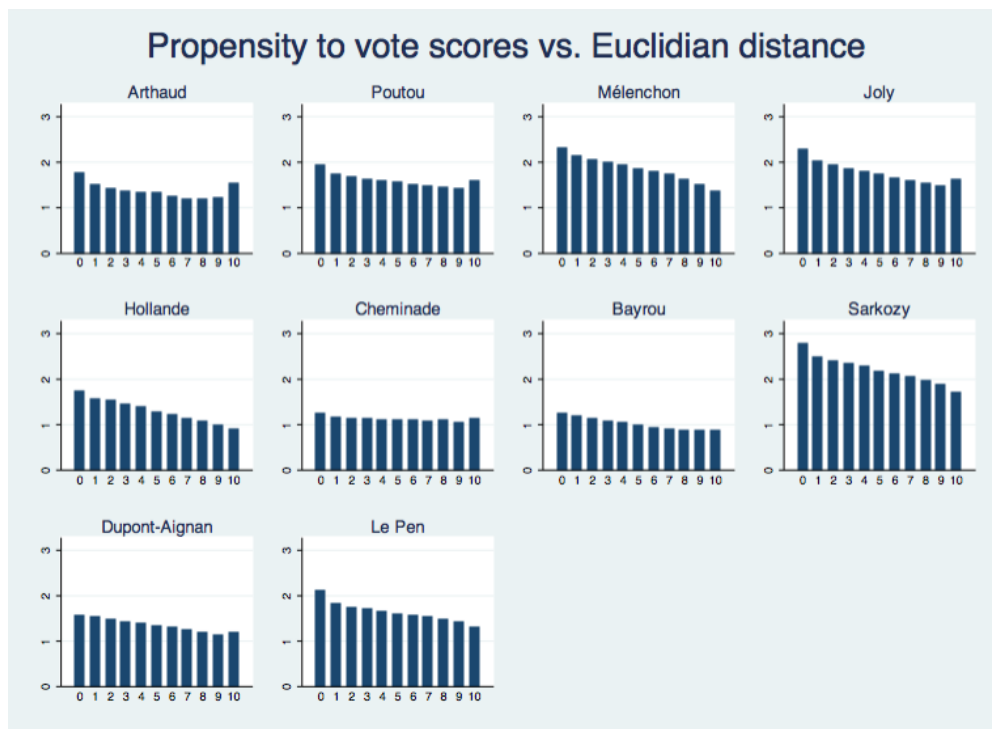
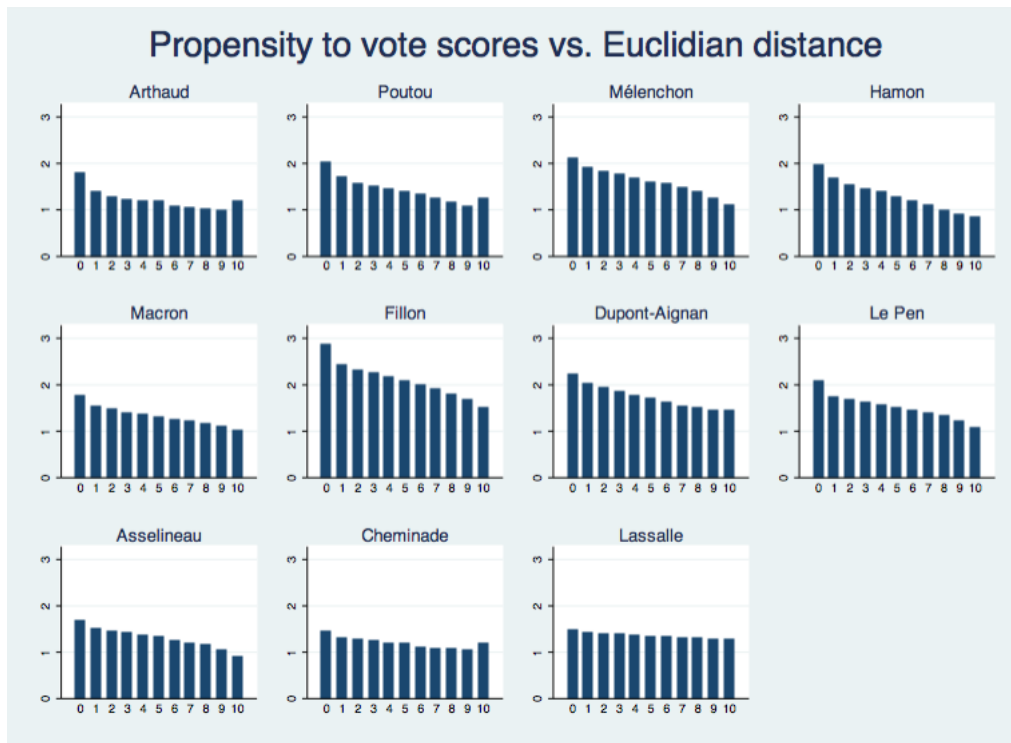


Figure 5.2. Congruence between *La Boussole présidentielle*'s users and the candidates of the 2017 French Presidential election based on the average Euclidian distance between users and candidates in the bi-dimensional political landscape and the PTV scores expressed for each candidates (0-10 scale)



D – The second round of French Presidential elections: which candidate is the most convening?

1) “Downsian” vs. “directional” theory of issue voting in the second round of the 2012 Presidential election

The candidate that prevails in the second round of the French Presidential election is a candidate that successfully attracts an electorate broader than his core electorate (Nadeau et al., 2012). The two finalists have to convince voters, whose candidates have been eliminated in the first round, to vote for them. The Downsian theory of voting supposes that after having carefully compared their positions to those of the candidates, voters will pick the candidate who is the closest to their ideas.

Table 5.2 is a cross-table in which we can see for the 2012 users of *La Boussole présidentielle*, who came to the VAA in between the two rounds, their vote intention for the second round according to their declared vote in the first round. The sample of users who answered these questions is mostly made out of men (58.7%) older than 35 years old (70.1%).

The distribution of users having answered these two questions over the level of education variable is the same than for the overall sample. The data displayed in Table 5.2 lead to two observations: the users who voted for Hollande and Sarkozy in the first round declared a strong loyalty to these two candidates in the second round; and the votes transfer from users who voted for centrist and right-wing candidates in the first round is much more fragmented than the votes transfer of users who voted for a left candidate in the first round. This high votes transfer from left users in favour of Hollande suggests that not only he is the candidate with the issue positions the closest to them but that he also is the natural candidate for these left voters in the second round of the Presidential election³⁴.

Table 5.2. Vote intention for the second round of La Boussole présidentielle's users according to their declared vote in the first round (2012 French Presidential election)

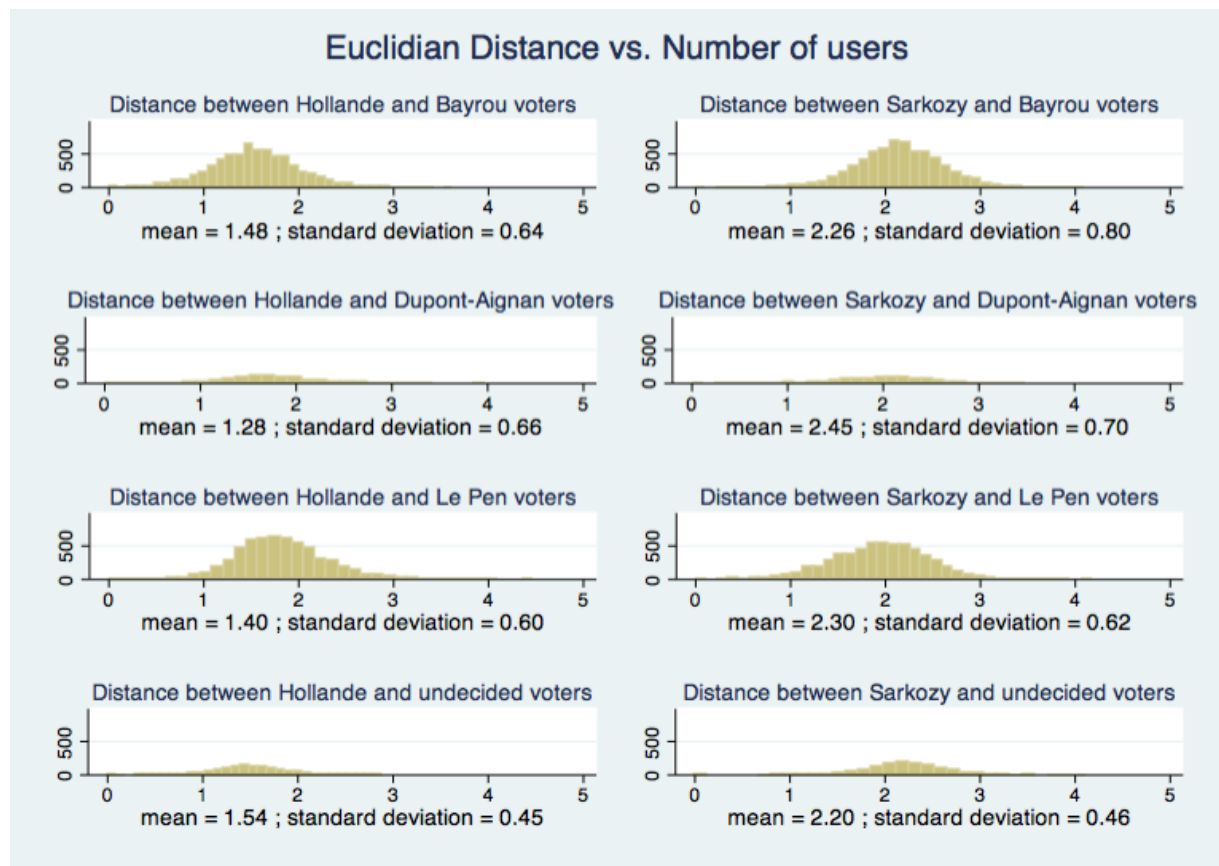
Declared vote in the 1 st round	Vote intention for the 2 nd round				
	Hollande	Sarkozy	Abstention / blank vote / does not know	Total	N
Arthaud	57.7%	3.8%	38.5%	100%	26
Poutou	60.2%	9%	30.8%	100%	133
Mélenchon	85.7%	4,3%	10%	100%	1,585
Joly	76.2%	5.1%	18.7%	100%	332
Hollande	96.2%	1%	2.2%	100%	3,656
Cheminade	31.6%	34.2%	34.2%	100%	38
Bayrou	33.4%	32.1%	34.5%	100%	1,462
Sarkozy	1.2%	96.7%	2.1%	100%	2,753
Dupont-Aignan	26.9%	38.8%	34.2%	100%	219
Le Pen	14.9%	51%	34.1%	100%	1,534
Did not vote / blank vote	33.1%	32.4%	34.5%	100%	1,104
N	6,427	4,507	1,908		12,842

As shows in Table 5.2, the votes' transfer of centrist and right wing users is less concentrated on the conservative candidate, Sarkozy, than that of left users for Hollande. The

³⁴ See Annexe 5.1 for the positions of left users in the political landscape of *La Boussole présidentielle*.

Euclidian distances, between the positions of the runners-up and those of the users who declared having voted for Bayrou, Dupont-Aignan and Le Pen in the first round (Figure 5.3), show that on average these voters are closer to Hollande’s issue positions than Sarkozy’s, similar observation for users who declare to be undecided for their second round vote. Despite the fact that a majority of these users are closer to Hollande than to Sarkozy in the political landscape of the VAA, a significant share of these users intends to vote for Sarkozy in the second round of the Presidential election (see Table 5.2). In fact, issues voting can also be the result of some issues of particular interest for voters. According to this line of thinking, voters rather listen to the candidate who is “on the same side of the barrier” of them on these issues and who holds a clear-cut position on the issues that matter most to them. It is the “directional theory” of issue voting (Rabinowitz and MacDonald, 1989).

Figure 5.3. Euclidian distances between *La Boussole présidentielle*’s users and second round candidates according to their declared vote in the first round (Bayrou, Dupont-Aignan and Le Pen).



To analyse more precisely the votes transfer of centrist and right-wing voters in the 2012 French Presidential election, Table 5.3 reports the average importance that second-round users attributed to the main issue dimensions included in the VAA. Compared to other groups, users who have voted for Bayrou in the first round considered issues related to the economic and financial crisis (“Crisis” heading in the table) as very important to them, the users who voted Sarkozy did the same. Thus, among the Bayrou voters of our sample, those who designed this issue dimension as important are 2.02 times more likely to intend to vote for Sarkozy in the second round than those who did not designed this issue dimension as important (p value < 0.05). Similarly, users who have voted for right-wing candidates stand out by the high level of importance that they attributed to the issues of immigration and integration, and by the low level of importance that they attributed to social issues.

Table 5.3. Importance of issue dimensions according to the vote declared in the first round (average scores)

Issue dimensions	Second round users	Hollande voters	Sarkozy voters	Bayrou voters	Dupont-Aignan voters	Le Pen voters
Income and purchasing power	0,88	0,91	0,90	0,86	0,87	0,91
Employment and labour	0,94	0,96	0,94	0,94	0,94	0,93
Social	0,74	0,91	0,56	0,74	0,68	0,60
Crisis	0,82	0,79	0,91	0,87	0,82	0,82
Environment	0,60	0,71	0,45	0,63	0,53	0,43
Immigration and integration	0,62	0,41	0,79	0,56	0,74	0,89
Justice and institutions	0,75	0,78	0,76	0,71	0,76	0,83
Values	0,64	0,72	0,62	0,59	0,59	0,65
European Union	0,61	0,62	0,76	0,68	0,52	0,46
N	17.209	2.566	2.190	1.785	235	1.243

Note: The value 1 means that the issue dimension is important, the value 0 means that it is not.

We observe exactly the same pattern for users who declared having voted for Sarkozy. Thus, among Le Pen voters, those who have designated immigration and integration as important issues are 2.33 times more likely to intend to vote for Sarkozy in the second round than those who did not designate these issues as important. Analogously, Le Pen voters who designated social issues as important are 3 times less likely to intend to vote for Sarkozy than those who have declared these issues as important. Thus, if voters who have declared having voted for Bayrou or Le Pen in the first round are on average closer to the issue positions of Hollande than those of Sarkozy in the political landscape of *La Boussole présidentielle*, they seem to care a lot about some issues and these issues pushes them to vote for Sarkozy in the second round because on these issues he is closer to their positions. Sarkozy's tough stance on immigration and on the assimilation of immigrants echoes favourably with right-wing voters; and his positions in favour of a stricter budgetary discipline attract some centrist voters.

In sum, the directional theory of issue voting shed light at the aggregate level on one mechanism that partly structured the polarization of the second round voting between candidates perfectly embodying, at the time, their political family: the left for Hollande and the right for Sarkozy, the former prevailing with 51.6% of the votes.

2) New cleavage, old issues: the second round of the 2017 Presidential election

In 2017, the second round of the Presidential election was an earthquake in French politics. For the first time since 1958, year of the establishment of the French 5th Republic, none of the candidates representing the political parties that dominated French politics since decades made it to the second round. Instead, we witnessed the confrontation between the centrist Emmanuel Macron (*En Marche!*) and the extreme rightist Marine Le Pen (*Front National*). This scenario disrupted the political context in two ways. First, from a political offer perspective, the traditional left-right cleavage that had structured the second round ballot since 1965³⁵ was shattered in this election. Both runners-up claimed during the campaign to disrupt this traditional cleavage as Macron spoke of “progressivism vs. conservatism”, and Le Pen spoke of “patriotism vs. globalism”. How have voters of traditional left-right parties reacted in the second round of the election? And second, the qualification of the extreme-right

³⁵ The first Presidential election through direct suffrage took place in 1965. Except in 1969 and in 2002, the second round of French Presidential elections always led to the confrontation of a left leaning candidate and a right leaning candidate.

candidate has brought back the issue of the “Republican Front” against the extreme right³⁶ into the public debate.

Table 5.4. Vote intention for the second round of La Boussole présidentielle’s users according to their declared vote in the first round (2017 French Presidential election)

Declared vote in the 1st round	Vote intention for the 2nd round				
	Le Pen	Macron	Abstention / blank / does not know	Total	N
Arthaud	12.9%	32.3%	54.9%	100%	31
Poutou	14.3%	30.6%	55.1%	100%	98
Mélenchon	10.7%	36.3%	53%	100%	2,811
Hamon	4.4%	69.6%	26%	100%	799
Macron	2.3%	93.2%	4.5%	100%	3,367
Lassalle	19.1%	39.1%	41.8%	100%	115
Cheminade	20.8%	20.8%	58.4%	100%	24
Asselineau	35.1%	7.9%	57%	100%	191
Fillon	23.1%	38.4%	38.5%	100%	1,946
Dupont-Aignan	40.9%	14%	45.1%	100%	727
Le Pen	93.6%	1.1%	5.3%	100%	2,037
Did not vote / Blank vote	20.2%	28%	51.8%	100%	1,047
N	3,391	5,983	3,819		13,193

Table 5.4 shows for the in-between rounds users of *La Boussole présidentielle* their vote intention in the second round according to their declared vote in the first round. The sample of users who answered these questions is more male (58.1%) and older (63.1% of these respondents are older than 35 years old) than the overall sample of VAA users, but their distribution over the level of education variable is similar. Several elements of the distribution of answers in Table 5.4 are striking. First of all, both the Macron and Le Pen voters in the

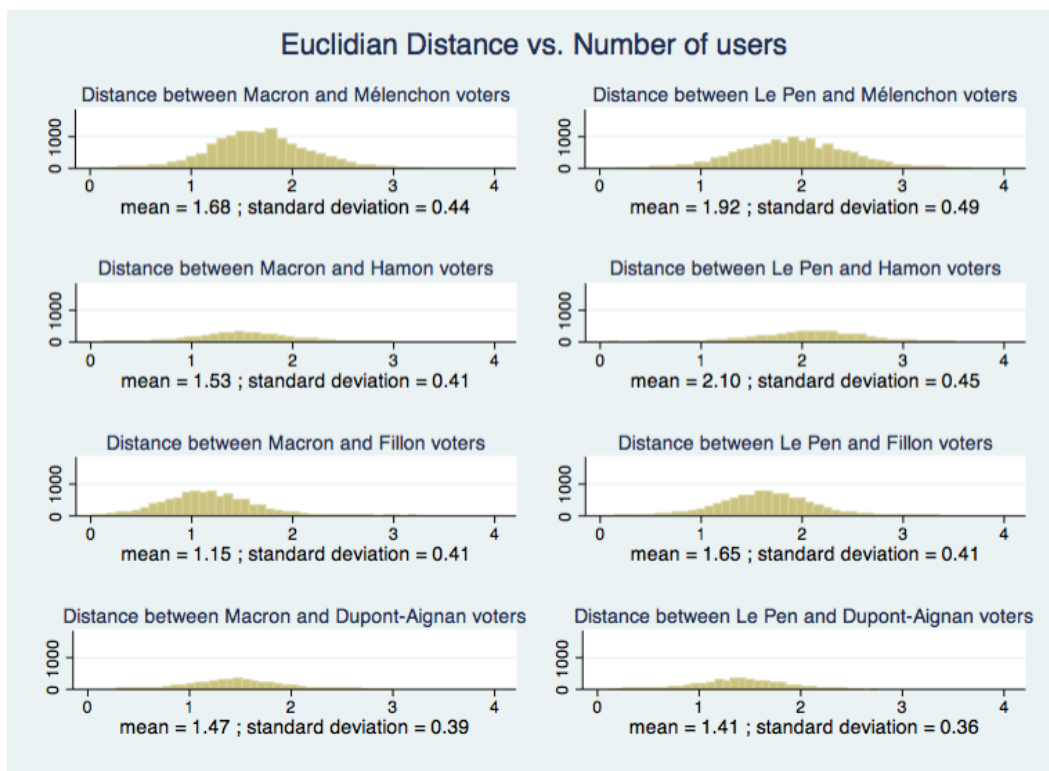
³⁶ In the Presidential election of 2002, Jean-Marie Le Pen was the first extreme-right candidate ever to qualify for the second round of the election. Traditional political parties united into a “Republican front” in order to defend the Republic against the extreme-right by calling their voters to cast their ballot in favour of the other candidate, Jacques Chirac.

VAA sample are very loyal to their candidate in the second round (93.6% for Le Pen and 93.2% for Macron). Second, the majority of VAA users of all the remaining voter groups, but Hamon's, declared their intention to cast a blank vote, to abstain or that they are undecided. 69.6% of *La Boussole présidentielle* users who declare having voted for Hamon in the first round intend to vote for Macron in the second round. Either because of the “Republican Front” strategy or because Macron was the candidate the closest to their issue positions (see Figure 5.4), users who voted Hamon are the only voter group that massively transferred its vote in the direction of one of the two candidates. The other voter groups are torn two or even three ways. More than half of the users who voted for left-wing candidates in the first round – Arthaud, Mélenchon and Poutou – intend to vote for neither of the two candidates, while about one third of them intends to vote for Macron in the second round. More than one third of users having voted for Asselineau or Dupont-Aignan in the first round intend to vote for Le Pen, while the 57% of Asselineau voters and 45% of Dupont-Aignan voters do not want to choose between the two candidates. Finally, the remaining voter groups are split three-way between Le Pen, Macron and neither of them. In particular, the users who declared having voted for Fillon in the first round: 23% of them intend to vote for Le Pen, 38% for Macron and 38% for neither of them.

Figure 5.4 shows the distance in the political landscape of *La Boussole présidentielle* between users who voted for the main eliminated candidates and the two remaining runners-up³⁷. Figure 5.5 represent the same data for the users who have expressed a second round vote intention neither for Le Pen nor for Macron. These data show that except for users who voted for Dupont-Aignan in the first round, all main voter groups are closer to the issue positions, as measured by the political landscape of *La Boussole présidentielle*, of Macron than those of Le Pen. Interestingly, despite the fact that in Figure 5.4 compared to the other main voter groups users who voted for Fillon in the first round are the closest to Macron in the political landscape, only a minority of them (38.4%) intends to vote for him in the second round (see Table 5.4).

³⁷ See Annexe 5.2 for the positions of each voter groups in the political landscape of *La Boussole présidentielle*.

Figure 5.4. Euclidian distances between *La Boussole présidentielle*'s users (2017) and second round candidates according to their declared vote in the first round (Mélenchon, Hamon, Fillon and Dupont-Aignan).

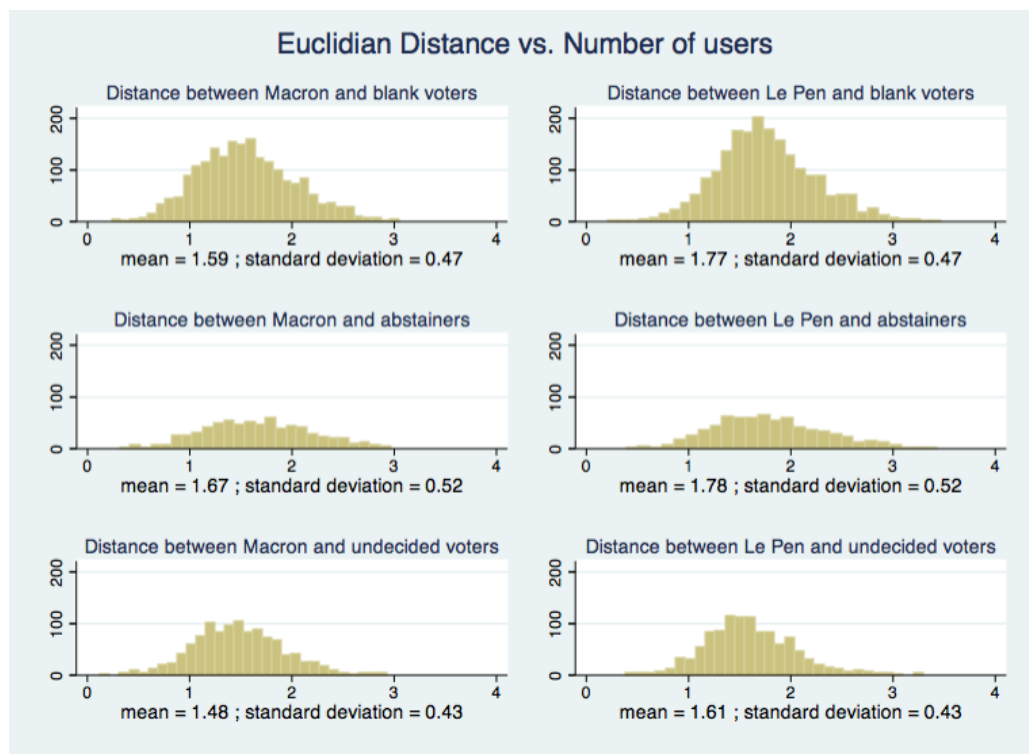


As in 2012, data regarding the importance users attributed to the main issue dimensions of the VAA were collected in 2017. However, due to technical difficulties experienced during the data collection, the quality of the data for these variables is questionable³⁸. As a result we will not present here the full descriptive data of the issue importance variables as we did in Table 5.3 with the 2012 data. Yet Fillon's voters and Le Pen's voters had in common to have expressed for the issue dimensions of 'Immigration and Integration' and of 'Law and Order' a higher importance than the other main voter groups. Hence, Le Pen is likely to have attracted a significant amount of Fillon's voters due to her tough stances on these two issue dimensions. Similarly, users who declared their intention to abstain in the second round

³⁸ Due to a glitch in the system, users were spending a too short amount of time of the issue importance questions. In addition, while in 2012 users had to submit their answers to all issue importance questions in one go, hence insuring that data were collected on all such questions and that the respondents did not wander to other tasks; in 2017 respondents did not have to submit their answers to these questions in one go but could answer to one of them, then interact with other features of the application, and then if they wished so to further answer the issue importance questions. As a result, the data recorded display little or even no variation in the answer distribution of the issue importance questions, which is strongly abnormal and suspicious.

consider economic issues related to the reform of the labour market, to public spending and to social policies as more important to them than to the other voter groups. This observation seems coherent with the political discussion that took place in-between the two rounds concerning the vote of Mélenchon’s voters. Many of his voters declared their intention to abstain precisely because they disagree with the liberal economic positions brought forward by Macron on the labour market reform and on his intention to reduce public spending. Whether both observations regarding Fillon’s voters and voters who intend to abstain in the second round are in line with the analyses made by political commentators during and after the campaign, the low quality of the data collected in 2017 on these specific items forces us to be cautious and to treat these observations as mere hypotheses for further analysis.

Figure 5.5. Euclidian distances between *La Boussole présidentielle’s* users (2017) and second round candidates according to their vote intention in the second round (Blank voters, abstainers and undecided voters).



E – Issue voting, image voting: La Boussole présidentielle and the primary of the right and the centre

In the fall of 2016, *Les Républicains* (LR), the *Parti chrétien-démocrate* (PCD) and the *Centre national des indépendants et paysans* (CNIP) organised the first conservative primary of French politics in order to select a common candidate of the right and the centre for the presidential election of 2017. While every poll published in the months before the primary election anticipated a battle for victory between Alain Juppé and Nicolas Sarkozy, it is François Fillon who prevailed and won the presidential nomination. If pollsters justified their miss by arguing that Fillon's victory was due to a last moment shift in public opinion, the gap of about 15 points between the last published polls and Fillon's score in the first round of the primary makes this argument unlikely. In reality the novelty of such an election among the French right, the unknown number and sociology of voters made it very difficult to draw reliable samples to analyse this election. Moreover the unusual development of the campaign made it harder to understand its inner logic and its dynamic.

In fact, the campaign has been dominated by an ideational battle between the candidates. Most candidates have focused on issues and have emphasized their capacity to lay out a credible political manifesto by, among other things, publishing books presenting their political vision and their policy ideas³⁹. The organisation of three television debates in order to provide a platform for this confrontation of ideas has reinforced the impression that issues have played a key role during this primary election. The victory of Fillon seems to confirm this hypothesis as Fillon put policy issues at the centre of his campaign, especially after the success of his book *Faire* published in 2015 and sold at more than 100,000 copies. In addition Fillon's victory has led commentators to affirm that primary elections polarise voters as Fillon was perceived a very conservative candidate while his main opponent, Juppé, was considered more centrist and moderate. We propose to test these two hypotheses: the issue voting hypothesis and the polarization hypothesis.

³⁹ Jean-François Copé, *Le sursaut français*, Paris, Stock, 2016. François Fillon, *Faire*, Paris, Broché, 2015. Alain Juppé, *Mes chemins pour l'école*, Jean-Claude Lattés, 2015. Alain Juppé, *Pour un Etat fort*, Paris, Jean-Claude Lattés, 2016. Alain Juppé, *Cinq ans pour l'emploi*, Paris, Jean-Claude Lattés, 2016. Nathalie Kosciusko-Morizet, *Nous avons changé de monde*, Paris, Albin Michel, 2016. Bruno Le Maire, *Ne vous résignez pas !*, Paris, Albin Michel, 2016. Nicolas Sarkozy, *La France pour la vie*, Paris, Plon, 2016. Nicolas Sarkozy, *Tout pour la France*, Paris, Plon, 2016.

1) The users of *La Boussole présidentielle* during the primary of the right

For this analysis, we are using a non-probabilistic sample of self-selected respondents collected through the VAA of “*La Boussole présidentielle*” during the campaign of the French right and centre open primary of the Fall 2016. The VAA was online in its primary format from October 24 to November 27, day of the second round of the election. About 90,000 voters received a personalised “voting advice”. At the beginning and at the end of the list of issue statements, users could answer socio-demographic (gender, age, level of education, profession, and so on) and attitudinal (certainty of turnout, candidate images evaluation, propensity to vote questions, left-right self-placement, vote intention, and so on) questions. In order to rely on a sample of users who has answered seriously to the questionnaire, we filtered out of the dataset users who had not answered to all the questions⁴⁰ and whose who have answered in the same way to all issue statements (linear distribution issue emphasized in the previous section). Then as the upcoming analyse focused on the campaign dynamics of the first round of the primary election, we filtered out of our sample all respondents who use the VAA in between the two rounds, respondents who were younger than 18 and therefore who cannot vote, respondents who have declared that they were sure they would not vote in the primary election, and respondents who were hesitating over the fact that they would vote or not; so that we would end up with a sample made out of only voters who were sure of going to vote in the first round of this primary election. Thus, the sample of “*La Boussole présidentielle*” users used in this analysis is made out of 5,304 voters.

Table 5.1 shows the socio-demographic distribution of the sample and compares it to an exit poll of the first round of the primary. We observe that the VAA sample is more male (65.6%) than the estimated primary electorate (59%), the age distribution among 18-49 years old is almost identical in both samples, but 50-64 years old are overrepresented in the VAA sample (+7.6 points) while respondents older than 64 years old are underrepresented (-4.7 points).

⁴⁰ This criteria filters out users who may have been several times on “*La Boussole présidentielle*”, from the same computer or from different computers, because it is very unlikely that these users would answer twice to all questions, issue statements and additional questions. To get a voting advice, users only need to position themselves on issue statements every other question is elective.

Table 5.1. Socio-demographic distribution of the sample

	<i>La Boussole présidentielle sample (N=5.304)</i>	Exit poll ELABE (N=1.892)
Gender		
Man	66%	59%
Woman	34%	41%
Age		
18-24	5%	6%
25-34	8%	10%
35-49	22%	22%
50-64	31%	23%
64<	34%	39%
Level of education		
Lower than high school	17%	
High school diploma or College education	33%	
University degree	50%	
Left-right self-placement (0-10 scale)		Partisan preference
Extreme left	2%	14% (without)
Left	9%	15% (Left)
Centre	20%	14% (Modem-UDI)
Right	42%	46% (LR)
Extreme right	27%	11% (FN-DLF)
Profession		
Farmers	1%	
Craftsmen, Retainers, Businessmen	12%	
Managers and liberal professions	54%	
Intermediate professions	14%	
Employees	12%	
Workers	2%	
Non-actives	5%	
Professional status		Social group
		32% (Higher and middle classes)
Public sector employees	13%	
Private sector employees	33%	18% (Popular classes)
Independent workers	12%	
Retirees	32%	43% (retirees)
Other non-actives	10%	7% (other non-actives)

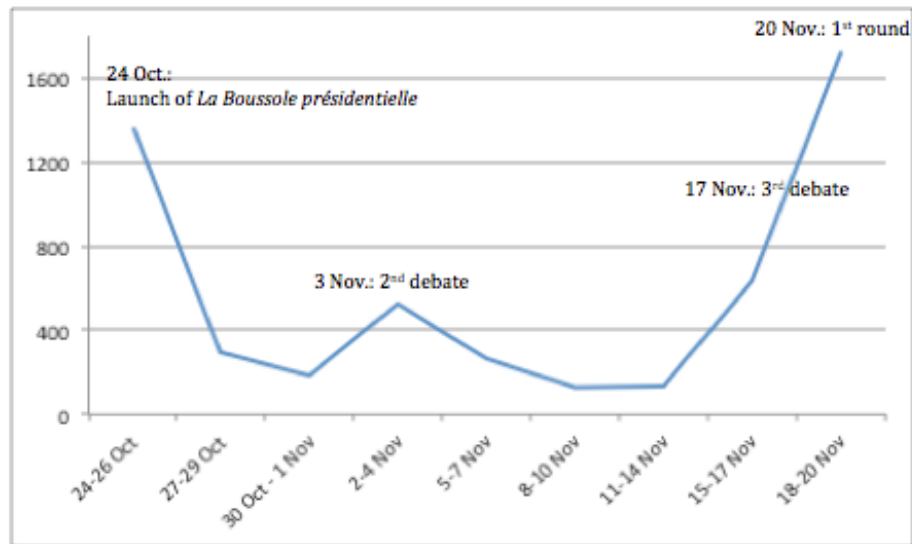
When looking at the political orientation of the samples, we see a similar structure in both cases with about 60% of voters that position themselves on the right and the centre of the

political spectrum (62% in the *La Boussole* sample and 60% in the ELABE sample), and about 10-15% who position themselves on the left of the political spectrum (11% for *La Boussole* and 15% for ELABE). Regarding variables that we cannot compare from one sample to another, we observe that voters holding an university diploma (49.6%) and managers and liberal professions (54.1%) represents a large majority of “*La Boussole présidentielle*” sample.

In order to stabilise across time the socio-demographic bias of our sample, we have divided our sample in sub-samples of three days, and we have weighted these sub-samples by gender, age and level of education. This statistical procedure keeps the socio-demographics structure of our sample constant over the whole campaign, and neutralises the effects that would be due to the socio-demographic variations of the sample during the whole period of observation.

As we have already underlined in previous section, VAA data share a certain number of features with data collected through rolling cross-sections surveys and, therefore, are a potential rich source of information about campaign effects on voting behaviour, especially since VAA data collect large daily sample while traditional rolling sample do not. With large daily samples, statistical analyses measures the individual determinants of voting behaviour can be carried out. Figure 5.1 shows the distribution of “*La Boussole présidentielle*” sample over the four weeks preceding the first round of the primary. If the VAA has recorded many new users every day, we observe four peaks of connections: when the application was launched, during the second and third television debates between candidates (the first television debate took place on October 13 and could not be included in the scope of this analysis), and finally during the week-end of the first round of the primary.

Figure 5.1. Distribution of “La Boussole présidentielle” sample



To best exploit the potential of VAA data for analysing campaign dynamics, we are going to present both the distribution and the explanatory structures of our data. First, we will observe campaign dynamics by comparing VAA data with opinion polls published by survey companies. Then, we will study the aggregate trends in our VAA sample to identify whether a shift in candidate images, propensity to vote scores or issues agreement levels occurred first in the campaign. Finally, we will analyse the individual determinants of the propensity to vote for the three main candidates (Fillon, Juppé and Sarkozy) by comparing different models of voting behaviour (socio-demographic variables, partisan affiliation, issues agreement, and candidates' images).

2) The evolution of vote intentions better measured by “La Boussole présidentielle” than by opinion polls.

The Fillon dynamic has been the most salient, and for many unexpected, phenomenon of the campaign of the primary of the right and the centre. According to polls published during the campaign (see Figure 5.2), Fillon was the “third man” of this campaign behind Juppé and Sarkozy both comfortably ahead during most of the campaign. It is only in the last days of the campaign that Fillon seems to have overtaken the gap between him on his main opponents. Hence, the gap between the last published polls (30%) and the actual result of Fillon in the first round (44%) surprised many commentators. Polls show that early November

Fillon outpaced Bruno Le Maire – his direct opponent for the “third man” status – and builds up a dynamic until Election Day. In parallel of this positive Fillon dynamic, Juppé sees his advance to progressively flake during the last three weeks of the campaign. The Fillon dynamic starts around November 3, day of the second television debate between the candidates.

Figure 5.3 shows the distribution of voting intentions among the sample of “*La Boussole présidentielle*” users from launch date – October 24 – until the day of the first round of the primary – November 20. We observe the same trends than among polls data: a strong Fillon dynamic, a constant decline of support for Juppé, and a relative stability of Sarkozy in polls. However, we observe in the VAA sample very different level of vote intentions for these three main candidates than in polls. Among the VAA sample, Fillon outruns Juppé on November 10, while he does so in polls on November 20 that is only two days before the first round. In addition, vote intentions for Fillon reach about 40% during the last week of the campaign in VAA data. These data emphasize two important results: firstly, VAA data are able to seize the same campaign dynamics that opinion polls measure; and secondly, than in a context in which it is impossible to know the boundaries of a target population – the electorate of an open primary – VAAs are a pertinent alternative survey method to study public opinion and its dynamics.

Figure 5.2. Vote intentions for the first round of the primary – Opinion polls

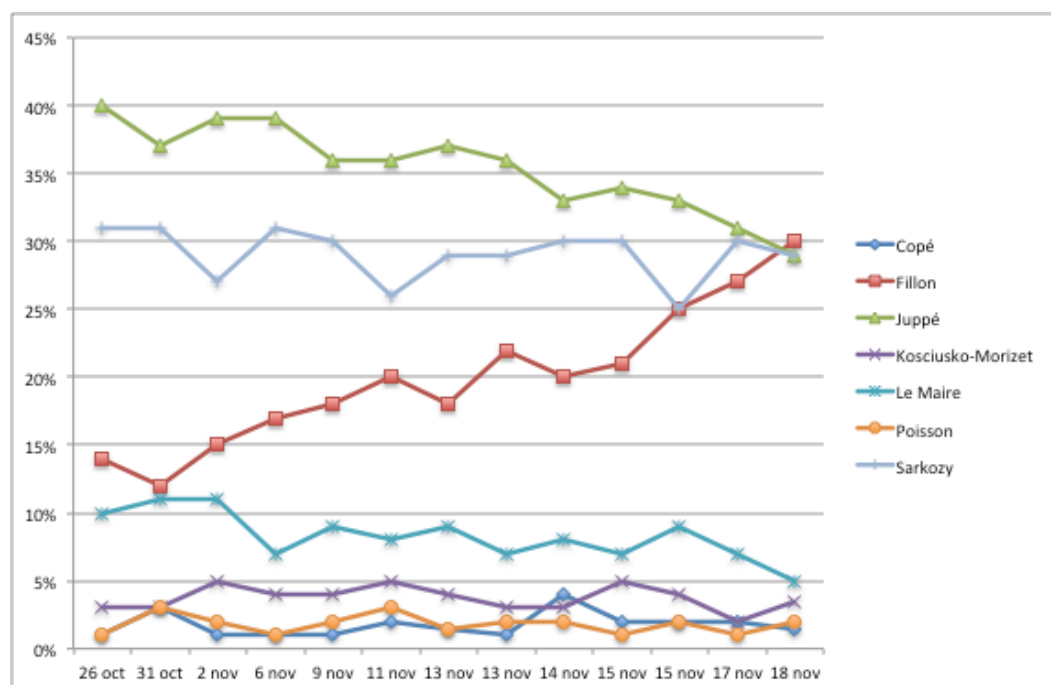
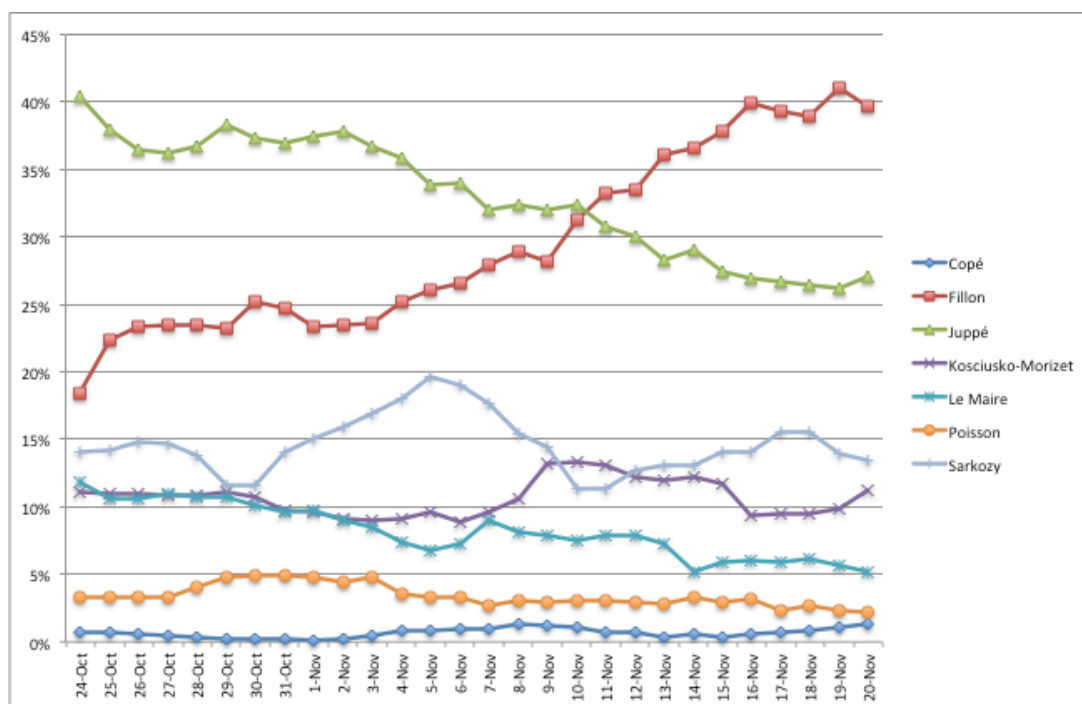


Figure 5.3. Vote intentions of users sure to go vote in the first round of the primary – La Boussole présidentielle (weighted data & smoothed average scores over 7 days)



3) Aggregate-level analysis: a campaign dynamic triggered by the candidate image rather by issues agreement

To better assess campaign effects, Johnston and Brady (2002) consider that in addition of doing statistical association tests between explanatory variables and voting preferences (we will do precisely that in the next sub-section), a graphical representation of key variables is primordial. This visualisation allows identifying chronologically the effect of explanatory variables on voting intentions. Figure 5.4 displays the evolution of the average values for the propensity to vote and the candidate images (fitting for the job and empathy)⁴¹ variables for Fillon, Juppé and Sarkozy during the campaign among the sample of VAA users. In order to measure the voting preferences of our users we use the propensity to vote scores for each candidate instead of the voting intention expressed only for one candidate. In fact, the chosen indicator is more appropriate when trying to map the preferences for candidates who belong

⁴¹ Candidate images – fit for the job and empathy – are measured with the following two questions: “In your opinion, to what extent the following statement applies to each candidate: He is fit to be the President of the Republic / He understands the problems of people like you” (answer scale from 0 “not at all” to 10 “very well”).

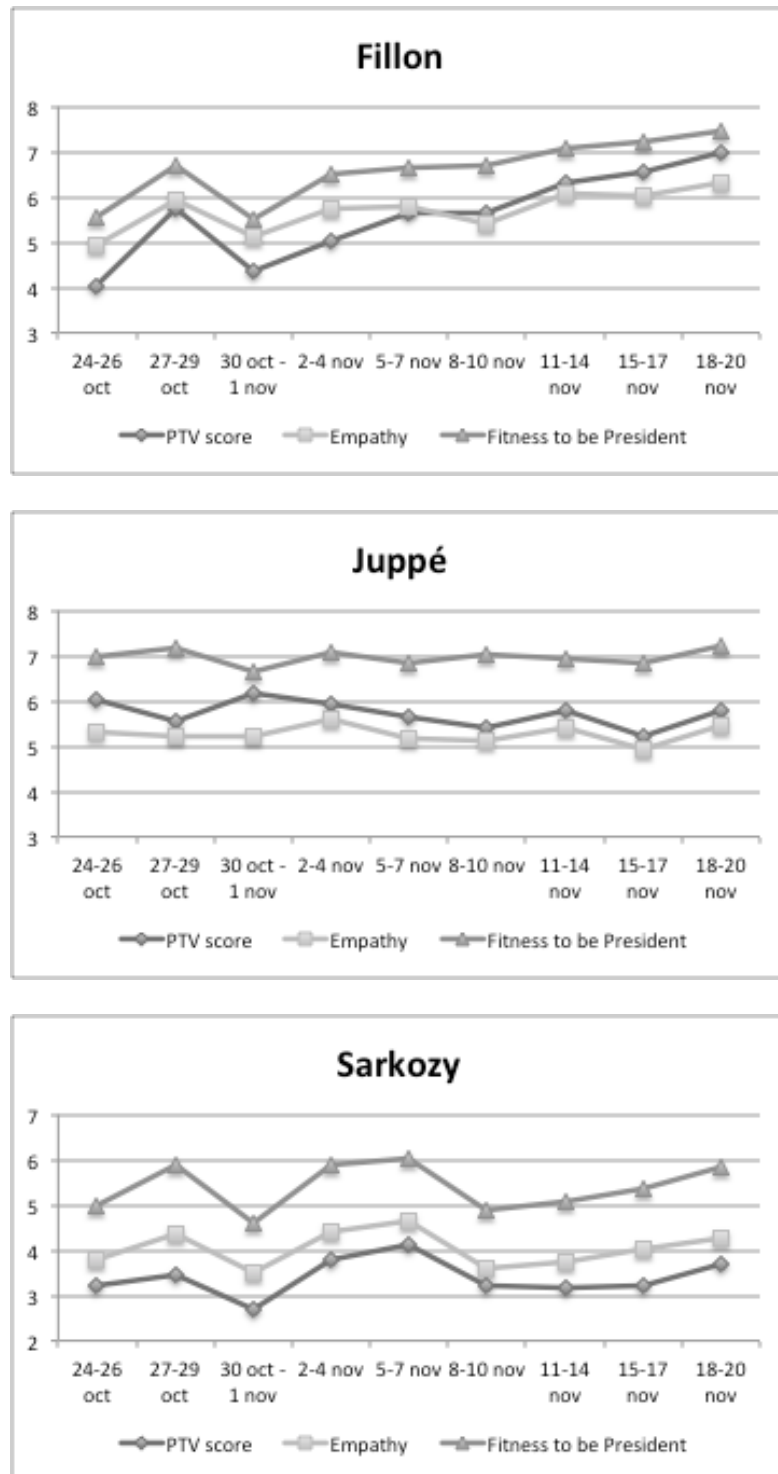
to the same political family. PTVs are an indicator that “reveals the more or less complex map of voters for several candidates”, that “measure the hesitations of voters”, and so that “explores the dynamics of the voting decision making process of voters” (Denni et al., 2012).

First observation, the average values for all three variables strongly increase for Fillon during the campaign, while they barely evolve for Juppé and they only slightly increase for Sarkozy. These results confirm once more the presence of a Fillon dynamic at the aggregate level in *La Boussole présidentielle* data: his average PTV scores increases from 4 to 7 on an eleven points scale from the launch of the VAA on October 24 to the first round of the primary on November 20.

Second observation, his fitness to be the President score (+1,8 points) increases more than his empathy score (+1,2 points) and, most notably, his fitness reaches a high level and stays at that high level from the period of observation of 2-4 November onwards – around the time when the second television debates between the candidates took place⁴². We observe that the increase in the fitness to be President of Fillon preceded the strong increase in his PTV scores, which also starts on 2-4 November but is less frank than the increase of his fitness to be President. Following this boost, his average PTV scores keeps increasing until the end of the campaign surpassing his average empathy score and almost catching up with his average fit to be President score. Thus, we can formulate the hypothesis stating that *it is the fitness to be President of Fillon that has led to an increase in his PTV scores along the campaign*.

⁴² The second debate of the primary of the right and the centre took place on 3 November 2016. During this debate, a large place was dedicated to the discussion of the political line of the candidates and of the possible electoral alliances with centrist political parties, and in particular with the *Mouvement Démocrate* (Modem) of François Bayrou (debate segment from 22h15 to 22h45). This discussion has mostly opposed Alain Juppé, who favoured a broad alliance including *Les Républicains* (LR), the *Union des Démocrates Indépendants* (UDI) and the Modem, to Nicolas Sarkozy, who held a firmer stance toward the Modem and did not wish to include Bayrou’s party within a possible political coalition. While all the candidates participate in this political discussion, François Fillon refuses to enter “this fist-fight” that he considers as typical of “the Republic of parties”. During this sequence, all his interventions deal with his intention to pass “a contract not with Bayrou or the centre but with the French people”. He also declares that “in order to tackle France’s problems we need a radical and energetic programme”, and “once that he will have received the trust of French people, neither Bayrou nor anybody else will object to it”. By discarding the discussion of political alliances, Fillon tried to step above party politics according to a stance that he qualifies of “Gaullist”. In the following days, political commentators emphasize how Fillon emerges as a leader fit to be President, and that he has become the “third man” of this primary election at the expense of Bruno Le Maire.

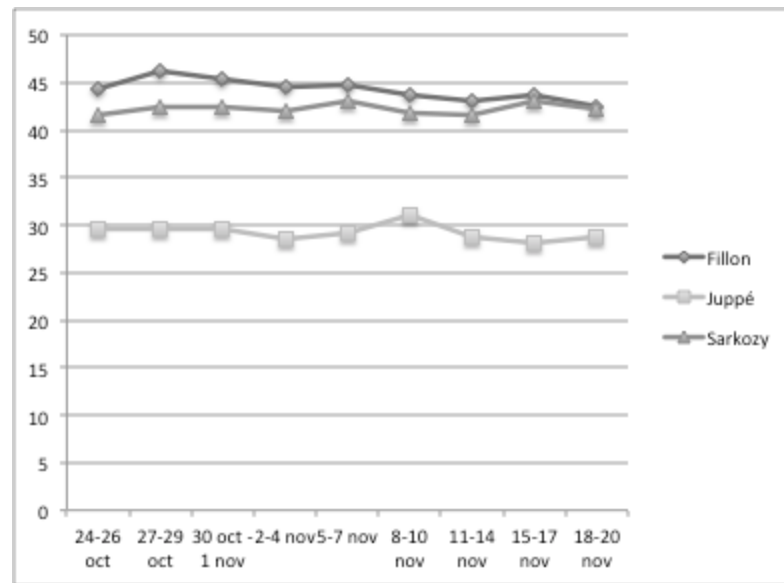
Figure 5.4. Evolution of image traits and propensity to vote scores for the main candidates (average values – scale from 0 to 10)



When observing the evolution of the average image traits of Juppé, we note that they barely change and that no decrease in his image scores seems to have an impact on his average PTV score. Moreover, from the 4-6 November onwards, his empathy and PTV scores move in parallel. Thus, whether Figure 5.4 suggests a correlation at the aggregate level between the empathy score for Juppé and his PTV scores, this image trait does not appear as significant in Juppé's PTV scores as the fit to be President did for Fillon's PTV scores. Therefore, we must think of other explanatory variables for expressing a high PTV scores for Juppé. Many commentators have argued that the primaries organized during the 2016-2017 electoral sequence in France have polarized the electorate within each political family. The primaries would have led to a hardening of the political stances of some candidates in order to attract the most radical fringes of their respective electorates at the expense of the median voter. In front of the more right-wing candidates Fillon and Sarkozy, Juppé represented a more moderate and more centrist candidate. In addition, exit polls have shown that centre-left voters were mobilized in this primary election in order to eliminate Sarkozy from the race by voting Juppé. Finally, his opponents criticized Juppé for having received the support of Bayrou. Therefore, we hypothesize that *the more right-wing voters are the less likely they are to vote for Juppé*.

Finally, the image traits of Sarkozy and his PTV scores evolve in line with each other. This observation suggests that there may be a strong relationship between these variables but does not allow us to distinguish between the two traits. Thus, we can only assume that Sarkozy's image has a strong explanatory power of the PTV scores expressed about him. As a matter of fact Sarkozy is a candidate with a well-established and polarizing image within the electorate, whether a positive or a negative image.

Figure 5.5. The evolution of issues agreement scores between *La Boussole présidentielle* users and the main candidates of the primary of the right and the centre



To conclude our aggregate level analysis, Figure 5.5 displays the average agreement scores between *La Boussole présidentielle*'s users and the three main candidates on the issue statements of the application. We observe that it is with Fillon's positions that the users agree the most, closely followed by Sarkozy while Juppé's positions found less support within our sample of users. We also note that the average agreement scores barely change during the campaign, none of the lines mimics the trends identified in the previous paragraphs: *there seems to be no relationship between the issues agreement level and the evolution of the PTV scores expressed for these three candidates during the campaign.*

4) Individual level analysis and the longitudinal effects of the campaign: image effects and polarisation between the candidates.

In order to measure the individual determinants of the PTV for the main candidates of the primary, we use a *conditional change model* (Johnston and Brady, 2002). This type of statistical model aims to predict the PTV for a candidate according to the explanatory variables measured the day respondents answered the questionnaire, controlled by the PTV levels measured before the campaign. In the context of a VAA, this pre-campaign referential is obviously missing from the dataset. However, it can be estimated by including in the statistical model the centred values of the key explanatory variables (image traits – fitness to

be President and empathy – and the issue agreement level between candidates and respondents). We can obtain the centred variables by subtracting to the declared value by the respondent on day d the average values of all the respondents measured on the same day d ⁴³. This procedure creates pre-campaign reference values by assuming that from one day to the next the average variation of a variable's value, for instance the empathy of Juppé, is the same among all the respondents. This is a strong assumption about beliefs change, but it is a necessary one as VAA data do not provide a pre-campaign measurement point that can be used as a control in the model⁴⁴. Hence, this procedure allows introducing in the model a pre-campaign referential controlling for our key explanatory variables. Thus the *conditional change model* is modelled through the following equation:

$$Y_{it} = \alpha_1 + \beta_1 B_{it} + \delta_1 (\alpha_0 + \beta_0 (B_{it} - B^*_i) + \varepsilon^{\circ}_{it}) + \varepsilon_{it}$$

In this equation, Y_{it} represents the PTV to vote for a candidate, B_{it} the value of the independent variable measured during the campaign, and $(B_{it} - B^*_i)$ the parametrisation of the independent variable producing its pre-campaign value. Within this parametrisation, B^*_i represents the average value of the independent variable measured among all sample respondents over a period of 3 days. The model appreciates three dependent variables: the propensity to vote for François Fillon, Alain Juppé and Nicolas Sarkozy. Our hypothesis is that the preferences of primary voters is the result of both their left-right self-placement (an important variable for this primary as a part of Juppé voters is expected to come from the centre-left or even the left), the issues agreement level (the issue statements of *La Boussole présidentielle*) and the image traits (fitness to be President and empathy) controlled by socio-demographic variables and the referential pre-campaign image traits and issues agreement

⁴³ Johnston and Brady (2002: 291) who first presented the application of a conditional change model to rolling cross-section data argue that “the statistical consistency that makes the estimator so attractive accrues as the size of the daily samples increases without limit”. Therefore, to insure a large sample enough for each observation point, the referential centred variables were computed over periods of 3 days. As the dataset covers a period of 28 days, one period of observation covers 4 days instead of 3.

⁴⁴ The alternative to this conditional change model would have been a linear regression model without the inclusion of the referential pre-campaign variables. We tested such an alternative modelling. The results show that the overall variance explained is of the same order of magnitude than in the conditional change model, and the statistical significance of the main explanatory variables is the same in the two scenarios. However, the direction of the coefficients of the image traits variables is sometimes different because without the referential pre-campaign variables modelled in the conditional change model, it becomes impossible to distinguish between what falls under the label of campaign effects and what falls under the umbrella of attitudes already hold before the campaign. The absence of these referential pre-campaign variables would therefore led to wrong conclusions regarding campaign dynamics of the primary of the right and of the centre.

variables. For each candidate, we are testing three nested regression models from the simplest (left-right self-placement controlled by socio-demographic variables) to the more sophisticated (left-right self-placement, issues agreement and image traits controlled by socio-demographics and referential pre-campaign variables). The socio-demographic variables are gender, age in 5 age groups (18-24, 25-34, 35-49, 50-64, 64<) and level of education in 3 groups (lower than high school degree, high school degree and college degree education⁴⁵, and university degree). Finally, the left-right self-placement scale is recoded in 5 categories⁴⁶. After we insert the variables of interest into the conditional change model, we obtain the following equation:

$$\begin{aligned}
 Y_{it} = & \alpha_1 + \beta_1 \text{Enjeux}_{it} + \delta_1 (\alpha_0 + \beta_0 (\text{Enjeux}_{it} - \text{Enjeux}^*_i) + \varepsilon^{\circ}_{it}) \\
 & + \beta_1 \text{Étoffe}_{it} + \delta_1 (\alpha_0 + \beta_0 (\text{Étoffe}_{it} - \text{Étoffe}^*_i) + \varepsilon^{\circ}_{it}) \\
 & + \beta_1 \text{Empathie}_{it} + \delta_1 (\alpha_0 + \beta_0 (\text{Empathie}_{it} - \text{Empathie}^*_i) + \varepsilon^{\circ}_{it}) \\
 & + \beta_1 \text{Échelle gauche-droite}_{it} \\
 & + \text{Variables de contrôle}_{it} + \varepsilon_{it}
 \end{aligned}$$

The results of the models displayed in Table 5.3⁴⁷ show that for each of the three candidates, the introduction of the candidates image's traits translates into a strong increase of the variance explained: for each of the three candidates, the Adjusted Chi-Square value is multiplied by at least 3 from model 1, which only relies on control variables and the left-right self-placement, to model 3, in which image effects are introduced⁴⁸. Similarly, the Adjusted Chi-Squares increase of at least 2,7 times from model 2, including issues agreement scores, to model 3.

⁴⁵ In the French education system, it corresponds to a “BAC+2” level of education.

⁴⁶ 0-2 = extreme left; 3-4 = left; 5 = centre; 6-7 = right; 8-10 = extreme right.

⁴⁷ Sample made of *La Boussole présidentielle*'s users sure to vote in the first round of the primary of the right and the centre. Sample weighted daily on the average sample values of gender, age and level of education.

⁴⁸ These results confirm the work of Chiche and Boy (2009) who have provided empirical evidence on the importance of candidates' images in order to explain voting behaviour in French Presidential elections.

If we turn to the effects of our key explanatory variables, we notice that the left-right self-placement of respondents remains significant across models⁴⁹. Considering that we are analysing PTV scores for a primary election in which the left-right prism among the political offer is necessarily more limited than in a Presidential election, this result is remarkable. It is likely due to the fact that the three candidates included in the analysis over-emphasized the ideological differences between each other in order to be more distinguishable for their electorate; hence, stressing a left-right polarization within this primary election. The more the VAA users located themselves on the right the more the PTV scores for François Fillon and Nicolas Sarkozy increases, while it is exactly the opposite for Alain Juppé.

The polarization of the electorate participating in a primary election is not new within the literature. Owen and Grofman (2006) have already shown that the competitive nature of primary elections results in the polarisation of voters, candidates and their positions, in particular in the context of primary elections organized for the designation of Congress candidates in the United States. If the ideological distance between voters of the two main parties is wide and that their respective primary elections are particularly competitive, “strategic candidates” will hold positions further away from the national median voter and closer to the party median voter. This process will ultimately polarize, not only voters’ preferences but also, the propositions of candidates during the campaign and during the legislature. This polarisation suggests that voters’ choice during a primary election is more the result of an ideological or partisan decision than in national elections when the whole electoral body is consulted (Fiorina et al., 2006; Fiorina and Levendusky, 2006). If the electoral turnout in a primary election is weak, then this process is likely to be even stronger as strongly partisan voters are more likely to mobilize themselves and to be overrepresented among primary voters. The data collected by *La Boussole présidentielle* confirm the polarization effect of primary elections but in a context of high participation (4.3 million voters in the first round) and in which potential Juppé’s voters were the furthest away from the right median voter.

The variables measuring the effect of issues agreement between the VAA users and the candidates are strongly significant for Fillon while they are not for Juppé and barely have an impact for Sarkozy. It is therefore Fillon that attracts issue voters during this primary; however, the results of the conditional change model show that this issue voting is not the

⁴⁹ Even if we know that when dealing with very large samples as the one we are using, statistical tests tend to be significant.

result of a campaign effect (variable “Issues agreement”) but that it was acquired before the beginning of the campaign (variable “Referential – issues”)⁵⁰. The campaign impacts negatively issues voting in favour of Fillon. Paradoxically, during the campaign, to agree with Fillon does not translate in an increase in the PTV score expressed in his favour. The Fillon campaign dynamic is rather found in his candidate image. When we introduce the image variables in the regression model (model 3), their effects wipe the significance of issue variables out. It is his fitness to be President of the Republic that weights in and not his perceived empathy. Before the campaign, considering that Fillon is fit to be President led to a decrease in the PTV score expressed in his favour (variable “Referential – fit”) while during the campaign an increase of one point in his fitness to be President score translated into a 1.5 point increase in the PTV scores expressed in his favour (variable “Fit to be President”). These results mean that before 24 October (date of the VAA launch), *La Boussole présidentielle*’s users who do not intend to vote for Fillon still consider that he is fit to be President, and that during the campaign Fillon successfully established his image and created a positive voting dynamics in his favour based on this specific image trait.

Juppé’s campaign dynamic stands both on issue voting and on his image traits. In fact, we observe significant and positive coefficients on the issue agreement and empathy variables. An increase of one point on the issue agreement scale translates into an increase of 0.18 point on the PTV score expressed in his favour. Much more sharply, an increase of one point on his empathy scale translates into an increase of 1.17 point on the PTV score expressed in his favour. The negative coefficient on his fit to be President variable means that during the campaign even the sample respondents who declared a low PTV score in his favoured think that he is fit to be President. His past governmental experience seems to provide him with a certain prestige among primary voters, even those who do not intend to vote for him.

Finally, when we interpret the results of the regression model on the PTV score expressed in favour of Sarkozy, two elements are salient. First, the issue variables are never significant underlining that Sarkozy’s campaign dynamic stood only on his image, and in particular on his perceived empathy as an increase of one point of his empathy score translates into an increase of 2.5 points of the PTV score expressed in his favour. He is by far

⁵⁰ As a reminder, *La Boussole présidentielle* for the primary of the right and the centre was launched on 24 October 2016. Hence the data collected can only measure the campaign effects that took place during the last four weeks of the campaign.

the candidate whose image has had the greater role in his electoral support. Whether he performs rather well on the “fit to be President” scale (see Figure 5.4), after all he has already been President of the Republic, such fitness does not translate in an increase of support (negative coefficient of the variable “fit to be President”). And second, he is the only candidate, out of the three tested, whose socio-demographic control variables remain significant in Model 3. Thus, to be a man and to have a level of education lower than the average of *La Boussole présidentielle*'s users are strong determinants of the Sarkozy vote in the first round of the primary of the right and the centre.

Table 5.2. Linear regression models (OLS) predicting the propensity to vote scores of candidates⁵¹

	FILLON			JUPPÉ			SARKOZY		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Women	-.012 (.145)	-.035 (.141)	-.058 (.095)	.647*** (.148)	.524*** (.148)	.003 (.106)	-.743*** (.147)	-.737*** (.144)	-.391*** (.101)
Age	.289*** (.062)	.185** (.061)	.017 (.041)	.030 (.063)	.034 (.063)	-.015 (.072)	.060 (.063)	-.016 (.062)	.021 (.044)
Education	.279** (.097)	.218* (.094)	.057 (.063)	.302** (.100)	.199* (.101)	-.010 (.045)	-.639*** (.099)	-.553*** (.097)	-.372*** (.068)
Left-right scale	1.126*** (.069)	.884*** (.072)	.215*** (.050)	-1.034*** (.069)	-.965*** (.070)	-.771*** (.049)	1.674*** (.069)	1.403*** (.073)	.185*** (.056)
Issue agreement		-.748*** (.062)	-.040 (.061)		.257* (.112)	.180* (.082)		.248 (.132)	-.156 (.107)
Referential - issues		.797*** (.062)	.050 (.061)		-.220* (.050)	-.177* (.082)		-.181 (.132)	.184 (.107)
Empathy			-.108 (.515)			1.172*** (.348)			2.532*** (.698)
Referential - empathy			.516 (.515)			-.725* (.348)			-1.981** (.698)
Fit to be President			1.555*** (.394)			-.725* (.348)			-.978* (.457)
Referential - fit			-.962* (.395)			1.030* (.419)			1.328** (.457)
Constant	-377 (.469)	33.852*** (2.754)	-3.295 (2.852)	8.468*** (.475)	1.041 (3.288)	.565 (3.493)	-1.175* (.475)	-10.532 (5.572)	5.363 (4.176)
Adjusted R2	.101	.171	.625	.089	.102	.550	.211	.243	.632
N	2626	2626	2626	2599	2599	2599	2621	2621	2621

⁵¹ ° $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

F/ Conclusion

This chapter has evaluated the appropriateness and the performance of VAAs for the study of voting behaviour and campaign dynamics. First, the uniqueness of VAA data allowed us to analyse and to visualize voters-candidates congruence on the issue statements in the two-dimensional political landscape of *La Boussole présidentielle*. We have studied this match first by using the propensity to vote scores expressed for each of the running candidate for the first round, and then by crossing issue positions and vote intentions for the second round of the presidential election. With the first criteria, we have determined that in most cases voters are the closest to the favourite candidates than to the candidates that they have discarded. With the second criteria, we have noted that in 2012 despite the fact that on average voters of the far-right and of the centre were closer to the issues positions of Hollande than to those of Sarkozy, a considerable share of these voters casted their ballot for Sarkozy in the second round because he was closer to them on the issues that mattered the most to them, namely economic issues for centrist voters and immigration issues for the far-right. In 2017, a glitch in the system during the data collection process prevented us from having reliable data on issues importance for respondents who visited the VAA during the presidential election. Nevertheless, the data collected by *La Boussole présidentielle* during the French primary of the right and the centre have proven VAAs to be a powerful measurement instrument to unravel campaign dynamics and to understand voters' motivations during an election. To confirm the validity of VAA data for such types of analyses, further datasets should be analysed with the same methodological perspective and the same statistical procedures, first and foremost the data collected during the centre-left primary of the *Belle Alliance Populaire* 2017⁵² and the presidential election of 2017.

⁵² However, the (very) short length of the campaign of the centre-left primary, barely two weeks right after the Christmas and New Year Eve holidays, may prevent us from observing any substantive campaign dynamic.

III. Media use and information flow in the digital era: the case of online VAAs in electoral campaigns

CHAPTER 6 – INFORMATION FLOW IN CONTEMPORARY MEDIA SYSTEMS

This chapter aims to present a theoretical framework in order to understand and to analyse political communication in contemporary societies. The first step of this process is to acknowledge that despite similarities, media traditions, and therefore the political communication that they mediate, can be widely different from country to country. Thus, any comparative analysis in this field should contextualise its approach within the broader framework of media systems (section A). Modern media systems are rooted into very different social, cultural, and political contexts. However, in these last decades, they have experienced common trends that are said to push toward a homogenization of such media systems (section B). These transformations have deeply impacted the relationship between citizens, parties and media, with a shift from party-generated engagement into the political process to a media-generated one (section C). In fact, with the spread of the Internet, there has never been as much new political information available as today. This new media environment impacts not only information receivers, i.e. citizens, but also information producers, i.e. journalists (section D); and makes the role of electoral campaigns central for the spread of political information within the electorate (section E). All along this chapter, the role and place of online VAAs within these broader developments is progressively introduced.

A - A framework for media systems' analysis

This dissertation *analyses VAAs as informational tool in society and their use by voters in different media and political systems*. Along these lines, this dissertation touches on *the working of democratic politics and the role of information in these processes*. To fulfil this purpose, we need to channel the discussion. As far as the informational dimension of VAAs is concerned, we are considering it as belonging to the repertoire of news journalism accessible during campaigns, rather than all the varied activities and genres of the media. By *media*, we mean all means of public communication, but our focus is directed to the mainstream media where the work of the professional journalist, although not exclusively, is embedded. By *society* we mean any collective social entity to which media as defined might

be oriented, in particular our main attention is on the role that news journalism performs towards voters.

The concept of *role* is key here as it implies two elements: an institutional one and a normative one. A role refers to “a composite of occupational tasks and purposes that shows wide recognition and recurrence” and which is “normally located within an institutional framework, directed and regulated by the typical activities of the institution” (McQuail, 2006: 48). The relevant institution of our study is the mass media system of a given society. Because a role includes a purpose, there is necessarily a normative character attached to it, that is to say “an element of value-based desirability” (McQuail, 2006: p.49). Speaking about a ‘normative role’ means that the actions and practices involved in performing the role are guided by some external ideal, that is they are not primarily driven by a potential material reward or advantage. Furthermore, McQuail, (2006) argues that “[n]ormative purpose can either be voluntary (self-chosen by an organization or a purpose) or assigned externally (as in the form of media law and regulation)” (p.49).

One near-mythic purpose of the media is to strengthen “the assumed free marketplace of ideas” (Dervin, 1994: 369). The assumptions behind this purpose are that access to ‘good information’ is critical for the working of ‘good democracy’; this ‘good information’ ought to be available to all citizens in a democracy, and we must therefore provide means of access to ‘good information’ to all citizens. To perform this function the means of communication need to be independent from other systems, particularly from the political system. From this perspective, some scholars have analysed the development of news media in Western society as a process of progressive differentiation of media from other social bodies, arguing that “a society is considered ‘modern’ if its journalistic information system is autonomous from other social systems” (Alexander, 1981: 23-26). The perspective of differentiation also appears in the works of Bourdieu (1996), the former when he discusses the nascent sphere of ‘collective will-formation’ in which public issues could be discussed and an autonomous public opinion created, and the latter when he introduced the concept of ‘field’ applied to journalism, i.e. a sphere of social action with its own rules of the game, standards of practice and criteria of evaluation. However, both authors have implied that a process of de-differentiation has been taking place as the economic power is increasingly dominating the media.

Nevertheless, according to Hallin and Mancini (2004), the concept of differentiation is unquestionably useful for understanding differences among media systems as some of the dimensions they employ in their analysis can be connected to it:

- *Political parallelism*, organizational links between parties and media, or at least some aspects of it, can be understood in terms of the degree of differentiation or lack of differentiation between the media and the political system.
- *Professionalization* of the journalistic profession can be understood in terms of the degree of how journalism distinguish itself from other occupations and forms of social practice.
- *The role of the state* can be understood in terms of the differentiation or lack of differentiation between media and state.

To position this dissertation into the existing literature, we will now present the theory of media system as put forward by Hallin and Mancini (2004). First, we will introduce the four dimensions they use for their analysis (section 2.1.1), and then we will present their three models of media and politics (section 2.1.2).

1) The Four Dimensions of a Media System

The framework Hallin and Mancini (2004) use to compare media systems in Western Europe and North America is structured around four major dimensions: (1) the development of media markets, with particular emphasis on the strong or weak development of a mass circulation press; (2) political parallelism, that is the degree and nature of the links between the media and political parties or, more broadly, the extent to which the media system reflects the major political divisions in society; (3) the development of journalistic professionalism; and (4) the degree and the nature of state intervention in the media system.

a) The Structure of Media Markets

One of the most obvious differences among media systems has to do with the development of the mass circulation press. In some countries mass circulation newspapers developed in the late nineteenth and early twentieth century. In other they did not. That historical difference is reflected today in different rates of newspaper circulation: high rates of newspaper circulation are characteristic of Scandinavia and other parts of Northern Europe, and low rates characteristic of Southern Europe Hallin and Mancini (2004).

“The distinction here is not only one of quantity. It is also a distinction in the nature of the newspaper, its relation to its audience and its role in the wider process of social and political communication. The newspapers of Southern Europe are addressed to a small elite – mainly urban, well-educated, and politically active. They are both sophisticated and politicized in their content, and can be said to be involved in a *horizontal* process of debate and negotiation among elite factions. The newspapers of Northern Europe and North America, by contrast, tend to be addressed to a mass public not necessarily engaged in the political world. They are, in this sense, involved in a *vertical* process of communication, mediating between political elites and the ordinary citizen [...].” (Hallin and Mancini, 2004: 22)

With their relatively low circulation, the newspapers in Southern Europe have not historically been profitable business enterprises, and have often been subsidized by political actors. On the other hand, the high-circulation newspaper markets of Northern Europe have sustained strong commercial media enterprises. With regard to patterns of development of the press, one interesting manifestation of this difference is the fact that large gender differences in newspaper readership persist in Southern Europe, while being small or non-existent in the other regions covered by the book of Hallin and Mancini. Because the media were closely tied to the political world in Southern Europe, and because women were historically excluded from that sphere, the habit of reading newspaper never developed among women there.

The differential development of mass circulation newspapers is naturally accompanied by differences in the relative roles of print and electronic media. “In countries where mass circulation newspapers are absent, the mass public relies heavily on electronic media for information about political affairs” (Hallin and Mancini, 2004: p.24). Consequently, the presence or absence of a mass circulation press has deep implications for the development of the media as political institutions.

b) Political Parallelism

“One of the most obvious differences among media systems lies in the fact that media in some countries have distinct political orientations, while media in other countries do not”

(Hallin and Mancini, 2004: p.27). Even though the true party press has almost disappeared, and even if the political tendencies of European newspapers are fuzzier today than they were a generation ago, distinct political tendencies persist, more in some countries than in others. This distinction is expressed by the concept of *party-press parallelism*, proposed by Seymour-Ure (1974). By party-press parallelism, Seymour-Ure meant the degree to which the structure of the media system paralleled that of the party system. “It exists in its strongest form when each news organization is aligned with a particular party, whose views it represents in the public sphere” (Hallin and Mancini, 2004: p.27). This kind of one-to-one connection between media and political parties is less and less common nowadays; they more often are associated not with particular parties, but with general political tendencies. For that reason, Hallin and Mancini (2004) prefer to use the more general term of *political parallelism*, while recognizing that party-press parallelism in the stricter sense does in some cases persist.

Political parallelism has a number of different components, and there are a number of indicators that can be used to assess how strongly it is present in a media system (Patterson and Donsbach, 1993). Perhaps most basically, it refers to *media content* – “the extent to which the different media reflect distinct political orientations in their news and current affairs reporting, and sometimes also their entertainment content” (Hallin and Mancini, 2004: 28). Another of the most important components of political parallelism is *organizational connections* between media and political parties or other kinds of organizations. A closely related component of political parallelism is the *tendency for media personnel to be active in political life*, often serving in party or public offices. This is also much less common today. Somewhat more common is a *tendency in some systems for the career paths of journalists and other media personnel to be shaped by their political affiliations*, in the sense that they work for media organizations whose politics coincide with their own. Political parallelism is also often manifested in the *partisanship of media audiences*, with supporters of different parties or tendencies buying different newspapers or watching different TV channels. Finally, it is manifested in *journalistic role orientations and practices*, in some historical periods journalists retain more of the “publicist” role, i.e. an orientation toward influencing public opinion. In some other periods, journalists are more likely to see themselves as providers of neutral information or entertainment.

In short, the culture and discursive style of journalism is closely related to that of politics in systems where political parallelism is strong.

c) Professionalization

The ideal type of professionalization is based on the history of the classic “liberal” professions, above all medicine and law. Journalism departs substantially from that ideal type. One of the central criteria of this model is that the practice of a profession is “based on systematic knowledge or doctrine acquired only through long prescribed training” (Wilensky, 1964: 138). Journalism has no such systematic body of knowledge or doctrine. As much as it departs from the ideal type of the liberal professions, journalism has come to share important characteristics with them. In order to compare media systems in terms of the degree and form of professionalization of journalism, Hallin and Mancini (2004) focus primarily on three related dimensions of professionalization:

- (1) *Autonomy* has always been a central part of the definition of professionalism. This is one of the key reasons why many occupations try to “professionalize” themselves in order to justify greater control over their work process. Control of the work process in journalism is to a significant extent collegial, in the sense that primarily peers exercise authority over journalists. The authors stress the fact that the autonomy here mentioned is not necessarily the autonomy of individual journalists but of the corps of journalists taken as a whole.
- (2) *Distinct professional norms* as a set of shared norms are common in many professions. In the case of journalism, these norms can include ethical principles such as the obligation to protect confidential sources or to maintain a separation between advertising and editorial content, as well as practical routines and criteria for judging excellence in professional practice and allocating professional prestige. Naturally, the existence of distinct professional norms is related to autonomy in the sense that such norms could not govern the practice of journalism if that practice were controlled by outside actors.
- (3) *Public service orientation*. Another important element of the concept of “professionalism” is the notion that professions are oriented toward an ethic of public service. It is a historically specific conception of the journalist’s role in society with important consequences for the practice of journalism and the relation of the media to other social institutions. Since

journalism lacks esoteric knowledge, journalists' claims to autonomy and authority depend to a particularly great extent on their claim to serve the public interest.

Hence, the key elements of journalistic professionalization are the notion of journalism as a 'public trust', the existence of shared standards of professional practice, and the emphasis on journalistic autonomy.

d) The Role of the State

The state plays a significant role in shaping the media system in any society. But there are considerable differences in the extent of state intervention as well as in the forms it takes. The most important form of state intervention is surely public service broadcasting, which has been present in every country in Western Europe and North America except in the smallest country such as Luxembourg. In most countries, it has been the only or the primary form of broadcasting until recently. There has been a strong shift toward commercial broadcasting in recent years but public service broadcasting remains quite significant in most of the countries that Hallin and Mancini cover in their study.

Public broadcasting has been the most important form of state ownership of media. However, in many countries the state has also owned news agencies, newspapers, or other media-related enterprises, either directly or through state-owned enterprises. Press subsidies have also been present in most of the countries covered by the authors. Additionally, the state, and in many cases state-owned enterprises, are also advertisers. Finally, subsidies for the film industry are also very common.

In the broadest terms, "a distinction can be made between relatively liberal media systems, in which state intervention is limited and the media are left primarily to market forces, and systems in which social democratic or *dirigiste* traditions are manifested in a larger state role in the ownership, funding, and regulation of media" (Hallin and Mancini, 2004: p.44, emphasis in original). Systems also vary in the *effectiveness* of media regulation: a weaker state role can result either from a deliberate policy favouring market forces or from failure of the political system to establish and enforce media policy. Apart from issues of media ownership, funding, and regulation, the state always plays an important role as a source of information and "primary definer" of news (Hall et al., 1978).

According to Hallin and Mancini (2004), these four dimensions cover most of the major variables relevant to comparing the media systems of Western Europe and North America, at least from the point of view of media and politics. The following section (2.1.2) presents more in details the three ideal types of media systems that the authors identify based on the four dimensions of analysis: the Polarized Pluralist model, the Democratic Corporatist model, and the Liberal model.

2) Three Models of Media Systems

a) The Mediterranean or Polarized Pluralist Model

What distinguishes Southern Europe (Greece, Italy, Portugal, and Spain) – and to a lesser degree France – from the rest of Western Europe and from North America is most basically the fact that liberal institutions, including both capitalist industrialism and political democracy, developed later. One important legacy of the long-lasting forces of the *ancien régime* – the landholding aristocracy, the absolutist state, and the Catholic or Orthodox Church – is the fact that the political spectrum remained wider and political differences sharper in Southern Europe than in Northern Europe or North America. Political scientists refer to it as polarized pluralism (Sartori, 1976).

This heritage and the long and conflicted transition to capitalism and bourgeois democracy in Southern Europe produced a media system closely tied to the world of politics. The weakness of liberal social and economic institutions limited the development of the mass circulation press, and limited development of the market economy restricted both the resources available to commercial newspapers and the need for the kind of information-oriented content that was crucial to their social function in a market economy (Hallin and Mancini, 2004: 128-129). Therefore, the media developed in Southern Europe as an institution of the political and literary worlds more than of the market, and which main purpose was the expression of ideas. Another characteristic worth noting of the press market in the Mediterranean countries is that gender differences in newspaper readership are quite large, reflecting the closeness of the press to the world of politics and the traditional exclusion of women from the latter, as well as historically high rates of female illiteracy (Vincent, 2000).

Under dictatorships in Southern Europe in the twentieth century, the tradition of a pluralistic and politically engaged press was cut off. Once democracy was consolidated, a high degree of political parallelism re-emerged, with the media serving to represent the wide range of political forces that contended for influence. The commercial press did not develop as strongly as in the Liberal or Democratic Corporatist systems. Newspaper circulation remained relatively low and electronic media obtained correspondingly a central role. Broadcasting too has tended to be party-politicized, with France moving away from that pattern in the 1980s. One of the most characteristic patterns of the Mediterranean region is the use of the media by various actors as tools to intervene in the political world, leading to high level of media instrumentalization. A correlate to instrumentalization is, compared to Liberal or Democratic Corporatist systems, the relatively low level of journalistic autonomy and professionalism, with political loyalties often superseding commitments to common professional norms and institutions. The state has also tended to play an interventionist role in many ways although clientelism and political polarization have often undercut its effectiveness as a regulator, except in France. (Hallin and Mancini, 2004: 113-124 and 138-142)

b) The Democratic Corporatist Model

What the authors call the Democratic Corporatist Model developed in Northern and Central Europe – in Scandinavia, the Low Countries, Germany, Austria and Switzerland. A strongly intertwined historical evolution has affected the communication system across these two regions of mainland Europe. The social interactions within these countries have often been conflictual in character. But conflict too is a social relationship, and has often meant exportation or mutual influence of cultural models. Luther's challenge to the Church played a particularly important role in creating a common culture and a common public sphere in Northern and Central Europe.

The common history of these Northern and Central European countries has meant that, despite many differences among them, their media systems share important common characteristics. Hallin and Mancini (2004: 143-145) summarize those characteristics in terms of three 'coexistences' that they identify as distinctive to the Democratic Corporatist countries. In the first place, a high degree of political parallelism has coexisted with a strongly developed mass-circulation press. Political partisanship has weakened substantially over the last generation. Nevertheless, the experience of a strong advocacy press not only characterizes

the history of the media in Northern and Central Europe, but in important ways still affects journalism, media structures, and the way these interact with other social forces. At the same time strong commercial media markets developed in all these countries and the Democratic Corporatist countries remain distinctive for their high levels of newspaper circulation.

The second ‘coexistence’ is closely related to the first: a high level of political parallelism in the media has coexisted with a high level of journalistic professionalization, including a high degree of consensus on professional standards of conduct, a notion of commitment to a common public interest, and a high level of autonomy from other social powers. But political parallelism in the media has weakened while journalistic professionalization has strengthened over the last decades. The media in Democratic Corporatist countries have traditionally reflected the divisions and diversity of society, yet have functioned as members of a profession with strong institutional coherence, consensus on its own rules of conduct, and substantial autonomy from other social institutions.

The third ‘coexistence’ has to do with the role of the state. In the Democratic Corporatist countries – except in Austria and Germany – liberal institutions were consolidated early. In this sense, there is a strong tradition of limits on state power on the one hand. On the other hand, strong welfare state policies and other forms of active state intervention developed in those countries in the twentieth century, and these tendencies are also manifested in important forms of public-sector involvement in the media sphere that distinguish the Democratic Corporatist from the Liberal countries. This is reflected “in the media field by a strong consensus that the state must play a positive role as the guarantor of equal opportunities of communication for all the organized social voices in pursuit of the ‘common good’” (Hallin and Mancini, 2004: p.197).

c) The Liberal Model

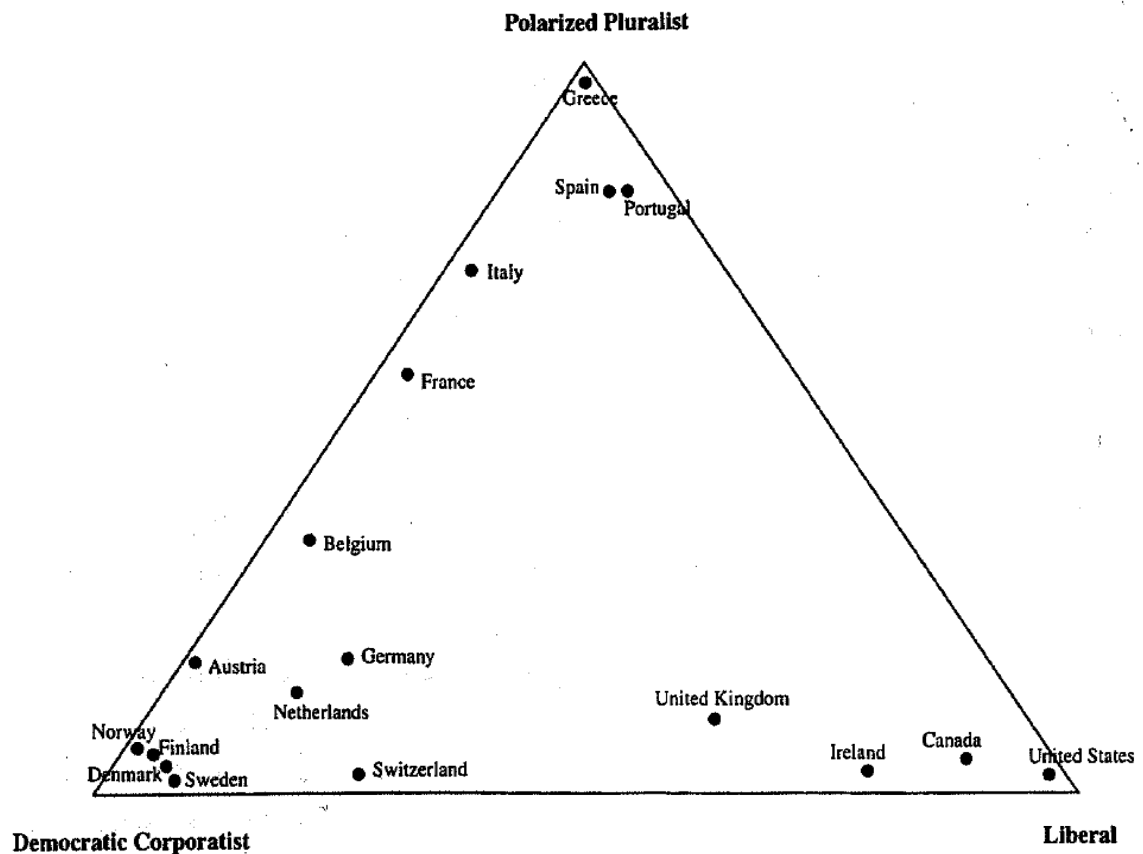
The Liberal or Anglo-American model of the mass media is the only model that has really been analysed in media studies as a coherent model. In fact, the early consolidation of liberal institutions in Britain and its former colonies – here Canada, Ireland, and the United States – together with a cluster of social and political characteristics related to this history – early industrialization, limited government, strong rational-legal authority, moderate and individualized pluralism and majoritarianism – are connected with a distinctive pattern of media-system characteristics (Hallin and Mancini, 2004: pp.198-248). These include the strong development of a commercial press that expanded with relatively little state

involvement, and became overwhelmingly dominant, marginalizing party, trade union, religious, and other kinds of non-commercial media. With Ireland being the exception, commercial broadcasting played a larger role than in most of continental Europe. In each of those countries, an informational style of journalism has become dominant emphasizing a relatively strong professionalization of journalism, the development of a strong tradition of “fact-centred” reporting, and the strength of the objectivity norm, and traditions of political neutrality – though with a very important exception in the British press. In general, “media have been institutionally separate from political parties and other organized social groups, for the most part, since the late nineteenth century. Finally, state intervention in the media sector has been limited by comparison with the Democratic Corporatist or Polarized Pluralist systems” (Hallin and Mancini, 2004: p.246).

Nevertheless, there are significant differences among the four countries. The British and to a lesser extent the Irish and Canadian systems share important characteristics in common with continental European systems both in their political institutions and cultures and in their media systems. The strength of public broadcasting and the persistence of party-press parallelism in the British press is one of those shared characteristics. It also suggests that the common assumption that commercialization automatically leads to the development of politically neutral media is incorrect. Public service broadcasting also occupies a different role within the Liberal Model countries. In the United States it has always been marginal, while in the three other countries it has played a central role in media history.

The Liberal Model of media system is commonly taken around the world as the normative ideal of the neutral independent watchdogs. The authors underline that if “the Liberal countries have long and strong traditions of press freedom, [...] [and] the BBC can be said to deserve its reputation as a model public broadcasting system, with both relatively strong political independence and a good balance of responsiveness to public taste and a public service orientation [...], [then] [o]ther characteristics of the Liberal systems are less attractive” (Hallin and Mancini, 2004: p.247). The British press is characterized by partisan imbalance and a fairly high degree of instrumentalization, and the U.S. press by a lack of diversity. Both the British press and US American television are characterized by high degrees of commercialization that strain journalistic ethics and raise questions about how well the public interest is served.

Figure 2.1. Relations of Individual Cases to the Three Models (Hallin and Mancini, 2004: 70)



In their book, Hallin and Mancini (2004) have argued that there are important connections between the patterns of development of media systems, based on the four dimensions, and certain key characteristics of the political system. Usually, however, the connections between media system and political system variables cannot be interpreted as a mechanistic, one-to-one correspondence. Elements of political structure interact, for one thing, with other kinds of factors, including technological and economic factors. Also these connections do not arise from one-way causal relationships. Media systems have their own effects on the political system in many cases; the process is really one of co-evolution of media and political institutions within particular historical contexts. Table 2.2 summarizes the patterns of variation of the characteristics of the three models.

Table 2.2. *Pattern of Variation in Four Media System Dimensions (Hallin and Mancini, 2004: 299)*

	Polarized Pluralist	Democratic Corporatist	Liberal
Development of Mass Press	Low	High	High
Political Parallelism	High	High	Low
Professionalization	Low	High	High
State Intervention	High	High	Low

“[T]he Liberal Model has dominated media studies and has served as the principal normative model against which other media systems have traditionally been measured” (Hallin and Mancini, 2004: 306). However, the authors suggest that it is probably the Polarized Pluralist Model, more than the other two outlined in their book, that is most widely applicable to other systems as an empirical model of the relation between media and political systems. They suspect that scholars in many parts of the world will find the different aspects of analysis of Southern Europe relevant to their own cases, such as the role of clientelism, the strong role of the state, the role of media as an instrument of political struggle, the limited development the mass circulation press, and the relative weakness of common professional norms.

Now that we have presented the theoretical foundations of a media system perspective allowing us to differentiate between three different models, we will discuss trends that have impacted the media across media systems in these last decades.

B - Transformations in media and political communication

The way how information is being produced, communicated and accessed has profoundly changed in the last 50 years. The media, which are the central avenue for political communication, are no longer simply channels for transmitting messages. “They are autonomous mediators in society and they follow their own rules, aims, constraints and production logic” (Negrine and Papathanassopoulos, 2011: 41). These media changes echo the technical, social and political evolutions of contemporary societies (Blumler and Kavanagh, 1999): in particular those of modernization, commercialization and digitalization.

Firstly, these changes in the nature, form and appearance of the media should be understood within the broader framework of the modernization of societies. In such societies, there is an increased ‘functional differentiation’, and an emergence of specialist interest groups and ‘social sectors’, all of which undermine “the traditional aggregative structures of society” (Swanson and Mancini, 1996: 253). One fundamental component of the modernization perspective is the idea that the importance of group solidarity and the centrality of organized social groups are giving way to greater individualism (Giddens, 1990). According to this view, the European political order used to be organized around social institutions, such as political parties, trade unions, and churches, among others, rooted in ideological commitments and group loyalties related to broad social divisions, especially those of social class and religion. The ties of individuals to these groups were central both to their identity and to their material well-being, and the institutions connected with these groups were central to the organization of the public sphere. If political communication is being transformed, this cannot be understood without reference to the collapse of this old political order, and its displacement by a more fragmented and individualistic society. Thus, in recent decades there has been a significant ‘depillarization’ – an erosion of the ties between established parties and traditional organized interests (Webb et al., 2002). This trend has led mass media to assume “many of the information functions that political parties once controlled; instead of learning about an election at a campaign rally or from party canvassers, the mass media have become the primary source of campaign information” (Dalton and Wattenberg, 2000: 11-12).

Secondly, processes of deregulation, privatization and commercialization have transformed both print and electronic media though the change is especially dramatic in the latter case. In the case of the print media, the post-World War II period is characterized by a gradual decline of the party press and general separation of newspapers from their earlier rooting in the world of politics. As party papers declined, commercial newspapers have grown in strength; these newspapers, similar to their American counterparts, tend to be catch-all papers, defining themselves as politically neutral (though generally liberal and centrist in ideological orientations) and committed to an informational model of journalism (Hallin and Mancini, 2004). Picard (2004) argues that nowadays the primary content of newspapers is commercialized news and designed to appeal to broad audiences, to entertain, to be cost effective and whose attention can be sold to advertisers. The most dramatic changes, however, has clearly been the commercialization of European broadcasting (Hultén, 2007). Public

service broadcasting was regulated by norms and values firmly rooted in the distinct cultural and political paradigms that prevailed in the different nation states of Europe. “Sustaining and renewing the society’s characteristic cultural capital and cement” was indeed one of the central missions of public service broadcasting (Blumler, 1992: 11). In important ways the public service system limited the social and political impact of television, creating continuity between television culture and the established culture of wider society (Hallin and Mancini, 2004).

Since the 1980s, the commercial “deluge”, as many discussions have characterized it, is dramatically undercutting this system, disrupting the connection between broadcasting and national systems. There has been much comment on the “tabloidization” of newspapers as they compete for readers. The equivalent process in television has led to many new forms of ‘reality’ television that deal in all kinds of ‘human interest’ and dramatic topics in a variety of formats (Bird, 1998; Connell, 1998). Langer (2003) shows that those transformations in the media are a question of access (who gets in the news) and of representation (how they are depicted). The new format characterized by infotainment, dramatization and personalization does make news more accessible to the many but also led to a trivialization of what people learn from news (McQuail, 2005). By and large, these changes have changed the ways media work. For instance, commercialization privileges ‘media logic’ over ‘political logic’ (Mazzoleni, 1987) with the effect of forcing those in politics to become aware of the needs of the media. “Though political actors may have lost direct control over the media as journalism becomes more independent and critical, they can often find other and different ways to exert their control over the media” (Negrine and Papathanassopoulos, 2011: 44). As they develop effective means of persuasion based on research on audiences and systemic campaigns, political actors become more professional (Negrine *et al.*, 2007).

Thirdly and lastly, both political actors and ‘old’ media have had to adapt to the emergence of ‘new’ media. Information and communication technologies (ICTs) such as cable and satellite television “created a television of abundance where there was once scarcity” and gave rise to 24h news channel “that forced politicians amongst others to re-think their communication strategies” (Negrine and Papathanassopoulos, 2011: 44). Some referred to these changes as the “third age of political communication” (Blumler and Kavanagh, 1999). With the emergence of the Internet, the digital age created different conditions for political communication. On the one hand, the digital media complements and supplements the older forms of communication by creating other sources of information: it can target

individuals as well as groups; it can be plentiful since there is no restriction on supply; and so on. And on the other hand, the Internet becomes a means of communication *per se* connecting people in different and complex ways: it can be direct and not mediated by traditional professional journalists; it can be interactive; it can be peer-to-peer; and so on. Although the Internet has exponentially increase the supply of information, we still live in an age of *mass media* as television and newspapers continue to be important players within the political system.

C - Information, media environment and politics

As underlined above, these changes in the landscape of political communication echo socio-cultural and political transformations in modern societies. With regard to electoral politics, declining levels of party attachment of voters, and the withdrawal of parties from society, have weakened the core vote for traditional political parties (Inglehart, 1997; Dalton and Wattenberg, 2000). According to Plasser and Plasser (2002: 307), “Western European parties have responded to dealignment tendencies within the electorate with a strategy of professionalization of party management and reliance on modern campaign techniques”. Among their functions, political parties were mostly responsible for integrating excluded social groups into the body politics, and for embodying socio-cultural cleavages within society and making lines of conflicts apparent and legitimate. If because of these changes political parties have become nothing more than small, unrepresentative bodies seeking power without a real organic connection to society, how are voters engaging with current affairs?

Manin (1997) describes the electoral process of contemporary democracies as functioning as an ‘audience democracy’. In this scenario, voters are nothing more than individuals to be courted at irregular intervals for their consent and who “*respond* to [...] particular terms offered at each election” (Manin, 1997, p.222, emphasis in original), without a continuing process of engagement for policy-making, consultations and involvement. Here, not only the mass media occupy a central role in mediating messages from elites to citizens, but they have also become important enablers of greater engagement:

“Media consumption (of old and new media) contributes importantly to people’s possibilities for public connection and engagement in the democratic process. (...) News engagement contributes significantly to

explaining political interest – itself a major predictor of voting. *Encouraging a broad range of public-oriented media consumption, and the growth of related media literacy, should be central to wider strategies for reversing political disengagement*” (Couldry et al., 2006: 190, emphasis in original).

In parallel to this shift from party to media-generated engagement, there has been an exponential increase in the supply of information due to the revolution in information technology, embodied first by the development of cable television and second by the emergence of the Internet. This new media environment could be extremely positive for democratic affairs as “communicative abundance permits a greater scrutiny of those who are in power or who seek power” (Keane, 2008: 739). However, there is a major difference in how information is accessed through traditional media technologies and new media technologies. The former is a ‘push’ technology “where the content is pushed to us in digestible chunks whether we wish it or not” (Negrine and Papathanassopoulos, 2011: 46). While the latter is a ‘pull’ technology where “the attentive citizen can – with minimal effort – access newspapers, radio and television stations the world over, (...) and the typical citizen – who is relatively uninterested in politics – can avoid news programming altogether” (Iyengar, 2011: 56). Similarly, Prior (2007: 26) argues that “in a media environment that is no longer constrained by a sophistication requirement or the lack of choice, people’s individual choices become more important”, and concludes that “political information in the current media environment comes mostly to those who want it”.

This environment of media abundance characterized by different levels of demand for information raises the question of the knowledge gap between different groups of citizens (Tichenor et al., 1970; Genova and Greenberg, 1979; Eveland and Scheufele, 2000). “[T]elevision had a levelling effect on the distribution of information. The evening news reached not only those motivated to tune in, but also people with generally low levels of political interest, thus allowing the latter group to ‘catch up’ with their more attentive counterparts” (Iyengar, 2011: 56). However, Tichenor et al.’s ‘knowledge gap’ hypothesis posits that “as the infusion of mass media information into a social system increases, segments of the population with higher socioeconomic status tend to acquire this information at a faster rate than the lower status segments, so that the gap in knowledge between these segments tends to increase rather than decrease” (1970: 159-160). Therefore, in a media system under conditions of enhanced consumer choice, and therefore in which exposure to

news is more contingent on motivational factors, the knowledge gap between more and less motivated citizens widens (Prior, 2007). Yet, the literature is not unanimous on this issue and points out two elements that temper this assertion. First, people often learn politically relevant facts as a by-product of non-political routines, such as interpersonal communication on societal issues or watching infotainment television shows, among others (Downs, 1957; Popkin, 1994; Baum, 2003). And second, in countries where 'public service' requirements continue to be imposed on the broadcast media, the gap between more and less educated citizens is reduced. "In these nations, television is more successful in reaching disadvantaged groups because public broadcasters (...) are under continuous pressure to connect to all sections of society in order to justify their public funding" (Iyengar, 2011: 57). Hence, due to public-service oriented systems, the increased knowledge gap does not appear to be a universal phenomenon.

A media environment characterized by the abundance of information poses another question: how do citizens sort through the vast array of news sources? Iyengar argues that "the increasing quantity of news supply also makes it necessary for the politically attentive to exercise some form of choice when seeking information" (2011: 59). This selective exposure may take two main forms. On the one hand, the more diversified media environment makes it more feasible for consumers to seek out news they might find agreeable. An information seeker will find news more agreeable if the political information he is exposed to reflect his individual partisan leanings. In other words, "people will avoid information that they expect will be discrepant or disagreeable and seek out information that is expected to be congruent with their pre-existing attitudes" (Iyengar, 2011, p.59). And on the other hand, "people may respond to the problem of information overload by paying particular attention to issues they most care about while ignoring others" (Iyengar, 2011, p.62). The emergence of new issues in the political debate (Inglehart, 1990), and of issue voting as an explanatory variable of vote choice, echo this form of selective exposure to information. Given the "parallelism of policy preferences and the direction of the vote" (Key, 1966: 7), not only voters may prefer parties that focus on the issues they care about most, but they may also favour parties that are on the same side as them on key issues and hold these views intensively (Rabinowitz and Macdonald, 1989). Consequently, it is likely that they will seek out information that reveals the parties' positions on those issues only. Thus, information seekers lean toward favoured sources and limit their attention span to issues that affect them most directly.

These observations about media choice for the information seekers and for the non-politically interested consumer reminds us that, living in complex societies, it is unrealistic to expect everyone to be expert in everything, and this includes being expert in politics. In fact, Schudson argues that we do not need to all become deeply knowledgeable about politics, since citizens today are “monitorial rather than informed” (1998: 310). Although regular citizens cannot hope to possess the knowledge and skills to a whole-hearted engagement with politics, except by becoming full-time politicians, they may still be concerned democrats; and “thereby able to exercise their influence at decisive moments (obviously at elections, but also through investigative media and other querulous experts who routinely challenge politicians’ judgement)” (Webster, 2011: 34). As we will see in the next section, debates over the role of the Internet in democracies and non-democracies resonate with these observations on how information is used by citizens.

D - Internet, journalism and information openness

The earlier mass media of press and broadcasting were widely seen as beneficial (even necessary) for the conduct of democratic politics. The benefit stemmed from the flow of information about public events to all citizens and the exposure of politicians and government to the public gaze and critique. However, negative effects were also perceived because of the dominance of channels by a few voices, the predominance of a ‘vertical flow’, and the heightened commercialism of the media market, leading to neglect of democratic communication roles. The typical organization and forms of mass communication limit access and discourage active participation and dialogue.

The new electronic media have been widely hailed as “a potential way of escape from the oppressive ‘top-down’ politics of mass democracies in which tightly organized, political parties make policy unilaterally and mobilize support behind them with minimal negotiation and grass-roots input” (McQuail, 2005: 151). They provide the means for highly differentiated provision of political information and ideas, almost unlimited access in theory for all voices, and much feedback and negotiation between leaders and followers. They promise new forums for the development of interest groups and formation of opinion. Not least important as Coleman points out, is the “role of new media in the subversive service of free expression under conditions of authoritarian control of the means of communication” (1999, 73). It is certainly not easy for governments to control access to and use of the Internet by dissident citizens but also not impossible.

Hence, it is often suggested that new media will revitalize democracy because it allows users to command huge resources that will make citizens better informed. As a matter of fact, the Internet has expanded the space available for opinionated and motivated journalism about politics. However, if it can give rise to millions of websites (its strength), they are of little use if no one accesses them (its weakness) (Negrine and Papathanassopoulos, 2011). The question of the Web's political potential and of its impact on public opinion is torn in the literature between "cyber-optimists" asserting that Internet applications *mobilize* citizens within the public sphere, and "cyber-pessimists" stressing that political use of the Internet *reinforces* the existing digital divide between Internet users and non-users but also between different types of users (political use vs. non-political use of the Internet).

Those who take a pessimistic view claim that fragmented news weakens the foundation of democracy by "diminishing the public's information about public affairs" (Patterson, 2000: 2); while those who take an optimistic view argues that even a thin diet of news consumed by the majority is sufficient to sustain a healthy democracy (Zaller, 2003). As there is an abundance of empirical evidence supporting both sides of the argument (for a review see Hirzalla et al., 2010), drawing an inference on the role of the Internet on citizens' involvement with politics seems inconclusive. To overcome this impasse, this dissertation will draw from another outlook developed in the literature: the *realistic* view that tries to transcend technological determinism, i.e. the assumption that technology imprints its own logic on social relationships. As developed by the institutional approach, this strand of the literature looks at society as organized by a diversity of institutions, each of which defines social roles and identities, rules and enforcement mechanisms, situation and strategies; the media system being an institution among many others. Accordingly, "an institution's participants appropriate the technology in the service of goals, strategies, and relationships that the institution has already organized" (Agre, 2002: 311). In support to the *realistic* view, Kalathil and Boas found that "the Internet is not necessarily a threat to authoritarian regimes [because if] [...] [c]ertain types of Internet use do indeed pose political challenges to authoritarian governments [...] [, o]ther uses of the Internet reinforce authoritarian rule, and many authoritarian regimes are proactively promoting the development of an Internet that serves state-defined interests rather than challenging them" (2003: 3). After all, the Internet is only a set of connections between computers or a set of protocols allowing computers to exchange information; it can have no impact apart from its use by human beings.

In the previous section, the focus was mostly on how the new media environment has impacted the audience, i.e. citizens, but how are the information producers, i.e. journalists, reacting to it? The spread of avenues to get information through the Web is a phenomenon also likely to alter the institutional workings of journalism, especially as an increasing number of online sources, such as social media, weblogs and *Wikipedia* among others, are perceived by journalists as credible and accurate (Broersma and Graham, 2013; Messner and Distaso, 2008; Messner and South, 2011). However, while online sources may serve as a mean to broaden the range of voices in the news by displaying non-elite sources and by feeding soft news coverage (Moon and Hadley, 2014; Paulussen and Harder, 2014), they do not seem to substitute traditional sources for the coverage of main political events, such as elections or societal conflicts (AlMaskati, 2012; Knight, 2012). The Internet plays an important role when journalists search for information in order to trigger a story or to add background (Bakker et al., 2013) but ultimately journalists need to adapt online information to their own stories and still prefer traditional source channels to cover political issues (Machill and Beiler, 2009; van Leuven et al., 2014). These findings on the Internet's use by journalists are tuned equally to the workings of the technology and to the workings of the social mechanisms with which technology interacts. The Internet is a tool to collect additional information and to access more open information but online verification strategies require a different set of skills than offline ones, thus journalists still opt for offline sources for serious and substantial reporting (Broersma and Graham, 2013).

Given the imbrication of online and offline practices for information production and the coexistence of 'push' and 'pull' media in citizens' media use, one can affirm that contemporary media systems are organized around two networks and their respective central nodes: television and the Internet, "television for low interactivity practices and the Internet for high interactivity practices" (Cardoso, 2011: 119). "The digital era has not completely eroded the strength of the mainstream media for day-to-day coverage of events and opinions: political debate is still debate that takes place in traditional media, augmented by the presence of conversation on the web" (Negrine and Papathanassopoulos, 2011: 46). Through the coexistence and the complementarity of those different media, communication has become a networked action. Nowadays, interactions between users and mass media are composed of traditional top-down mass media communication but also of horizontal interpersonal communication.

This networked media environment makes the assessment of a tool, such as online VAAs, contingent on the country's media system under study. VAAs are only a symptom of a new technology that helps sorting, selecting and processing information, however the use of a VAA by both information seekers and information producers will be contingent on the goals the institutional setting provide to the different actors, the strategies it suggests to them, and the cognitive form it instills in them. The democratic assumptions behind VAAs' design, structure and content suggest that VAAs, as a journalistic news source, would be a good fit within two different journalistic components of the professionalization dimension of a media system: the public service orientation and the distinction of professional norms.

VAAs fit within the public service orientation of journalism because, like journalists, they provide information on which citizens will be able to judge between competing candidates and parties, and because they scrutinize the political positions of the elites. Hence, journalists, who in a democracy are responsible for reporting and monitoring the exercise of power, should find in a VAA an useful news source. Extending Neveu's (2002) argument on polling to VAAs: VAAs give journalists increased authority to question public officials, whose claims to represent the public they can now independently assess. Therefore, *one would expect that in a journalistic culture in which the public service orientation is vivid, VAAs would be incorporated in the journalists' newsgathering routines.*

VAAs are also likely to be perceived as exploitable news source by a journalistic field characterized by distinct professional norms. VAAs allow for new ways of feeding impartial information into the political process, both in quantitative and qualitative terms. In the early process of journalist professionalization, mostly in North America, "the dominant form of professional practice came to be centred around the notion of 'objectivity' – that is the idea that news could and should be separated from opinion" (Hallin and Mancini, 2004: 219). In accordance, partisanship in political journalism is permitted but where it exists it should not pretend to be objective coverage. If journalism aims to be a source of information in a deliberative democracy, journalists should be "objective reporters of political reality, striving to be as neutral and detached as possible, even though they will hold their own political views" (McNair, 2009: 239). Online VAAs echo this approach of information production that is characteristics of the commercial press as they objectify social reality through data analysis. Bias can also exist within a VAA in the selection of issues or in the phrasing of statements but the use of a scientific method (as described in Chapter 1) should prevent any strong partisan bias. Hence, due to its inherently objective approach to social reality, *VAAs should be less*

likely to be incorporated in journalists' newsgathering routines in a highly partisan media landscape than in other types of media environment.

E - Flow of information and electoral campaign

1) Electoral campaigns as information campaigns

Although the most obvious outcome of an electoral campaign is the selection of who should govern, from a civic perspective they can also be tools for inducing citizens to think more about politics. As a matter of fact, in our modern democracies where elections are the key institutions, campaigns are the most intense time for interaction between political elites and citizens over matters of public policy (Manin, 1997; Kriesi, 2008). Buchanan argues that campaigns provide “an explosion of opportunities...to notice, focus, and, most important, learn interesting and useful things as the time for voting approaches” (2000: 177). In other words, “campaigns can determine if citizens are pulled into learning about, thinking about, and seeking information about the candidate or if citizens remain on the side-lines as disinterested or even disillusioned observers” (Kam, 2007: 17). Although “the volume of information flow can be seen as an important governor upon the magnitude of oscillations in party fortunes” (Converse, 1962: 591), the intensity of a campaign and the amount of political information that voters, particularly potential floating voters, are exposed to may affect their tendency to vote at all. Hence, as Jamieson summarizes it, “how we elect is as important as who we elect” (1992: 237).

In political science, the mobilization model of electoral participation claims that people vote because they are mobilized to do so by the elites (Caprara, 2008). It is true that political elites' persuasion effort stands at the centre of the process of campaigning. In addition, election campaigns are not situations in which only new information is disseminated to the public; rather they are situations where information already publicly available is dispersed with greater intensity. Yet, some information may be new to many citizens who are not informed of all party positions on many relevant issues. Hence, we can assume that during campaign periods political information reaches broader segments of society than during non-campaign periods. However, Tichenor et al. (1970)'s ‘knowledge gap’ already mentioned earlier posits that when the infusion of mass media information increases, the gap in knowledge between higher and lower socioeconomic segments of society tends to increase. In

the specific context of election campaigns, the empirical examination of this hypothesis provides evidence both for an increase (Craig et al., 2005; Holbrook, 1999; Nadeau et al., 2008) and a decrease (Freedman et al., 2004; Norris and Sanders, 2003; Ondercin et al., 2011) of the knowledge gap. After arguing that these differences in results may be driven, “to a large degree, by different analytical approaches” (Hansen and Pedersen, 2014: p.306). Hansen and Pedersen contend that “highly educated voters may process information faster than voters with a lower levels of educational attainment, yet the increased information intensity during election campaigns may provide this latter group with good opportunities to, at least partially, catch up” (2014: 318). Given these dynamics, the timing of information intake is consequently crucial to Hansen and Pedersen’s statement. This statement could be particularly true if we assume that voters with low levels of political interest are exposed to campaign information at a later stage of the campaign, while politically interested voters search for political information as soon as the campaign starts, if not even earlier. Nadeau et al. underline that the key research questions to the study of the flow of information during a campaign – its diffusion by parties, its delivery by the media and its absorption by voters – are: “*who* receives *what* information, in *what* context, and with *what* effects?” (2008: 230, emphasis in original). But following the line of argumentation above, we pose the additional research question: *When do different types of voters access political information during an electoral campaign?*

2) Voters, information and media

The variable in the study of voting behaviour that best synthesizes the relationship between voters, information and media is the time-of-voting decision. As early as *The People’s Choice*, Lazarsfeld et al. (1948) devote a chapter on the “time of decision”. Their research aims at identifying the impact of short-term variables, *i.e.* the media, public opinion leaders, social networks and local campaigns, had on voting behaviour. Their findings underline the weight of socio-economic variables (socio-economic status, religion, and place of residence) acting as predispositions, and leading to an important stability of voting behaviour. The role of the campaign would only be to activate these predispositions among the electorate; thus, the same variables could explain the behaviour of early and campaign deciders. In a similar fashion, the Michigan School explained the stability of voting behaviour and the early moment of voting decision as a result of voters’ party identification (Campbell

et al., 1960). In both these approaches, voting behaviour is the result of long-term predispositions that would be activated during the campaign. Therefore, voters who would be volatile and thus campaign deciders are seen as characterized by a deficiency of social and political socialisation and as uninterested by politics.

However, the erosion of party identification and the dealignment between social groups and political cleavages has led to an increasing electoral volatility in advanced democracies (Dalton et al., 1984; Franklin et al., 1992). Given these changes in the sources of political and electoral cues, there has been an increasing focus on short-term determinants of voting behaviour. New theories have emerged in order to explain this “changing voter” (Nie et al., 1976). More detached from social and political ties, voters are now presented as capable to autonomously and rationally express their choice and, more particularly, at each election to reflect their own economic interest and their satisfaction toward the incumbent government in their ballot choice (Key, 1966). Issue preferences are also gaining saliency among the electorate in order to explain its vote (Carmines and Stimson, 1980; Key, 1966). According to these approaches, a campaign or undecided voter would be a voter who is interested in politics, consumer of political information, particularly through newspapers, and who would take the time to reflect before deciding which party or candidate earns his or her vote.

To reconcile these two perspectives on late deciders, McAllister (2002) identified four types of voters through a bivariate analysis including time-of-voting decision and interest in election outcome. Among the types of voters who decide which party to vote for before the campaign, there are the ‘partisan’ voters who care about the election outcome and the ‘disengaged’ voters who do not care about it. And the late-deciders are divided between the ‘calculating’ voters who care about the election outcome and the ‘capricious’ voters who do not care about it. His analysis shows that the rise of late-deciders is related to the process of de-alignment experienced in advanced democracies, and that different levels of political interest distinguish between the two types of late-deciders (pp.31-33) (See Table 6.2 for a summary of McAllister’s typology).

Table 6.2. McAllister's (2002) typology of voters

<i>Interest in election outcome</i>	<i>Timing of the vote decision</i>	
	Before campaign	During campaign
Cares	Partisan	Calculating
Doesn't care	Disengaged	Capricious

Empirical evidence on late deciders reveals that they exhibit “a good deal of volatility in vote intentions” (Fournier et al., 2004: 669) and that they tend to perceive themselves as outside of the traditional left-right cleavage (Cautrès and Jadot, 2009). Fournier et al. (2004: 675) argue that “the only characteristic distinguishing pre-campaign from campaign deciders is the level of strength of partisanship”. Individuals who decide during the campaigns are less attached to political parties. In short, this suggests that in polarized pluralist political systems in which “cleavages are likely to be very deep” (Sartori, 1976: 135) and identification to existing political parties stronger, voters would more likely be early deciders. In such circumstances, the role of the electoral campaign for a party would be to mobilize the social groups traditionally supporting it rather than persuading undecided voters. While in moderate pluralist political systems, in which polarization is lower and electoral volatility higher, there is more room for persuasion to take place during the campaign.

In this process the media have also a role to play. As such, journalism is essential in order to aid democratic activity in the wider public sphere of civil society and to support citizen participation by providing lines of communication between citizens and government. This role is particularly relevant during an electoral campaign as they are the main medium through which voters have access to political information. The amount and the quality of political information included in the media is likely to have an impact on voters’ mobilization and knowledge issues pertaining to the election, and on how voters access political information, if they do at all since we saw that some citizens are not interested in politics and

will not look for this type of information in a media environment where they can chose what information to be exposed to.

As different types of media systems exist, one would expect that this process of access to information would differ from one media system to another. This dissertation employs VAA use as an indicator of how voters access (online) political information during an electoral campaign in different media systems. In particular, when different voter types do so. The objective is to distinguish between voters according to their voting decision making process: how advance are they in this process when they visit a VAA? Have they decided who to vote for, are they still doubting between two parties, or are they completely undecided?

How can we expect media systems do have an impact on VAA use? Partisan media dominates Polarized Pluralist media systems. Political systems with such a media system are, as the name of the media system indicates, characterized by a rather strong political polarization where partisan identification plays a stronger role. Therefore, voting behaviour in countries falling into this category is entrenched into political cleavages that historically run deep into the social structure of their societies. Those systems include a large number of partisan and decided voters, who are sure for whom to cast their ballot at an early stage of the campaign, and by fewer undecided voters. Hence, *in Polarized Pluralist media systems, voters who visit a VAA are mostly partisan voters*, they have already decided for whom to vote for when they visit the VAA, *and few undecided voters make their way to the VAA*. In addition of a partisan media landscape, Polarized Pluralist media systems are also characterized by a media use gap between politically interested and non-interested voters. Hence, the inherent structure of such media system is less likely to allow non-interested voters to catch-up and to reduce their political knowledge gap during the campaign.

In a Liberal media system, commercial catchall media with no partisan affiliations are the dominant type of media. Thus, one can expect that a heterogeneous group of voters will visit the VAA during a campaign. But the timing of such visit should differ per voter type. Politically attentive voters will be among the first to hear about the availability of a VAA and use it (Hooghe and Teepe, 2007), but as the media attention on the election increases, the information will progressively reach less politically attentive voters. Hence, *partisan voters – who already know for who to vote for – should come to the VAA first, and be the most prominent group of users (as they are the ones mostly making their way to politically-orientated online applications), but the closer one gets to Election Day, the higher the proportion of doubting and undecided voters would use a VAA*.

Finally, in Democratic Corporatist media systems, where the media see themselves as the mobilizers of an active citizenry, *all types of voters should use a VAA*. As stressed out in section 7.3, in public-service oriented systems media are more successful in reaching disadvantaged groups because they need to justify their public funding in the case of public broadcasters. Independently of the public broadcaster, such media systems are characterized by a strong public service orientation; therefore, reaching out to disadvantaged groups, and not only to an elite audience, is an aim inherent to the journalistic culture of such countries in times of elections. Therefore, partisan voters should not even be the dominant user-group among VAA users. Rather as such type of applications are designed for the segments of the electorate who do not know yet for whom to cast their vote, *doubting and undecided voters should be the largest VAA user-groups, and their weight among the users should increase the further the campaign advances*.

3) Structure of the analysis

Hence, one of the aims of this dissertation is to study patterns of online information intake in different media systems during electoral campaigns. Online information seeking-behaviour should be shaped by the offline media environment, by both information providers' and information seekers' behaviours. We are interested in knowing how online VAAs make their way through different media systems, that is how they are perceived and used by traditional media, and when voters use them. In short, we want to study the influence of media systems (macro-level) on patterns of individual behaviours (micro-level). We will proceed through 3 steps of analysis.

First, we will study how press journalists, who traditionally assess public opinion gravitate toward elites sources and more recently polls, perceive and use VAAs as a journalistic news source (Chapter 8). We carried out interviews with journalists from different countries (France, the Netherlands, and Turkey), and therefore different journalistic cultures fitting the three media systems of Hallin and Mancini (2004). The Netherlands is the country where VAAs were invented and where they first became popular (De Graaf, 2010). Moreover, Dutch journalists see themselves as the mobilizers of an active citizenry and have a vocational call to serve the commonweal; hence, providing us with a distinctive normative approach to journalism, one that is characteristic of Democratic Corporatist media system. Turkey is included in the study because in 2011, year in which the VAA under study was developed in

the country, Turkey was the electoral democracy with the most partisan media system where a VAA was developed. Hence, Turkey provides us with a case to study VAAs in a politically polarized media environment, such as we found in Pluralistic Polarized media system. Finally, France is included in this part of the study because when a VAA was launched in 2012 only commercial media used and promoted the VAA; thus, allowing us to investigate the use and perception of commercial press journalists, characteristics of Liberal media systems, toward this type of online applications⁵³. This qualitative data provide us with both an insight into “the process of adaptation” (Swanson, 2004) through which transnational trends, i.e. the spread of new information technology, become manifest in each country, and an insight into the normative component within different journalistic cultures toward data-driven journalism. The amount of political information that undecided voters encounter affects their tendency to vote at all. VAAs, a political oriented web application, can only reach doubting and undecided voters through proper media dissemination. Hence, the willingness of journalists to engage with this type of applications, and the set of available media promoting VAAs, will have an impact on who learns about politics through VAAs.

Second, we will look at the impact of specific media mentions of VAAs on the partisan and attitudinal characteristics of VAA users (Chapter 9 and Chapter 10). For this analysis to be carried out, we kept track of all the media mentions concerning two VAAs in two countries: in Turkey during the general election of 2011 and in France during the Presidential election of 2012⁵⁴. These media mentions are newspapers articles and television news stories mentioning or using VAA data, so through these analyses we can study the impact of push-media on the composition of VAA users. In the case of Turkey there will be a particular focus on partisan media as the Turkish media system is characterized by a strong political polarization, and in the case of France there will be a particular focus on commercial media as only they mentioned the VAA.

Finally, we will look at how the share of decided, doubting and undecided voters using a VAA evolves during an electoral campaign in seven countries representing the different media systems identified by Hallin and Mancini (2004): the Netherlands and Sweden for the

⁵³ The country selection process is further explained in Chapter 8.

⁵⁴ Media mentions of VAAs in the Netherlands could not be collected for several reasons. First, the high popularity and competition of VAAs in the Netherlands make it harder but not impossible to track down all media mentions of VAAs and to tie them to VAA use. And second, the use by *Kieskompas* of web widgets to insert VAAs at the bottom of each article on a website since 2012, makes it impossible to connect media mentions of the application to changes in VAA traffic. This issue is further explained in Chapter 10.

Democratic Corporatist media system, Australia and the United Kingdom for the Liberal media system, Spain and Turkey for the Polarized Pluralist media system, and France as an in-between case⁵⁵ (Chapter 11).

4) VAA data as comparative data

This Part 2 of the dissertation engages in comparative research by using VAA collected data but for the qualitative interviews of Chapter 8. Comparative survey research can be comparative by the comparative use of national data or by being comparative by design.

A large body of comparative research in official statistics, for instance, is carried out using data from national studies designed for domestic purposes, which are then also used in analyses across samples/populations/countries. Early cross-national social science research often consisted of such comparisons (Rokkan, 1969; Verba, 1969). Official statistics agencies working at the national and international level often utilize such national data for comparative purposes (Harkness et al., 2010). Such agencies harmonize data from national studies because adequately rich and reliable data from surveys that were deliberately designed to produce cross-national datasets are not available for many countries.

The VAA data used in this dissertation have been collected by the university-based social enterprise Kieskompas. Every time Kieskompas develops a VAA in a new national election, it does so in collaboration with national scholars. So on the one hand, the core of the questionnaire included in the VAA is identical, but on the other hand national scholars can decide to include specific items into the questionnaire because they are interested in them for their own research, for instance a “time-of-voting decision” question was included in a VAA for the first time during the 2012 French Presidential election⁵⁶. This inclusion was due to the fact that two of researchers of the team had previously worked on that specific issue⁵⁷. However, in following VAAs, Kieskompas edited this questionnaire item into a measure of vote certainty by asking respondents how sure they were about their vote when they visited the

⁵⁵ France is considered, by Hallin and Mancini (2004), an in-between case as its media system shares features of different models, see Chapter 8 for a longer development on this issue.

⁵⁶ “Regarding your voting decision, would you say that...”: “you made up your mind a long time ago”, “you made up your mind recently”, “you have not decided yet”.

⁵⁷ CAUTRES B., JADOT A., « L’(in)décision électorale et la temporalité du vote : le moment du choix pour le premier tour de l’élection présidentielle de 2007 », *Revue française de Science Politique*, vol. 57, 2007, p. 293-314.

VAA. Precisely because VAA datasets can differ from one country to another, Chapter 9 and Chapter 10 developed a comparative use of VAA datasets collected within specific national contexts (France and Turkey). Both chapters developed parallel analyses but within the specificity of each national context (different nature of hypotheses) and within the specificity of each national dataset (different indicators). However, in both circumstances, the analyses carried out allow us to study the impact of the national media systems on VAA use by French and Turkish voters in their respective media environment.

Thus the absence, the presence or the modification of a survey item restrains the comparability of the datasets on some issues. As we did not want to rely on an opportunistic adjustment of data after they have been collected for our comparative research, we rely on VAA questionnaire items that are comparative by design between different national contexts. Surveys that are deliberately planned for comparative research are to be understood as “projects that deliberately design their instruments and possible other components of the survey in order to compare different populations and that collect data from two or more different populations” (Harkness et al., 2010: 5). Whether each single VAA does not collect data from two or more different populations, except in the case of supranational elections such as the European Parliament elections since 2009, the instrument is by itself a component “designed” to result in comparative data as the method of data collection is the same, i.e. web-survey, the structure of the questionnaire is always the same and many of the items included in the questionnaire are identical (socio-demographic questions, conative questions, some issue statements, attitudinal questions) or to the least are functionally equivalent indicators (in the case of some issue statements). In that regard, VAA surveys can be considered as “cross-national surveys” as they are deliberately designed in each step of the survey process to achieve functional equivalence. Hence, if we do not rely on items that have been introduced by the national teams, VAA datasets are particularly appropriate for the study of voters in electoral democracies as we do here in Chapter 11.

In short, the distinction between comparative use of national datasets and surveys that comparative by design accommodates the view that all social science research is comparative and that national data can be used in comparative research, while also allowing for the need for special strategies and procedures in designing surveys and analysing data intended for comparative research.

CHAPTER 7 – NEW MEDIA, OLD PRACTICES: THE USE OF ONLINE VAAS BY PRESS JOURNALISTS

A - From “political observatories” to “data-driven journalism”

Ideally, voting is based on an informed choice. Among key contributions to this process, political journalism occupies a central role as it informs, critically scrutinizes elites, represents citizens and advocates for the people in the public sphere (McNair, 2009). By providing information to judge between competing candidates, journalists enable citizens to make informed and effective choices about the exercise of state power.

The question whether journalists are leaving up to their democratic role is a recurrent one among media observers and scholars. Already in 1920, in *Liberty and the News*, Walter Lippmann cited two reasons of why American journalism was failing to serve the needs of modern democracy. “First, journalism was in the hands of ‘untrained amateurs’, and though the amateur ‘may mean well... he knows not how to do well’” (Lippman, 1920: 45, cited in Schudson, 2010: 100). Therefore, journalists needed to undergo further professional training in order to raise the standards of the news. “Second, the world had simply become far too complex to be adequately reported by the conventional tools of journalism” (Schudson, 2010: 100). He observed that administration had become more important than legislation but much harder to follow. The work of administration spreads out across time, and its impact is not visible in a way that reporters are able to measure. Journalists could report the complexity of the modern world only by making use of “political observatories” that “examine human affairs with scientific instruments, methods, and outlooks” (Schudson, 2010: 101). Lippmann called for independent, non-partisan, scientific organization that would be committed to an agenda of research about the political and social world and that would be able to produce it in a form accessible to the competent journalists. Political observatories could provide “the material that would allow newspapers to offer a more thorough, complete, objective, and reliable portrait of relevant public life for the citizen to digest” (Schudson, 2010: 101).

In 1920, political observatories were few; they did not begin to mushroom until the 1970s with the rise of non-profits organization and advocacy groups to influence the political agenda by making information about the political world available to journalists and directly to citizens (Bigelow and Herrnson, 2008; Schudson, 2010). To cite one among many, Human Rights Watch was founded in 1978, its researchers are quoted and its reports are cited dozens of times in leading newspapers every year. With the spread of the Internet, there has never

been as much new political information available as today. New technologies provide citizens and social groups with unprecedented means of making their voice heard. This new environment also provides journalists with easy to reach information, sources and data. Whether develop by NGOs, by scholars or by media outlets, online VAAs have appeared within this media environment. VAAs apply a scientific protocol to data gathering, are driven by non-partisan goals, and can therefore to a certain extent be considered, in Walter Lippman terms, as a “political observatory”. As a matter of fact, VAA collect large amount of data on their users’ issue attitudes and voting behaviour. VAAs can also be considered a crowdsourcing data-gathering tool as the public is involved in the data gathering process by answering survey-like questions.

The role of computer scientists in journalism has increased significantly since the mid-2000s. Some have argued that contemporary “data-driven journalism” improves the way journalism can contribute to democracy mainly in three ways (Parasie and Dagiral, 2013). The first is by strengthening journalistic objectivity, as journalists have to equip themselves with the tools to analyse data in order to help people out by really seeing where it all fits together, and what’s going on in the country. The second way is by offering new tools to news organizations to sustain governmental and partisan accountability. Finally, the third way is by increasing citizens’ political participation through their own production and analysis of data.

Consequently, a growing number of scholars are interested in understanding how the availability and use of such information and ecological environment of the Internet era have changed the journalistic news production process, as well as the journalistic profession as a whole (for a review see Lecheler and Kruikemeir, 2016). How does the integration of data-driven journalism really affect the way journalism can contribute to the public good? The socio-political implications of technological innovation in news organizations have recently been a major concern for scholars. Some of them suggest that emerging work practices in online newsrooms conflict with established epistemologies of how data can support investigative journalism (Parasie and Dagiral, 2013). The term “epistemology” is used here with reference to journalists’ knowledge claims about the empirical world. Our intent is not to say whether those claims are valid or not, but rather to identify the norms that make them justifiable beliefs for journalists (Ettema and Glasser, 1987).

The claim of this chapter is to explore the fit between the established epistemologies within different journalistic cultures and the embedded assumptions of online VAAs as a

data-source. In order to do so, we will first explore the connection between new sources of data and the openness of political and media systems in which they emerge. These theoretical considerations will lead us to identify country cases for a comparative analysis of epistemologies (France, the Netherlands and Turkey). Finally, to investigate journalists' relationship to the data source under study, i.e. online VAAs, we conducted interviews with press journalists in those three countries.

B - The openness of media systems

New digital technologies bring new ways of producing and disseminating knowledge in society. Schudson (2010) argues that contemporary uses of databases in news have developed thanks to a more general democratic process. This is why, according to Parasie and Dagiral, “research on contemporary data-driven journalism should investigate both the epistemological and the socio-political meanings that are collectively assigned and discussed at the interface between these worlds” (2013: 869). Epistemological concerns are strongly connected to moral and political concerns; therefore, we need to assume that they are going to be different according to the political and media systems under examination.

Since the second half of the twentieth century, the normative criterion to assess these systems is always how democratic they are. Even though the word “democracy” is almost invariably used in the daily political discourse, it lacks a standard definition to which can be referred (Sartori, 1973). In a working paper on the “index boom” of quantitative measures of political systems, González Garibay et al. (2008) have reviewed conceptual definitions of democracy since ancient political philosophy writings to modern political science accounts of it. They argue that “[a] common characteristic they share, since the Greek period, is the involvement of the political system’s population in the making of decisions affecting the collectivity” (p.10). Dahl’s definition is explicit about it by referring to democracy as “a political system one of the characteristics of which is the quality of being completely or almost completely responsive to all its citizens” (Dahl, 1971: 2). However, instead of using the word responsiveness that implies an actual policy response by the political structure, Garibay et al. (2008) rather use the word openness in order to seize the procedural dimension of democratic regimes. Hence, they define “procedural democracy” as a political system one of the characteristics of which is being completely or almost completely open to all citizens. “Implicit in this definition is the concept of political openness, which means the degree to

which a political system is capable of offering a response to their citizens' preferences" (p.10). A country becomes democratic when its procedural openness reaches a certain threshold; political openness is assumed to be a continuum by the authors, and democracy a specific area of that continuum beyond the threshold.

When developing their media systems theory, Hallin and Mancini (2004: 47) argue that "political system variables could be called the "independent variables" in their analysis of the relation between media and political systems, as many are more general and deeply rooted aspects of social structure and culture than the media-system characteristics". As a result, the openness of a political system should be reflected into the openness of a media system, that is the capacity of the media to adapt and respond to the changes in our information environment, including more interactive, multidimensional storytelling enabling readers to explore the sources underlying the news and encouraging them to participate in the process of creating and evaluating stories. After all, data journalism can be defined as "the new possibilities that open up when you combine the traditional "nose for news" and ability to tell a compelling story with the sheer scale and range of digital information now available" (Gray et al., 2012: 2).

C - Country cases

To explore different journalistic epistemological models and their interaction with data-driven journalistic tools, we need to select cases that allow capturing such differences. As political openness is assumed to be a continuum by Garibay et al. (2008), we should choose cases, within the framework of Hallin and Mancini's media systems theory, representing the most open and the most close type of political and media systems, to which we shall add an in-between case along that continuum to strengthen the validity of the comparison.

In addition all these country cases should have experienced the emergence of online VAAs for national elections. There are not many VAAs developers that have promoted such applications in several countries. In Europe, the three main actors on this niche market are *Kieskompas*, *VoteMatch* and *SmartVote*, with the former leading and having developed over 200 VAAs across more than 50 countries around the world⁵⁸. *Kieskompas*, an university-based social enterprise, and the country teams with which it collaborates always adopt the

⁵⁸ Personal correspondence with the academic director of *Kieskompas*.

same approach toward the media by first trying to establish a partnership and then launching in completion, or if necessary, a mini-campaign to promote the VAA site (Krouwel et al., 2014). As online VAA are spreading across electoral democracies, these tools sometimes strongly differ in terms of methodology, design and approach to the media (Garzia and Marschall, 2012; Wagner and Ruusuvirta, 2012). Hence, selecting VAAs from the same developer allow us to keep the materialization of transnational trends in political communication, i.e. online VAAs, constant across the different journalistic cultures under study.

The presence of VAAs developed according to the *Kieskompas* method in many countries has allowed us to select country cases that fit the theoretical requirements emphasized above: the Netherlands representing the most open type of political and media system, Turkey representing the most close type of political and media system, and France representing an in-between case. When Garibay et al. (2008) developed their political openness index the Netherlands were ranked 4th, France 16th and Turkey 72nd out of 135 countries⁵⁹. Before comparing the media systems of these three cases, we will make two remarks concerning the degree of openness of their respective political systems. Firstly, we won't review in depth the characteristic of these three political systems, however we believe that the electoral laws in use for national elections in each of these three countries are symptomatic to their position on our theoretical continuum. The Dutch elect their representatives through a full proportional system allowing for a very accurate picture of the country political diversity. The French cast their ballot following a two-rounds majoritarian run-off system granting a strong majoritarian bonus to the winning political party. And the Turks vote under the electoral law with the highest national threshold in the world: 10%, which makes it extremely difficult for small parties to be represented in the Parliament.

Secondly, the data used in this chapter were collected in 2013, before the authoritarian turn that Turkey is experiencing since a few years. In the first decade of the twenty-first century, observers were praising Turkey's democratizing efforts but since mid-2013 and the *Gezi* protests that erupted across the country, Turkey has drifted toward a predominant party system (Gumuscu, 2013) and arguably toward authoritarian rule. Due to the specific moment in which the data were gathered – early 2013 – we believe that the inclusion of Turkey as a country-case is still valid.

⁵⁹ Their political openness index includes six dimensions: political participation, political competition, transparency, accountability, interfaces, and the rule of law

Let's now move to a media system comparison between the Netherlands, Turkey and France. As in other North and Central European countries, the Netherlands developed at an early stage a mass-circulation press infused with a high level of political parallelism. As a consequence, newspapers had distinct political orientations. Yet as journalists obtained a relatively high level of autonomy in the second half of the twentieth century, the journalistic profession secured its independence from social and economic actors (Brants and McQuail, 1997), resulting in a high level of professionalization among the profession. The consequence of this autonomization process is that the journalists' activist orientation has faded since the 1970's, and Dutch journalists are nowadays more likely to see themselves as mobilizers of an active citizenry instead of a specific social and political group. In Hallin and Mancini's classification, the Netherlands fit within the *democratic corporatist* model of media systems.

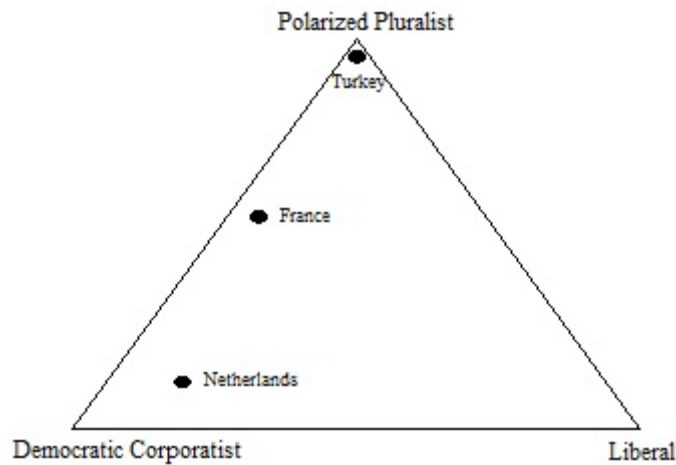
While, as in other Mediterranean countries, newspapers in Turkey have historically been directed for the most part to an educated elite interested in the political world (Kaya and Çakmur, 2010). Turkish media have been, and continue to be, used by various actors as tools to intervene in the political world. Hence, journalistic autonomy and professionalization is regarded as low among Turkish journalists (Özcan, 2010). This characterization does not imply that the quality of the writing and the sophistication of political analysis are lower than in other media markets. However, the narrow social base of the press market and the regular instrumentalization of the media by various actors sketch out a journalistic culture in which the development of a strong public service orientation has necessarily been limited (Bayram, 2010), and where the focus is rather oriented toward elite competition than in the direction of citizens' preferences, and therefore fit within the *polarized pluralist* model of media system⁶⁰.

France is considered here as an 'in-between case' (Hallin and Mancini, 2004), meaning that it shares elements from different journalistic cultures. For instance, as in other Mediterranean countries, French journalism has historically been characterized by a "political tropism" and by a strong partisan press (Chalaby, 1996; Neveu, 2001). However, the mass circulation press has progressively been infused by some elements of the Anglo-Saxon journalistic tradition, distinguishing reporting from commentary, (Ferenzci, 1993). Investigative or critical reporting, so called information-oriented journalism, has made its way

⁶⁰ We should underline here that in their original analysis Hallin and Mancini (2004) did not include Turkey in their countries' classification. Özcan (2010) has realized an analysis of the Turkish media system according to the four variables of Hallin and Mancini's model (the structure of media markets, the level of political parallelism, the degree of professionalism and the role of the state) and makes a strong case for Turkey being categorized as a *polarized pluralist* media system.

into French journalism during the last couple of decades of the twentieth century. On the continuum going from the *democratic corporatist* to the *polarized pluralist* media systems, France is located almost halfway⁶¹ (Hallin and Mancini, 2004); thus, allowing us to sketch a comparison between cases located along a theoretical continuum.

Figure 7.1. Relation of the Selected Cases to the Three Models



Sources: Elmas and Kurban (2010) and Hallin and Mancini (2004)

D - VAAs as a data-driven journalistic source

VAA developers rely on the assumption that VAA-collected data can help journalists to set the political agenda through the disclosure of political relevant information. In their genetic code, VAAs aim to “address what may be called a democratic ‘competence gap’ between how engaged and knowledgeable voters actually are and how engaged and knowledgeable they would have to be for the democratic process to function properly” (Fossen and Anderson, 2014: 246). In fact, a VAA aims to increase users’ ability to vote well by procuring information about the policy proposals of parties and candidates, and by comparing it with the users’ positions on those same issues. Hence, VAAs gather both a party-dataset and a users-dataset.

⁶¹ See Hallin and Mancini (2004) for a detailed account of the French media system categorized as being in between the *polarized pluralist* model to which Turkey belongs (Özcan, 2010), and the *democratic corporatist* model in which The Netherlands fit.

As this study is the first attempt to explore the use of VAAs as journalistic news source, a qualitative method is employed to capture and analyse journalists' perception and use of such type of tools. Whereas, generalization on the subject of the study is beyond the scope of a small sample such as the one undertaken here (n=13), the inclusion of participants from different countries, and therefore different journalistic cultures, provides both an insight into "the process of adaptation" (Swanson, 2004) through which transnational trends become manifest in each country, and the foundation for future comparative research on VAA-journalists practices.

E - Participants

In VAA-media partnerships, it is the individual journalist who interacts with the academic team of the VAA, requests data on specific topics, receives reports, and ultimately produces content-based articles out of VAA data. When no such partnership exists, the individual journalist is contacted through data reports, then decides whether and how to report on the VAA site. To capture these difference scenarios, the sample for this study is composed of journalists in France, the Netherlands and Turkey, who reported about VAAs or used VAA data in one of their stories. The interviews took place between 10 January and 06 March 2013 at the journalists' workplaces but for one of them at his private residence, in the cities of Amsterdam, The Hague, Istanbul, and Paris. The affiliations of journalists and other relevant information on the interviews are provided in Annex 7.1. As already emphasized the VAA developer *Kieskompas* developed all the three VAA sites covered by the journalists interviewed. As the content of the VAAs was similar (same design, data structure, methodology, and graphical representation of the results), the journalists interviewed were exposed to the same raw material.

F - Study design

The study involved face-to-face interviews with journalists (see Annex 7.2 for the interview protocol). Interviews were semi-structured, meaning that a general interview protocol was used as a guide, and allowed the researcher to probe deeper into topics of interest and the participant was free to focus on areas of particular salience. The researcher occasionally followed up the structured questions with unscripted questions aimed to seek further clarification of participants' responses. The semi-structured approach gives the researcher the opportunity to continue asking questions until a participant's response is clear,

rather than being restricted to an exclusive set of inquiries (Doody and Noonan, 2013). As the study explores the rationale behind participants' actions, it views data gathered in the interview process as qualitative, meaning that the content of the interviews was not broken down and grouped into categories (coding). Nevertheless, the semi-structured interviews were organized around main themes of interest: their journalistic career, the production of stories, the role of journalism within society, the journalist relationship to the political process, and finally, their experience with VAAs. The findings are first presented by country and then are analysed comparatively.

G - Perception and use of VAAs as journalistic news source

1) The Netherlands

Since 2006, two VAAs are competing over popularity and methodology in the Netherlands: the governmental-based *StemWijzer* and the university-based *Kieskompas*, the latter is engaged in a media partnership with the quality newspaper *Trouw*. This competition between the two applications resulted in important media attention on the phenomenon of VAAs. It became “a fixed aspect of political campaign, when there is a general election or a local election coming up, [...] there is going to be” an antagonism between the two sites (Dutch Journalist 2). In fact, most media stories by journalists uninvolved in a VAA-media partnership “are usually about the struggle between these two” (DJ2). The interviewed journalists see VAAs as a way to help “to analyse your [the users'] opinions and hold them against the opinions of the different parties” (DJ4); “People do not always think explicitly about those topics [the ones in the VAA site], so it can help to make a more responsible choice.” (DJ1)

A consistent epistemological model appears throughout these interviews. The underlying assumption of this model is that computer data combined with statistics can serve to reveal issues that citizens and journalists cannot fully embrace from their own individual perspective. In this model, data have no journalistic value by themselves. The reporter has to find the hidden “story” in the data:

“I was just asking about can you give me the results on the question about euthanasia, what are people thinking about it? [...] So they [the researchers] give me that information and then I can split it

to the different parties. People who are voting Social Democrats, [...] how are they answering that specific question? Then I am checking what is in the party manifesto. I am just comparing those two results. What are the Social Democrats saying about euthanasia, and what are voters [who are voting Social Democrats] saying about it? And I am doing that with all the parties [...] and when I see a big gap, [...] then you have got a story.” (DJ3)

In this model, data must allow for sampling, based on social science, controlled sampling or comparison between social groups produce intelligibility into the data. They also have to contain information about social groups: gender, age or level of education are major variables. In conclusion, the Dutch journalists interviewed are aware of the limits of VAA data as they have “a permanent discussion with *Kieskompas* about the representativity [of the data]” (DJ1), but nevertheless they incorporate them in their routine work as a journalistic news source “by selecting major society problems and writing articles about them” (DJ1).

This epistemological model is partly a continuation of the traditional conception of how journalism can contribute to democracy in Democratic Corporatist media system – especially that “media should facilitate the functioning of representative organizations and expose their internal processes to public scrutiny and the play of public opinion” (Hallin and Mancini, 2004: 189).

2) Turkey

As the VAA ‘*Oy Pusulasi*’ did not rely on a VAA-media partnership, the interviews were conducted with five out of the six columnists from both partisan and commercial newspapers who mentioned the VAA site in one of their pieces. Out of the six columns that mentioned *Oy Pusulasi*, half made a simple suggestion to use the application in case one would still be undecided about his or her vote, and the other half provided an analysis using VAA data or developed an explanation of the inner logic of the tool. The columnists have personally heard about the VAA by members of the academic team, or by emails with a report attached sent in an effort to promote the tool among personal networks.

The interviews revealed that despite reporting about the tool the participants expressed doubts about the validity of what VAAs try to achieve, i.e. measuring voters positions and

matching them with parties. Journalists believe that since another professional group, i.e. researchers, produces the data their categorization might be manipulated:

“I had some doubts whether such variables uhmmm website would be able to locate where the people stand in the map of preferences, I thought it was a very difficult challenge, you know to achieve what the page was aiming to achieve, so I did not have much trust in the website, I must confess.” (Turkish Journalist 3)

“These terms, progressiveness, conservativeness, left and right, come inescapably from Western values. [...] I have doubts about this formalization process. I do not believe Turkish politics can be formalized. Maybe you can but you have to use Turkish concepts, and no one tries to create Turkish concepts.” (T.J.1)

One of the most characteristic patterns of the Mediterranean region with regards to the relationship between media and politics is the use of the media by various actors as tools to intervene in the political world. This relation of the media to politics has also contributed to the elitism of journalism and a tendency for the media to concentrate rather narrowly on the activities of party elites (Hallin and Mancini, 2004). This epistemological model sees the media as a battleground between contending social forces. Hence, the actors in such media systems see any other social group who tries to intervene in the public sphere, here social scientists, as instrumentalized and as competitors rather than possible collaborators in the pursuit of the “common good”.

The Turkish journalists interviewed picture themselves as “public intellectual” addressing the elites, they are unconcerned with the general public in their writings and if they address the general public it is because “you have to translate the language of politics to the general masses language” (T.J.1). Therefore, VAAs are not perceived as potentially informative for the general public but are rather seen as useful for their personal reflection, and of their peers, or even as an entertainment tool:

“We played a little game in our newspaper, I asked a lot of people to go on the website and answer the question and put themselves on the political axis, and everyone was happy to do that because it is really a game for us.” (T.J.1)

In short, they show no interest in the play of public opinion.

3) France

The French VAA '*La Boussole présidentielle*' established a VAA-media partnership with several media including a regional newspaper *Ouest France* and a free daily *20 Minutes*. In order to foster media coverage of the application, the academic team provided media partners with weekly reports on political behaviour based on the data collected through the VAA. These reports led to the publication of several articles in the media partners' outlets and to a total of 53 media references in newspapers, magazines and newswires⁶² during the six weeks of the electoral campaign.

All, but one interviewed journalist, were "persuaded of the VAA utility for voters, both for comparing users' and candidates' issues positions, and for explaining the important issues of the election" (French Journalist 1). In short, they described it as an informative tool for voters as summarized: "VAAs intertwine manifestos, interactivity, and solid content in a playful format. It answers to the people's demand to access information, it won't answer to all the questions, but still" (FJ4). When questioned about the utility of VAAs for them, which is for their journalistic work, all participants underlined the benefits that they could get out of VAA data. For instance, "VAAs bring in data to support things that we [journalists] see on the fieldwork and that support electoral sociology arguments" (FJ3). Moreover, "because of the high number of respondents, it is a different and refreshing journalistic tool [compared to opinion polls]" (FJ4).

The epistemology model here puts the emphasis on giving the audience the largest and easiest access to information. Readers can do their own research on how an issue affects their personal situation, empirical research has shown that one of the main effects of VAAs on their users is that it stimulates them to gather further information on the issues at stakes in the election. According to this epistemology model, public access to information is key and journalists should not centralize the construction of a moral claim with the support of data analysis so much: readers are considered as legitimate and competent actors in this process (Parasie and Dagiral, 2013).

⁶² Source: *Lexis Nexis*.

H - Exploring differences between and within countries of VAAs' journalistic practices

The overall journalistic attitude toward an online VAA may be correlated to its online success: if the application becomes news then journalists will pay greater attention to it and vice versa. However, independently of the relative success of a VAA⁶³, journalists may have at heart the objective to provide voters with as much relevant information as possible before they cast their vote. On this point, an important difference that emerges among participants to this study is the public service orientation that they expressed when questioned about their role as journalist within society; concretely the extent to which their work serves the public interest. This is an important angle of analysis as the content of VAAs aims to provide a service to voters by helping them access information: VAA developers select a set of issues, pinpoint party's positions on those issues and present them to voters in a centralised fashion. As this work echoes in many ways the job of a political journalist who reports about political debates and electoral campaigns, a journalistic culture that emphasizes the scrutiny of politics and political institutions in its reporting is more likely to have a positive perception of VAAs and similar applications.

For instance, the Dutch interviewees emphasized the role of their profession as a pillar of democracy. By revealing truths that can be found in available data, this approach intends to inform public debate and influence the political agenda. Their objective is to provide information in a “critical but constructive way” (DJ3) to “help citizens to make a responsible choice” (DJ4). In particular, nowadays, the newspaper *Trouw* has made “a plea toward representative democracy, [...] for instance by encouraging people on Election Day to go to the ballot.” (DJ1). This role as mobilizers of an active citizenry along with the belief that

⁶³ Scholars have identified several factors explaining the success of VAAs in electoral democracies: the spread of the Internet as medium to access political information, the increase of electoral volatility in Western democracies, and the nature of the electoral system and the partisan competition (Garzia and Marschall, 2012). Last but not least, the way in which traditional media promotes these applications is a key element in explaining their popularity (Walgrave et al., 2008; Çarkoğlu et al., 2012; Krouwel et al., 2014). The fact that a VAA finds an echo or not in newspapers, radio or television explicates, within a country and between countries, why some of these websites record hundreds of thousands of users, sometimes even millions, while other VAA sites barely reach several thousands of users. A revealing example is the case of the ‘EU-Profiler’, which was launched in 30 countries for the 2009 European Parliament election. In a few weeks, the site generated a bit more of 900,000 pieces of advice (Treschel and Mair, 2011: 7); however, 45% of these users were located in only two countries: the Netherlands and Sweden. “These countries were the only instance in the EU-Profiler project where there was a promotional partnership with a national newspaper (*Aftonbladet* in Sweden, and *Trouw* in the Netherlands)” (Krouwel et al., 2014: 72).

journalists should actively set the news agenda constitutes a favourable environment for the incorporation of VAAs within a newspaper reporting.

In sharp contrast with this view, the Turkish interviewees (but one) declared that they are addressing “the more educated and urban population” (TJ3), “the decision-makers, the managers, [and] the students” (TJ4). As a consequence of this feature, they adopt the role of intellectual figures within the political debate, especially those writing for partisan outlets. This finding is coherent with the idea that high levels of political parallelism within the Turkish press market have limited the development of a strong public service orientation within the local journalistic culture.

Lastly, the French interviewees described their role of journalists as providers of information but remaining apolitical, that is, “explaining facts and providing the keys for understanding society” (FJ1), but without “telling [the voters] what to think” (FJ2 and FJ4). Rather than revealing truths that can be found in datasets with the support of statistics, they suggest another approach where truths would be brought out through the access and processing of data from which citizens are estranged from, i.e. the assumption here is that in contemporary elections there is a decreasing focus on policy issues; and so focusing on them is by itself a way to reveal truths to the public that then has to process them on its own. This focus on a ‘neutral and objective’ journalism is characteristic of commercial media, which is in part determined by their reliance on advertisement and attempts to be ‘catch-all’ media, resulting in rather moderate content. In fact, *20 Minutes* is a free daily and therefore heavily relies on advertisement as a business model (Bakker, 2002), and *Ouest France* is a regional newspaper which incorporated advertisement within its management model since the end of the Second World War, way earlier than did ‘partisan’ national newspapers (Ballarini, 2008). These market positions are, according to the principles of neutrality and objectivity, compatible with the incorporation of a VAA within the media outlet.

The affiliations of the journalists interviewed show that these participants belong to different types of newspapers: quality press, partisan newspapers, commercial press, and free daily. As VAAs’ content is developed following a ‘procedural neutrality’ toward the different political actors (Anderson and Fossen, 2014), partisan newspapers may be less attracted by VAAs. For instance, in Turkey, where there is a polarized and partisan media system, particularly in the press (Bayram, 2010; Kaya and Çakmur, 2010; Çarkoğlu et al., 2014), no VAA-media partnership has been established due to a lack of interest from both partisan and commercial media outlets (Çarkoğlu et al., 2012). The systemic characteristic of the media

system has prevailed over the type of media that could be interested in a VAA. The case of Turkey shows that if the Internet is a democratizing force because it facilitates open information, it has not power to make information open on its own. The political culture and the actors have to want it, which is not the case of the dominant Turkish political culture.

Finally, the use and perception of VAAs as a journalistic news source seems to differ between commentary-oriented journalists and reporting-oriented journalists. Among the journalists interviewed, columnists in France and in Turkey described VAAs as “games” suggesting that they rather focused on the entertaining dimension of this sort of tools, while reporters in the three countries of this study looked at VAAs for their data gathering capabilities and how they could use them in their reporting, even in Turkey as this quote from a younger journalist shows:

“Usually I try to cover other issues as well, cultural issues or women issues, [...] human rights and all kind of rights. So I try to address those who have something to say or who think that not much is being said in the media, [...] or maybe new things which are not in the news. [...] [VAAs] will be a valuable source, people can go there and they can see what their answer is, it is a good way, and they can explore parties that they would otherwise not consider voting for.”
(T.J.2)

The apparent epistemological model here is the agenda-setting function of journalism, that is to address and to raise specific issues into the public debate that are considered to be of societal relevance. Online VAAs and other types of datasets can be particularly relevant for this purpose.

I - Conclusion

The comparative study of journalism in the twenty-first century explores the tension between the centralization of a new technology spreading across media systems providing journalists with additional resources for their newsgathering routines, and the decentralization of different journalist practices as institutionalized in each media system. The focus on VAAs as online sources and as data-gathering tools raises the question whether the availability of new information platforms has really changed journalism. Traditionally in order to assess

public opinion, journalists gravitate toward elites sources, and more recently polls. However, if the Internet functions as a new public space wherein a diverse range of voices can be heard and access to data facilitated (Papacharissi, 2002), then this should alter journalistic newsgathering routine in at least two ways. First, it may change the voices that are selected for news reports, here VAA data, and second, it “might affect the quality of news coverage [...] [by] furnish[ing] journalists with the ability to better explain complex political problems to their audience” (Lecheler and Kruikemer, 2016: 159). In particular, VAAs are a tool that centralizes party and users’ issue positions during an electoral campaign. Traditionally, these two sets of information are separate: newspapers often do their own party manifestos comparison and commission opinion polls to know about voters’ opinions.

The empirical material collected through semi-structured interviews of Dutch, French and Turkish press journalists who reported about online VAAs allows the identification of several variables that impact the perception and use of online sources and data as a journalistic news source to cover politics: the public service orientation within a journalistic culture, the type of newspapers to which a journalist belongs, and the type of journalistic writing in the repertoire of the journalist. These variables help us to draw a picture of the epistemological considerations that are strongly connected to the journalistic profession in different media systems.

The key factor internal to media systems in shaping our respondents perception and attitude toward online tools as source of journalistic data is their specific conception of the journalist’s role in society. Are they claiming to be some sort representative watchdog of the public’s interest, or do they perceive themselves as being the mouthpiece of a group of some kind? The figure of the journalist as a ‘critical expert’ developed first in the *democratic corporatist* media system model and then radiated toward other media systems. The interviews of Dutch journalists have shown how they openly claim to represent a pillar of democracy and the public interest. The interviews of French journalists revealed the intertwined effect of several journalistic influences: on the one hand, the spread of the professionalization model of journalism and its reporting values (neutrality and objectivity), and on the other hand the emphasis by the interviewed journalists to participate to the health of their democratic institutions by providing citizens with the necessary tools and knowledge to assess key issues in society. Thus, in the Netherlands the use of online data source to cover an electoral campaign was justified in the name of a higher principle inherent to the journalistic profession – the defence of the public interest – while in France a professional

imperative argument – being a neutral provider of information – was brought forward to explain the inclusion of online collected data in campaign coverage.

Finally, the Turkish interviews have shown how in an institutional settings historically immune to the figure of the journalists as a representative watchdog of the public's interest, the use of online sources and data to cover an electoral campaign is something not even being considered. As a symptom of this institutional environment, in recent years, Turkish journalists are facing increasing repression from state authority when trying to inform and critically scrutinizes elites. An increasing concern has been voiced about the freedom of media in Turkey, in particular within the press⁶⁴. Historically, such an environment has prevented the expansion of journalism as a professional community developing its own standards of practice, and in recent years it could have limited the integration of innovative reporting tools within established media organizations⁶⁵. This line of reasoning applies especially to technological innovations, such as online VAAs, that would increase the power of journalists as information producers and would ultimately increase their authority to question public officials and to study public opinion. But this goal does not match with the dominant epistemological model observed in the Turkish journalistic culture. A model more focused on elite sources rather than into the play of public opinion.

Two main weaknesses should be considered with regards to the validity of the findings of this chapter. First, the media systems of the countries included in this study are broader and more diverse than the picture presented through the interviews of selected press journalists. This explorative study focuses on a very specific interaction between journalists and the Internet, hence relying on a small sample of journalists, and therefore cannot led to any generalization without further data collection. Second, while the Turkish journalists interviewed are representative of the overall political spectrum of the Turkish media system (conservative and progressive newspapers, secular and religious newspapers), the journalists interviewed in France and in the Netherlands are not representative of the political orientations existing within their respective media systems. The newspapers *Trouw* and *Ouest*

⁶⁴ According to Freedom House's reports, the Turkish press was characterized as being 'partly free' during the 2000s and became 'not free' since 2013, with pressure upon the press that significantly increased from 2011 onwards. The number of media outlets being shut downs and of journalists being arrested has further increased in recent years. The Turkish VAA 'Oy Pusulasi' was launched for the general elections of June 2011 and despite several other attempts to promote the VAA in electoral years following 2011, there has been no interest in such applications in the country.

⁶⁵ Several Turkish interviewed journalists mentioned journalist self-censorship as something they had already practiced or saw colleagues practice.

France promote an active citizenry rather than a particular political view, while *20 Minutes* is more neutral. This discrepancy between the three countries is related to both the type of media partners a VAA searches for promotion, and the high level of political parallelism and polarization within the Turkish media system. VAA entrepreneurs commit to develop VAAs that are “transparent, impartial and methodologically sound”⁶⁶. This ‘procedural neutrality’, or some aspect of it, may be challenged by a partisan media, which would result in a takeover of the VAA purpose (Anderson and Fossen, 2014). Therefore, it is rather media outlets that see themselves as representative of the public’s interest that may be interested by a VAA. In the case of Turkey, the VAA media coverage was not the result of an editorial partnership but rather the decision of individual journalists to report on such online application (Çarkoğlu et al., 2012), hence the partisan diversity of the journalists interviewed.

Beyond the study of media systems and journalists’ practices, this study provides the first qualitative analysis of the ‘media dimension’ of VAAs (Garzia and Marschall, 2012). Further research should be undertaken in this area. For instance, transnational VAAs launched for the 2014 European elections provide a good case for a comparative analysis of VAA media coverage across 28 countries at a same election. In addition to the perception and use of VAAs by journalists, a content analysis could reveal the frames used in the coverage of VAAs. The simultaneity of public relation efforts in all member states to promote the same VAA also offers the opportunity to comparatively study under which circumstances these are successful in reaching out to traditional journalists in a larger number of cases compared to the study undertaken here.

To conclude, answers to questions regarding the perception and use of VAAs as journalistic news sources should also be of interest to all political scientists as it provides empirical evidence on the flow of political information in different media environments. Researchers on public opinion and political psychology have demonstrated the dependence of political behaviours on the media environment (Fiorina, 1990; Zaller, 1992; Prior, 2007). For instance, the intensity of a campaign and the amount of political information that floating voters encounter affect their tendency to vote at all, but also people often learn politically relevant facts as a by-product of non-political routines. Online VAAs are all but games; their interactive and entertaining sides are aimed at reaching out to the young and floating voters. This task can be achieved only through proper media dissemination. Therefore, changes in the

⁶⁶ The Lausanne Declaration on Voting Advice Applications in Garzia and Marschall, 2014, p. 227.

set of available media promoting this type of tools affect who learns about politics through VAAs and who may vote.

CHAPTER 8 – THE IMPACT OF MASS MEDIA ON VAA USE (I): TURKEY, POLITICAL PARALLELISM AND VOTERS’ PARTISANSHIP

A - The context of the 2011 Turkish parliamentary elections

On June 12th, 2011 Turkey had the third general election wherein the conservative Justice and Development Party [*Adalet ve Kalkınma Partisi*-AKP] dominated the election polls with 49.8% of the votes. The AKP’s first election victory in 2002 came in with 34.3%, to be followed by 46.6% in the 2007 general elections, and so this third election victory was a sign of continued success. As the electoral appeal of the AKP widened, the nature of the Turkish party system and behaviour of key players therein slowly changed, a process that in turn generated diverse consequences for government practices.

One result of the AKP’s establishment is that the Turkish party system has become a predominant party system where uncertainty about election results, and especially about the winner, has considerably diminished, and the opposition is in considerable disarray⁶⁷. A prominent feature of predominant party systems in general is the increasing complacency of the dominant party in power⁶⁸. Election successes are typically taken for granted and real competition between parties is replaced by competition between fractions within the dominant party. An immediate implication of this development for election campaigns is a focus, not on alternative issue positions and policy differences but rather on inner party struggles and rhetorical differences.

The establishment of such an atmosphere in the campaign, characterized by low information content, was also due to a 10% threshold of electoral support for gaining representation in the Turkish Grand National Assembly [*Türkiye Büyük Millet Meclisi*-TBMM]. In this system, unless a political party receives 10% of the nationwide votes, it cannot receive any seats in the TBMM. Accordingly, commentators in the June 2011 election

67 See Esen and Ciddi (2011) and Çarkoğlu (2011) for the recent claims of predominant party system in Turkey. See Özbudun (2000) and Kalaycıoğlu (2005) for concise reviews of modern Turkish politics. See Çarkoğlu (1998), Rubin and Heper (2002), Sayarı (2002, 2007) and Tezcür (2012) on the historical characteristics of the Turkish party system.

68 Ware (1996) states that a dominant party should “usually” win. See Sartori (1976, 171-172) for a more commonly adopted definition of electoral success over time.

focused on whether or not the Nationalist Action Party [*Milliyetçi Hareket Partisi*-MHP] was going to remain above or below the 10% nationwide electoral threshold. Thus, a great deal of attention was directed toward the horse race, polarizing attention on the upcoming seat shares in the TBMM. In addition, since the 1990s, ethnic and ideological cleavages have proved to be particularly powerful in structuring the Turkish electorate (Çarkoğlu and Kalaycıoğlu, 2009; Kalaycıoğlu, 1999). This feature has also led to the priming of a nationalist and polarized frame in public discourse, pushing aside policy stances.

For the June 2011 election, the widening electoral power of the AKP was clearly evident in how the election campaign was conducted by the political parties as well as how it was covered in the media. As the AKP confidently moved towards its third consecutive election victory, the media coverage appeared increasingly polarized and biased (Çarkoğlu et al., 2014). More importantly, the information content of the election debates and discussions appeared to sink even lower. The web based Voter Advice Application (VAA) (www.oypusulasi.org) that was launched during the last four weeks of the campaign preceding the June 12th 2011 election can hence be considered as a natural response to this growing partisan alignment of the Turkish media.

Despite the very limited support the *Oypusulasi* application received from traditional media sources, it was able to reach approximately 190,000 respondents⁶⁹. As this chapter illustrates, the application proves to be a valuable additional information source for election analysts in providing crucial information to interested voters about the issue positions of the major parties in an election. Yet, the analyses show that the sample of respondents reached via this application exhibit intriguing patterns. We also demonstrate the effectiveness of media support in promoting such applications. However, in conclusion, effective partnership with media is essential in reaching a large and well-balanced sample of the electorate.

69 190.000 advices given represents less than 1% of the Turkish electorate, usually the number of advices given by VAAs varies from about 5 to 35% of the electorate, but those numbers are reached with the support of national newspapers and televisions promoting the web application. This relatively small percentage of the Turkish electorate that has visited www.oypusulasi.org is due to the fact there was no such partnership in Turkey.

B - The Turkish media system and political parallelism

Since the AKP's coming to power following the 2002 general election, an increasing concern has been voiced about the freedom of media, pressures upon the press, and the emergence of an advocate/partisan's [*yandaş*] media (Çarkoğlu, 2010; Kaya and Çakmur, 2010; Kaymas, 2011). According to Freedom House's reports, Turkey was ranked in 2011 as 116th out of 206 countries in the Freedom of the Press Index with a status of "partly free". Similarly, the 2011 Press Freedom Index released by Reporters without Borders ranked Turkey as 138th among 179 nations, with increasing restraints on press especially in 2003, 2004, and 2009-2011⁷⁰. Media systems are shaped by the wider context of political structure and thus, the influence of the political system on media institutions is not unexpected. As Hallin and Mancini (2004) note, the role of state, interest groups, the structure of clientelism and the party system all influence the structure of a media system. Thus, in Turkey's case, these developments are hardly surprising within the rising predominant party system in the country.

The conceptual framework of the press-party parallelism (PPP) developed by Seymour-Ure (1974), which is defined as the partisanship or the alignment of a newspaper to a particular party, provides plenty of room for analysis especially when the expected role of the press in providing a non-partisan coverage of the news agenda is weak. Organizational ties, media content, personal affiliations of journalists, and the political characteristics of a newspaper's readership are typically used as the basis in diagnosing the alignment between a party and a media outlet. Hallin and Mancini (2004) prefer to use the term 'political parallelism', and note that PPP in a strict sense is in decline, but political parallelism is still common in the form of media organizations', associations not only with particular parties but also with general political tendencies.

Kaya and Çakmur (2010) and Bayram (2010) show that political parallelism in Turkish media history is nothing new. However, since the liberalization of the media markets in the late 1980s and early 1990s, a new competitive environment with increasing conglomerate control of media institutions has emerged. Kaya and Çakmur (2010) identify three characteristics of this new context. Firstly, the Turkish mainstream media heavily promotes the culture of commercialization by a showing preference to sports, scandal, and

70 For details and for an update since 2011 see: <http://en.rsf.org/>.

popular entertainment. The incorporation of entertainment in informative programs has led to the rise of ‘infotainment’ (Brants, 1998). Secondly, “in Turkey, unlike many European countries, deregulation and development of commercialization did not decrease the degree of political parallelism in the media institution. Instead, it increased the instrumentalization of the Turkish media by business interests” (Kaya and Çakmur, 2010, pp.528). Thirdly, a distinctive change in the Turkish media landscape is the rapid development of the conservative/Islamist media, which easily rivals the mainstream commercial media.

Recent empirical studies reveal that the level of parallelism in the 1990s reached a level unseen since the one-party era (1925-1945) (Bayram, 2010). From a different angle, Çarkoğlu and Yavuz (2010) show that during the first term of the AKP, from 2002 to 2007, internal pluralism decreased in the major newspapers of the country. Internal pluralism refers to a situation when individual media outlets contain multiple viewpoints and provide a fair share to all political views. While on the other hand, external pluralism is system wide pluralism, in which every political current in the system finds an outlet for the expression of its views, and is able to make its voice heard (Hallin and Mancini, 2004). Therefore, a decreasing internal pluralism indicates an increasing bias in individual media outlets towards particular political parties as well as an increasing polarization in Turkish media between 2002 and 2007.

Due to the combination of infotainment, political parallelism, and polarization, Turkish media appeared to be unable to focus their attention on issues relevant for the voters and to engage the political parties in an informative debate during the 2011 election campaign. The campaign appeared to focus on non-policy issues, harsh rhetoric, and the horse race. Parties gave hints of their specific policies on rare occasions. Though, such debates accomplished little for the undecided, but interested voters, since issues were framed in terms of personal conflicts between leaders instead of policy content. This, in turn, increased the perception of factionalism within parties.

Given this political background, the project team started to work for a VAA in Turkey approximately 18 months prior to the general elections in June 2011⁷¹. From inception, the objective was to find a media partner that could help the VAA to reach as wide a national political spectrum of voters as possible. Accordingly, large mainstream media groups were contacted. Nevertheless, eventually no institutional support could be obtained from any

71 Ali Çarkoğlu of Koç University-Istanbul headed the Turkish project team. André Krouwel of the Vrije University-Amsterdam and founder of kieskompas.nl was a partner and consultant in the project.

Turkish media group. The analysis will show that despite reluctance to systematically disseminate the content and findings from the VAA by sponsoring it, media attention from prominent columnists and news agencies remained supportive.

As already acknowledge in Chapter 4, VAAs are dependent on mass media to attract high volume of users. In the promotion of the *Oypusulasi* VAA, several columnists from newspapers spread across the political spectrum mentioned the website in their work, therefore attracting voters toward it. Due to this configuration – lack of institutional support from any Turkish media group but still coverage from columnists spread across the media spectrum – we can posit the following hypotheses:

Hypothesis 9.1: Conservative voters visited *Oypusulasi* when conservative leaning newspapers mentioned the website.

Hypothesis 9.2: Progressive voters visited *Oypusulasi* when progressive leaning newspapers mentioned the website.

But first we turn to the description of *Oypusulasi*'s users.

C - Users' description

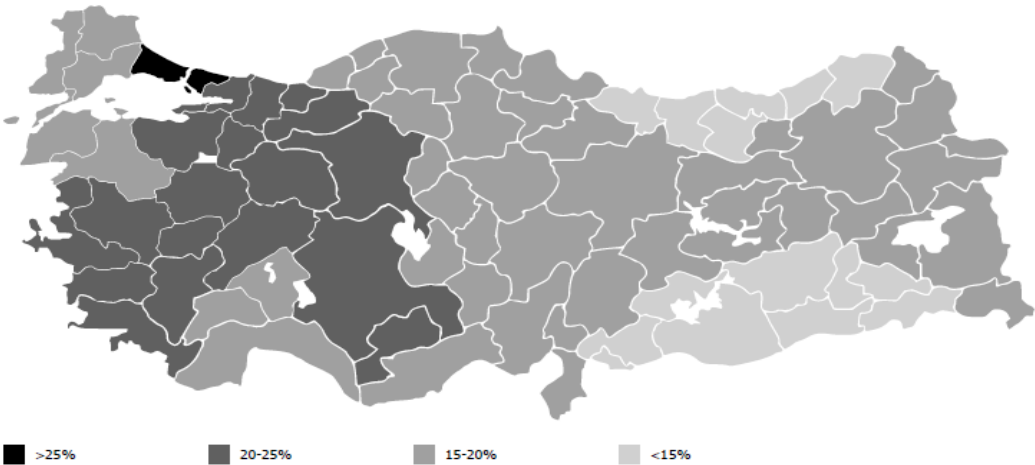
1) Socio-demographic characteristics

Since this VAA site was the first of its kind to emerge in Turkey, it is important to present the socio-demographic profile of *Oypusulasi* users. In addition, gathering information on the geographical location of each connection to the website allowed us to look at the geographical distribution of the connections and at diverse characteristics of users by regions. In the context of Turkey, a country characterized by strong economic, social and cultural differences within, it is a pertinent way to look at VAA users. On the *Oypusulasi* website, users were not only asked to position themselves on thirty statements in order to receive a political recommendation but also to provide information on such demographics as gender, year of birth, and level of education; answering these questions is not required for the tool to work. The location of connection was identified using a GEO-IP database. This database checks the users' Internet protocol (IP) address against a large database and returns the city if the users' IP is in a known IP-city range. Since personal IP addresses cannot be stored due to

privacy concerns, this procedure had to be used for compiling city-level data, which then were aggregated first into provinces and then regions.

As of April 2011, 42.9% of households in Turkey had access to the Internet. Despite this relatively low level of Internet penetration, the interest in political content is high among Turkish Internet users: 72.7% of them indicate that they read or download online news and newspapers, and 50.8% declare they read and post opinions on public or political issues via social network websites. Therefore, the Internet appears to be a communication tool mostly used for access to political information. In terms of Internet access, a salient digital divide between male and female and urban and rural areas also characterizes the country. While 54.9% of males use the Internet, only 35.3% of females do; this divide is persistent among all age groups. In urban areas, 53.2% of the population uses the Internet, while in rural areas only 25.7% of the population does⁷². Therefore, consistent with other VAA users, *Oypusulasi* users were predominantly young, male, with a university degree and urban. 75.2% of the users were male, 67.3% were below the age of 34, 87.5% attended or graduated from a university, and 76.2% connected to the VAA from the provinces of Istanbul, Ankara, and Izmir, the three largest urban centres in Turkey.

Figure 8.1. Proportion of Women among Users



72 Data from the Information and Communication Technology Survey in Households 2011, accessed on January 27, 2012 on www.turkstat.gov.tr.

Figure 8.2. Median Income of Users

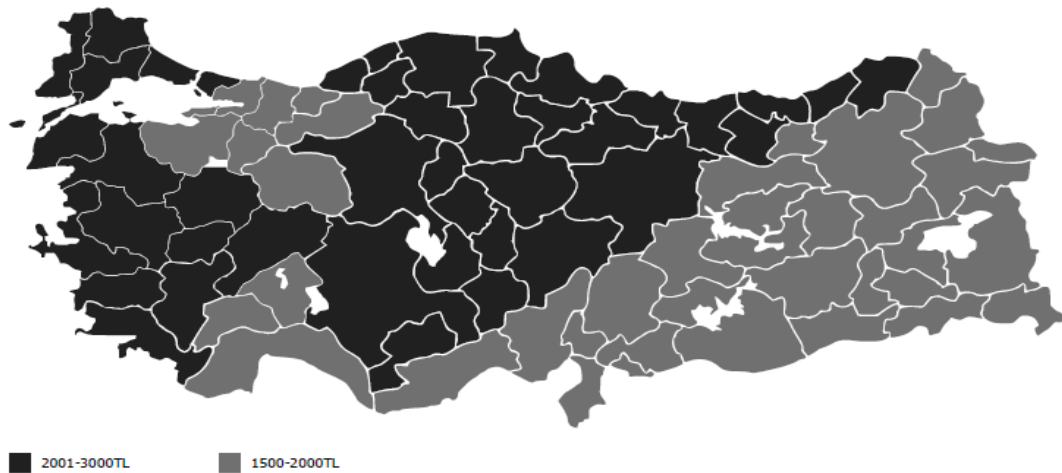
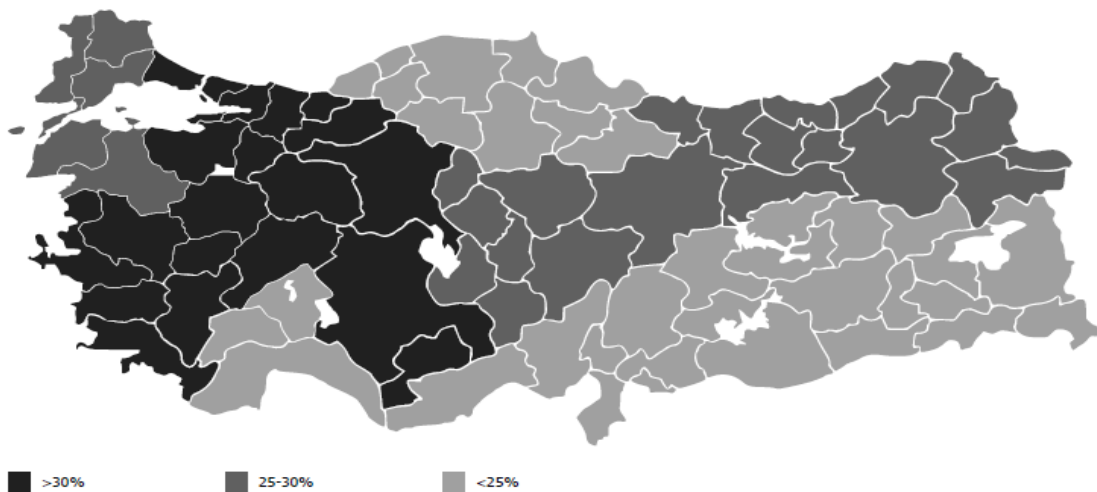


Figure 8.3. Proportion of 15-24 years old Users per Regions



The connections to the *Oypusulasi* website are mostly clustered in western regions, particularly in Istanbul, Western Anatolia, and the Aegean. While 18% of the Turkish population resides in the Istanbul region, 52% of connections to *Oypusulasi* came from there. Figures 8.1 to 8.3 show other relevant regional characteristics of the website users. Most female users also came from the western regions, where the median income and the

proportion of 15-24 years old users is the highest. The southeastern regions have the lowest proportion of female users, the lowest median income per users, and the lowest percentage of 15-24 years old users among all the regions. Such regional divide conforms our expectations and is in line with previous research on the regional characteristics of Turkish voters (Çarkoğlu, 2000, 2002).

Thus, the socio-demographics and geographical data collected on the users of the *Oypusulasi* site veer in the same direction of the data on Internet users, suggesting that two significant digital divides exist in Turkey: a divide between males and females, and a divide between urban and rural areas. With regards to technology and Internet usage, studies in Western countries underline the generational divide among possible others. *Oypusulasi* users have a median age of 30 years, in comparison to the median of the total population in 2010 at 29.2 years. Thus, the fact that the majority of the VAA users in Turkey are below 34 represents the national population demographic of a youthful society. Therefore, rather than a generational divide as a consequence of a web based survey, our data seem to primarily reflect the age structure of the country. Table 8.1 shows the vote intention of *Oypusulasi* users compared to the actual results of the 2011 Turkish Parliamentary election. We can see the large under-representation of AKP voters and the important over-representation of CHP voters among VAA users. These biases are largely due to the fact *Oypusulasi* was mostly accessed by users living in Western large cities with a higher income than the average population.

Table 8.1. Vote intention of Oypusulasi users⁷³

Vote intention/electoral results	Oypusulasi users	Turkish voters
AKP	23.6	49.8
CHP	47.1	25.9
MHP	9.7	13.0
BDP	5.3	6.6
Independents	4	
SP	1.3	1.5
BBP	0.8	0.7
Others	8.2	2.3
<i>N</i>	20,619	

2) Through which web channel did the users access oypusulasi.org?

When media partners are involved, hyperlinks toward the VAA site are available to large reader groups; therefore, estimating the importance of each of the channels of access to the website is possible. Lacking those partnerships, we had to rely on another tool for gathering this information. A ‘referrer’ variable was inserted in the tool; similar to the service provided by Google Analytics. We were able, via this feature, to keep track of the webpage through which the users accessed the *Oypusulasi* website.

Table 9.2 displays a comparison of diverse channels of access to the website between the users who connected from Turkey and the users who connected from other countries. Through the same procedure described in the previous section, using a GEO-IP database, we were able to identify the countries from which the users connected to the website. The comparison between connections from Turkey and connections from abroad is relevant for us because *Al-Jazeera* was an international partner of the project, and thus relayed the existence of such a website that provided substantive information on the political platforms of the main parties running in the Turkish election of 2011. Among the connections from Turkey, 84% of

⁷³ The political parties included in the tables are the Justice and Development Party (*Adalet ve Kalkınma Partisi*-AKP), the Grand Union Party (*Büyük Birlik Partisi*-BBP), the Peace and Democracy Party (*Barış ve Demokrasi Partisi*-BDP), the Republican People’s Party (*Cumhuriyet Halk Partisi*-CHP), the Nationalist Action Party (*Milliyetçi Hareket Partisi*-MHP) and the Felicity Party (*Saadet Partisi*-SP). Several other minor parties (the Democrat Party-*Demokrat Parti*-DP, the Left Democratic Party-*Demokratik Sol Parti*-DSP, and the People’s Voice Party-*Halkın Sesi Partisi*-HSP) are grouped into “others”.

the users directly entered the name of the site in the address bar of their web browser, 7.9% of the users were redirected to *oypusulasi.org* from the Al-Jazeera website, 3.3% from the *Doğan Haber Ajansı* website, and 2.9% from Google Search. Several other items record a flux inferior to 1% of the connection to the *Oypusulasi* website. Comparing those data with the connections from abroad, the most striking difference regards the fact that the connections emerging the *Al-Jazeera* website, from abroad, are almost as numerous as those going directly to the *Oypusulasi* website, 47.4% and 48.1% respectively. Clearly, the existence of effective media creates an important difference in the way users are attracted to a website.

Table 8.2. Channel of access to the *Oypusulasi* site⁷⁴

Channel of access	Connections from Turkey (%)	Connections from abroad (%)
Oypusulasi	84	48,1
Al-Jazeera	7,9	47,4
Doğan Haber Press Agency	3,3	1,0
Google Search	2,9	1,0
Eksi Sozluk	0,9	0,3
Facebook	0,4	0,3
Twitter	0,1	0,1
Le Monde	0,05	0,5
Kamil Pasha	0,03	0,2
Other	0,42	1,1
	100	100
N	57105	14462

⁷⁴ *Doğan Haber Ajansı* is a Turkish press agency; *Ekşi Sözlük* is a Turkish collaborative hypertext dictionary; *Le Monde* is the online version of a French newspaper; *Kamil Pasha* is the blog of Jenny White, professor of Anthropology at Boston University.

D - Type of voters and VAA use

In the absence of a media partner, the team behind the project had to launch its own ‘mini-campaign’ (Abold, 2008) in order to reach out to the voters. This ‘mini-campaign’ can be described as a ‘double-screen campaign’ since it involved both traditional media events such as promotion in television and coverage by newspaper columnists, and Internet-based promotions, such as the use of social networks. Another important but difficult to measure method of promoting the VAA was the massive number of emails to university students, academics, and informal networks of the project team members via social networks. Those mailings are likely to have impacted the early days of the campaign and also likely to have generated an inflow in the later stages; however this consequence is hard to demonstrate.

The number of connections that the *Oypusulasi* website received during the last four weeks preceding the election was about 190,000. However, after cleaning the data for users that did not answer any questions and did not position themselves on any issue statements, the dataset includes 73,041 observations. Among these, 58,579 come from Turkey. Since the media events under observation occurred in Turkey, only those latter domestic connections are kept for the analysis in this chapter. Before looking at all the media mentions, we are going to focus solely on the newspapers coverage of *Oypusulasi* and its impact on the political profile of VAA users.

Figure 8.4 reflects a clear pattern between the number of connections to the *Oypusulasi* website and the days in which newspapers items were published (see Table 8.3 for a detailed list). One can reasonably argue that newspaper coverage matches with the registered peak in the number of connections to the *Oypusulasi* website.

Figure 8.4. Number of Connections and Publication of Newspapers Items

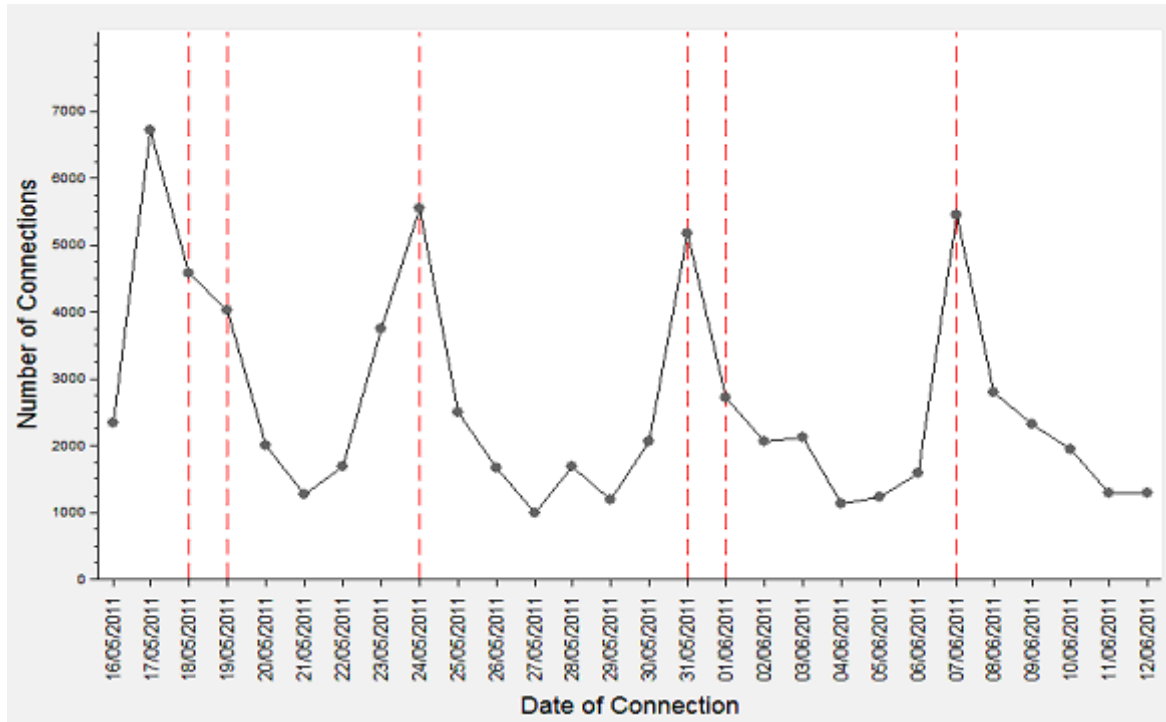


Table 8.3. Newspaper Items Covering the Oypusulasi website

Interruption Date	Interruption Type	Media	Name of Columnist
18.05.2011	Column	Vatan	Ruşen Çakır
19.05.2011	Column	Radikal	Koray Çalışkan
24.05.2011	Column	Bursa Gerçek	Hakan Yusuf Ekren
31.05.2011	Column	Hürriyet	İsmet Berkan
01.06.2011	Column	Akşam	Ali Saydam
01.06.2011	Column	Milliyet	Mehveş Evin
07.06.2011	Column	Zaman	Şahin Alpay

In addition of providing an implicit electoral advice to its users, the *Oypusulasi* website also asked them to estimate the likelihood that they will ever vote for each of the main parties competing in the election. By offering this question before the final graphical summary result is given, the estimated propensity to vote for each party is not ‘affected’ by the advice of the VAA. Eijk et al. (2006) demonstrate that this ‘propensity to vote’ (PTV) survey item is a convenient way to operationalize the electoral utility that voters attach to

each party competing for their votes at the election. Since, as noted earlier, a high level of press-party parallelism characterizes the Turkish media system, we can evaluate the heterogeneity of the PTVs expressed in light of the media events mentioned in the previous section. For instance, among the newspapers that discussed the tool in one of their columns, *Zaman* [Time] is identified as having a conservative stance and pro-AKP, while *Hürriyet* [Freedom], is perceived as adopting a more neutral stance in the media landscape⁷⁵. Therefore, we would expect their respective audiences to express PTVs toward different political parties.

When observing Figure 8.5, we see that the users generally expressed consistently higher PTVs for CHP than for any other party. This finding clearly indicates a partisan bias in the sample reached by our VAA, since CHP received only one quarter of the total vote in the elections while AKP received approximately 50% (see Table 8.1). However, what is relevant to our analysis here is that, on several occasions, the incoming sample of users appears to be more heterogeneous including supporters of parties other than the CHP as well: particularly on May 28th and on June 7th. On both dates, we see sharp increases in the PTVs expressed for the following parties: AKP, the Grand Union Party (*Büyük Birlik Partisi*-BBP), and Felicity Party (*Saadet Partisi*-SP). AKP and SP are conservative, pro-Islamist parties, while BBP has a more nationalist right-wing party identity⁷⁶. When crossing those two dates with Table 8.4, we see that on May 28th the television channel *TRTHaber* mentioned the *Oypusulasi* website in one of its news programs, and on June 7th, the newspaper *Zaman* discussed the tool in one of its columns. Both media institutions are known for their rather conservative audience (Çarkoğlu and Yavuz, 2010) and therefore may have attracted towards the VAA users likely to express PTVs in favour of those parties. In other words, as *Oypusulasi* received coverage in a relatively more conservative media, the inflow of respondents to our website immediately reflected the predominantly right-wing conservative party choices of the readers of these newspapers. As long as diverse media support our application, and in the case of the Turkish media system we believe that it is necessary in order to reach different ideological groups, our tool clearly demonstrates a natural openness to all ideological orientations.

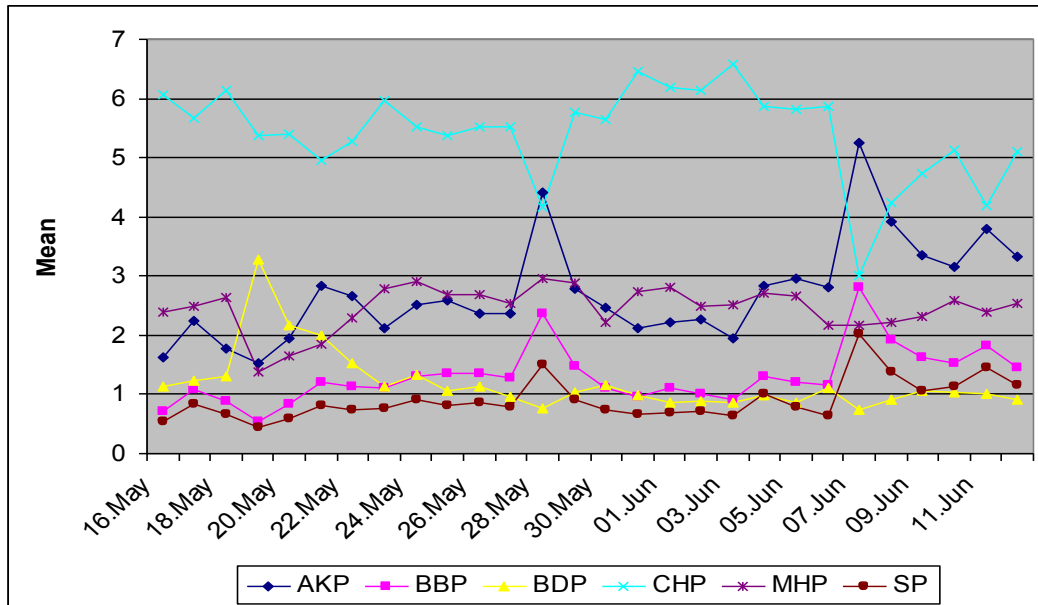
On Figure 8.6 to 8.8, we can see for each of the parties displayed in Figure 8.5 how often they were implicitly advised to the users during the four weeks of the campaign.

75 See Çarkoğlu and Yavuz (2010) for the partisan leanings of different newspapers in Turkey.

76 For ideological differentiation of political parties in Turkey see the summary exposition in Çarkoğlu (2003), p. 124.

Overall, every distribution has a four-peak structure due to the distribution of the connections to the website which is itself four-peak shaped (see Figure 8.4).

Figure 8.5. Evolution of the PTVs (scale 0-10) expressed on the Oypusulasi website



However, three observations emerge out of those distributions. Firstly, on May 19th when the newspaper *Radikal* mentioned the tool in one of its columns, we see a high concentration of respondents advised towards BDP (Figure 8.6). We believe that this increase is largely attributable to the liberal left-wing orientation of the *Radikal* daily newspaper and its core reader constituency, which apparently was more open to the policy preferences of the BDP in 2011. Secondly, on May 28th, when the television *TRTHaber* mentioned the VAA in one of its news programs, we observe a fifth peak emerging in the advices of conservative and nationalist parties, such as AKP, BBP, MHP, and SP (Figure 8.7 and 8.8). And lastly, on June 7th, there is a particularly high concentration of AKP, BBP and SP’s advice to users on the day in which the newspaper *Zaman* discussed the tool.

Figure 8.6. Distribution of the Advices Given in favour of BDP and CHP by the Oypusulasi Website⁷⁷

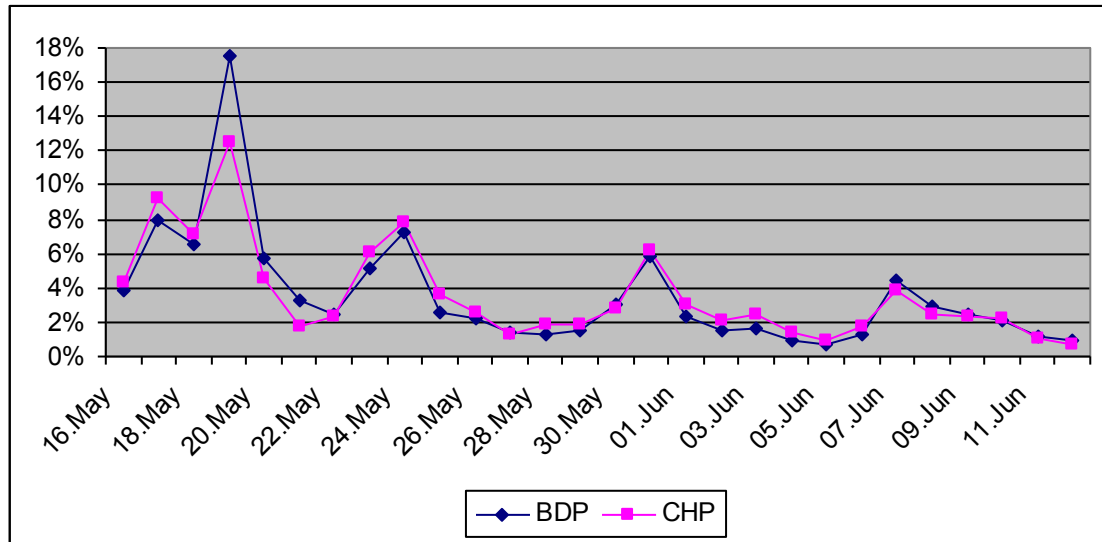
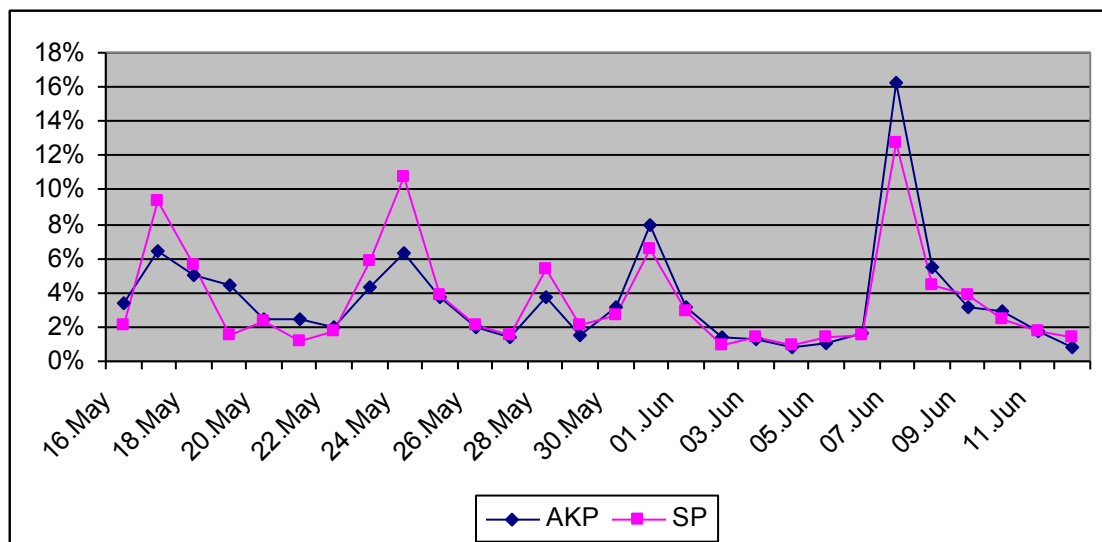


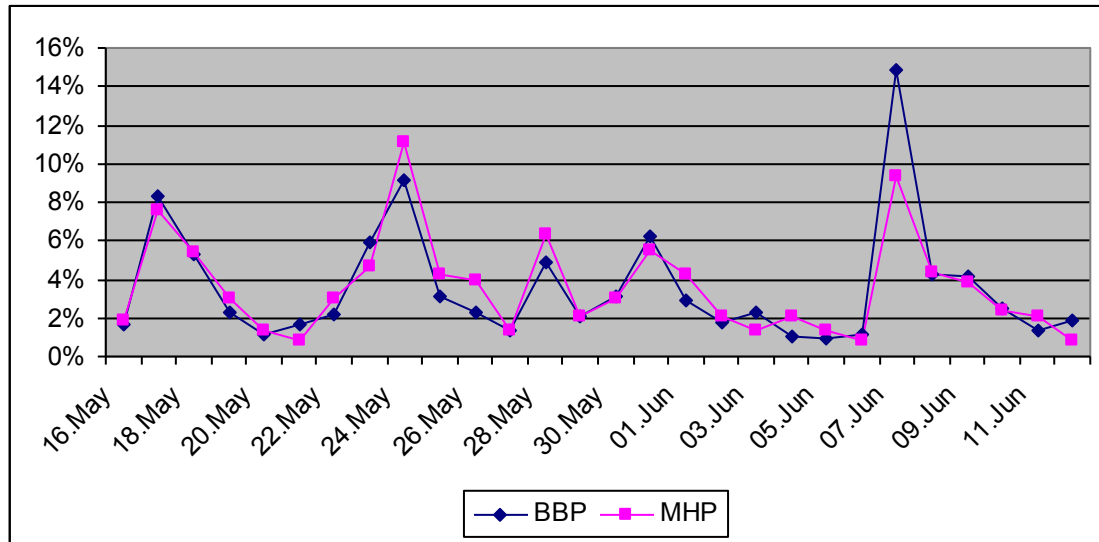
Figure 8.7. Distribution of the Advices Given in favour of AKP and SP by the Oypusulasi Website⁷⁸



⁷⁷ Peace and Democracy Party (*Barış ve Demokrasi Partisi*-BDP), Republican People's Party (*Cumhuriyet Halk Partisi*-CHP).

⁷⁸ Justice and Development Party (*Adalet ve Kalkınma Partisi*-AKP), Felicity Party (*Saadet Partisi*-SP).

Figure 8.8. Distribution of the Advices Given in favour of BBP and MHP by the *Oypusulasi* Website⁷⁹



In short, connections to the *Oypusulasi* website on any given day, as well as the political tendencies of users appear to be largely dependent on which media outlet had mentioned the VAA.

E - Assessing the impact of mass media on VAA use

As mentioned above, a ‘mini-campaign’ was launch in order to promote *Oypusulasi*. It resulted in a certain number of mentioned in newspapers, television programs and social networks. Çarkoğlu et al. (2012) identified which ones of those mentions were significant in bringing users to the VAA. In order to measure the impact of mass media on VAA use by different types of voters, i.e. voters with different political tendencies, a multiple-interrupted time series (MITS) analysis is applied to the dataset⁸⁰. In order to be able to conduct a MITS analysis, the dataset was recoded from daily to 12 hours unit (7am to 6pm and 7pm to 6am) so that both daily and evening coverage of the VAA could be measured separately.

⁷⁹ Grand Union Party (*Büyük Birlik Partisi*-BBP), Nationalist Action Party (*Milliyetçi Hareket Partisi*-MHP).

⁸⁰ See Lewis-Beck (1980) for an accessible exposition of the methods of MITS.

The interruptions are the mass media events that Çarkoğlu et al. (2012) found as significant in bringing users to the VAA (see Table 8.4). Those mass media are of two kinds: newspaper columns mentioning the tool and television programs in which the website was discussed. These different media items taken into the analysis as interruptions in the following MITS model:

$$Y (\text{Advice Party}_j) = \beta_0 + \beta_1 \text{Connections} + \beta_2 \text{Baseline Trend} + \sum \lambda_i \text{Time Unit}_i + \sum \mu_i \text{Media Events}_i + \varepsilon$$

Where Y indicates the number of advice for the parties included in the analysis (AKP, SP, CHP, BDP, MHP and BBP), β_0 indicates the reference level of the dependent variable for the dependent variable when no promotion takes place at the very beginning of the analysis period, β_1 controls for the effect of the number of *Oypusulasi* users on the dependent variable, and β_2 indicates the coefficient of the baseline time trend and the impact of each interruption (media event) on it. In fact, we used the distribution of our sample, i.e. independent variable, in order to predict the distribution of advices for each party, i.e. dependent variable; and test the effect of each media event on the latter. The MITS analysis was conducted for each voter type separately; the results are then brought together and shown in Table 8.5.

Several patterns are noteworthy. First, we see that none of the baseline time trends (t) has a significant coefficient indicating that the difference in each party advice between the beginning and the end of the campaign is not significant. However, many media events coefficients are significant indicating that they had an effect in altering the political profile of the site users. Most notably, the progressive newspaper *Radikal* had a strong effect in bringing users who agree with the policy proposals of CHP and especially BDP. Similarly, the largest selling conservative leaning newspaper *Zaman* had a strong effect in bringing users who agree with the policy proposals of AKP, while strongly reducing the numbers of users who agree with CHP's stances. If we look at the nationalist and religious users (MHP and BBP for the former, and SP for the latter), both the newspaper *Bursa Gercek* and the television channel *TRTHaber* significantly brought them to the website.

Table 8.4. Media Items as Interruptions for the MITS Analysis

Interruption Date	Interruption Type	Media	Name of Journalist/TV Program
18.05.2011	Newspaper column	Vatan	Rusen Çakir
19.05.2011	Newspaper column	Radikal	Koray Çaliskan
23.05.2011	News Program	CNNTürk	“Güne Merhaba”
24.05.2011	Newspaper column	Bursa Gercek	Hakan Yusuf Ekren
28.05.2011	News Program	TRTHaber	“Haber Tadında”
31.05.2011	Newspaper column	Hürriyet	Ismet Berkan
07.06.2011	Newspaper column	Zaman	Sahin Alpay

Finally, users agreeing with the policy proposals of CHP were significantly brought to *Oypusulasi* by the television channel *CNNTürk*, while the newspaper *Hürriyet* significantly reduced the number of vote advice for CHP produced by the site. On this latter result we should underline two points. First, in our dataset vote advices toward left progressive parties are over-represented, and second, *Hürriyet* is a more commercial and catchall newspaper compared to the other outlets included in the analysis. Therefore, its coverage of the VAA is likely to have increase the political heterogeneity of the users, and of the advices produced by the tool; hence the negative coefficient observed for CHP advices.

Thus, the findings of the MITS analysis reveal that users with different political profiles have been attracted to *Oypusulasi* through different mass media outlets.

Table 9.5. Results of the MITS analysis on VAA advice⁸¹

Date		AKP	SP	CHP	BDP	MHP	BBP
	Baseline trend (t)	-14.0 (16.9)	-2.69 (3.22)	8.15 (9.44)	-9.39 (18.78)	1.62 (2.45)	1.41 (4.62)
18 May	Vatan	13.66 (43.58)	2.96 (11.46)	-15.67 (25.14)	25.8 (50.78)	-6.27 (8.42)	2.04 (15.94)
19 May	Radikal	-70.27 (60.65)	-17.5 (17.36)	110.52** (35.26)	279.48*** (71.47)	-15.87 (12.53)	-16.96 (23.95)
23 May	CNN Türk	-33.54 (37.37)	-.51 (9.01)	70.9** (21.25)	60.47 (42.66)	-1.39 (6.67)	-16.24 (12.61)
24 May	Bursa Gercek	-18.71 (39.94)	16.29° (8.84)	-37.8° (22.65)	-1.0 (45.42)	28.68*** (6.64)	24.75° (12.54)
28 May	TRTHaber	16.55 (38.89)	19.65** (7.15)	-12.92 (21.98)	-50.2 (44.0)	26.79*** (5.55)	26.1* (10.42)
31 May	Hürriyet	19.53 (42.27)	-.96 (7.0)	-39.41° (23.6)	-64.88 (46.93)	5.11 (5.47)	-.89 (10.26)
7 June	Zaman	184.63*** (38.75)	5.09 (6.06)	-72.13** (21.42)	-68.05 (42.41)	6.09 (4.72)	18.09* (8.87)
	Number of advices produced	.07*** (.00)	.02*** (.00)	.04*** (.00)	.07*** (.00)	.01*** (.00)	.02*** (.00)
	(Constant)	-.4 (49.3)	-4.06 (8.17)	1.58 (26.71)	21.34 (52.62)	-6.01 (6.25)	-15.93 (11.77)
	Adjusted R-Squared	0.82	0.84	0.82	0.77	0.84	0.82

⁸¹ °p<.1; *p<.05; **p<.01; ***p<.001

F - The individual determinants of VAA use by voter types

The previous two sections have shown the parallelism at the aggregate level between advices given by *Oypusulasi* and the political orientation of the media outlet mentioning the VAA. The final step of this chapter explores the individual determinants of voter types. As in section D, we identify voter types by the advice received on the VAA, that is voters who agree the most with the policy positions of a party as calculated by *Oypusulasi*. We ran a logistic regression model with voter types as dependent dummy variables. We included the following socio-demographics variables in the model: gender, age, education and region of connection. The attitudinal variable ‘vote intention’ is also included in the model in order to control if there is a match between the party advice given by the VAA and the vote intention expressed by the user. Finally, we control for the time frame that the site was online (from week 1 to week 4) and for the newspaper coverage of the VAA. For every newspaper column, we coded a dummy variable for that event at the time of the event (7AM to 12AM) and zero otherwise.

Table 8.5. Logistic regressions⁸²

Party advice given by the VAA	AKP	SP	CHP
	Exp(B) (S.E.)	Exp(B) (S.E.)	Exp(B) (S.E.)
Men (ref: women)	1.711*** (.089)	2.198*** (.226)	.857* (.069)
Age (ref: 18-24)			
25-34	1.026 (.291)	.661 (.535)	1.306 (.276)
35-49	1.076 (.288)	.884 (.526)	1.403 (.273)
50-64	1.372 (.289)	.890 (.528)	1.159 (.277)
65<	1.196 (.302)	.662 (.568)	.873 (.293)
Education (ref: below high-school)			
High-school degree	.658* (.194)	2.170** (.257)	.945 (.250)
University degree	.750*** (.075)	1.082 (.150)	.872° (.081)
Region			
Istanbul	1.204* (.078)	.977 (.162)	.992 (.086)

⁸² °p<.1; *p<.05; **p<.01; ***p<.001.

Izmir, Manisa, Aydin	1.260* (.116)	1.203 (.230)	1.071 (.123)
Adana, Kahramanmaras, Antalya	1.333° (.150)	1.167 (.292)	1.082 (.182)
Diyarbakir, Gaziantep, Mardin	1.105 (.219)	.852 (.473)	.748 (.298)
Ankara, Konya	1.263* (.091)	1.015 (.186)	1.243* (.106)
Sakarya, Bursa	1.034 (.158)	.948 (.309)	1.017 (.186)
Samsun, Zonguldak, Kastamonu	.879 (.363)	.351 (1.017)	.571 (.594)
Sivas, Aksaray	1.347 (.304)	.721 (.729)	.810 (.520)
Van, Malatya	.859 (.364)	2.200 (.485)	.748 (.523)
Ordu	1.118 (.253)	1.024 (.474)	1.034 (.354)
Baliksehir, Tekirdag	1.311 (.260)	1.127 (.526)	1.177 (.299)
Erzurum, Agri	1.691° (.317)	.466 (1.017)	.185° (1.012)
Vote intention			
AKP	2.905*** (.078)	4.250*** (.194)	.030*** (.324)
SP	.660 (.319)	3.195** (.429)	.000 (2807.9)
CHP	.181*** (.112)	.081*** (.419)	1.008 (.081)
BDP	.344*** (.208)	.000 (1238.9)	1.439** (.125)
Independents	.373*** (.228)	.000 (1422.3)	1.548*** (.136)
MHP	.518*** (.135)	1.950** (.244)	.072*** (.325)
BBP	1.198 (.302)	4.972*** (.430)	.317° (.589)
Undecided	1.009 (.178)	1.372 (.422)	.439*** (.244)
Week of connection			
Week 1	1.482° (.202)	.745 (.360)	1.832* (.238)
Week 2	1.195 (.204)	1.060 (.349)	1.854* (.241)
Week 3	1.143 (.214)	.618 (.396)	1.617° (.250)
Week 4	1.370 (.206)	.794 (.365)	1.542° (.250)
Newspaper columns			
Vatan	1.087 (.133)	1.835* (.265)	1.070 (.131)
Radikal	.992 (.148)	.716 (.442)	1.508*** (.112)
Bursa Gercek	.883 (.143)	.908 (.249)	.796 (.143)
Hürriyet	1.431* (.146)	1.484 (.332)	.658* (.170)
Aksam & Milliyet	1.286 (.196)	1.281 (.447)	.898 (.211)
Zaman	1.362** (.107)	1.180 (.227)	.738 (.199)
Constant	-3.504*** (.357)	-4.989*** (.661)	-3.217*** (.367)
N (party/total)	1,463/21,880	300/21,880	1,132/21,880
Nagelkerke R square	0.189	0.174	0.113

Table 8.5. (continued) Logistic regressions

Party advice given by the VAA	BDP	MHP	BBP
	Exp(B) (S.E.)	Exp(B) (S.E.)	Exp(B) (S.E.)
Men (ref: women)	.879° (.067)	2.974*** (.280)	1.567** (.161)
Age (ref: 18-24)			
25-34	1.572 (.295)	.495 (.493)	2.048 (.725)
35-49	1.809* (.292)	.487 (.485)	2.181 (.722)
50-64	1.802* (.294)	.481 (.489)	2.788 (.722)
65<	1.407 (.307)	.486 (.530)	2.403 (.739)
Education (ref: below high school)			
High school degree	.680° (.219)	2.838*** (.271)	1.084 (.264)
University degree	.705*** (.079)	1.353° (.162)	.831 (.126)
Region			
Istanbul	.952 (.078)	1.194 (.188)	1.057 (.139)
Izmir, Manisa, Aydin	1.077 (.115)	.894 (.302)	1.265 (.200)
Adana, Kahramanmaras, Antalya	.774 (.180)	.785 (.411)	1.835 (.223)
Diyarbakir, Gaziantep, Mardin	1.171 (.200)	.502 (.730)	.507 (.520)
Ankara, Konya	.959 (.103)	1.599* (.203)	1.584** (.148)
Sakarya, Bursa	.904 (.184)	.544 (.476)	1.333 (.242)
Samsun, Zonguldak, Kastamonu	.625 (.531)	1.072 (.743)	.877 (.603)
Sivas, Aksaray	.781 (.469)	.579 (1.021)	1.393 (.478)
Van, Malatya	.887 (.407)	2.092 (.614)	.873 (.604)
Ordu	1.400 (.308)	.611 (.730)	.625 (.521)
Baliksehir, Tekirdag	.425* (.420)	1.751 (.533)	1.527 (.408)
Erzurum, Agri	.527 (.415)	2.946* (.542)	1.855 (.483)
Vote intention			
AKP	.108*** (.150)	4.869*** (.238)	4.675*** (.157)
SP	.050** (1.005)	3.178* (.557)	.961 (.602)
CHP	.351*** (.080)	.171*** (.387)	.149*** (.263)
BDP	12.435*** (.089)	.306 (.743)	.068** (1.012)
Independents	5.606*** (.097)	.472 (.744)	.089* (1.012)
MHP	.015*** (.581)	2.781*** (.277)	1.328 (.213)
BBP	.141** (.716)	3.505* (.629)	5.127*** (.350)
Undecided	.716* (.168)	1.457 (.502)	.830 (.408)
Week of connection			
Week 1	2.096** (.233)	.912 (.393)	1.130 (.320)

Week2	1.617* (.238)	.998 (.389)	1.159 (.318)
Week 3	1.406 (.247)	.913 (.414)	.874 (.344)
Week 4	1.697* (.243)	.423° (.440)	1.153 (.324)
Newspaper columns			
Vatan	1.042 (.123)	1.153 (.308)	1.293 (.224)
Radikal	1.535*** (.102)	.327° (.602)	.695 (.330)
Bursa Gercek	.785° (.139)	1.478° (.239)	1.466* (.193)
Hürriyet	.987 (.155)	.694 (.381)	1.155 (.271)
Aksam&Milliyet	.692 (.234)	1.395 (.399)	1.079 (.368)
Zaman	.759° (.166)	1.218 (.344)	.881 (.185)
Constant	-3.010*** (.376)	-5.367*** (.677)	-5.601*** (.801)
N	1,750/21,880	230/21,880	460/21,880
Nagelkerke R square	0.361	0.159	0.181

Table 8.5 reports the odd ratios (Exp(B)) of being advised by *Oypusulasi* to vote for AKP, SP, CHP, BDP, MHP and BBP. AKP and SP are two religiously conservative parties; CHP and BDP are two progressive social-democrats parties; and MHP and BBP are two nationalist conservative parties. We observe that among *Oypusulasi* users men are significantly more likely than women to vote for conservative parties, and that women are significantly more likely to vote for left progressive parties. In several occasions age and education are significant in the model, but no clear pattern emerges out of the results. Concerning the regions of connection, it is worth mentioning that there is a significant relationship between an increase in advices for conservative and nationalist parties (AKP and MHP) in the region of Erzurum-Agri, while there is a significant decrease in advices for progressive parties in both Erzurum-Agri (CHP), and Balikesir-Tekirdag (BDP), regions characterized by a strong nationalist vote. The vote intention dummy variables reveal a significant match between the party advice by the VAA and the vote intention of the users, but for CHP voters. This could be explained by the fact that two minor parties (DSP and HSP, see note of Table 8.1 for full names) were located close to CHP in the VAA political landscape, but slightly more toward the centre of it. Hence, many users with a declared vote intention for CHP have probably been advised those minors parties by the tool, but were still located very close to the policy stance of CHP. These variables also underline the voting and ideological proximity between all conservative and nationalist parties, and the partitioning of the left progressive vote between CHP and BDP. The variables measuring the time frame in

which users visited *Oyusulasi* confirm the overall political bias of the data. Voters ideologically close to the left-progressive parties are significantly more likely than other voters to have used the VAA at any time during the campaign.

Finally, the newspaper columns variables confirm the expectations of *Hypotheses 8.1* and *8.2*. The political profile of *Oyusulasi* users is affected by the political leaning of the newspaper mentioning the VAA. For a easier interpretation of the partial effects of each explanatory variable, i.e. newspaper columns, on the logistic regression, we turn to predicted effects represented in Figures 8.9 to 8.13 for all significant coefficient of such media variables. Though weak, the effect of *Radikal*, a left-progressive leaning newspaper, in bringing to the VAA progressive – CHP and BDP – voters is significant (Figure 8.9), such as the effect of *Zaman*, a conservative leaning newspaper in bringing conservative – AKP – voters is also significant (Figure 8.12). The commercial catch-all newspaper *Hürriyet* also has a significant effect in bringing conservative – AKP – voters to the VAA (Figure 8.10), this is hardly surprising as in the 2011 Turkish Parliamentary elections AKP received half of the expressed votes. Finally, according to the logistic regression model the local newspaper *Bursa Gerçek* significantly attracted nationalistic – MHP and BBP – voters to the VAA. However, the predicted effect plots in Figure 8.11 show an overlap of the confidence intervals between the presence and the absence of the column in such newspaper; hence, weakening such assertion. The same conclusion is reached in the relationship between the column published in the conservative leaning newspaper *Vatan* and voters for SP, a conservative religious party (Figure 8.13).

Figure 8.9. Predicted effects of the column published in *Radikal* on the party advices in favour of CHP, BDP and MHP on Oypusulasi

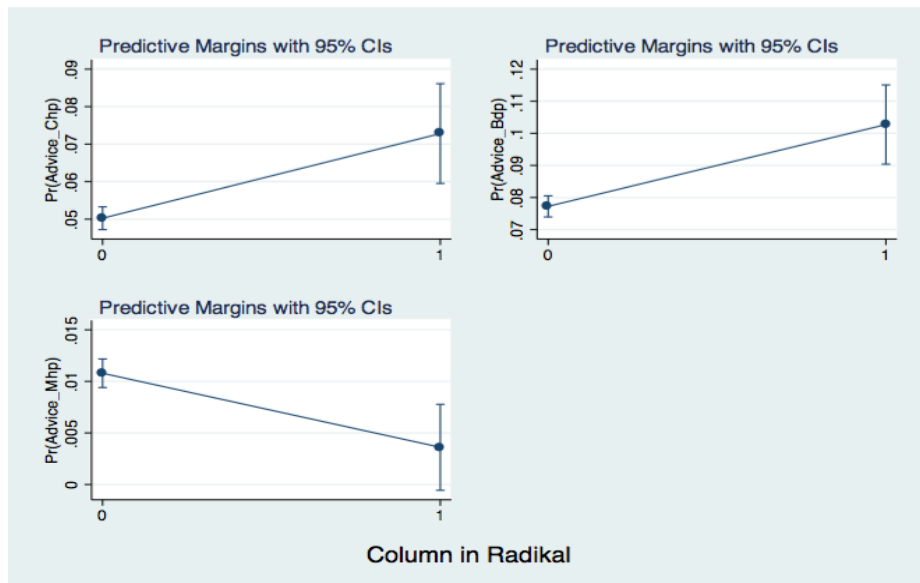


Figure 8.10. Predicted effects of the column published in *Hürriyet* on the party advices in favour of AKP and CHP on Oypusulasi

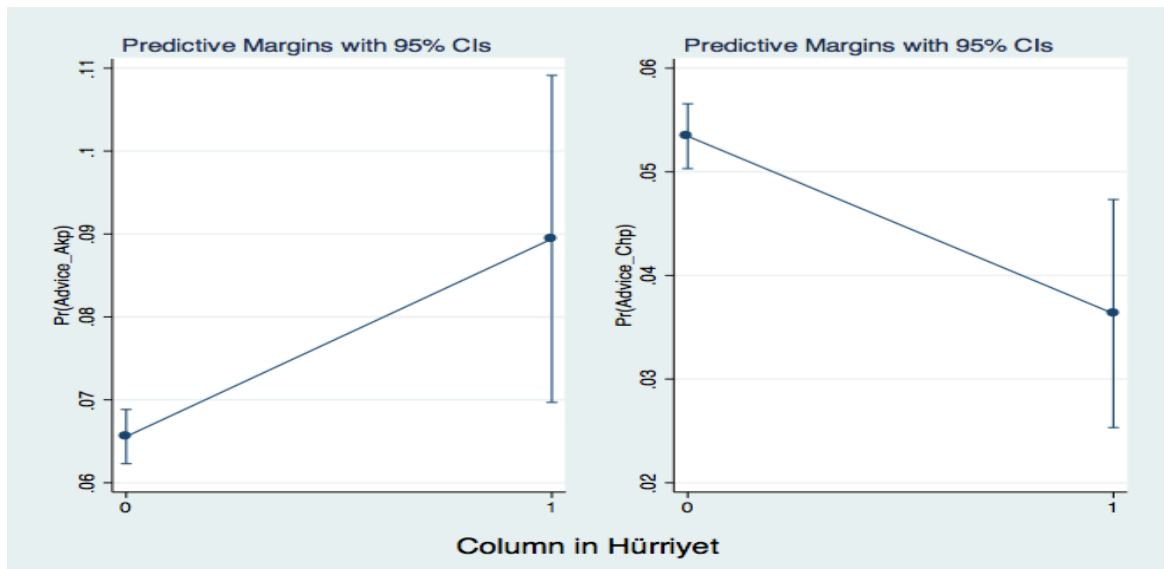


Figure 8.11. Predicted effects of the column published in Bursa Gerçek on the party advices in favour of BDP, MHP and BBP on Oypusulasi

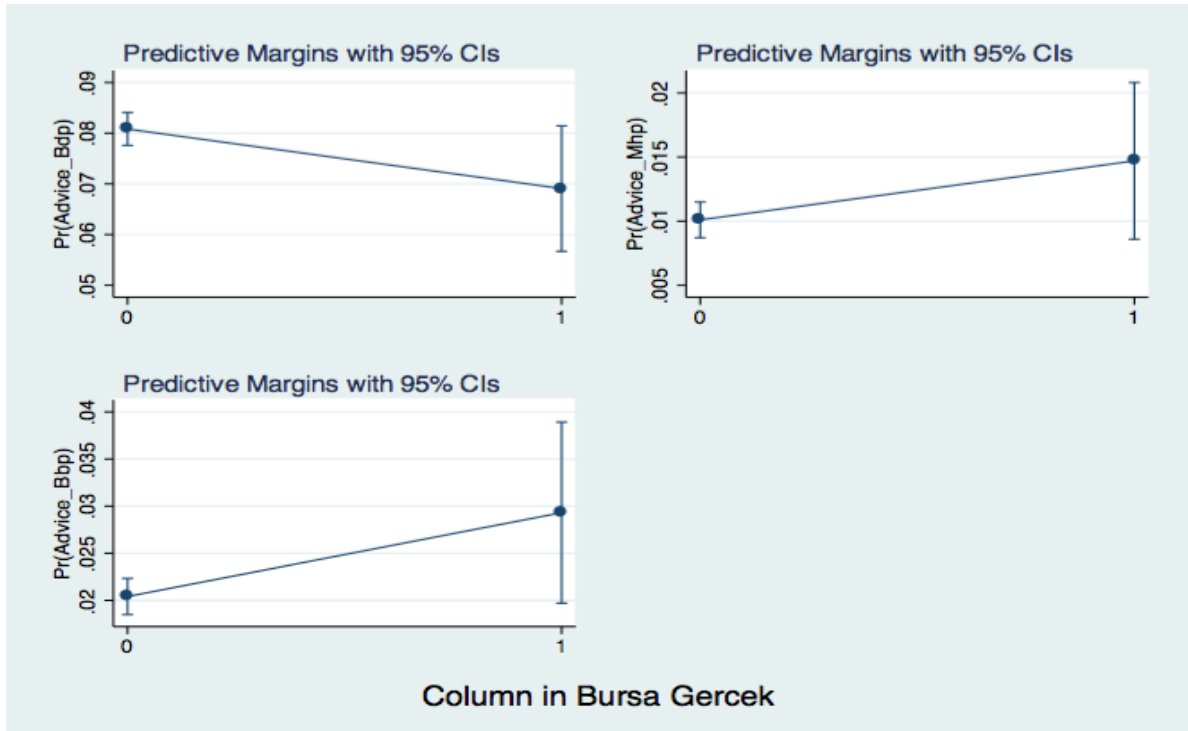


Figure 8.12. Predicted effects of the column published in Zaman on the party advices in favour of AKP and BDP on Oypusulasi

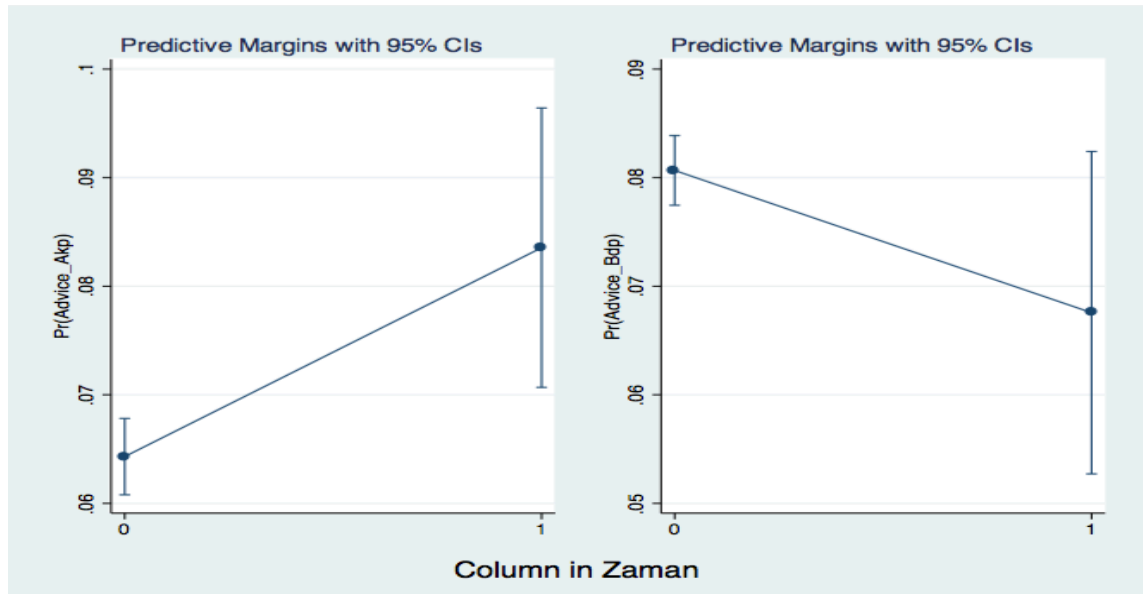
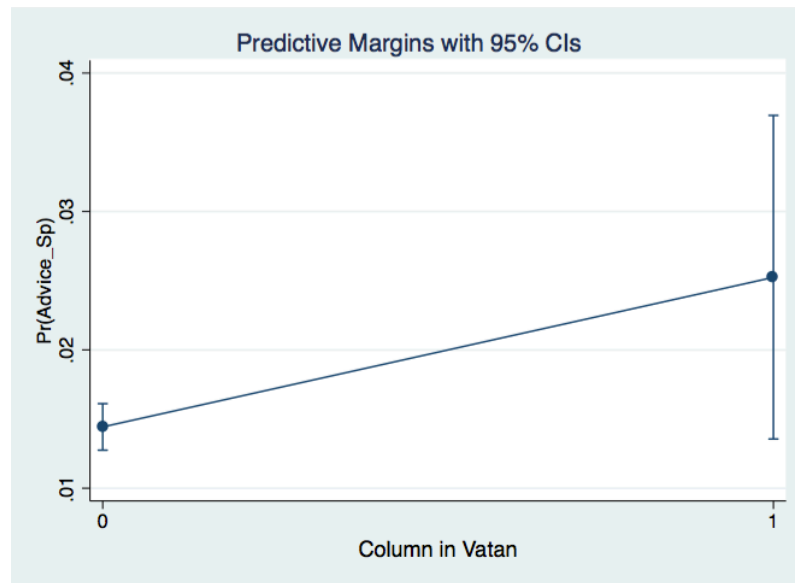


Figure 8.13. Predicted effects of the column published in Vatan on the party advices in favour of SP on Oypusulasi



G - Conclusion

Even though no national media sponsored the website, the fact that some media outlets still discussed the VAA in their news programs and columns led to a relative promotion of the application through a ‘mini-campaign’ (Abold, 2008). In this ‘mini-campaign’ traditional media outlets such as television and newspapers mentioned the tool in their campaign coverage, which considerably increased the number of users on the *Oypusulasi* website. Our analyses further confirm our expectations that in Turkey the diversity of the media discussing the VAA is essential to order to reach a politically heterogeneous group of users. Since media audiences in Turkey are politically segmented, it is only when, for instance, conservative media mentioned the website that users with conservative opinions came to use the VAA. Hence, it is not surprising that the political parallelism of the Turkish media is salient in the findings. The Turkish media system has a strong influence on patterns of individuals’ access to media and to political information.

The simultaneous increase in ‘recommendations’ in favour of conservative parties and the presence of the VAA in the conservative media also tells us about the tool itself. The VAA measured a parallel evolution of the PTVs expressed for conservative parties and of the ‘advice’ in favour of those same parties. Thus, the tool was successful in capturing different group of users. We would like to note that since 2011, several VAAs were launched in Turkey

for local and national elections but none of them received the media attention that *Oypusulasi* received in 2011. While in Western media systems, interest for such type of web-based applications has increased through the years, as already mentioned in Chapter 8 we think that the increasing pressure on the Turkish media system from the Turkish authorities⁸³ has strongly hampered any emerging trend toward data-driven journalism and issue-based political debate, as promoted by online VAAs.

⁸³ See <https://rsf.org/en/turkey> for an up to date appraisal of the freedom of the media in Turkey.

CHAPTER 9 – THE IMPACT OF MASS MEDIA ON VAA USE (II): FRANCE? VOTER TYPES AND COMMERCIAL MEDIA

A - The context of the 2012 French Presidential election

The two-round election that took place on April 22nd and May 6th 2012 saw the victory of the socialist candidate François Hollande (51.64%) against the incumbent and conservative candidate Nicolas Sarkozy (48.36%). This electoral outcome is mostly the result of the economic and social context that emerged from the public debt crisis in the Euro zone in 2009 (Piar, 2013). Since the beginning of the crisis, Sarkozy is the eleventh incumbent candidate, or party, not re-elected among the governments of the Euro zone.

If this electoral outcome was predictable, nonetheless the electoral campaign was rich in reversal of circumstances and shifts in public opinion trends. In fact, significant movements in voters' intentions have characterized the campaign of the 2012 French Presidential election. According to the *Présidoscopie* study⁸⁴, “in the six months prior to the first round of the election, half of the voters have changed their mind for whom to cast their ballot, or if to participate or not in it” (Piar, 2013: 20-21). In the year and a half before the election, vote intentions for the five major candidates have all experienced important fluctuations; the poll data below are issued from the edited volume on the 2012 French presidential and parliamentary elections: *Le Vote Normal* (Perrineau, 2013)⁸⁵.

In the first half of 2011, polls show that the favourite candidate for the Socialist Party's primaries (*Parti Socialiste* – PS) was the International Monetary Fund director Dominique Strauss-Kahn. In January 2011, with 30% of vote intentions he was 8 points ahead of Sarkozy in the polls for the first round and 28 points ahead in the hypothesis of a second round involving the two of them. However, in May 2011 he is involved in a sex-scandal and is discredited as potential candidate. Hollande who started with 20% of vote intention in

⁸⁴ The *Présidoscopie* study was a panel study over a period of eight months with twelve waves of 6,000 voters. The study was funded by the Centre of Political Studies of Sciences Po (Cevipof), the newspaper *Le Monde*, the foundation Jean-Jaurès, and the foundation for political innovation (Fondapol).

⁸⁵ For a more detailed account of campaign dynamics see Chapter 1 *Des campagnes sous l'emprise de la conjuncture*, pp. 20-33.

January 2011 won the PS primaries in October 2011 and experienced a “convention bump” (Campbell et al., 1992) in the polls with 35% of vote intentions after his primaries victory. Following this convention bump, his poll scores remain stable between 26% and 31% of vote intentions (Priar, 2013), and resulted in a first round vote share of 28.6%

Due to the economic crisis, the incumbent President Sarkozy was rather unpopular in 2011 (Chiche and Dupoirier, 2013), struggling to go above 25% of vote intentions. However, from the moment he announced his candidacy mid-February 2012, he triggered a campaign dynamic that led him to catch up, and even to temporarily surpass, with 30% of vote intention in the polls, his main opponent Hollande, but ended up behind him in the first round outcome with a vote share of 27.2%.

Marine Le Pen, who succeeded to her father at the head of the National Front (*Front National* – FN) in January 2011, is designated as the candidate of the FN in May 2011. In the first half of 2011, she receives positive media attention due to her attempt to de-demonize her party who has been labelled since decades as outside of the “Republican front” by the other political actors. This communication strategy will lead her up in the polls to 20% of vote intentions in May 2011, almost as much as the two runner-ups at this time: 23% for Hollande and 22% for Sarkozy. However, this momentum did not last, in the three months preceding the Presidential election vote intentions for Le Pen varied between 13.5% and 17%. In the first round of the election, Le Pen received 17.9% of the vote share, almost 10 points behind the two leading candidates but the highest score in the history of the FN in a Presidential first round.

Some commentators presented the candidate of the Left Party (*Parti de Gauche* – PG), Jean-Luc Mélenchon, as maybe the main winner of the first round campaign. With only 3.5% of vote intentions in March 2011, he climbed up to 17% in the polls thirteen months later. His candidacy was highly visible in the media, especially due to his attacks to the radical right candidate Le Pen. With 11.9% of vote share in the first round, it is the first time since 1981 that a second left-oriented candidate obtains more than 10% of the vote.

Lastly, François Bayrou, the centrist candidate of the Democrat Movement (*Mouvement Démocrate* – MoDem), did not succeed in creating the same dynamics around his candidacy than in the 2007 Presidential election when he obtained 18.6% of the vote share in the first round. In six months, between July 2011 and January 2012, he was able to increase his vote intentions in the polls from 6% to 15%, but from this point onward, his vote

intentions score decreased leading him to obtain 9.1% of the vote in the first round on April 22nd.

In addition to the five main candidates, five minor candidates also participated in the electoral context: the Green candidate Éva Joly (2.3%), the nationalist candidate Nicolas Dupont-Aignan (1.8%), the radical left candidates Philippe Poutou (1.1%) and Nathalie Arthaud (0.5%), and the independent candidate Jacques Cheminade (0.3%). Table 9.1 summarizes the variation of vote intentions in the polls for the five main candidates. These data underline the important shifts within public opinion that occurred in the year prior to the Presidential election, suggesting a strong volatility among the electorate and a possible important role of the campaign in voting-decision making.

Table 9.1. Recap of vote intention's amplitudes in polls for the five main candidates of the 2012 French presidential election (Piar, 2013: 23)

Candidates (first round score)	Lowest score in polls (date)	Highest score in polls (date)	Difference
François Hollande (28.6%)	20% (January 2011)	35% (October 2011)	15 points
Nicolas Sarkozy (27.2%)	22% (May 2011)	30% (19 March to 2 April 2012)	8 points
Marine Le Pen (17.9%)	13.5% (20 March 2012)	20% (May 2011)	6.5 points
Jean-Luc Mélenchon (11.1%)	3.5% (March 2011)	17% (11 March 2012)	13.5 points
François Bayrou (9.1%)	6% (March 2011)	15% (24 January 2012)	9 points

B - The French press between partisanship and commercialism

The French press is characterized by the co-existence of a political tropism in journalistic practices (Neveu, 2001) and a popular press market. Historically, the purpose of the nineteenth-century newspaper in France was the expression of ideas, both literary and political. Balzac described the “press” as:

“the word adopted to express everything which is published periodically in politics and literature, and where one judges the works both of those who govern, and of those who write, two ways of leading men” (quoted in Ferenczi, 1993: 28).

As in other Mediterranean countries, French newspapers tend to represent distinct political tendencies. The political identification of French newspapers varies from clearly ideological papers such as *L'Humanité* [Humanity] and *La Croix* [The Cross] to relatively apolitical papers. Major national dailies reflect broad political tendencies, *Libération* [Liberation] representing the reformist left, *Le Monde* [The World] the liberal centre-left, *France-Soir* [France-Evening] the center-right, and *Le Figaro* the conservative right.

Albert (1983) argues that “French journalism has always been more a journalism of expression than a journalism of observation. As much as in the presentation of facts, it has always been interested in the exposition of ideas... In this, it is fundamentally different from Anglo-Saxon journalism, for which news always has priority” (quoted in Hallin and Mancini, 2004: 98). Nevertheless, commercial newspapers flourished in France in the late nineteenth early twentieth centuries, but the commercial press, which claimed to have no politics, did not displace the press of opinion in the way it did in Liberal countries. The commercial press mostly developed as local newspapers, which, in 2013, account for about 60 per cent of newspaper circulation; its readership is less elite and less male in character than the national press. The largest selling paper in France is a regional daily, *Ouest France* [West France], at about 700,000.

Ferenczi (1993) argues that when the mass circulation press began to develop in France, key elements of the news- and information-based Anglo-American model were embraced. Articles of pure reflection gave way to a form of journalism that combined reporting and commentary, creating a French model of journalism distinct from the Anglo-Saxon.

Given the political context described in section A and given the normative goal of a VAA, i.e. to help undecided voters to make their choice, the French VAA ‘*La Boussole présidentielle*’ established a VAA-media partnership with the intend to reach undecided voters and voters not politically interested. Thus, a partnership was established with the regional newspaper *Ouest France*, the free daily *20 Minutes* and the private broadcast *M6*. All these media claim to be apolitical and reach out to different audiences. *Ouest France* has a more rural and older audience; being a free daily, *20 Minutes* is only published in large cities

reaching the urban and working populations; and *M6* has a younger audience than other broadcasting channels. In order to foster media coverage of the application, the academic team provided media partners with weekly reports on political behaviour based on the data collected through the VAA.

Despite important level of indecisiveness, a very large majority of the electorate cares about national election outcomes and many attempt to cast a well-informed vote at the ballot box (McAllister, 2002), by more or less intensively following the election campaign and extract politically relevant information from a variety of media sources, including online VAAs. Van de Pol et al. (2014) established a typology of VAA users in the Netherlands through a data-driven classification analysis by including the following attitudinal variables: vote certainty, the reason why users visited the VAA, campaign interest, and internal and external political efficacy. Their research identifies three groups of VAA users that they labelled ‘doubters’, ‘seekers’, and ‘checkers’. Both the ‘doubters’ and the ‘seekers’ as their name suggest they do not know for which party to vote for and are therefore using the information provided by the VAA to help them in their decision-making process. What mostly distinguishes the members of these two groups is their level of external political efficacy. Doubters are politically more cynical and do not believe their voice is heard by political elites, while seekers are more optimistic about the empathy of political leaders. Finally, the ‘checkers’ are more likely to be partisan voters who have already decided which party to vote for and are only using the VAA to ‘check’ if the VAA will match their already established preference. Although this VAA-users typology is the first one going beyond socio-demographics characteristics of users, the results did not reveal any substantive variations in the composition of the user typology through the campaign⁸⁶.

Their analysis fails to capture the decision-making of voters in relation to the campaign process⁸⁷. A feature of this decision-making process that has gained empirical prominence in the last decades is that an increasing number of citizens decides only (very) late in the campaign on which party or candidate deserves their vote (Cautrès and Muxel, 2011; Dupoirier and Frogner, 2009; Fournier et al., 2004; McAllister, 2002; Nadeau et al., 2012).

⁸⁶ Checkers who represented a bit more than 70 per cent of users when the site was launched went down to 63 per cent on Election Day. This decrease is primarily attributed to the increase of seekers using the website, while the presence of doubters remained stable (van de Pol *et al.*, 2014: 405-406).

⁸⁷ Their “vote certainty” item does not differentiate between voters who have decided for which party to vote for before the campaign or during the campaign.

Hence, we believe that the typology developed by McAllister (see Chapter 6, table 6.2) should be tested on VAA users as it provides a fitting analytical framework to observe when different types of voters access political information online during an electoral campaign, especially since some of these voter types – partisan and calculating – are expected to be active in information-seeking as they care about the outcome of the election, while other voter types – disengaged and capricious – are expected to be passive information receiver as they do not care about it.

But first, we turn to a socio-demographics description of *La Boussole présidentielle* users.

C - Users' description

1) Socio-demographic characteristics

Between 27 March and 6 May 2012, 779,641 users⁸⁸ visited *La Boussole présidentielle*. The socio-demographics profile of the VAA users is presented in Table 9.2. 54.3% of the users are male, 54.8% are university educated and 54,1% are between 18 and 34 years old. These percentages are bigger than the actual size of these groups within the French population, respectively: +5.9, +33.4 and + 34 points. Hence, like in most countries where VAAs were launch, users were mostly educated young male. However, for reasons explained below, the analyses of this chapter are not based on the overall sample of VAA users but only on a large sample of voters who used *La Boussole présidentielle* during the four weeks (27 March – 22 April) leading up to the first round of the 2012 French Presidential election. We intentionally left out of the analyses the data collected between the first and the second round, held on 6 May, as the decision making process for the second round answers to different logics than the one for the first round⁸⁹.

Traditionally, VAAs are made out of two questionnaires: a core questionnaire with issue statements in order to match voters and parties issue positions, and an auxiliary questionnaire including socio-demographics and attitudinal items. In order to get a

⁸⁸ This number does not account for the overall number of connections, but only for the number of users who have answered to at least one question.

⁸⁹ See Nadeau et al. (2012: 214-219 and 230-232) for a detailed argument on the time-of-voting decision and the dynamics induced by the two-rounds structure of the French Presidential elections.

personalized voting advice, users merely need to fill in the former, hence only about 11 per cent of the overall VAA users answered to the latter resulting in an available sample for our analysis of 58,301 voters. An analysis of the VAA sample's representativeness shows that the sample members are largely representative of the general French electorate in terms of age, albeit voters older than 65 are underrepresented (see Table 9.2). Concerning other socio-demographics and voting variables, the sample members are more male, better educated, stronger supporter of a left-wing candidate (Mélenchon), and lesser supportive of the incumbent right-wing candidate (Sarkozy). However, this political bias does not necessarily imply a structural overrepresentation of left-wing voters. In fact, the sample members are largely representative of the votes received by the other three main candidates spread over the political spectrum (Hollande on the left, Le Pen on the right, and Bayrou on the centre). Similarly to other web surveys focusing on political behaviour, our data is likely over-representing politically interested voters, but we are converting this bias in a feature of the analysis (see *H9.1a* and *H9.1b* below). As the data collected through VAAs are time-stamped, we can actually make the following hypotheses about VAA use and about timing of information intake:

H9.1a: The most politically interested voters use VAAs relatively early in the campaign.

H9.1b: The least politically interested voters use VAAs relatively late in the campaign.

Finally, we are cautious when making generalizations about the French electorate.

Table 9.2. *La Boussole présidentielle* sample and the French electorate⁹⁰

	French population	Overall LBP users	Sample
Gender			
Men	48	54.2	59.9
Women	52	45.8	40.1
Age			
18-24	11	24.4	15.1
25-34	16	30	20
35-49	26	24.4	25.9
50-64	25	15.4	27.4
65<	22	5.8	11.7
Education			
None	14.5	4	3.8
Below high school degree	43	17.7	24
High school degree	18.5	23.4	21.6
College degree (Bac+2)	10.5	19.6	19.4
Graduate degree	13.5	35.3	31.3
1st round results/vote intention			
Nathalie Arthaud	0.6	0.4	0.4
Philippe Poutou	1.1	1	0.8
Jean-Luc Mélenchon	10.9	18.2	19.3
Eva Joly	2.3	3.2	3
François Hollande	28.1	25.6	28.1
Jacques Cheminade	0.2	0.3	0.2
François Bayrou	8.9	13.4	12.3
Nicolas Sarkozy	26.7	19.1	17.4
Nicolas Dupont-Aignan	1.8	1.9	1.7
Marine Le Pen	17.5	15.8	16.3
Blank ballot	1.9	1.1	0.7
N		627,647 (90,565 for vote intention)	58,301

⁹⁰ Data for the VAA sample are based on information from respondents completing the auxiliary questionnaire included in the VAA *La Boussole présidentielle*. Population data are from the National Institute of Statistics and Economic Studies (www.insee.fr), and electoral results data are from the Interior Ministry (www.interieur.gouv.fr). Due to the very large sample size, the confidence intervals for the sample are narrow and thus do not overlap with the population data; 95 per cent confidence intervals for the sample are +/- 0.2 to 0.5 percentage points across groups.

2) Through which web channel did users access *laboussolepresidentielle.fr*?

Contrary to the Turkish VAA, connections from abroad were insignificant and therefore Table 9.3 only present the web channels through which users accessed *La Boussole présidentielle* from France. We can see that more than 75% of the connections came from the two main media partners of the VAA: *20 Minutes*, a free daily, and *Ouest France*, a regional newspaper. Then follows *MSN News* and *2012 et vous* with about 17% of the connections combined, which are news website which were also media partners of the VAA. Finally, we see that about 4% of users came to the VAA through social networks and 0.6% through university networks. These data clearly indicate that media partners were all successful in bringing users to the VAA site.

Table 9.3. Channel of access to *La Boussole présidentielle* site⁹¹

Channel of access	Share of total users
20 Minutes	57.26%
Ouest France	21.19%
MSN news	13.21%
2012 et vous	3.86%
Facebook	3.71%
CEVIPOF	0.40%
Sciences Po	0.20%
Twitter	0.17%

D - Type of voters and VAA use

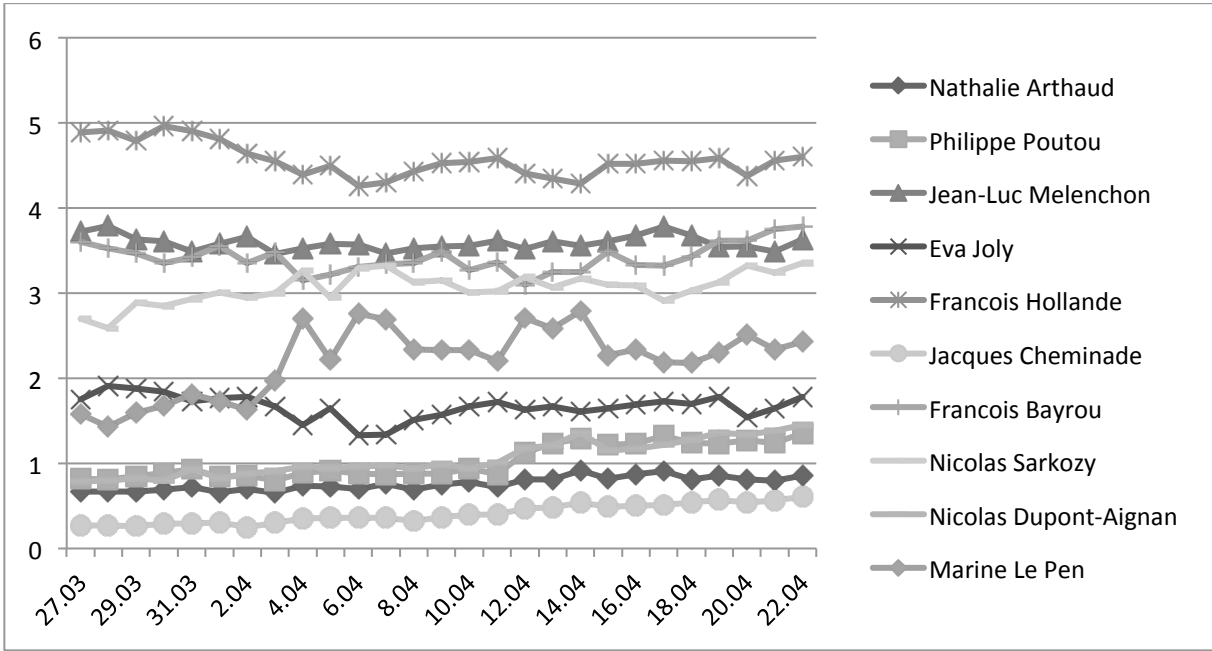
1) The political tendencies of *La Boussole présidentielle* users

As in the Turkish VAA, before providing an implicit voting advice to its users, *La Boussole présidentielle* website also asked them to estimate the likelihood that they will ever

⁹¹ *20 Minutes* and *Ouest France* are the two newspapers partners of *La Boussole présidentielle*; *MSN News* and *2012 et vous* are two online news portal also partners of the VAA; CEVIPOF and Sciences Po are the research institute and university that developed the tool.

vote for each of the candidates competing in the election, i.e. the ‘propensity to vote’ (PTV) for each candidate. In the Turkish case, we observed important variations in the PTV level for each of the main parties according to the media coverage of the VAA (see Figure 9.5 and Table 9.3). Figure 9.1 displays the average PTV levels expressed by *La Boussole présidentielle* users during the campaign. Except for the right-wing candidate Marine Le Pen on 4 April (+0.7 points), we do not observe important variations in the PTV levels distribution during the campaign. Compared to the Turkish dataset, where we could observe variations of 2 points from one day to another, the PTVs distribution in the French dataset is very stable.

Figure 9.1 Evolution of the PTVs (scale 0-10) expressed on *La Boussole présidentielle* website.



We reach the same conclusion when observing the distribution of the implicit advices to the users during the four weeks of the campaign (see Figures 9.2 to 9.5). Overall, every distribution has a four-peak structure. This data shape is due to the distribution of the connections to the website which is four-peak shaped, which is itself due to media coverage of the application on specific dates (see Figure 9.6). In short, the political tendencies of *La Boussole présidentielle*'s users appear to be largely independent on which media outlet had mentioned the VAA.

Figure 9.2. Distribution of the advices given in favour of left-wing candidates

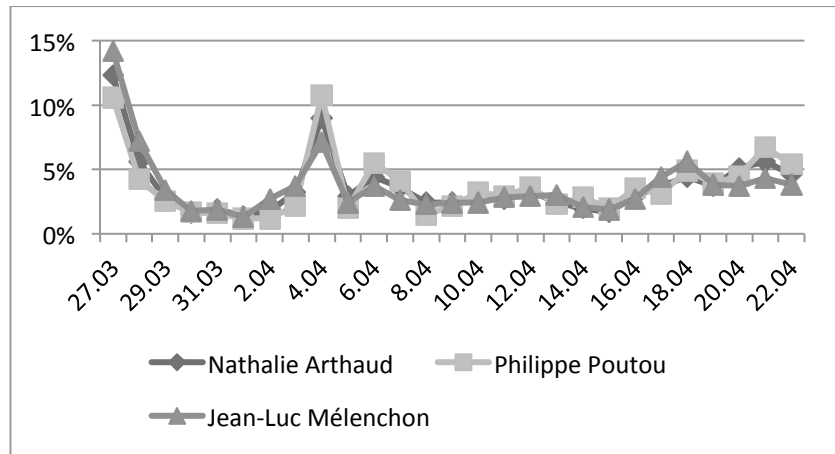


Figure 9.3. Distribution of the advices given in favour of left candidates (Eva Joly and François Hollande) from March 27 to April 22, 2017. The y-axis represents the percentage of advice, ranging from 0% to 14%. The x-axis shows dates at two-day intervals. Both candidates show a sharp initial peak on March 27, followed by a decline and a secondary peak on April 4.

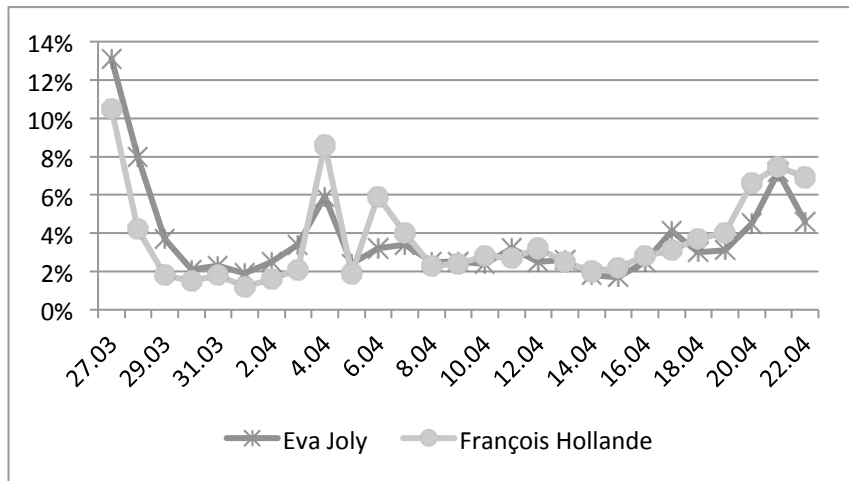


Figure 9.4. Distribution of the advices given in favour of conservative and right wing candidates

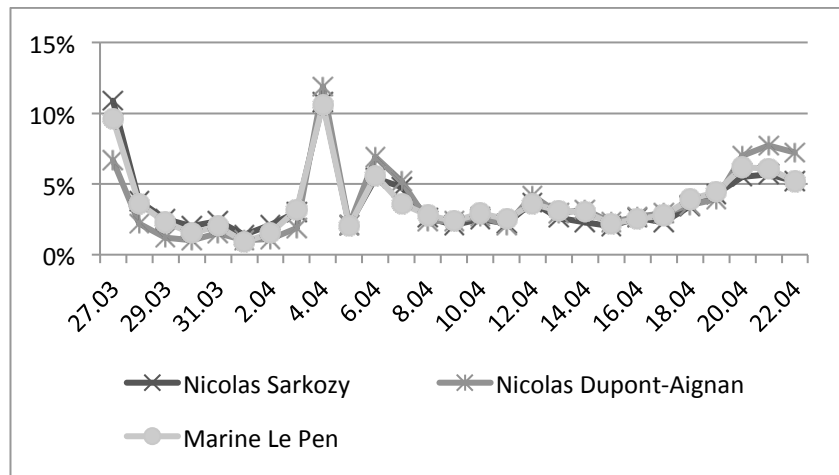
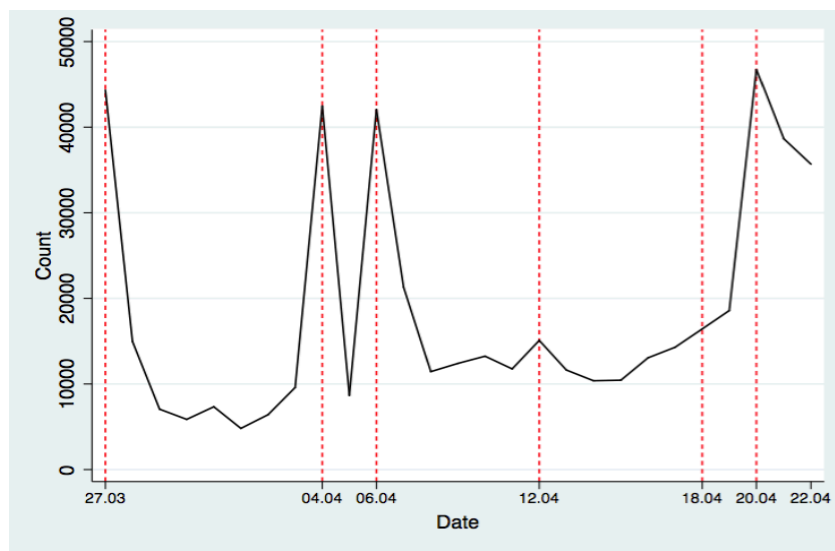


Figure 9.6. Number of connections and media coverage of La Boussole présidentielle.



2) Why and when do voters visit a VAA?

In Chapter 8, we saw that users of a specific political tendency visited a VAA when a media of their same political tendency mentioned the website in its coverage. As we do not observe significant variations in the political profile of *La Boussole présidentielle* users, then why and when do French voters visited the VAA?

One major pull to VAA-sites will occur when citizens do not know whom to vote for or still doubt between multiple parties or candidates. Overall, this electoral indecisiveness is more widespread among voters with low interest in politics (Cautrès and Jadot, 2009). Some of these late deciders and low-interest voters are likely attracted to a VAA that could help them make up their mind whom to vote for. Another reason for visiting a voting-decision website could be that voters are given a personalised advice rather than general information on parties, candidates and issues. A VAA provides a personalised ‘advice’ in the shape of a comparison of personal opinions with the official position of parties or candidates. This relates to the notion of political efficacy, which suggest that even interested voters need a certain level of information in order to feel competent enough to make a voting decision. VAAs feed both into external political efficacy as they show that parties or candidates are responsive in that they address issues relevant to voters, and into internal political efficacy as they provide detailed information on the positions of parties and candidates on these salient issues. Voters that already possess high levels of political efficacy will also use VAA’s because this trait is associated to the political use of the Internet (Kenski and Stroud, 2006). Hence, as van de Pol et al. (2014) did in their research, we posit the following hypotheses:

H9.2a: The most political efficacious voters use VAAs relatively early in the campaign.

H9.2b: The least political efficacious voters use VAAs relatively late in the campaign.

H9.3: The most undecided voters use VAAs relatively late in the campaign.

In order to test the hypotheses formulated so far in this chapter, we are going to apply McAllister’s typology (2002) of voters introduced in Chapter 6. As the number of observations is very high, a partitioning classification method was adopted to allocate, by iteration steps, each respondent to one of the four voter types: partisan, disengaged, calculating and capricious voters. The following variables were included in the classification analysis: time-of-voting decision, frequency of campaign following, internal and external political efficacy, and propensity to vote scores (PTVs). The time-of-voting decision variable is usually measured retrospectively. As a VAA collects data *during* the campaign, the phrasing of the answer categories was adapted to capture voters determination at the moment they used the VAA, as follows: “You made up your mind a long time ago”; “You made up your mind recently”; “You still have not definitely made up your mind”. Political interest was measured by the frequency of campaign following, as suggested by David (2009). Due to

limited space in the auxiliary questionnaire, the concepts of internal and external political efficacy were measured through only one item from validated question batteries. The former was measured by respondents' answers to the statement: "Some people say politics is too complicated and that one needs to be a specialist to understand". And the latter was operationalized with the following question: "Would you say that politicians usually care about what people like you think?" The responses to both items were measured over a 4-point scale. Finally, PTV scores (0-10 scale) were used to compute a dummy variable to sort out between voters who expressed only one PTV score higher than 8 (0) and voters who expressed two or more PTV scores higher than 8 (1).

Table 9.4 represents the distribution of the VAA users sample according to the variables on which the classification analysis was based. In conformity with McAllister's typology, our results allow us to identify four voters' types. Among early-deciders, we distinguish between *partisan* voters and *disengaged* voters. In both these groups, every respondent has already made his choice when he visited the VAA. 9 out of 10 partisan voters have made up their mind about whom to vote for before the campaign, they follow the campaign very intensively, they display the highest external political efficacy out of the four voter types, and the lowest level of consideration for other candidates that their own with almost 75 per cent of them declaring a high PTV score for only one candidate. Of the disengaged voters, 8 out of 10 have made up their mind before the campaign and this is the group that shows the lowest interest in the campaign and the lowest level of external political efficacy. Together, these two groups of early-deciders represent 49.4 per cent of our sample, respectively 31.4 per cent for partisan voters and 18 per cent for disengaged voters.

Among late-deciders, we differentiate between *capricious* and *calculating* voters. The former group stands out of the analysis as 9 out of 10 capricious voters have not made up their mind yet at the moment they visited the VAA, and 60 per cent of them declared high PTV scores for two or more candidates making it by far the most undecided group out of the four voter types. The latter group has the second highest percentage – 25 per cent – of members who decided for whom to vote for during the campaign. Most perceptibly, calculating voters are the respondents in our sample who follow the campaign the most and who display the highest level of internal political efficacy, expected features of a calculating voter. Together, these two groups represent 50.6 per cent of our sample, respectively 28.6 per cent for capricious voters and 22 per cent for calculating voters.

Table 9.4. Distribution of voter-types among La Boussole présidentielle users⁹²

	Calculating voters	Capricious voters	Partisan voters	Disengaged voters
Time-of-voting decision				
You made up your mind a long time ago	75%	0%	91.5%	81.7%
You made up your mind recently	16.4%	10%	8.5%	18.3%
Your choice is not made yet	8.6%	90%	0%	0%
Frequency of campaign following				
	3.7	2.7	3.5	2
Internal political efficacy	3.9	2.7	2.6	2.7
External political efficacy	2	1.9	2.4	1.7
Multiple high PTVs	0.34	0.6	0.27	0.32
Proportion of each group of users				
	22%	28.6%	31.4%	18.00%
N	12,853	16,650	18,325	10,473

Figure 9.7 and Figure 9.8 show the distribution of users' connection to the VAA during the campaign according to the voter type they belong to. From the beginning to the end of the campaign, the relative percentage of partisan voters among VAA users decreased from 36.9 per cent the day the VAA was launched to 27.8 per cent on Election Day. Similarly, the share of calculating voters declined from 26.2 to 16.9 per cent. The count of these two voter types decreases from 17,019 to 14,159 between the first two weeks and the last two weeks of the campaign. In contrast, the percentage and the count of the least interested voters increases during the campaign: the one of capricious voters increases from 26.2 to 30.4 per cent (with a highest point of 38 per cent the day before Election Day) and the one of disengaged voters increases from 14.1 to 24.9 per cent. Their count slightly increases from 13,205 to 13,918 between the first and second half of the campaign. Finally, we observe that the most undecided group, i.e. capricious voters, is the group that most visits the VAA in the second half of the campaign. They are the most numerous group in 10 out of the 16 last days of the campaign with particularly high percentage scores in the last three days of it. These findings support the *hypotheses 9.1a, 9.1b, 9.2a, 9.2b and 9.3* according to which the most interested

⁹² Time-of-voting decision is a nominal variable, for each type of voters the total is 100%. Frequency of campaign following, internal and external political efficacy are measured on a scale from 1 to 4. Higher average values signify that voters follow the campaign more frequently and have a higher internal and external political efficacy. Multiple PTVs is a dummy variable where 1 means that the respondents has expressed PTV scores equal or higher than 8 for two or more candidates.

and efficacious voters use VAAs relatively early in the campaign and the least interested voters, the least efficacious and the most undecided ones use VAAs relatively late in the campaign.

Figure 9.7. Distribution of the four types of voters among La Boussole présidentielle users (3 days moving average)

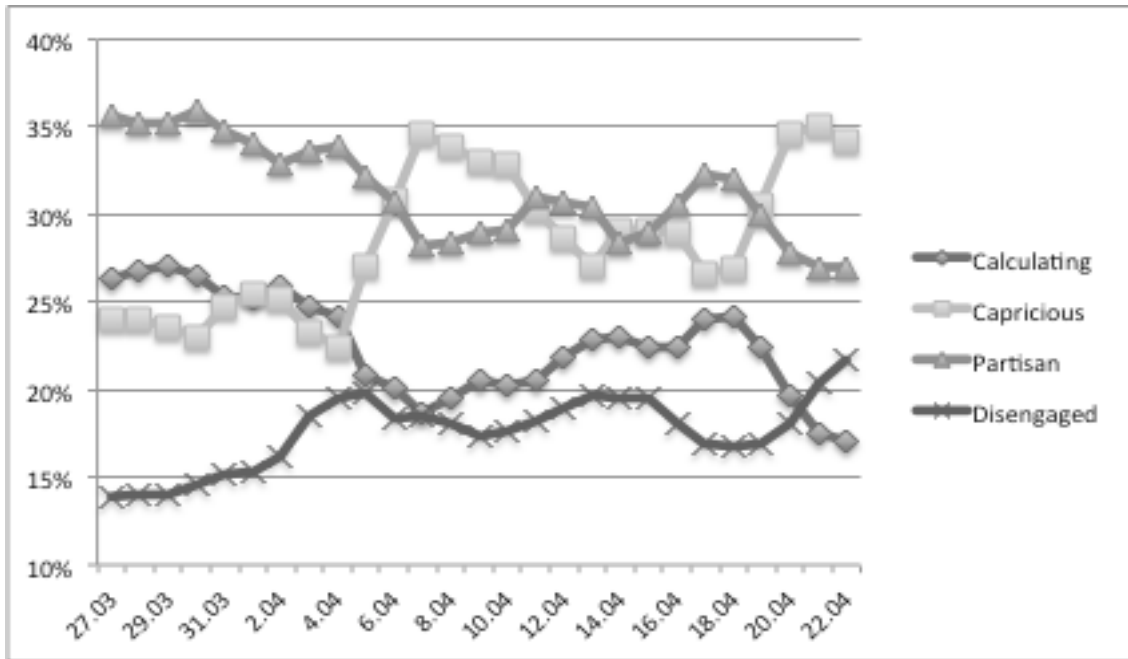
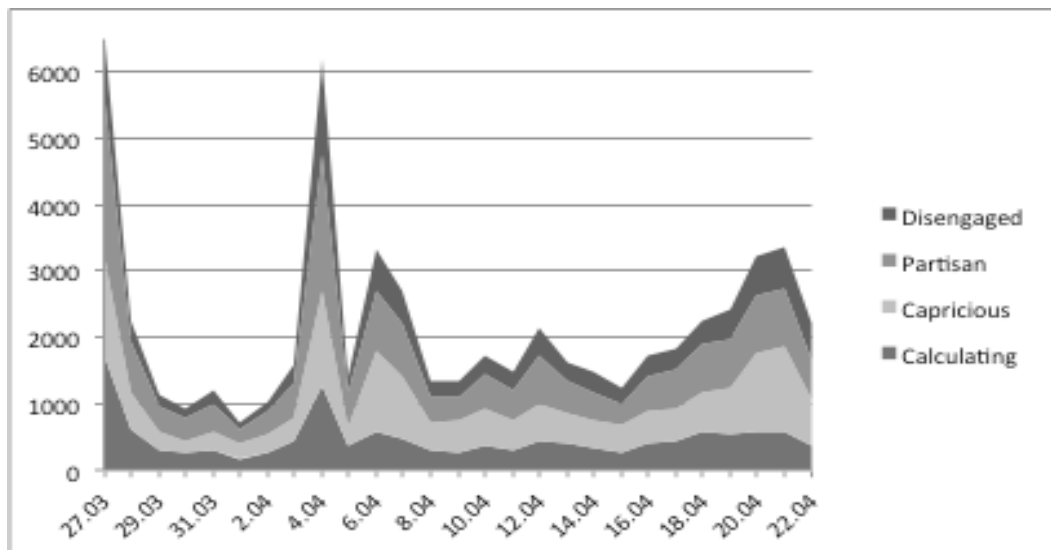


Figure 9.8. Distribution of the four types of voters among La Boussole présidentielle users (count)



E - Assessing the impact of mass media on VAA use

It is widely acknowledged in the literature that VAAs are dependent on mass media to attract high volume of users (Walgrave et al., 2008). As VAAs are websites including politically relevant information for voters, we assume that in the absence of mass media coverage, mostly politically interested voters use the application, i.e. the “partisan” and the “calculating” voters in McAllister’s (2002) typology; while mass media coverage will attract voters who are less interested in politics and who follow the campaign less intensively, i.e. the “capricious” and “disengaged” voters. However, we can refine the distinction between these latter two groups. As “capricious” voters are undecided, they may be looking for politically relevant information from more than one media source. In contrast, “disengaged” voters, who are early-decidors and do not care about the outcome of the election, are not actively searching for political information during the campaign period but may be passively exposed to it through television. Hence, “capricious” voters are more likely to be attracted to a VAA that could help them make up their mind whom to vote for. Accordingly, we propose the following hypotheses:

H9.4a: Capricious voters are brought in relatively higher numbers to the VAA by both television and newspapers coverage.

H9.4b: Disengaged voters are brought in relatively higher numbers to the VAA when a television media promotes the website.

H9.4c: The promotion of the VAA by media partners (television and newspapers) has a negative impact on the relative numbers of calculating and partisan voters visiting the website.

La Boussole présidentielle had a partnership with multiple media outlets including the regional newspaper, *Ouest France*, the free daily, *20 Minutes*, and the television channel *M6*. These partnerships resulted in newspaper coverage of the VAA on March 27, April 4, 6, 12 and 18, and in television coverage on April 4 and 20. As illustrated by Figure 9.6, on these specific dates the number of users (strongly) increased. Hence, we carry a multiple-interrupted time series (MITS) analysis in order to assess the effect of media coverage on the aggregate repartition within the voter typology. To do so the dataset was recoded from daily to 12 hours basis (26 days into 52 segments of 12 hours: 7am to 6pm and 7pm to 6am) so that

both daily and evening coverage could be measured separately. The first interruption occurred on March 27, the day the application was launched. As this date also represents the first unit of time in our MITS analysis, it was omitted from it. The different media events are taken into the analysis as interruptions in the following MITS model:

$$Y (\text{Voter Type}_j) = \beta_0 + \beta_1 \text{Connections} + \beta_2 \text{Baseline Trend} + \sum \lambda_i \text{Time Unit}_i + \sum \mu_i \text{Media Events}_i + \varepsilon$$

Where Y indicates the number of users belonging to one of the four voter types (partisan, disengaged, calculating, capricious), β_0 indicates the reference level of the dependent variable for the dependent variable when no media coverage takes place at the very beginning of the analysis period, β_1 controls for the effect of the number of *La Boussole présidentielle* users on the dependent variable for every time unit, and β_2 indicates the coefficient of the baseline time trend and the impact of each interruption (media event) on it. In fact, we used the distribution of our sample, i.e. independent variable, in order to predict the distribution of each voter types, i.e. dependent variable; and test the effect of each media event on the latter. The MITS analysis was conducted for each voter type separately.

Table 9.5 summarizes the results of the MITS analyses for each voter type among our sample of VAA users. Several patterns are noteworthy. First, all baseline trends are in phase with our previous observations (decrease of partisan and calculating voters through the campaign, and increase of disengaged and capricious voters), but only the trend for capricious voters is significant. Second, almost all media coverage items brought significant shifts among the distribution of voter types within our sample. The relative number of partisan voters visiting the VAA significantly decreased at all but one media coverage item, similarly the strong decrease in the relative number of calculating voters on April 4 and 6 is statistically significant, thus mostly supporting *hypothesis 9.4c* according to which media coverage would bring a relative decrease in politically interested voters visiting the website. As posited by the *hypothesis 9.4b*, the relative number of disengaged voters using the VAA (strongly) increased when television coverage mentioned the application on April 6 and 20. Finally, the relative number of capricious voters increased on April 4, 6 and 12, but decreased following the television coverage of April 20; hence, only partially supporting *hypothesis 9.4a*.

Table 9.5. Results of the MITS analysis⁹³

Date		Partisan	Disengaged	Calculating	Capricious
	Baseline trend (t)	-2.0 (1.4)	.6 (2.0)	-2.2 (1.7)	3.6** (1.1)
4 April	20 Minutes & Ouest France	-68.9* (33.1)	-21.5 (47.6)	-153.0*** (41.16)	242.3*** (27.6)
6 April	20 Minutes & M6 (mid-day news)	-171.4*** (38.0)	188.6*** (54.6)	-210.9*** (47.2)	195.2*** (31.7)
12 April	20 Minutes	-37.6° (19.8)	28.1 (28.0)	-27.4 (23.7)	38.5* (15.6)
18 April	20 Minutes	4.71 (24.5)	-18.6 (34.9)	31.3 (29.9)	-16.4 (19.8)
20 April	M6 (evening news)	-81.5* (34.8)	174.2*** (50.1)	-44.3 (43.4)	-49.7° (29.2)
	Number of users	.36*** (.00)	.24*** (.01)	.24*** (.01)	.16*** (.01)
	Constant	9.8 (16.3)	-6.6 (23.2)	35.6° (19.7)	-38.7** (13.1)
	Adjusted R-Squared	0.99	0.97	0.98	0.98

F - Individual determinants of VAA user by voter types

Focusing on individual predictors of late decision-making, McAllister (2002) found evidence of the impact of partisan de-alignment and social modernization on this phenomenon. The former implies that fewer voters enter the campaign with predispositions towards a party and are thus more susceptible to the influence of short-term factors. The latter refers to the rise of educational levels in all advanced democracies. This phenomenon has enhanced the political skills of voters and thus, their political interest (Inglehart, 1997); hence, voters with a higher level of education are expected to spend more time scrutinizing and evaluating the different choices they are offered in an electoral context. These trends have a greater impact on the younger generations. Having interviewed a cohort of young people over a period of twelve years, Muxel (2001) has shown that there is a higher degree of volatility

⁹³ °p<.1; *p<.05; **p<.01; ***p<.001

among young voters than older ones, and that voting did not appear to be a particularly structured behaviour.

As party organizations have always been structurally weaker in France than in the US, it is the left-right dimension, and not partisan identification, that has served as the main ideological and partisan dimension with which French voters identify (Mayer, 2010; Nadeau et al., 2012). Therefore, a sign of partisan de-alignment would be if voters would identify neither with the left nor with the right. Another peculiarity of the French political system is its two-round run-off presidential election. In the first round of the 2012 Presidential election, there were five candidates on the left of the political spectrum⁹⁴ and three candidates on the right of it⁹⁵. Hence politicized voters had a broad pool of candidates to choose from and would probably hesitate between several candidates as only one left candidate and one right candidate made it to the second round (respectively Hollande and Sarkozy). Based on this rationale, we test the following hypotheses:

H9.5: Voters who position themselves as “neither left nor right” are more likely to be disengaged voters and less likely to be partisan voters.

H9.6: Voters with a higher level of education are more likely to be calculating voters.

H9.7: Younger voters are more likely to be late-decidors while older voters are more likely to be early decidors.

H9.8: Voters that position themselves on the extreme left or extreme right are more likely to be calculating voters and less likely to be capricious voters.

As we are dealing with a typology with more than two groups, we ran a multinomial logistic (MLNM) regression model to seize the individual determinants of voter types among our sample of VAA users. We included the following socio-demographics variables in the model: gender, age, education and occupation. Two attitudinal variables were included in the model: left-right self-placement and vote intention for the first round of the election. The former measures voters' identification with the main ideological and partisan dimension of French party competition. The latter is included in order to appraise the likelihood for the supporters of the different candidates to belong to one type of voters or to another. Finally, we

⁹⁴ Nathalie Arthaud, Philippe Poutou, Jean-Luc Mélenchon, Eva Joly and François Hollande.

⁹⁵ Marine Le Pen, Nicolas Dupont-Aignan, and Nicolas Sarkozy.

controlled for the media coverage of the VAA and for the time frame that the site was online (from week 1 to week 4). For every media event, we coded a dummy variable for that event at the time of the event and zero otherwise. Since newspapers items are run on a daily basis they are included into the analysis by coding every hour from 7 AM to 11PM as positive in order to cover the daily exposure of a newspaper article (the log files of the VAA users recorded the exact time of access to the website). We also incorporate the television items into the analysis by coding every hour from 7PM to 11PM as positive in order to cover the user increase that followed the mention in the evening news of the VAA.

In order to take into account the socio-demographic bias of our sample, we calculated weights based on the gender, age and education composition of the French electorate. The weights are shown in Annex 9.1. Besides voters with no education who are strongly underrepresented in our sample (weights higher than 3), the other groups are acceptably representative of the French electorate (weights lower than 3 and higher than 0.33). We run the MLNM model with both the weighted and un-weighted samples and compare the results.

The MLNM regression captures the individual determinants of voter types, yet the regression coefficients are difficult to interpret as they are relative to the base outcome. Hence, we only report the change in predicted probability of belonging to each of the four voter types for an increase from the minimum to the maximum value of each independent variable, while holding all other independent variables constant at their means. Thus, Table 9.5 shows the change in predicted probability when running the MLNM model with both the un-weighted and the weighted samples of VAA users. To visualize which of these changes are statistically significant we plotted them in Figure 9.9 to Figure 9.13 with their confidence intervals. As there are only minor differences between the two analyses, the following observations and figures are based on the weighted sample results only.

The socio-demographic variables of our model reveal that among VAA users, men and older respondents are more likely to be calculating and partisan voters than capricious and disengaged voters. Contrary to *hypothesis 9.7*, age is not a variable discriminating between early and late-deciders, but rather a variable distinguishing between different levels of political interest. Older VAA users are more likely to be calculating and partisan voters, while they are less likely to be capricious and disengaged voters. Similarly, the occupation variables reveal that unemployed respondents are more likely to be disengaged voters than calculating and partisan voters. Lastly, respondents with higher level of education are more likely to be calculating voters confirming *hypothesis 9.6*.

Table 9.5 Individual determinants of voter types among VAA users

Variables	Change in predicted probability (un-weighted sample)				Change in predicted probability (weighted sample)			
	Calc.	Cap.	Part.	Dis.	Calc.	Cap.	Part.	Dis.
Men	.09	-.09	.05	-.05	.06	-.08	.05	-.03
Age	.17	-.24	.09	-.02	.15	-.24	.11	-.02
Education	.10	-.03	-.03	-.04	.09	-.03	-.02	-.03
<i>Job (ref=unemployed)</i>								
Farmers	.06	-.08	.07	-.05	.04	-.09	.09	-.04
Craftsmen	.01	-.02	.04	-.03	.01	-.02	.04	-.02
Managers	.04	-.03	.03	-.04	.02	-.03	.03	-.02
Middlemen	.07	-.05	.05	-.07	.06	-.04	.05	-.06
Employees	.08	-.06	.06	-.07	.07	-.06	.05	-.07
Workers	.08	-.05	.07	-.10	.07	-.04	.06	-.08
Others (including retired)	.03	.00	.04	-.07	.04	.01	.02	-.07
<i>Left-Right self-placement (ref=centre)</i>								
Very left	.19	-.18	.04	-.06	.21	-.18	.03	-.06
Left	.05	-.08	.06	-.03	.07	-.09	.06	-.04
Right	.02	-.05	.05	-.02	.03	-.06	.06	-.03
Very right	.10	-.18	.09	-.01	.13	-.20	.09	-.03
Neither left nor right	.06	.02	-.10	.02	.09	-.00	-.09	.01
<i>Vote intention (ref=don't know)</i>								
Arthaud	.06	-.17	-.01	.12	.05	-.15	-.08	.19
Bayrou	-.07	-.26	.35	-.02	-.01	-.24	.26	-.01
Cheminade	.05	-.21	.19	-.03	.16	-.17	.04	-.04
Dupont-Aignan	.06	-.21	.18	-.04	.16	-.19	.05	-.02
Hollande	-.03	-.42	.44	.01	.03	-.41	.36	.02
Joly	-.03	-.23	.24	.02	.05	-.21	.12	.05
Le Pen	-.02	-.32	.30	.05	.03	-.31	.20	.07
Mélenchon	.06	-.30	.25	-.01	.12	-.28	.17	-.00
Poutou	.07	-.20	.02	.10	.11	-.20	-.03	.12
Sarkozy	-.07	-.37	.48	-.04	-.00	-.35	.39	-.02
Blank/don't vote	-.01	-.12	.04	.09	.04	-.10	-.10	.17
Media 1 27.03 - press	.04	-.06	.06	-.04	.04	-.07	.07	-.04

Media 2									
03.04 - press									
Media 3									
04.04 – press									
Media 4									
06.04 - TV									
Media 5									
12.04 - press									
Media 6									
18.04 - press									
Media 7									
20.04 - TV									
<i>Week (ref=week 1)</i>									
Week 2									
Week 3									
Week 4									

Figure 9.9 Average marginal effects for the socio-demographic variables of the MLNM model

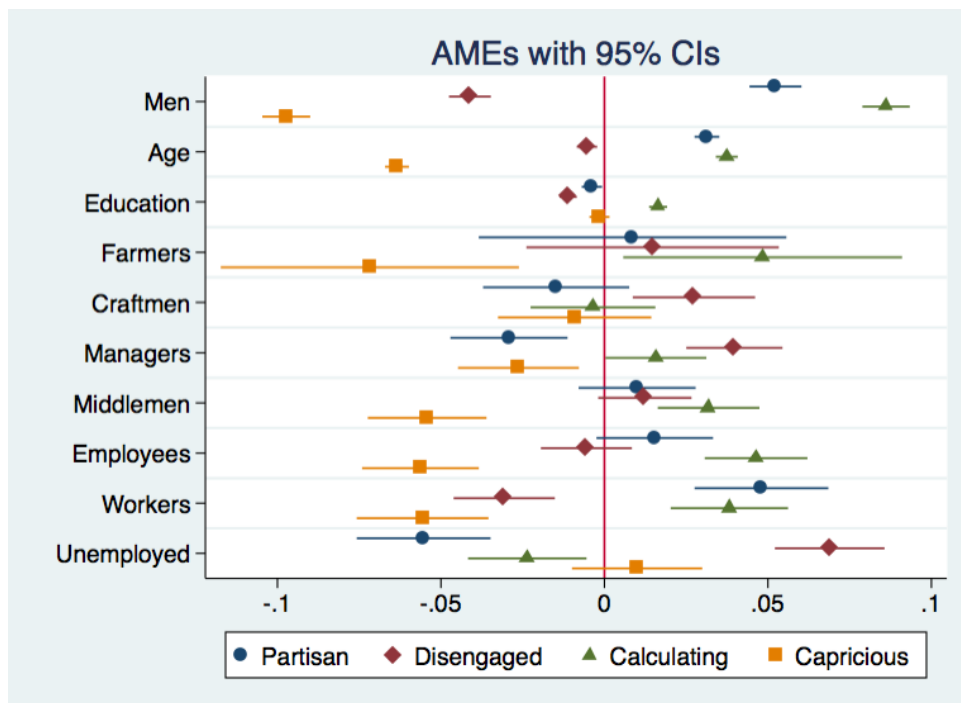
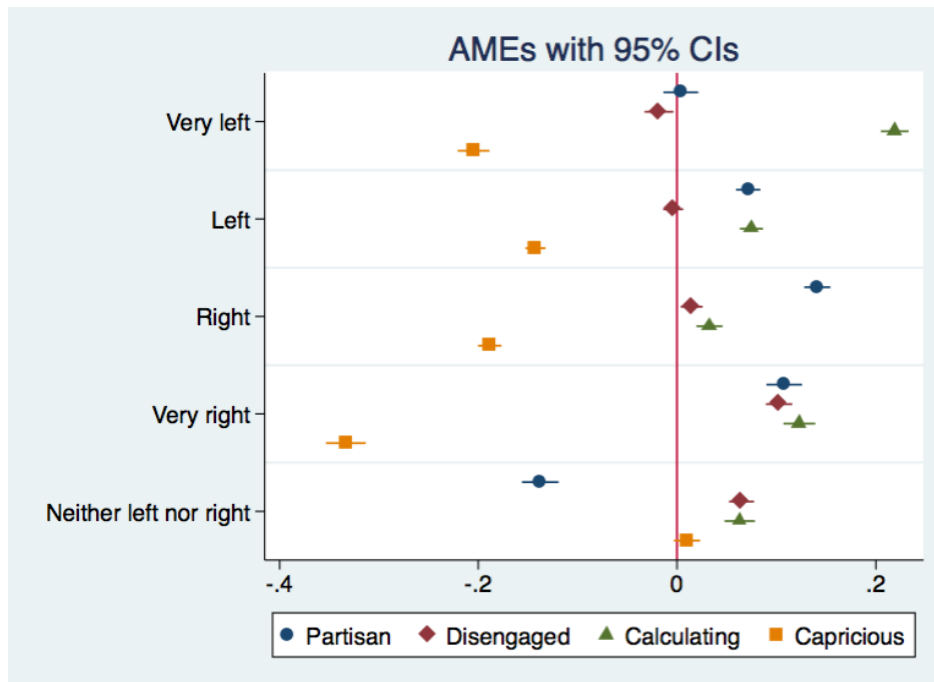


Figure 9.10 Average marginal effects for the left-right self-placement variable of the MLNM model



As found by McAllister (2002) a major influence in differentiating between both sets of voters within early and late-deciders is political de-alignment. Among early-deciders, partisan voters are less likely to position themselves as neither left nor right, and disengaged but also calculating voters are more likely to do so. Albeit the evidence is weak, these results support *hypothesis 9.6*. Moreover, respondents who intent to cast a blank ballot or not to vote are more likely to be disengaged voters. This is a finding revealing how this group of voters is more marginalized than the other groups from the political and partisan system. Among late-deciders, extreme voters are more likely to be calculating voters and less likely to be capricious voters, finding that supports *hypothesis 9.8*. In addition, we observe that respondents who intent to vote for a minor candidate (Arthaud, Dupont-Aignan, Joly, Mélenchon and Poutou) are more likely to be calculating voters as expected due to the two-round run-off electoral system.

Figure 9.11 Average marginal effects for the vote intention variables of the MLNM model

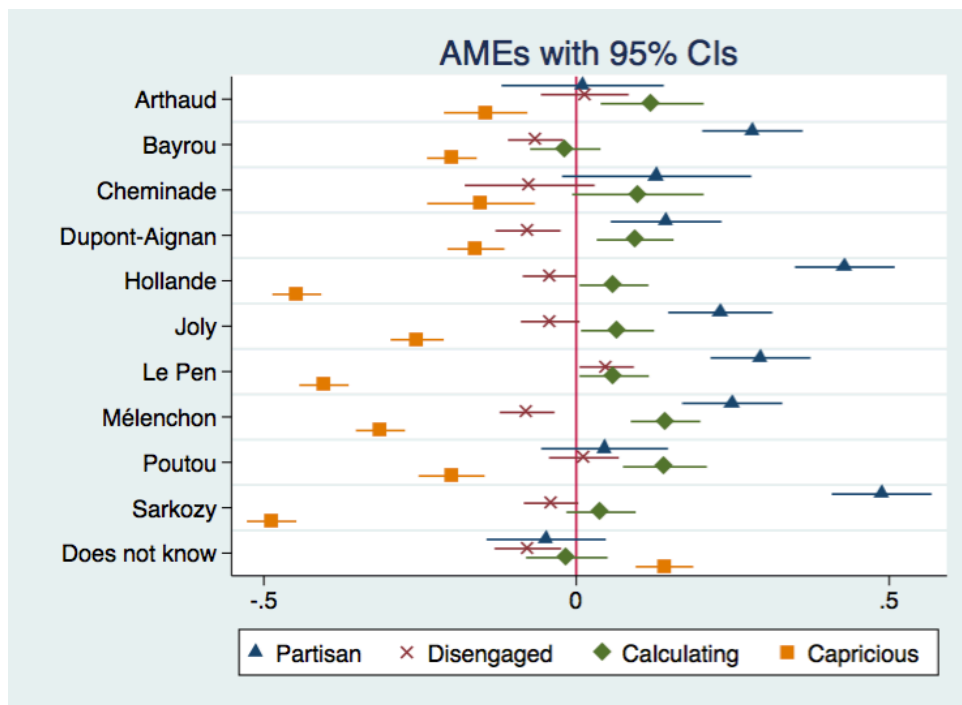


Figure 9.12 Average marginal effects for the media event variables of the MLNM model

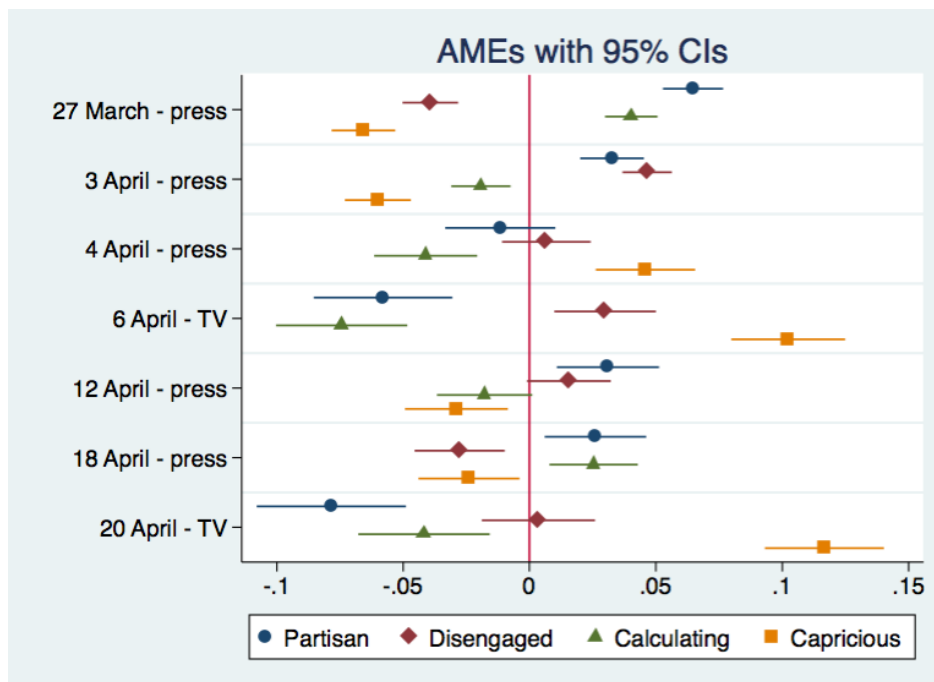
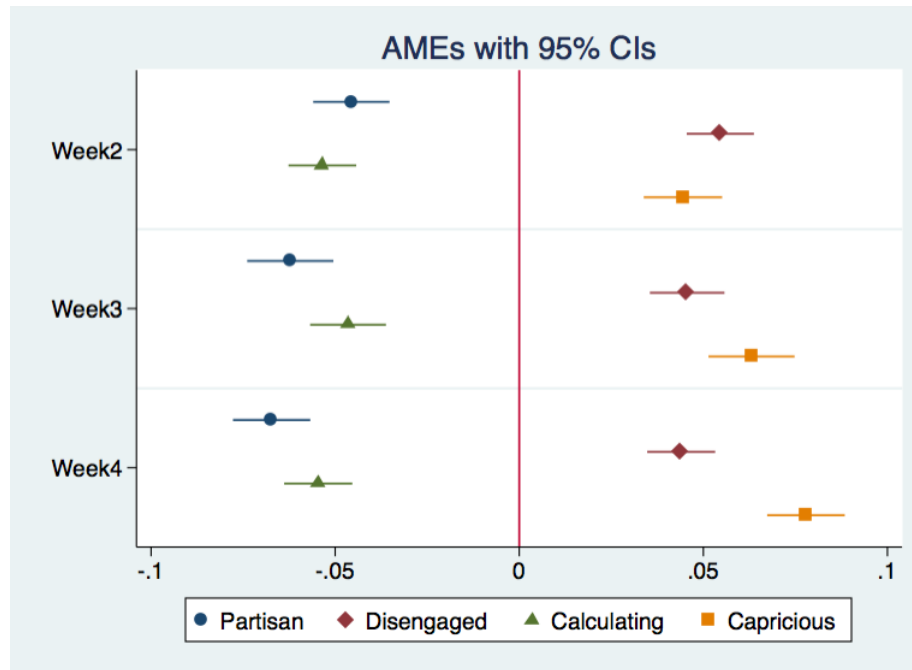


Figure 9.13 Average marginal effects for the week variables of the MLNM model



Finally, despite smaller changes in the predicted probabilities, the media and time control variables also reveal some patterns. Calculating and partisan voters were more likely to use the VAA in the first week of the campaign while capricious and disengaged voters were more likely to use it in the subsequent weeks. Among the media events variables, the television coverage of April 6th and of April 20th has the strongest effect. Most notably, during both events we see a decrease in partisan and calculating voters and an increase in capricious voters among VAA users. Except on April 4th, press coverage results in the increase of partisan voters and in the decrease of capricious voters among VAA users.

G - Conclusion

From a political communication perspective, the results of this chapter are very informative. The findings show that different group of voters are using online VAAs at different times, for different reasons and are likely to process the political information in a different manner. In this sense, VAA data and their analysis allows us to investigate what different types of information-seeking behaviour exist among voters, how media affect these behaviours, and the individual determinants of belonging to each voter type.

In analysing whether VAAs only ‘preach to the converted’, we found that VAA users do not constitute a homogeneous group. Instead, our empirical analyses revealed four groups of VAA-users – partisan, disengaged, calculating and capricious voters – that differ substantially on important political dimensions in their attitudinal structure. Although politically interested voters (the partisan and calculating groups) represent 63.1 per cent of VAA users at the beginning of the campaign, their share drops to 43.5 per cent on the day prior to Election Day. Not only VAAs are used by heterogeneous groups of voters, but also their distribution evolves during the campaign. This finding leads us to now have a better understanding of how different segments of the electorate search and are exposed to relevant political information that is embedded in a VAA-site: the most politically interested and the most politically efficacious voters use VAAs relatively early in the campaign. In contrast, the least politically interested voters, the least politically efficacious and the most undecided ones use VAAs relatively late in the campaign.

These different timings in information intake through a website inform us on the spread of political information within the French electorate, and the role that mass media play in reaching out to those least interested in politics: it is when mass media mentioned the VAA of *La Boussole présidentielle* that the least interested voters most visited the site. While this study did not aim at pinning down any precise knowledge gain of VAA-use for voter, Tichenor et al. (1970)’s knowledge gap hypothesis also posits that different socioeconomic groups acquire new information at different rates. The findings of this chapter clearly indicate that this is the case with regards to online political information. These different rates of acquiring new information clearly suggest that some voters are more active than others in searching for political information. Our analysis shows that the least interested voters in the campaign and the least politically efficacious voters – capricious and disengaged voters – search for political information online when they are engaged to do so by traditional mass media, in particular television. As argued by Zaller (1992), it is when the campaign intensifies that the least sophisticated voters are more exposed to political information and therefore, more subject to campaign or learning effects.

VAA-websites have added a novel, high-impact information channel in election campaigns that provides voters with high-quality, politically relevant information, helping them make the most important choice in a democracy: who to vote for. As VAA users are exposed to political information when visiting such websites, VAAs are likely to have cognitive effects by affecting individuals’ information-seeking behaviour about politics

(Marschall and Schmidt, 2010; Ladner et al., 2010) and by increasing voters' knowledge on party positions (Schultze, 2014). Furthermore, behavioural effects of VAA use have received much attention as VAAs appear to increase turnout (Hirzalla et al., 2010; Marschall and Schultze, 2012) and are likely to influence (a small percentage of) users in their final vote choice (Ladner et al., 2012; Wall et al., 2014). However, results of VAA effect studies on political knowledge and voting behaviour often exhibit low variations, we believe that segmenting VAA users according to voter types could be more informative than segmenting them on socio-demographic characteristics or on political interest alone.

Two main weaknesses should be considered when interpreting the results of this chapter. First, due to space limitations in the auxiliary questionnaire in the VAA website, some concepts were measured with only one item, whereas most studies use a scale of multiple items yielding more reliable measurements. This gap should be improved in future VAAs by strengthening their questionnaire design. Second, the analysis presented here relies on a sample of VAA users that is neither representative of the overall *La Boussole présidentielle* users nor of the French electorate. Hence, the sample suffers from a (double) self-selection bias, resulting in a sample more male and more educated than the French electorate. However, we took into account the temporal heterogeneity of our sample by developing an analytical framework distinguishing between different levels of political interest. Based on the main socio-demographic variables (gender, age and education), we applied weights to the sample when running the MLNM regression and observe that the results displayed the same direction; differences could only be observed in the magnitude of the probabilities obtained. Despite these sample biases, our time stamped and dynamic VAA data shed into light insights on the different voter types that use VAAs and on the dynamics of VAA use and information intake during electoral campaigns.

CHAPTER 10 – A COMPARISON OF VAA USE ACROSS MEDIA SYSTEMS

A – Hypotheses of VAAs use across media systems

Previous chapters have shown that epistemologies existing in different journalistic cultures lead to different perceptions and uses of VAAs by press journalists. These findings suggest that a media system and its related features have a strong impact on the profiles of users visiting an online VAA. In particular, Chapters 8 and 9 have shown how VAAs' media coverage structures the profiles of VAA users, but also how it does so differently in distinctive media environments. In the case of Turkey, we saw how the political profile of VAA users was correlated with the political leaning of the newspaper mentioning the application. And in the case of France, we saw how the commercial press successfully brought less political interested voters to the VAA when it was mentioning it in its election coverage.

VAAs' target population is voters who have not made their choice for whom to vote yet, whether they are interested or less interested in politics, in order to help them make their choice. How are media systems shaping the performance of online VAAs in reaching out to this target population?

In a Polarized Pluralist media system with high level of political parallelism, as we saw in Chapter 8 with the case of Turkey, we saw that the political heterogeneity of users was highly dependent of media coverage. This phenomenon suggests that voters who visit a VAA are mostly partisan voters, as they are drawn to the application by politically oriented newspapers that are mostly read by partisan audiences. The literature, but also our findings in Chapter 9⁹⁶, shows that partisan voters are the voters group that most makes up its mind for who to vote for before the electoral campaign starts (McAllister, 2002). Therefore we posit the following two hypotheses:

H10.1: In a Polarized Pluralist media system, decided voters make up the absolute majority of users visiting a VAA during an electoral campaign.

H10.2: In a Polarized Pluralist media system, the likelihood of doubting and undecided voters to visit a VAA barely increases along the electoral campaign.

⁹⁶ In Table 9.4, 91.5% of partisan VAA users have made up their mind for whom to vote for a long time ago.

In Chapter 9, we studied the impact of commercial press coverage on VAA users. We observed that a media push, i.e. an article mentioning the VAA and using VAA collected data in its election coverage, led to the decrease of users who are politically interested and in the increase of voters who are less political interested. VAA promotion by commercial media outlets also brought an increasing number of undecided voters to the application (see “capricious” voters in the Table 9.4, who are by far the most undecided voter group among the groups of Chapter 10). Therefore in the context of a commercial media promotion of VAA we posit the following hypotheses:

H10.3: In a Liberal media system, decided voters are the majority of users visiting a VAA during an electoral campaign.

H10.4: In a Liberal media system, decided voters will come to a VAA first, but the likelihood of doubting and undecided voters to visit a VAA moderately increases along the electoral campaign.

Whether in Chapter 8 we could study VAA media coverage in a Polarized Pluralist media system and in Chapter 9 we could do so with a focus on a commercial media environment similar to the one of a Liberal media system, we were not able to replicate such study case for a Democratic Corporatist media system. In Chapter 7, the Netherlands was the country representing this media tradition in our work, this case selection was particularly valid as the Netherlands is the country where VAAs were first developed. However, the strong popularity of VAAs in this country made the replication of our analyses in Chapters 8 and 9 impossible. Let us explain. Online VAAs are too widely reported in the Dutch media for us to be able to identify all media push in order to attract users. In addition, the more advanced development of digital technology in the Dutch press makes it impossible to carry the analyses of Chapters 8 and 9 on the VAA data available. When first developed, online VAAs were an Internet page that was inserted on media websites, and in order to promote it journalists were encouraging their audience to go and visit that unique webpage. Therefore, if one would have kept track of all media references to a VAA, or to only one specific type of media references, one could carry out the analyses we did in Chapters 8 and 9. However, nowadays online VAAs can be inserted as web widgets on every single page of a media website, for instance the VAA can be available on every webpage of the politics section of a

media outlet. As a result, journalists do not need to make an explicit reference to the VAA for their audience to become a VAA user. Instead the application is inserted at the bottom of each article about politics. This new technological flexibility makes it harder, if not impossible, to establish a link between a specific media reference to a VAA and its impact on VAA use. Hence, because of both those reasons (wide popularity of VAAs in the Netherlands, and pioneering technological development⁹⁷) we could not study the impact of VAA media coverage in the Netherlands as we did in Turkey and in France.

However, because of our exploratory study of journalistic practices toward online VAAs in the Netherlands (Chapter 7), we know that Dutch journalists perceive their role as the promoter of an active citizenry, that they should facilitate the public scrutiny of representative organizations and that they should expose the play of public opinion. In short, journalists in a Democratic Corporatist media system such as in the Netherlands aim to get to know public opinion and to provide the public with the tools to understand and to grasp social and political phenomena. We also know that such media systems are characterized by a strong public service orientation reaching out to disadvantaged groups (see Chapter 6 and Chapter 7), and not only to an elite audience. Therefore, we posit the following three hypotheses:

H10.5: Compared to other media systems, in a Democratic Corporatist media system the distribution of voter types among VAA users is the most heterogeneous.

H10.6: In a Democratic Corporatist media system, the likelihood of doubting voters to visit a VAA does not evolve as they access the tool at any time during the campaign.

H10.7: In a Democratic Corporatist media system, the likelihood of undecided voters to visit a VAA moderately increases during the electoral campaign.

B – Measuring voters’ decision-making process in relation to the campaign process

In Chapter 6, we argued that the variable in the study of voting behaviour that best synthesizes the relationship between voters, information and media is the time-of-voting decision. However, this variable exists in only one VAA dataset available⁹⁸ and therefore

⁹⁷ For this same reason we could not replicate the analysis of Chapter 9 with the data collected during the 2017 French Presidential election.

⁹⁸ See Chapter 9 for the use of this variable in our analyses.

cannot be integrated within a comparative research framework. The two sets of variables that are present across datasets and that could fulfil the purpose of measuring the level of uncertainty of voters in relation to their decision-making process are: “vote certainty” and “probability scales of political polling”, also known as “propensity to vote scores” (PTVs). However, these two variables are quite different from each other, both with respect to the content of what they measure and with regard to the cognitive process through which the answers are extracted from respondents. The variable of “vote certainty” is a meta-attitudinal self-reported measure of the degree of certainty in one’s voting decision, and the variable of “PTVs” is an operative index of the information processing involved in the voting decision.

Bassili argues that “[g]iven people’s well-documented shortcomings in examining their own mental processes, meta-attitudinal responses are more susceptible to contextual influences in survey settings than measures of information processing” (1993: 60). In a study comparing operative versus meta-attitudinal measures of attitude strength, Bassili underlines the theoretical differences between the two types of measurement: “Operative indexes, like response latency, are direct manifestations of the information processing involved in an attitude judgement. Meta-attitudinal indexes, like certainty of attitude strength [...], require that respondents reflect on their attitudes and report their ‘impressions’ of it” (Bassili 1993: 55-56).

Research on judgment processes has shown that verbal reports can fail to capture accurately the contents of mental processes (Nisbett and Ross, 1980; Nisbett and Wilson, 1977). Therefore, “[t]here are reasons to expect that meta-attitudinal indexes of attitude strength to be susceptible to influences that are irrelevant to the properties of an attitude. By contrast, operative indexes, such as response latency, are directly linked to the cognitive properties of an attitude [...], [and] are likely to be better moderators of the attitude-behaviour relationship than meta-attitudinal ones” (Bassili, 1993: 56). In particular because, as Bassili and Fletcher (1991) have shown, response latency provides an index of the extent to which an attitude has been pre-processed and integrated coherently in memory.

Moreover, in addition of the expectation of being a better moderator of the attitude-behaviour relationship, PTVs provide people with a measure that allows them to express the degree of certainty, or uncertainty, inherent in their future intentions for each of the candidates or parties, and not simply for the overall decision-making process. This characteristic of PTV variables allows us to classify respondents according to their level of vote certainty computed out of their answer to these variables, and therefore to compute our

dependent variable. Respondents, who out of all the candidates or parties running for office express only one high PTV scores (that is a score higher than 7 out of a 11 points scale), are considered as “decided voters”. Similarly, respondents who express two high PTV scores are considered as “doubting voters”, respondents who express more than two high PTV scores are considered as “undecided voters”; finally, respondents who do not express a high PTV scores are considered as “distant” from all candidate or parties. Thus, PTVs allow us “grasping electoral choices in all their complexity” (Tiberj et al., 2013: 252).

C - Cases Selection

In order to test whether in different media systems voters visiting VAAs differ with relation to their level of uncertainty, we included in this chapter countries representing those different media systems. Table 10.1 shows the list of countries selected, the year and the election during which the data were collected and the type of media system each country represents according to Hallin and Mancini’s typology (2004). Neither Australia nor Turkey were included in Hallin and Mancini’s typology; however, we have already argued in Chapters 7 and 8 that Turkey fitted within the Polarized Pluralist media system, and within the media studies literature Australia is labelled as a Liberal media system. We should also note that we have labelled France as a hybrid media system, while Hallin and Mancini’s typology classifies it as an “in-between” case but still within the Polarized Pluralist media system. We have opted for this hybrid classification because while historically France shares many characteristics with Polarized Pluralist media systems, more recent trends (in particular the commercialization of the media) pull its media system away from this ideal-type. Moreover, as we have seen in Chapter 9, the media outlets that promoted the French VAA are outlets with large readerships, heavily relying on advertisement in their business model, and politically neutral; hence, media that we can label “commercial media”.

Table 10.1. Cases Selection⁹⁹

Country	Year	Election	Media System
Australia	2016	Parliamentary election	Liberal
France	2012	Presidential election	Hybrid
Netherlands	2012	Parliamentary election	Democratic Corporatist
Spain	2015	Parliamentary election	Polarized Pluralist
Sweden	2014	Parliamentary election	Democratic Corporatist
Turkey	2011	Parliamentary election	Polarized Pluralist
United Kingdom	2015	Parliamentary election	Liberal

D - Results

1) The distribution of voter types among VAA users

Table 10.2 shows the distribution of VAA users per country. We recorded observations in every category of our dependent variable but in the case of Australia where there are no undecided VAA users. In the 2016 Australian Parliamentary election, voters could only choose between two opposing political forces (the Labour Party on the left and the Liberal-National Coalition on the right, see Annex 10.1 for a classification of all parties and candidates included in the analysis), therefore Australian VAA users could only doubt between two parties and could not be undecided between 3 parties or more.

Confirming *hypothesis 10.5*, it is in the Netherlands and in Sweden that the distribution of VAA users among the category of our dependent variable is the most heterogeneous. In particular, in both countries more than 20% of the VAA users are undecided voters, 21.1% and 20.2% respectively, which is more than double than in the other countries under study where the share of undecided voters never goes above 10%. Thus in Democratic Corporatist media systems, an online VAA manages to reach out to both voters who already knows who to vote for and voters who do not know who to vote for yet, whether

⁹⁹ All the VAA datasets collected in these elections and used in this chapter have been collected by *Kieskompas* following the methodology presented in Chapter 3 and promoting the VAAs as explained in Chapter 2.

doubting or undecided voters. Decided voters represent even a minority of VAA users in these two countries: 28.6% in the Netherlands and 38.8% in Sweden.

On the contrary, in Turkey, decided voters represent 56.1% of VAA users, which is the highest share among selected countries, doubting voters 14% and undecided voters only 4.7%. This distribution of VAA users confirms *hypothesis 10.1* stating that in a Polarized Pluralist media system decided voters make up the absolute majority of users visiting a VAA during an electoral campaign. However, the distribution of VAA users in Spain, the other country here with a Polarized Pluralist media system has only 44.8% of decided voters, thus failing to support *H10.1*. This result can be explained by a major change that the Spanish party system has experienced in the 2015 Parliamentary election.

Since the establishment of democracy in 1978, two parties have dominated the Spanish party system: the Spanish Socialist Workers' Party (PSOE) on the left and the People's Party (PP) on the right. Electoral victories and political power has been alternating uninterrupted between these two parties. During the Parliamentary election of December 2015, for the first time four political parties can be considered as competitive. In addition of the two parties already mentioned, there are *Podemos* a left-wing party and Citizens (C's) a centrist party.

The emergence of these two new parties is due to the financial and economic crisis that hit the country since 2008, but also to the repetitive corruption scandals that hit established political parties, in particular PP. In this changing electoral environment it does not come as a surprise that electoral behaviour is more volatile than in previous elections, the combined electoral share of PP and PSOE in the 2015 Parliamentary election is of 50.7% the lowest since the elections of 1982, and a drop of 23.1 points from the 2011 election. Hence, decided users are the largest users group but they do not represent the absolute majority of them.

Table 10.2. Distribution of voter types per country among VAA users

Voter types	Netherlands	Sweden	Australia	United Kingdom	France	Spain	Turkey
Decided	28.6%	40.0%	54.3%	51.3%	41.8%	44.8%	56.1%
Doubting	28.6%	26.9%	11.3%	18,0%	20.2%	19.4%	14.0%
Undecided	21.1%	19.6%	-	6,0%	9.0%	5,0%	4.7%
Distant	21.8%	13.4%	34.5%	24.7%	29.0%	30.8%	25.1%
Total	100%	100%	100%	100%	100%	100%	100%
<i>N</i>	<i>316,056</i>	<i>62,759</i>	<i>174,521</i>	<i>10,275</i>	<i>237,258</i>	<i>59,033</i>	<i>44,580</i>

If we turn to the countries with a Liberal media system, Australia and the United Kingdom, we see that in both cases decided voters represents the absolute majority of VAA users, respectively 54.3% and 51.3%. These findings contradict *hypothesis 10.3* according to which in a Liberal media system decided voters are only the majority of VAA users. As already underlined above, Australian voters had only two choices in the 2016 Parliamentary election, hence the lack of undecided voters in our voter typology. This limited number of alternatives for Australian voters may explain the higher than expected number of decided voters among VAA users. In the case of the United Kingdom, VAA users could choose between seven different political parties; therefore, we cannot explain why its users distribution failed to meet *H10.3* through the political offer of the 2015 UK Parliamentary election. However, we should emphasize that the sample of British VAA users is the smallest among the seven selected countries: with barely more than 10,000 users it is a very small sample for such types of online application⁹⁹ (Marshall, 2014). As online VAAs will first attract politically interested and partisan voters (Hoogher and Teepe, 2007; Vitiello and Krouwel, 2015), when the VAA sample is small biases are more likely as the sample will be more homogeneous and lack many doubting and undecided voters.

Interestingly, the distribution of voter types among French VAA users fits with what expected in a Liberal media system with 41.8% of decided voter, by far the largest voter type among French VAA users but not a group large enough to represent the absolute majority of VAA users like in Polarized Pluralist media system. As already emphasized, the promotion of the 2012 French VAA was exclusively done through commercial media, hence we observe a distribution of voter types in conformity with *H10.3* set out for Liberal media systems.

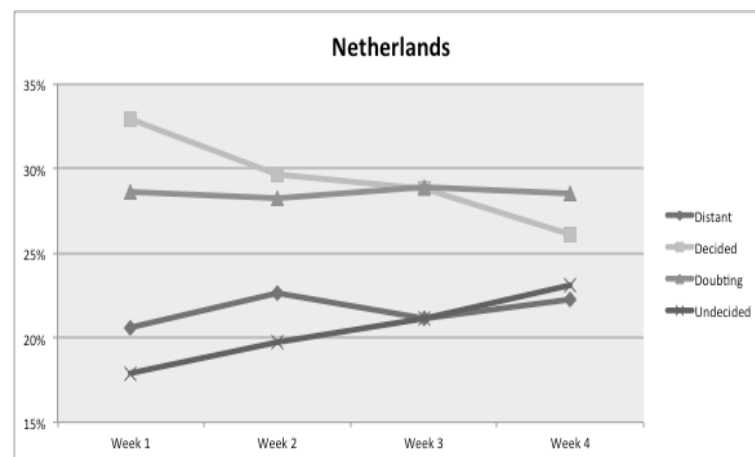
2) The evolution of voter types among VAA users during the campaign

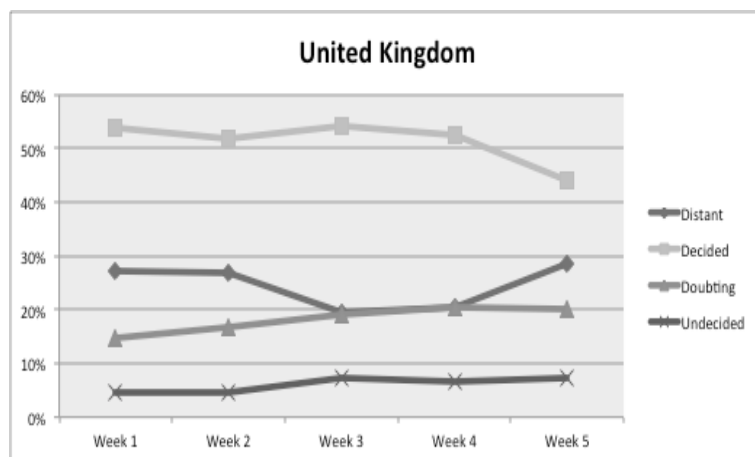
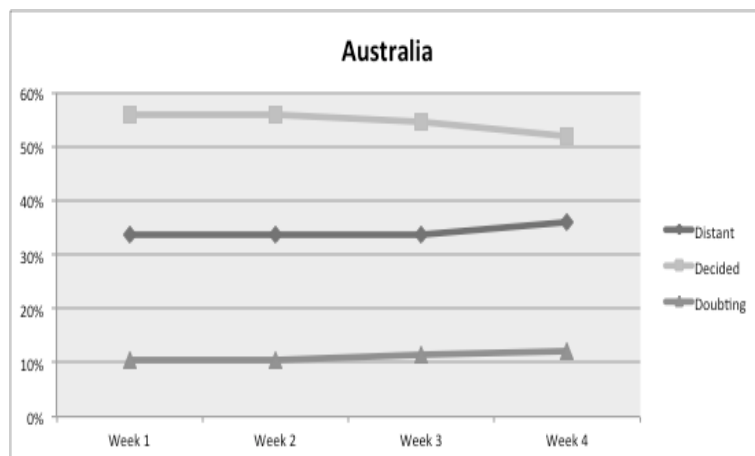
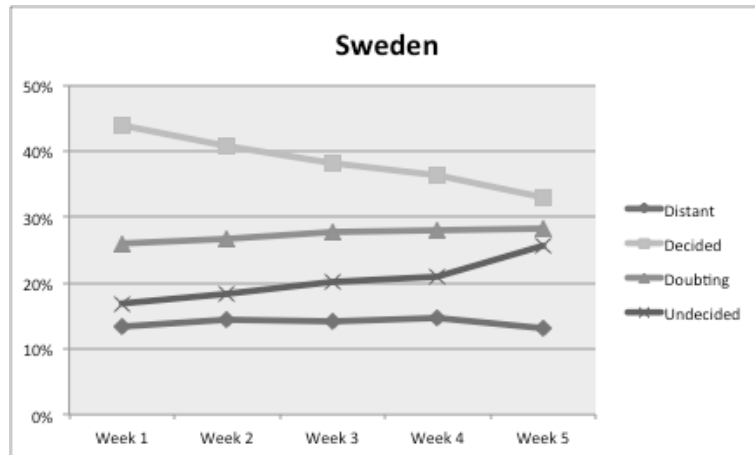
Whether VAAs are online tools designed to help voters decide for which party to vote for, they also are an original and a recreational way to sensitize voters who are less interested in politics about the issues discussed during the campaign and the manifestos brought forward by each party. The volume of information flow intensifies during an electoral campaign, both

⁹⁹ A small variation in the daily number of users can have a larger impact on the distribution among voter types visiting a VAA. As a matter of fact, the daily distribution of each of the voter types in the UK sample follows a pattern of ‘boom and bust’, while the distributions of each of the voter types among the other VAA samples in this study are more linear.

in mass media and in online media, reaching broader segments of the electorate than in off-campaign period, and thus *mobilizing* political participation. At the same time, the least politically interested voters – ‘distant voters’ in our classification – mostly rely on mass media for exposure to political information and hence, the ones who mainly use political Internet applications are engaged and active citizens; practices that tend to *normalize* political participation (Hargittai, 2002, 2010). When scrutinizing the distribution of VAA users according to our dependent variable, we see that in all media systems a significant share of the users is made out of distant voters. The share of distant voters is the lowest in Sweden (13.4%) and in the Netherlands (21.8%), but we should not forget that in these two countries we have observed, by far, the highest share of undecided voters among VAA users and a low level of interest in political affairs also characterizes undecided voters. In the five other countries, the share of distant voters goes from one quarter to one third of VAA users. These results show that online VAA are reaching out to both interested and less interested voters, and so have the potential to *mobilize* voters across media systems.

Figure 10.1 Evolution of the distribution of voter types among VAA users during the campaign





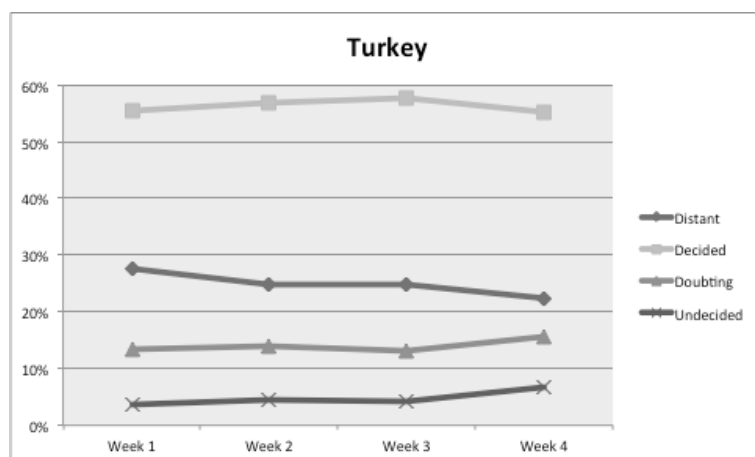
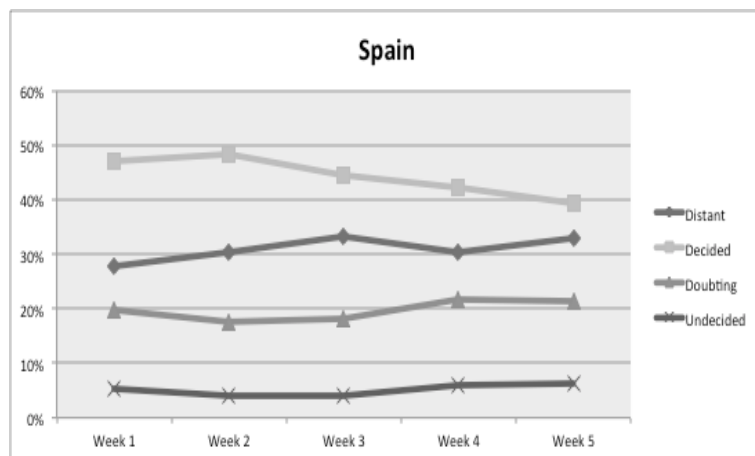
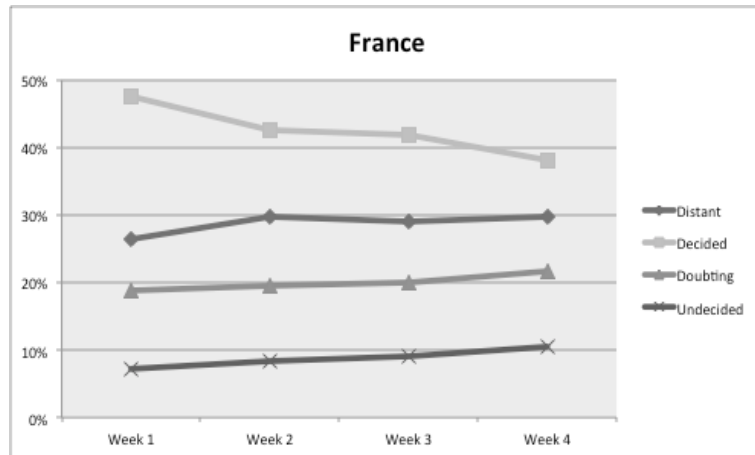


Figure 10.1 displays the evolution of the distribution of the four voter types among VAA users during the campaign in each of the countries under study. We observe that in all

cases, but in Turkey (-0.3 points), the share of decided voters substantially decrease from the beginning to the end of the campaign: -5 points in Australia, -7 in the Netherlands, -8 in Spain, -9.5 in France, -10 in the UK and -11 in Sweden. Hence, there is a general tendency across media systems to the decrease of decided voters among VAA users the further the campaign progresses.

On the contrary, doubting and undecided voters increase among VAA users from the beginning to the end of the campaign. Doubting voters increase of 5.5 points in the UK, and between 2 and 3 points in the other countries but in the Netherlands where their share remains constant (-0.1 point). Undecided voters increase most in the countries with a Democratic Corporatist media system, i.e. the Netherlands (+8.5 points) and Sweden (+5 points). In all the other countries they increase of 3-3.5 points from the beginning to the end of the campaign, but in Spain where they share among VAA users increases of only 1 point.

Finally, the share of distant voters, that is voters who did not express a high PTVs for parties or candidates running for office, most increase in Spain (+5 points), slightly increases in France (+3.5 points) and in Australia (+2.5 points), remain stable in the Netherlands, Sweden and the UK, and decreases in Turkey (-5 points). We note that the two countries belonging to the Polarized Pluralism media system, Spain and Turkey, display antagonistic results with regards to this fourth voter type. We saw in Chapter 8 that Turkish voters were brought to the Turkish VAA by partisan newspapers and so it is not surprising that the share of distant voters among VAA users decreases from the launch of the application to Election Day. While in the case of Spain, the blaming of the political class for the economic crisis that hit the country from 2008 onwards and the emergence of corruption affairs may have led part of the Spanish electorate to feel more distant from their political representatives.

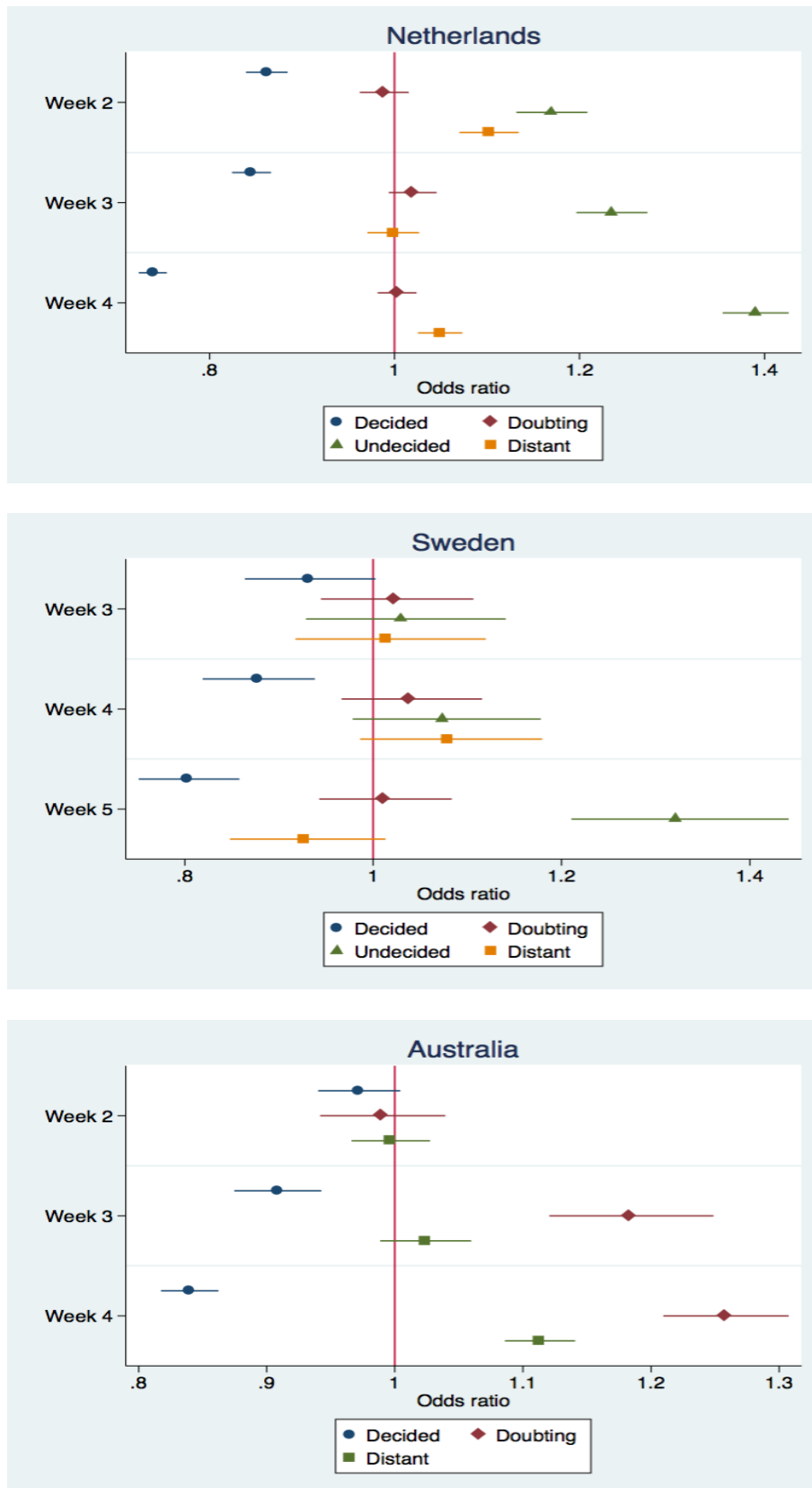
Whether these aggregate observations allows us to draw some general observations, such as the fact that from the beginning to the end of the campaign the share of decided voters among VAA users tend to decrease while that of doubting and undecided voters tend to increase, we should not rush into conclusions. Hence, in order to assess the validity of our hypotheses regarding the likelihood of each voter type to use a VAA at different times of the campaign and in different media systems, we use a logistic regression analysis to measure the individual effect of the campaign on each voter type in using a VAA.

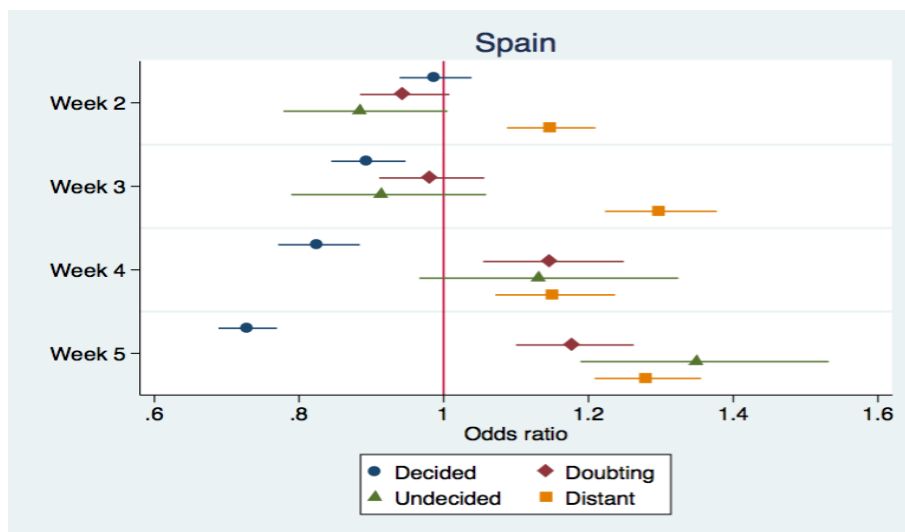
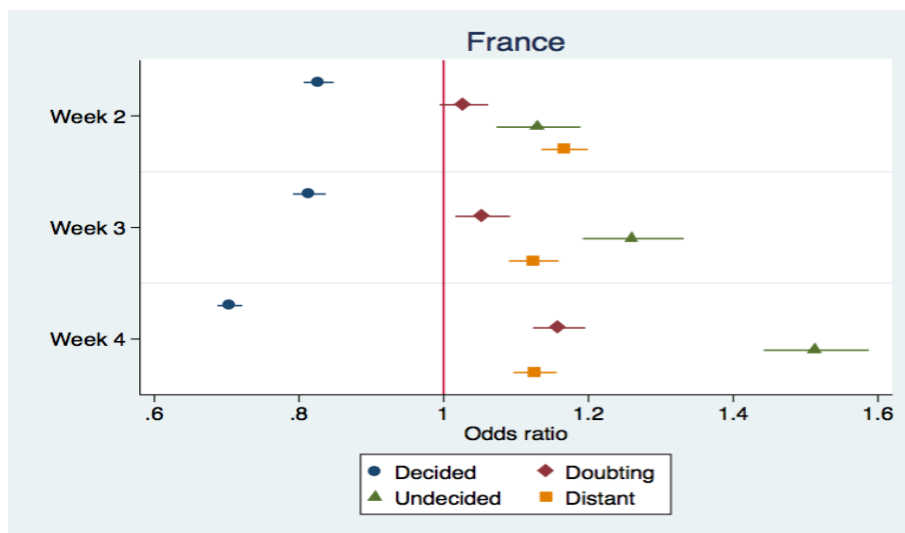
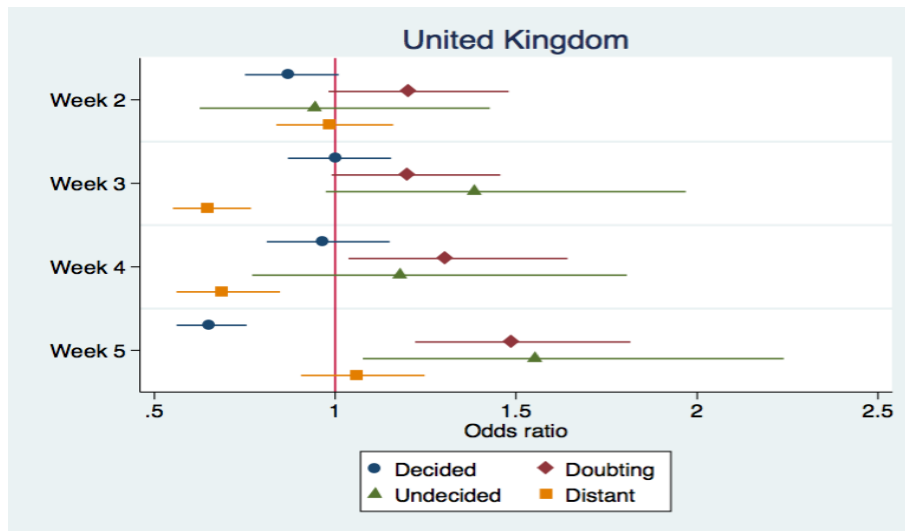
The dependent variable of the model is the voter types variable and the key independent variables are the time frame dummy variables indicating in which week of the campaign individual voters used the VAA. In addition of the time frame of connection, other

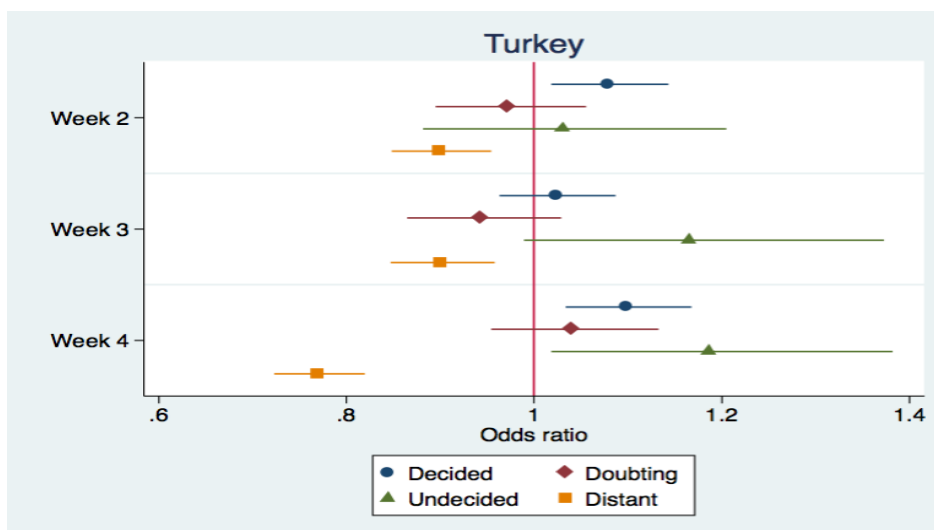
control variables were inserted in the model such as gender, age, level of education and the direction of the high PTVs expressed. The direction of the PTV scores is used to distinguish between the political orientations of voters: left wing, left, center, right, right wing, and regionalists. For instance in the dummy variable 'left-wing' all users who have expressed a PTV score higher than 7 for a left-wing party are coded 1 and all the other users are coded 0. The descriptive distribution of all these variables is provided in Annex 10.2, and the full logistic regression models are provided in Annex 10.3. Here, we are only going to report the results of the main independent variable of the model: the impact of the weeks of the campaign on the likelihood to belong to the four voter types.

For the sake of clarity, we display here only the odds ratio for each voter type to visit a VAA in different weeks of the campaign. The results are visible in the different graphs of Figure 10.2. Before analysing the results in light of the media system to which the countries belong, we must observe that our data confirm the general assumption found in the literature that there is a significant likelihood that decided voters are the first to access VAA during an electoral campaign. The results for decided voters are significant for all points of observation in the cases of France, the Netherlands and Sweden, for weeks 3, 4 and 5 in Spain, for weeks 3 and 4 in Australia, for weeks 2 and 4 in Turkey, and in week 5 in the United Kingdom. In all countries under study but in Turkey, the likelihood of decided voters to use a VAA decreases along the electoral campaign, meaning that their likelihood to use a VAA is the highest on the first week of the campaign. The decline is the strongest in the United Kingdom, France, Spain and the Netherlands where decided voters are between 1.54 and 1.35 times less likely to use a VAA in the last week of the campaign than in the first week of it (odds ratios ranging from 0.65 to 0.74). In Sweden and Australia, decided voters are between 1.25 and 1.20 times less likely to use a VAA in the last week of the campaign than in the first week of it (odds ratios ranging from 0.8 to 0.84). Only in the case of Turkey the direction of the results is different as decided voters are 1.09 times more likely to use a VAA in week 2 and week 4 of the campaign than in the first week of it. However, this small increase coupled with the standard error and the absence of variation between week 2 and week 4 suggests a steady likelihood for decided voters to use a VAA in Turkey rather than a significant increase in such likelihood.

Figure 10.2. Odds ratio for each voter type to visit a VAA during the campaign (reference = Week 1)







If we turn to the likelihood of doubting and undecided voters to visit a VAA, we see that the general tendency is toward an increased likelihood of these two voter types to use a VAA along the electoral campaign. However, we perceive differences according to the three media systems under study. In the following paragraphs, we will only report statistically significant odd ratios.

In Polarized Pluralist media systems, we observe a slight to moderate increase in the likelihood of doubting and undecided voters to use a VAA at the end of the campaign. In Turkey, undecided voters are 1.2 times more likely to use a VAA in week 4 than in week 1 of the campaign. In Spain, doubting voters are 1.14 and 1.17 times more likely to use a VAA in week 4 and week 5 than in week 1 of the campaign; and undecided voters are 1.35 times more likely to use a VAA in week 5 than in week 1 of the campaign. These odd ratios confirm *hypothesis 10.2* according to which we should observe a slight increase in the likelihood of doubting and undecided voters to use a VAA along the electoral campaign. However, we must acknowledge that the likelihood increased for undecided voters in Spain is higher than expected and comparatively to the other cases can be considered as a moderate increase. We believe that the peculiar context of the 2015 Spanish parliamentary election with the emergence of two new competitive parties explains these stronger results than expected.

In Liberal media systems we witness the stronger increase in the likelihood of doubting and undecided voters to use a VAA along the campaign. In the United Kingdom, undecided voters are 1.55 times more likely to use a VAA in week 5 than in week 1 of the campaign; and doubting voters are 1.3 and 1.5 times more likely to use a VAA in week 4 and

week 5 than in week 1 of the campaign. In Australia, doubting voters are 1.18 and 1.25 times more likely to use a VAA in week 3 and in week 4 than in week 1 of the campaign. Finally in France, that we classified as a hybrid media system but which VAA was exclusively promoted by commercial media, undecided voters are 1.17, 1.25 and 1.55 times more likely to use a VAA in week 2, week 3 and week 4 than in week 1 of the campaign; and doubting voters are 1.12 and 1.18 times more likely to do so as well in week 3 and week 4 than in week 1 of the campaign. Overall, these findings support *hypothesis 10.4* stating that in a Liberal media system, decided voters will come to a VAA first, but the likelihood of doubting and undecided voters visiting a VAA moderately increases along the electoral campaign.

While in Polarized Pluralist and in Liberal media systems we expected the likelihood for doubting and undecided voters to use a VAA evolving in the same direction, we expected them to differ in Democratic Corporatist media systems. As a matter of fact neither in the Netherlands nor in Sweden the likelihood of doubting voters to use a VAA during the campaign changes from the beginning to the end of the campaign. We see that in both countries, the confidence intervals of each point of observation representing doubting voters, overlaps with the odd ratio of 1 indicating no statistically significant change in the likelihood to use the VAA from the beginning to the end of the campaign. These results support *hypothesis 10.6*. On the contrary, the likelihood of undecided voters to use a VAA significantly increases toward the end of the campaign. In the Netherlands, they are 1.17, 1.24 and 1.39 times more likely to use a VAA in week 2, 3 and 4 than in week 1 of the campaign. In Sweden, undecided voters are 1.32 times more likely to use a VAA in week 5 than in week 1 of the campaign. Thus, our analyses support *hypothesis 10.7* stating that in a Democratic Corporatist media system, the likelihood of undecided voters to use a VAA moderately increases along the electoral campaign.

Finally, with regard to distant voters we do not observe consistent tendency per media systems but rather patterns proper to each country case. For instance, in France and in the Netherlands distant voters are slightly more likely to use a VAA passed the first week of the campaign than in the first week of the campaign. We record significant odds ratios ranging from 1.04 to 1.19 in weeks 2 to 4 in France, and in week 2 and in week 4 in the Netherlands. We see similar odd ratios for distant voters in Sweden but none of these odd ratios are statistically significant. In these three countries, the VAA deployed had media partnerships

with national newspapers¹⁰⁰, thus benefitting from a media push at the launch of the application. It is acknowledged in the literature that newspapers are more read by older, male and more politically interested voters. Hence, in countries where they enjoy a media partnership with printed newspapers, VAAs will reach politically interested voters quickly and least interested voters more progressively. In Australia, we observe a similar phenomenon but only on week 4 in which distant voters were 1.11 times more likely to use a VAA than in week 1. The Australian VAA also had a partnership with a major media conglomerate¹⁰¹; however the VAA promotion mostly took place online, thus explaining the delayed likelihood increase in distant voters to count among VAA users.

In Spain, distant voters are not only more likely to be among VAA users passed the first week of the campaign, but this likelihood also increases during the campaign. In fact they are 1.15 times in week 2, 1.3 times in week 3, 1.15 times in week 4 and 1.28 times more likely in week 5 to use a VAA than in week 1 of the campaign. This increased likelihood of distant voters to use a VAA along the campaign can be explained by the intense horse race between the established Spanish parties and the two new parties in the 2015 Parliamentary election. Such context is in fact favourable to an increased interested for the campaign among voters who are usually more distant from politics.

Lastly, in Turkey and in the United Kingdom distant voters are less likely to be among VAA users past the first week of the campaign. In Turkey, the odd ratios range from 0.9 to 0.75 from week 2 to week 4; and in the UK, the odd ratios are of 0.65 in week 3 and of 0.69 in week 4. The decreased likelihood of distant voters to count among VAA users in Turkey is most likely due to the highly partisan nature of the Turkish media system, in particular in the press, leading partisan and decided voters to the VAA rather than least politically interested voters, and even more so the further the campaign advances. For the UK, as already mentioned earlier, we believe these results that contradict trends observed in other similar countries are due to the small sample, and consequently strongly biased in favour of politically interested users, collected through the British VAA.

¹⁰⁰ The French *La Boussole présidentielle* had a partnership with *Ouest France* and *20Minutes*, the Dutch *Kieskompas* had a partnership with *Trouw*, and the Swedish *Aftonbladets Valkompas* had a partnership with *Aftonbladet*.

¹⁰¹ Fairfax Media

Table 10.3 Summary of main findings

Media system	Hypothesis	Cases supporting hypothesis	Cases not supporting the hypothesis	Explanation
Polarized Pluralist	Distribution of voter types (H10.1)	Turkey	Spain	Re-composition of the Spanish party system at time of data collection
Polarized Pluralist	Campaign dynamics and voter types (H10.2)	Turkey, Spain (mixed results)	Spain (mixed results)	Re-composition of the Spanish party system at time of data collection
Liberal	Distribution of voter types (H10.3)	France	Australia, United Kingdom	Two-party system in Australia; Sample too small in the UK
Liberal	Campaign dynamics and voter types (H10.4)	Australia, France, United Kingdom		
Democratic Corporatist	Distribution of voter types (H10.5)	Netherlands, Sweden		
Democratic Corporatist	Campaign dynamics and voter types –doubting voters (H.10.6)	Netherlands, Sweden		
Democratic Corporatist	Campaign dynamics and voter types – undecided voters (H10.7)	Netherlands, Sweden		

E - Conclusion

This chapter had as objective to assess comparatively the impact of media systems on VAA use during an electoral campaign, both with regards to the distribution of different voter types – decided, doubting, undecided and distant voters – among VAA users, and with regards to the evolution of the share of these voter types during the electoral campaign. The results of the analyses and the hypotheses testing are summarised in Table 10.3.

Our first set of hypotheses related to the distribution of voter types among VAA users (*hypotheses 10.1, 10.3 and 10.5*). These hypotheses are supported in four out of seven countries included in the analyses. Political and methodological arguments provide a rational of why the hypotheses were not supported in Australia, in Spain and in the United Kingdom.

In the first two countries, the national electoral context of when the data were collected differed from the political context of previous elections. In the 2016 Australian parliamentary elections, main parties had organized themselves in two coalitions before the campaign therefore strongly simplifying the decision making process of voters, likely increasing the numbers of decided voters compared to what expected in a multi-party system. The 2015 Spanish parliamentary elections are characterised by an exceptionally high fragmentation of the party system which increased the level of volatility and indecision among the electorate. This political context altered for this specific election essential features on which we built our hypotheses for Polarized Pluralist media system; namely that the electorate was strongly structured along partisan lines, and so that voters were mostly decided voters. In our data, decided voters are the largest voter group among Spanish VAA users but there are not as many as expected. In the United Kingdom, we believe that the lack of support for the distribution hypothesis among VAA users is due to the “small” sample size used for analysis (approximately 10,000 users). To conclude on our first set of hypotheses, we can draw solid conclusions about the distribution of voters types among VAA users in Democratic Corporatist media systems but we cannot do so neither in Liberal media systems nor in Polarized Pluralist media systems.

Our second set of hypotheses covered the impact of the campaign on the distribution of voter groups among VAA users (*hypotheses 10.2, 10.4, 10.6 and 10.7*). These hypotheses are fully validated in six out of seven countries (Australia, France, the Netherlands, Sweden, Turkey and the United Kingdom), and are supported by mixed results in the remaining country: Spain. In this latter case, we had hypothesized that the campaign would only lead to a small or even to no increase in the likelihood of doubting and undecided voters to use a VAA, we do observe a small to a moderate increase of such likelihood for doubting voters, but we observe a moderate to a strong increase in the last week of the campaign for undecided voters. As explained in the previous paragraph, the peculiar context of the 2015 Spanish parliamentary election explains in our opinion why the empirical analyses for said country did not meet our theoretical expectations. Despite the peculiar political context in which the data were collected in Spain, we can affirm that our results on the impact of the campaign on the evolution of voter types among VAA users are conclusive across media systems.

To conclude, the assessment of our results shows that media systems do matter for online VAAs use. However, if because of circumstantial sample biases, the distribution of voter groups among VAA users is susceptible to be different from what was laid down in our

hypotheses, but the influence of the campaign on VAA use in each country is well measured by the data. In fact, in each media system, the campaign shapes differently the likelihood of each voter type to count among VAA users at different moments of it.

CONCLUSION

Online VAAs are a relatively recent subject of analysis for political scientists. As a result of this novelty and of the increasing popularity of these applications, VAA researchers have mostly carried out VAA-centric research, meaning with a main focus on the methodology of VAAs and the effect of VAAs on political participation. Without neglecting these fundamental aspects of VAA research (see in particular Chapter 3 and Chapter 4), the main achievement of this dissertation is the study of VAAs as part of broader processes of political communication, both theoretically and empirically.

From an empirical perspective, this dissertation is one of the first to consistently use national VAA datasets in a comparative research design. The results of this comparative undertaking are to make patterns of variations and similarity across systems more visible, so as to more clearly conceptualize relationships between VAAs, the main actors of political communication and media systems. Empirically, this process led me to formulate and to test hypotheses about the interrelationships among media systems, VAAs and voters; thus exploring the relationship between macro and micro levels of analysis.

After acknowledging in Chapter 2 how VAAs, as a communicational tool, are intertwined with the main actors of political communication – political parties, media and voters – I theoretically expanded our understanding of VAAs by connecting VAA use with macro-level theories of media systems (Chapter 6). In the debate between cyber-optimistic and cyber-pessimistic, this dissertation takes a *realistic* view on the connection between information technology and political processes. In other words, between those who consider that the Internet would lower the threshold for citizens' participation in the public debate and provide an opportunity for all to be equally informed, and those who consider that the Internet will simply mimic or even increase the inequalities of resources and access to politics that we observe in offline political practices, this dissertation shows that existing media systems matter when analysing online political and communicational processes.

The main finding of this dissertation is that VAA use by different voter groups – partisan, doubting and undecided – varies across media systems. In order to fully grasp who is using VAA and when, VAA researchers need to alter their way of assessing its use in at least two ways. First, as already suggested by van de Pol et al. (2014), one needs to go beyond

socio-demographic profiles of VAA users and look instead at their cognitive and conative profiles to get a better picture of who visits a VAA during an electoral campaign. While socio-demographic profiles of VAA users repetitively emphasize the overrepresentation of young men with a university degree, cognitive and conative variables lead us to distinguish between users based on their level of political interest and by the state of their voting decision-making process. This alternative way of profiling is more in line with the normative goal of VAAs, which is to reach to voters who are undecided or less interested in politics. The analyses presented in this dissertation stress the validity of this profiling method by showing that the distribution of VAA users according to conative variables (propensity to vote scores) varies from one country to another.

One could argue that these differences are due to the presence or absence of media promotion of VAAs. After all, this dissertation underlines the necessity of a VAA-media partnership to explain the success of a given application (Walgrave et al., 2008). However, and this leads us to the second way in which VAA researchers need to alter the way of assessing VAA use, this dissertation shows that the distribution of voter types among users is consistently different across media systems. In Democratic Corporatist media systems VAA users are the most heterogeneous (according to the voter typology developed on the basis of conative variables), while in Polarized Pluralist media systems they are the most homogeneous with a strong bias toward partisan voters. In Liberal media systems the distribution of VAA users is more subject to circumstantial variations (party system, media promotion, and so on). Two criteria explain these differences across media systems: the openness of the system and the dominant journalistic culture within it. In Polarized Pluralist media systems, which are historically the most elite-oriented media systems and in which one observes the highest level of inequalities between the most and the least politically interested citizens with regards to access to political information (Hallin and Mancini, 2004), online VAAs struggle to reach out to undecided voters. Even when some media mention the tool, users attracted to the VAA by these mentions are partisan voters of the same political leaning of the media that did the mention. The partisan nature of the media environment in these media systems limits the spread of political information to non-partisan citizens.

Democratic Corporatist and Liberal media systems are both more open and more inclusive than Polarized Pluralist media systems, but one important element distinguishes between the two: the dominant journalistic culture. In line with the media studies literature,

this dissertation has shown that the strong public service orientation within the journalistic culture of Democratic Corporatist media systems sets them apart from other media systems. This culture of public service media comes from a long-standing tradition of autonomy from other social powers and the commitment by journalists to a common public interest, as well as from the idea that public media are the guarantor of equal opportunities of communication for all the organized social voices in the public debate (Hallin and Mancini, 2004). On the other hand, in Liberal media systems, the media have been left primarily to market forces, thus marginalizing non-commercial media. This important differentiation between systems explains why, on the one hand, in the Democratic Corporatist model, the distribution of VAA users among voter types is the most homogeneous and, on the other hand, in Liberal media systems, the distribution of VAA users among voter types are heavily influenced by the specificity of each national case: bipolar party competition in Australia, small sample of respondents in the UK, and solid promotion of the VAA by commercial media in France.

As argued in the theoretical framework, election campaigns are not situations in which only new information is disseminated to the public; rather they are situations where information that is already publicly available is dispersed with greater intensity. In this process media systems are transmission belts making it possible for the more intense flow of political information to reach broader segments of society. As a matter of fact, this dissertation shows that media systems also matter during electoral campaigns by playing a role in the extent to which information reaches non-partisan voters. In all media systems, the closer one gets to Election Day the more heterogeneous the profile of VAA users. However, on this matter, Democratic Corporatist media systems performed better than Liberal media systems, which themselves perform better than Polarized Pluralist media systems. Thus, when assessing VAA use across electoral democracies, media systems matter.

These results have concrete implications for VAA makers and actors who believe in the power of the Internet for making the public debate more inclusive. Except in Democratic Corporatist media systems where the media structure already reaches out to politically disadvantaged groups, VAA makers need to engage in an active promotion campaign in order to hope to narrow the gap between partisan and doubting/undecided voters among VAA users. Such strategy should yield positive results in a Liberal media environment, such as in France in 2012 when several media partnerships were established with commercial media, but its outcome is less certain in a Polarized Pluralist media system as shown by the case of Turkey

in which the profile of VAA users simply replicated the partisan leaning of the newspaper mentions, i.e. when a conservative newspaper mentioned the VAA, the profile of VAA users was turning more conservative. Either way, a promotion campaign of an online VAA is necessary to reach out to the segments of society which are least interested in politics.

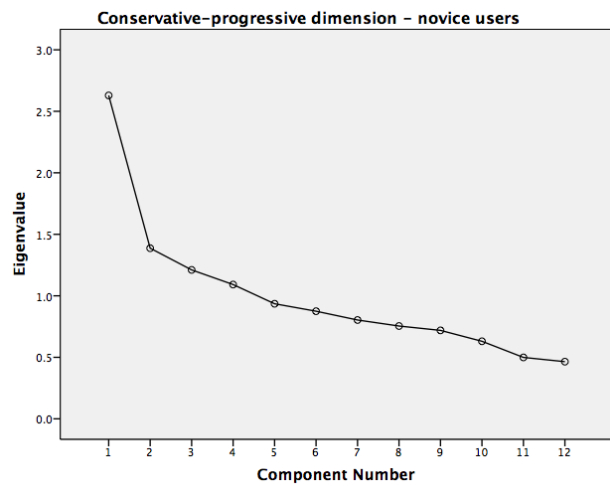
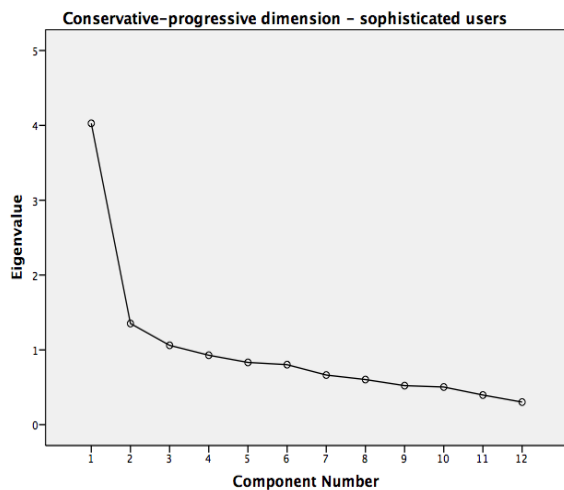
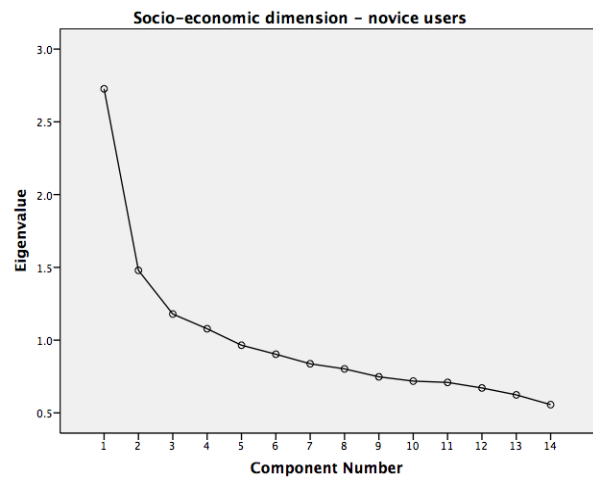
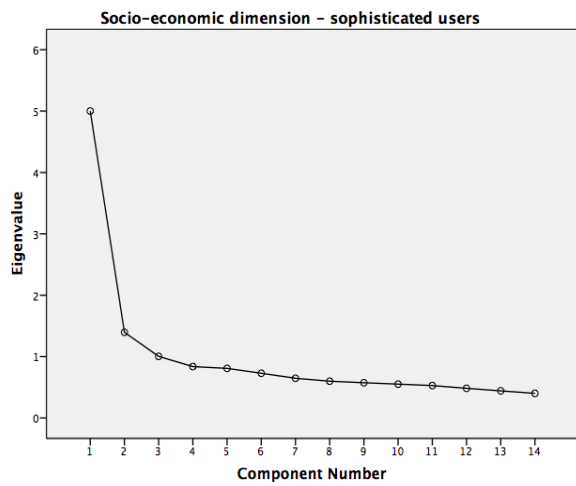
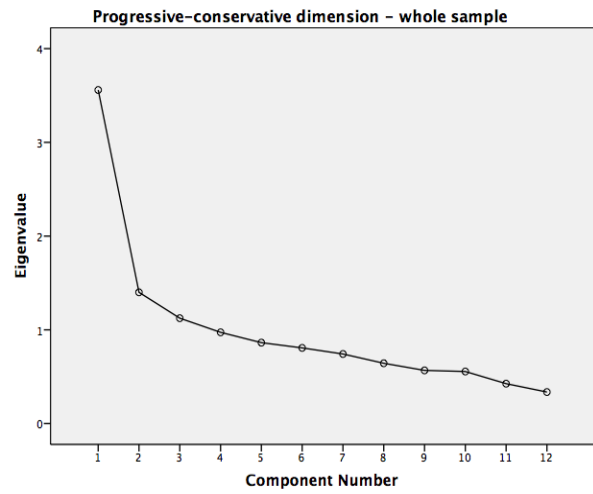
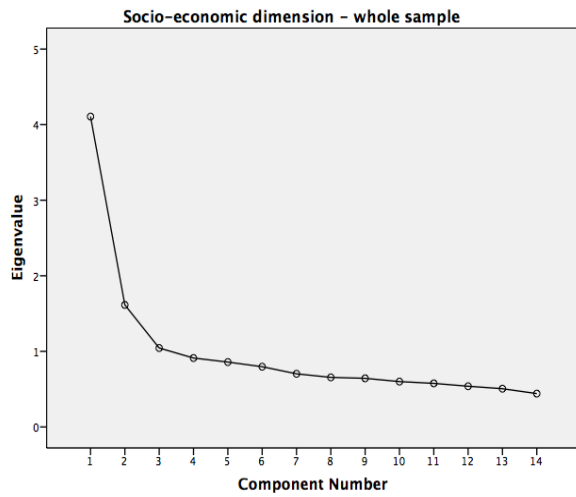
In addition of studying the effect of media systems on VAA use, this dissertation also used VAA data, i.e. VAA users' responses to the web-questionnaire included on VAA sites, to analyse voting behaviour and campaign dynamics. In fact, despite the fact that a VAA collects data on a daily basis during the campaign, mimicking to a certain extent a *rolling cross-sectional* survey, a surprisingly small number of studies have been carried out which exploit this feature of VAAs. As Vassil (2011) has pointed out, VAA samples suffer from three weaknesses: sample self-selection bias, unobserved heterogeneity and misreporting. These weaknesses are indeed a problem if one claims to generalize the results coming from VAA data to the whole population regarding vote intentions or VAA effects, but when studying the relationship between variables the situation is different. Research has shown that the relationship between keys explanatory variables of voting behaviour are well informed and measured in VAA samples (Fournier et al., 2015). Moreover, in electoral contexts in which it is impossible to know the target population, such as in primary elections, VAA data provide a unique tool for collecting large-N datasets to make electoral analysis possible through rolling cross section methods. In fact, with the study in Chapter 5 of the campaign of the primary of the French right and of the centre organized in the fall of 2016, this dissertation provides one of the first sophisticated individual-level analyses of campaign dynamics using VAA data. This analysis shows that if the appropriate measures are taken regarding data cleaning to avoid misreporting, and if socio-demographic biases are controlled for, VAA samples can be very informative for the study of electoral campaigns. For instance, in order to filter out socio-demographic effects on the primary campaign analysis of Chapter 5, the VAA sample was weighted daily in order to keep constant the distribution of socio-demographic variables (gender, age and level of education) among respondents during the campaign. In addition, in Chapter 9, I applied weights on the 2012 French VAA sample based on the same socio-demographic variables in order to compare the regression coefficients between the original un-weighted VAA sample and the representative weighted sample. I found no significant difference between the two sets of coefficients, confirming the argument by

Fournier et al. (2015) that the relationship between explanatory variables of behaviour are well informed and measured in VAA samples. Finally, regarding the unobserved heterogeneity problem mentioned by Vassil (2011), this dissertation incorporates this specific feature of VAA samples in its analytical framework by assuming that different voter groups use VAAs at different times. Thus, it is the research question and the research design that informs researchers of whether VAA data are acceptable to use or not, not the data per se. Probability-based sampling methods have been successfully used to gauge public opinion for many decades. “Though historically effective, such traditional methods are often slow and expensive, and with declining response rates, even their accuracy has come into questions. At the same time, non-representative polls, such as opt-in online surveys [and online VAAs], have become increasingly fast and cheap” (Gelman et al., 2016: 89). To deal with such non-representative samples, proper statistical adjustments are necessary which, in order to be reliable, need to rely on sufficient demographic information on respondents and on adequate population-level statistics. VAA samples include traditional socio-demographic indicators such as gender, age and level of education, but also include political indicators such as vote intention, past voting behaviour, left-right self-placement, among others. If promoted adequately by traditional media, VAA samples include all population sub-groups in relatively high numbers. It may be too early to say if VAAs are the future of non-probability polling, but I am convinced that the application of post-stratification sampling methods to VAA collected data is the future of VAA research.

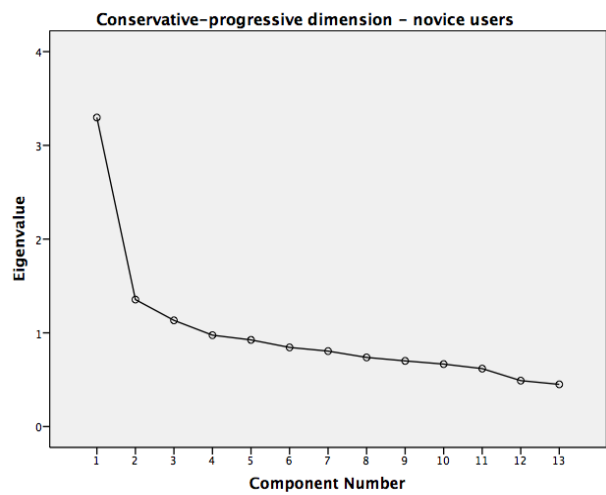
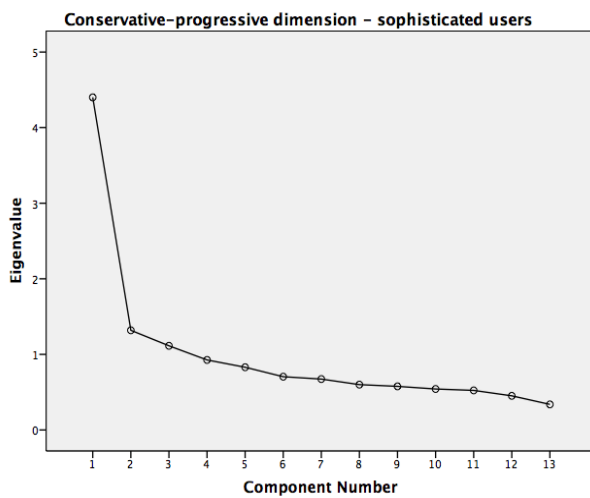
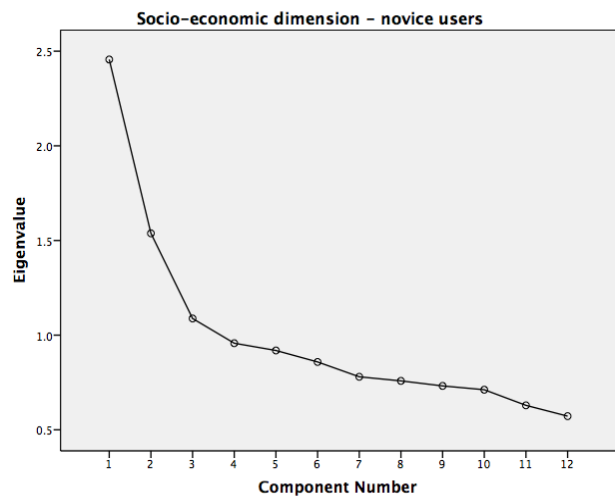
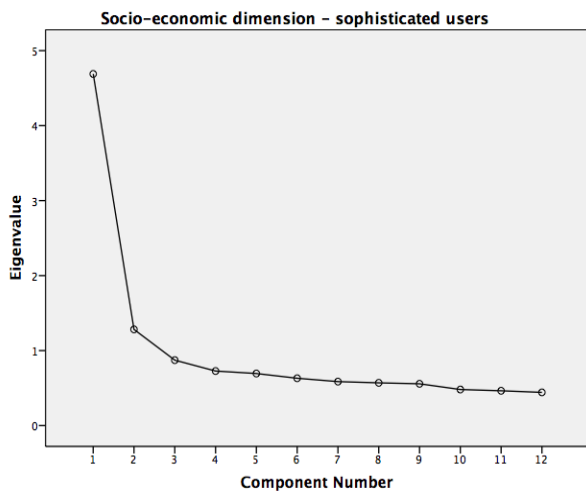
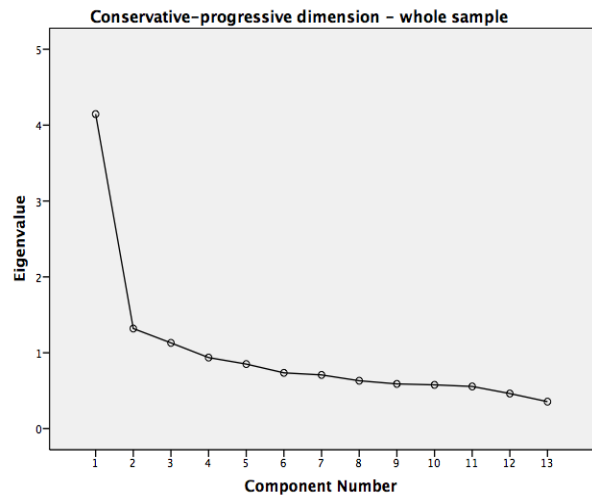
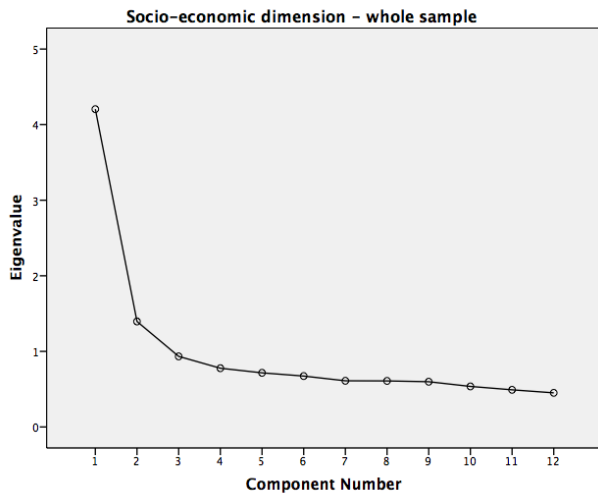
Annexes

Annex 4.1. Scree plots for the factor analyses carried on the 2012 <i>La Boussole présidentielle</i> sample	308
Annex 4.2. Scree plots for the factor analyses carried on the 2017 <i>La Boussole présidentielle</i> sample	309
Annex 5.1. Positions of second round users in the political landscape of <i>La Boussole présidentielle</i> according to their declared vote in the first round (2012).....	310
Annex 5.2. Positions of second round users in the political landscape of <i>La Boussole présidentielle</i> according to their declared vote in the first round (2017).....	311
Annex 7.1. List of participants for the press journalist interviews	312
Annex 7.2. Journalists' Interview Grid.....	313
Annex 9.1. Weights applied to La Boussole présidentielle sample for the MLNM logistic regression model (own calculations).	315
Annex 10.1. List of political parties or candidates included in the analyses	316
Annex 10.2. Distribution of VAA users per country on independent variables	318
Annex 10.3. Regression models.....	320

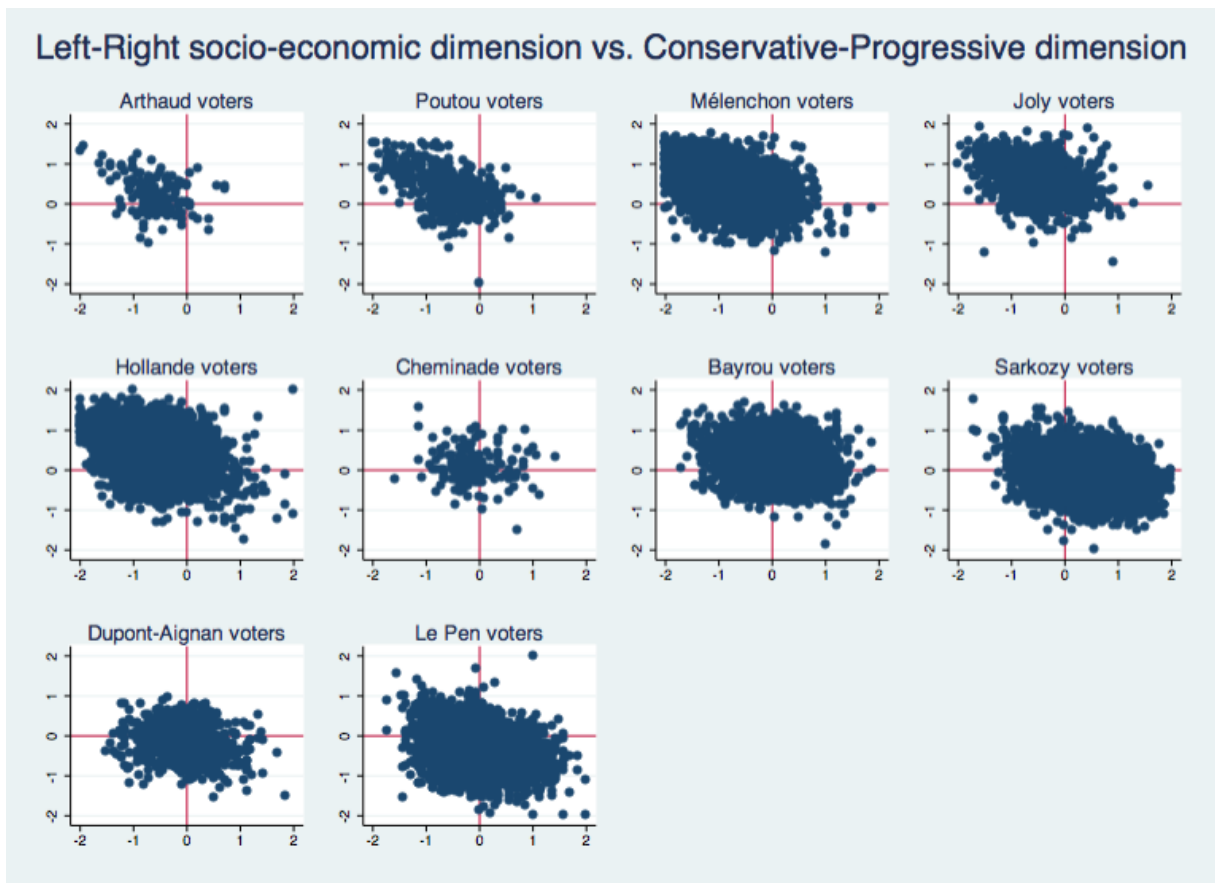
Annex 4.1. Scree plots for the factor analyses carried on the 2012 *La Boussole présidentielle* sample



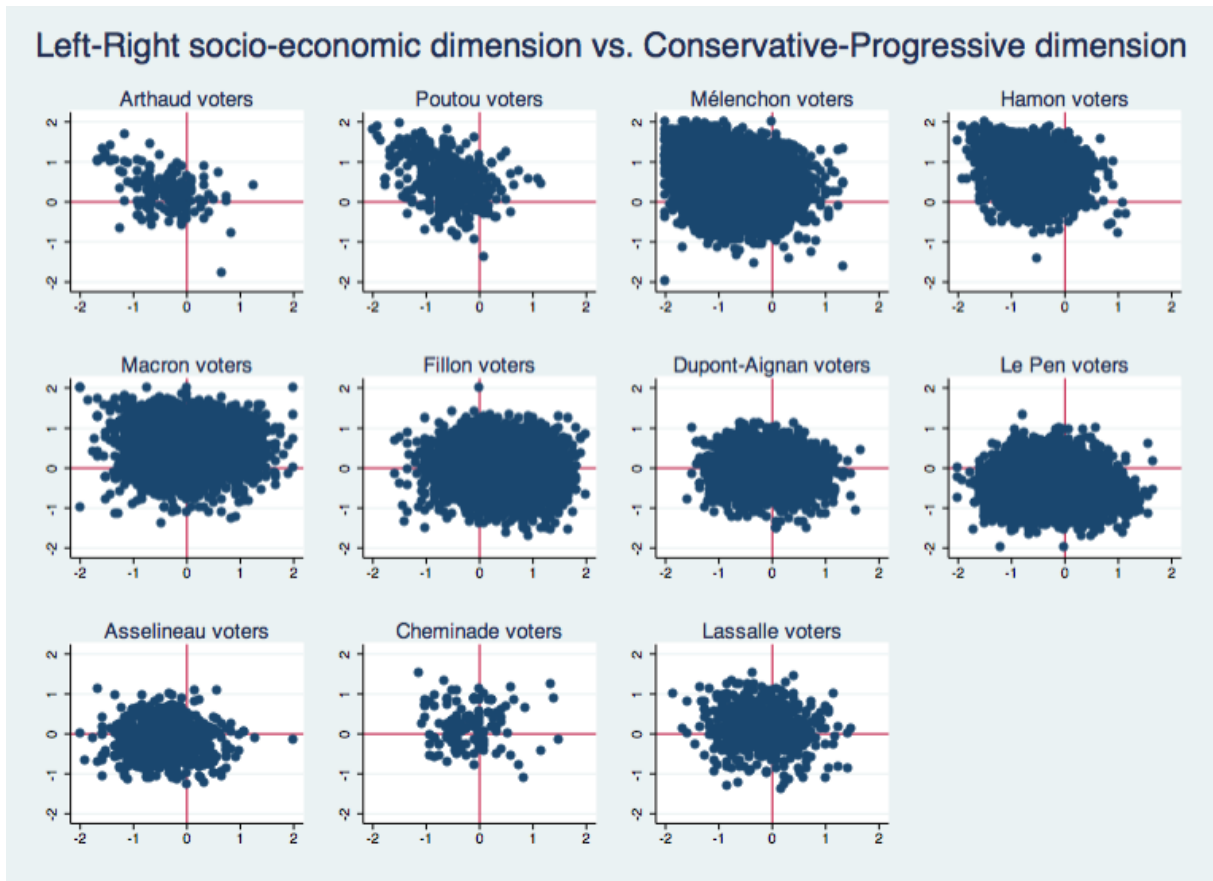
Annex 4.2. Scree plots for the factor analyses carried on the 2017 *La Boussole présidentielle* sample



Annex 5.1. Positions of second round users in the political landscape of *La Boussole présidentielle* according to their declared vote in the first round (2012)



Annex 5.2. Positions of second round users in the political landscape of *La Boussole présidentielle* according to their declared vote in the first round (2017)



Annex 7.1. List of participants for the press journalist interviews

	Position	Affiliation (when involved with VAAs)	Newspaper genre	Day of interview	Location of interview	Duration of interview	Political leaning of media outlet (if any)
Dutch journalist 1	Political reporter / Columnist	Trouw	Quality press	7/2/13	The Hague	40'	Centre-left
Dutch journalist 2	Political reporter	NRC/Vrij Nederlands	Quality press / Magazine	6/2/13	The Hague	32'	Centre-left
Dutch journalist 3	Online editor	Trouw	Quality press	7/2/13	Amsterdam	30'	Centre-left
Dutch journalist 4	Online editor	Trouw	Quality press	8/2/13	The Hague	60'	Centre-left
French journalist 1	Web chief editor	Ouest France	Regional newspaper	23/1/13	Paris	37'	Centre
French journalist 2	Columnist	Ouest France	Regional newspaper	22/1/13	Paris	42'	Centre
French journalist 3	Political reporter	20 Minutes	Free daily	24/1/13	Paris	42'	Neutral
French journalist 4	Political reporter	20 Minutes	Free daily	23/1/13	Paris	50'	Neutral
Turkish journalist 1	Columnist	Hürriyet	Commercial newspaper	15/1/13	Istanbul	42'	Liberal
Turkish journalist 2	Columnist / Reporter	Milliyet	Commercial newspaper	18/1/13	Istanbul	35'	Liberal
Turkish journalist 3	Columnist	Zaman	Partisan newspaper	10/1/13	Istanbul	30'	Conservative
Turkish journalist 4	Columnist	Akşam	Partisan newspaper	18/1/13	Istanbul	33'	Centre-right
Turkish journalist 5	Columnist	Radikal	Partisan newspaper	6/3/13	Istanbul	37'	Progressive - Left

Annex 7.2. Journalists' Interview Grid

The Journalist

- When did you start your journalistic career? And for which media did you work since then?
- How did you become a journalist?
- Is journalist your only profession at the moment? And in the past?
- Do you belong to any sort of journalistic associations?

The Production of Information

- How often do you produce a column/an article?
- How do you choose your topic?
- How do you gather the information/facts you need?
- When you write your columns/articles, who do you have in mind as an readership?
- What is the editorial line of your newspaper?

Journalism, Politics and Democracy

- For you, what is the role of journalists in society?
- In the light of what you just told me, how do you evaluate journalism in your own country?
- Do you belong or have belonged to a political party?
- How would you describe the average voter in your country? Is he informed/competent/ideological?
- Do you see yourself as having a role toward voters? Which one?

Online Voting Advice Applications

- How did you first hear about [the VAA]?

- [Only in France and in the Netherlands] How have you been involved in the VAA-media partnership? What sort of journalistic material have you produced in during this partnership?
- [Only in Turkey] Why did you mention it in your column?
- Do you think that it could help voter to choose between parties and candidates? Why?
- Did you talk about [the VAA] with your colleagues or chief editor? (if any) What were the reactions of those persons and of your readership to the website?
- How do you think the data produced by such a website could be use? Do you trust this type of data?
- Are the data useful for the political process/debate?

Annex 9.1. Weights applied to La Boussole présidentielle sample for the MLNM logistic regression model (own calculations).

Gender	Age	Level of education				
		None	Lower than high school	High school degree	College degree (BAC+2)	Graduate degree
Women	18-24	1.167	1.182	0.483	0.294	0.244
	25-34	4.75	1.083	0.737	0.509	0.345
	35-49	4.2	1.98	1.038	0.78	0.415
	50-64	3.091	1.578	0.611	0.5	0.388
	65<	9.5	5.607	1.571	0.75	1.308
Men	18-24	2	2.067	1.016	0.32	0.375
	25-34	3.2	2.095	0.909	0.636	0.388
	35-49	4.091	1.483	0.851	0.443	0.511
	50-64	3.364	1.34	0.619	0.5	0.5
	65<	7.167	2.3	1.444	0.333	0.71

Annex 10.1. List of political parties or candidates included in the analyses

	Netherlands	Sweden	Australia	United Kingdom
Left-wing parties	Socialist Party (SP), Party for the Animals (PvdD)	Left Party, Feminist Initiative	-	-
Left parties	Labour Party (PvdA), GreenLeft (GL)	Social-Democrats, Greens	Labour Party	Green Party, Labour Party
Centrist parties	Democrats 66 (D66), 50Plus (50+)	Centre, Liberal Party	-	Lib Dems
Right parties	People's Party for Freedom and Democracy (VVD), Christian Democratic Appeal (CDA), ChristianUnion (CU)	Christian-Democrats, Moderates	Liberal-National Coalition	Conservative Party
Right-wing parties	Party for Freedom (PVV), Reformed Political Party (SGP)	Swedish Democrats	-	UK Independence Party
Regionalist parties	-	-	-	Plaid Cymru, Scottish National Party

Annex 10.1. List of political parties or candidates included in the analyses (continued)

	France	Spain	Turkey
Left-wing parties	Nathalie Arthaud, Jean-Luc Mélenchon, Philippe Poutou	Podemos, United Left (IU), Republican Left of Catalonia (ERC)	Peace and Democracy Party (BDP)
Left parties	François Hollande, Eva Joly	Spanish Socialist Workers' Party (PSOE)	Republican People's Party (CHP)
Centrist parties	François Bayrou	Citizens (C's), Union Progress and Democracy (UPYD), Democratic Convergence (CDC)	Democrat Party (DP), Left Democratic Party (DSP), People's Voice Party (HSP)
Right parties	Nicolas Sarkozy	People's Party (PP), Democratic Union of Catalogna (UDC)	Justice and Development Party (AKP), Felicity Party (SP)
Right-wing parties	Nicolas Dupont-Aignan, Marine Le Pen	-	Grand Union Party (BBP), Nationalist Action Party (MHP)
Regionalist parties		Eh Bildu, Basque Nationalist Party, BNGallician, Més	

Annex 10.2. Distribution of VAA users per country on independent variables

	Netherlands	Sweden	Australia	United Kingdom
Gender				
Men	62.9%	55.8%	64.4%	68.7%
Women	37.1%	44.2%	35.6%	31.3%
Age				
18-24	15.6%	6.2%	14.6%	22%
25-34	22.7%	15.3%	26.3%	20%
35-49	32.6%	34%	30.1%	28.3%
50-64	22.1%	29.4%	20%	21.7%
65<	6.9%	15%	9%	7.9%
Level of education				
Lower than high-school	2.9%	6.3%	8.5%	3.8%
High-school degree	34.8%	43.1%	19.9%	42.1%
Higher than high-school	62.3%	50.6%	66.7%	52.7%
Direction of high PTVs				
Left-wing	9.7%	15.8%	-	-
Left	18.5%	29.1%	27.9%	22.9%
Centrist	16.1%	12.8%	-	6.4%
Right	21%	26%	15.6%	18.1%
Right-wing	17.5%	16.2%	-	12.2%
Regionalist	-	-	-	4.5%
Weeks				
Week 1	22%	25%	36.1%	25.4%
Week 2	14.8%	22.8%	17.1%	17.8%
Week 3	17.8%	13.1%	12%	23.2%
Week 4	45.4%	18.4%	34.7%	13.5%
Week 5	-	20.7%	-	20%
<i>N</i>	316,056	40,791	174,521	10,275

Annex 10.2 Distribution of VAA users per country on independent variables (continued)

	France	Spain	Turkey
Gender			
Men	57.4%	75.5%	77.2%
Women	42.6%	24.5%	22.8%
Age			
18-24	23.8%	20.8%	33.7%
25-34	29.6%	30.3%	37.4%
35-49	25.3%	30.6%	20.4%
50-64	16.2%	15.4%	7.1%
65<	5.2%	2.9%	1.5%
Level of education			
Lower than high-school	19.9%	14.1%	2.3%
High-school degree	23.1%	17.1%	7.8%
Higher than high-school	56.9%	68.8%	89.9%
Direction of high PTVs			
Left-wing	15.1%	26%	5.6%
Left	22.2%	4.2%	35%
Centrist	7.9%	13.5%	7.7%
Right	13.7%	5.7%	18.1%
Right-wing	11.4%	-	11%
Regionalist	-	6.6%	-
Weeks			
Week 1	18.9%	22.3%	32.8%
Week 2	27.9%	29.7%	24.2%
Week 3	17.8%	17.4%	21.4%
Week 4	35.4%	10%	21.5%
Week 5	-	20.6%	-
<i>N</i>	237,258	59,033	44,580

Annex 10.3. Regression models

Netherlands	Decided	Doubting	Undecided	Distant
Gender (ref=men)	-0.139 (.008)***	-0.040 (.008)***	0.077 (.010)***	0.161 (.009)***
Age (ref=18-24)				
25-34	-0.27 (.013)*	-0.042 (.013)***	0.028 (.016)	-0.002 (.015)
35-49	0.063 (.012)***	-0.124 (.012)***	-0.067 (.015)***	0.097 (.013)***
50-64	0.165 (.013)***	-0.214 (.013)***	-0.161 (.016)***	0.183 (.014)***
65=<	0.360 (.018)***	-0.235 (.019)***	-0.271 (.023)***	0.011 (.021)
Level of education (ref=lower than high-school)				
High-school degree	-0.042 (.025)	0.014 (.026)	0.080 (.032)*	-0.048 (.025)
Higher than high-school	-0.006 (.024)	0.111 (.025)***	0.167 (.031)***	-0.392 (.025)***
Direction of high PTVs				
Left-wing	-0.333 (.016)***	0.110 (.014)***	1.250 (.014)***	-
Left	-0.456 (.012)***	0.365 (.010)***	1.336 (.011)***	-
Center	-0.563 (.012)***	0.390 (.011)***	1.034 (.011)***	-
Right	0.155 (.019)***	0.483 (.019)***	0.932 (.022)***	-
Right-wing	0.015 (.020)	0.236 (.020)***	-0.132 (.023)***	-
Weeks (ref=week1)				
Week 2	-0.149 (.013)***	-0.011 (.013)	0.156 (.016)***	0.097 (.015)***
Week 3	-0.168 (.012)***	0.019 (.012)	0.210 (.015)***	-0.002 (.014)
Week 4	-0.303 (.010)***	0.002 (.011)	0.329 (.013)***	0.048 (.012)***
Constant	-0.594 (.027)***	-1.174 (.028)***	-2.529 (.035)***	-1.195 (.028)***
Pseudo R2	0.022	0.024	0.141	0.007
N	304,766	304,766	304,766	304,766

Sweden	Decided	Doubting	Undecided	Distant
Gender (ref=men)	-.113 (.026)***	.015 (.028)	.133 (.034)***	-.226 (.035)***
Age (ref=18-24)				
25-34	.014 (.062)	-.015 (.063)	.040 (.079)	-.067 (.084)
35-49	.044 (.057)	-.047 (.058)	-.077 (.073)	.111 (.076)
50-64	.179 (.057)**	-.148 (.059)*	-.182 (.075)*	.155 (.076)*
65=<	.271 (.062)***	-.207 (.064)***	-.215 (.082)**	.100 (.082)
Level of education (ref=lower than high-school)				
High-school degree	-.084 (.055)	-.009 (.061)	.242 (.085)**	.076 (.073)
Higher than high-school	-.184 (.056)***	.035 (.061)	.554 (.084)***	-.178 (.073)*
Direction of high PTVs				
Left-wing	-1.499 (.045)***	.577 (.037)***	2.257 (.044)***	-
Left	-.111 (.031)***	.577 (.032)***	1.567 (.042)***	-
Center	-1.300 (.047)***	.311 (.039)***	2.032 (.045)***	-
Right	-.428 (.031)***	.807 (.032)***	1.736 (.0439)***	-
Right-wing	.399 (.036)***	.380 (.039)***	.085 (.053)***	-
Weeks (ref=week1)				
Week 2	omitted	omitted	omitted	omitted
Week 3	-.072 (.038)*	.022 (.040)	.029 (.052)	.013 (.050)
Week 4	-.131 (.034)***	.0378 (.036)	.071 (.047)	.075 (.045)
Week 5	-.220 (.034)***	.011 (.035)	.278 (.044)***	-.076 (.045)
Constant	.072 (.077)	-1.529 (.081)***	-3.938 (.044)***	-1.765 (.100)***
Pseudo R2	.082	.035	.262	.006
N	29,131	29,131	29,131	29,131

Australia	Decided	Doubting	Distant
Gender (ref=men)	-.144 (.012)***	.372 (.017)***	-.096 (.011)***
Age (ref=18-24)			
25-34	-.043 (.018)*	.010 (.026)	.004 (.017)
35-49	-.075 (.018)***	-.014 (.026)	.047 (.016)**
50-64	-.082 (.019)***	.013 (.028)	-.063 (.018)***
65=<	.042 (.024)	-.111 (.036)**	-.318 (.023)***
Level of education (ref=lower than high-school)			
High-school degree	-.022 (.024)	.162 (.038)***	.023 (.021)
Higher than high-school	.047 (.022)*	.318 (.034)***	-.138 (.019)***
Direction of high PTVs			
Left-wing	-	-	-
Left	1.614 (.013)***	1.822 (.018)***	-
Center	-	-	-
Right	3.262 (.027)***	.040 (.029)	-
Right-wing	-	-	-
Weeks (ref=week1)			
Week 2	-.028 (.017)	-.010 (.025)	-.003 (.015)
Week 3	-.096 (.019)***	.168 (.027)***	.023 (.017)
Week 4	-.175 (.013)***	.229 (.019)***	.107 (.012)***
Constant	-.471 (.013)***	-3.362 (.042)***	-.546 (.024)***
Pseudo R2	.181	.119	.003
N	159,568	159,568	159,568

United Kingdom	Decided	Doubting	Undecided	Distant
Gender (ref=men)	-.295 (.055)***	.058 (.073)	.126 (.132)	.331 (.060)***
Age (ref=18-24)				
25-34	-.069 (.079)	-.070 (.102)	.074 (.179)	.168 (.090)
35-49	-.089 (.071)	-.245 (.095)**	-.202 (.172)	.406 (.081)***
50-64	.068 (.076)	-.281 (.100)**	-.318 (.183)	.088 (.087)
65=<	.306 (.104)**	-.293 (.135)*	-.161 (.253)	-.364 (.129)**
Level of education (ref=lower than high-school)				
High-school degree	-.074 (.128)	.463 (.191)*	-.040 (.298)	-.201 (.139)
Higher than high-school	-.140 (.126)	.545 (.189)**	.009 (.293)	-.126 (.137)
Direction of high PTVs				
Regionalist	-1.354 (.146)***	.835 (.142)***	3.161 (.163)***	-
Left	.474 (.064)***	1.115 (.079)***	2.066 (.129)***	-
Center	-.304 (.108)**	.868 (.124)***	2.126 (.162)***	-
Right	.862 (.068)***	1.012 (.081)***	.778 (.167)***	-
Right-wing	.669 (.078)***	1.211 (.090)***	.824 (.197)***	-
Weeks (ref=week1)				
Week 2	-.138 (.075)	.187 (.105)	-.057 (.210)	-.014 (.083)
Week 3	.002 (.072)	.183 (.098)	.325 (.179)	-.430 (.084)***
Week 4	-.035 (.089)	.266 (.117)*	.165 (.217)	-.371 (.105)***
Week 5	-.429 (.076)***	.398 (.101)***	.440 (.186)*	.061 (.081)
Constant	.118 (.141)	-2.925 (.211)***	-4.663 (.348)***	-1.105 (.154)***
Pseudo R2	.054	.084	.304	.020
N	6,790	6,790	6,790	6,790

France	Decided	Doubting	Undecided	Distant
Gender (ref=men)	-.173 (.008)***	.052 (.011)***	-.089 (.017)***	.184 (.009)***
Age (ref=18-24)				
25-34	-.155 (.012)***	-.069 (.015)***	.196 (.024)***	.141 (.012)***
35-49	-.105 (.015)***	-.179 (.016)***	.249 (.024)***	.010 (.013)
50-64	.083 (.014)***	-.249 (.018)***	.286 (.027)***	-.414 (.016)***
65=<	.263 (.021)***	-.334 (.028)***	.191 (.040)***	-.634 (.027)***
Level of education (ref=lower than high-school)				
High-school degree	.011 (.013)	.005 (.017)	-.002 (.024)	.164 (.015)***
Higher than high-school	.072 (.012)***	-.007 (.014)	-.027 (.021)	.220 (.013)***
Direction of high PTVs				
Left-wing	-.389 (.012)***	1.076 (.013)***	1.999 (.018)***	-
Left	.469 (.011)***	.933 (.012)***	1.425 (.018)***	-
Center	-.017 (.016)	.779 (.018)***	1.709 (.023)***	-
Right	.749 (.012)***	.802 (.015)***	1.032 (.022)***	-
Right-wing	.075 (.013)***	.941 (.015)***	1.659 (.021)***	-
Weeks (ref=week1)				
Week 2	-.190 (.012)***	.027 (.016)	.121 (.026)***	.154 (.014)***
Week 3	-.205 (.013)***	.052 (.018)**	.231 (.028)***	.117 (.015)***
Week 4	-.351 (.012)***	.147 (.015)***	.414 (.024)***	.118 (.013)***
Constant	-.209 (.017)***	-2.116 (.022)***	-4.369 (.036)***	-1.206 (.018)***
Pseudo R2	.027	.085	.235	.013
N	231,754	231,754	231,754	231,754

Spain	Decided	Doubting	Undecided	Distant
Gender (ref=men)	-.272 (.021)***	.250 (.026)***	.011 (.052)	.096 (.022)***
Age (ref=18-24)				
25-34	-.059 (.026)*	-.049 (.031)	-.066 (.062)	.127 (.027)***
35-49	-.058 (.025)*	-.221 (.033)***	-.091 (.063)	.325 (.027)***
50-64	.022 (.031)	-.307 (.039)***	-.078 (.075)	.261 (.032)***
65=<	.208 (.057)***	-.433 (.079)***	-.124 (.144)	.101 (.061)
Level of education (ref=lower than high-school)				
High-school degree	-.009 (.033)	.046 (.043)	.008 (.082)	.021 (.034)
Higher than high-school	.005 (.027)	.108 (.035)**	.093 (.068)	.039 (.028)
Direction of high PTVs				
Left-wing	.805 (.021)***	1.411 (.025)***	1.631 (.048)***	-
Left	.790 (.046)***	.774 (.05)***	1.809 (.078)***	-
Center	1.118 (.028)***	1.017 (.032)***	1.163 (.067)***	-
Right	.704 (.041)***	1.379 (.044)***	.857 (.102)***	-
Regionalist	-.691 (.039)***	.815 (.041)***	2.895 (.051)***	-
Weeks (ref=week1)				
Week 2	-.012 (.025)	-.057 (.033)	-.122 (.065)	.137 (.271)***
Week 3	-.111 (.029)***	-.019 (.037)	-.089 (.075)	.261 (.030)***
Week 4	-.191 (.034)***	.137 (.043)***	.123 (.080)	.140 (.036)***
Week 5	-.317 (.028)***	.164 (.035)***	.299 (.064)***	.246 (.029)***
Constant	-.404 (.037)***	-2.278 (.048)***	-4.591 (.064)***	-1.209 (.038)***
Pseudo R2	.054	.094	.242	.004
N	52,464	52,464	52,464	52,464

Turkey	Decided	Doubting	Undecided	Distant
Gender (ref=men)	-0.100 (.026)***	-0.010 (.038)	-0.298 (.079)***	0.097 (.026)***
Age (ref=18-24)				
25-34	-0.090 (.026)***	0.024 (.037)	0.049 (.068)	-0.001 (.026)
35-49	-0.037 (.031)	-0.001 (.044)	0.000 (.081)	-0.115 (.032)***
50-64	0.075 (.047)	-0.254 (.070)***	0.120 (.129)	-0.103 (.048)*
65=<	-0.218 (.102)*	-0.333 (.168)*	0.452 (.271)	0.328 (.099)***
Level of education (ref=lower than high-school)				
High-school degree	0.031 (.092)	-0.051 (.128)	-0.305 (.212)	-0.073 (.100)
Higher than high-school	-0.086 (.082)	-0.017 (.116)	-0.174 (.188)	0.213 (.089)*
Direction of high PTVs				
Left-wing	1.440 (.051)***	1.573 (.061)***	1.840 (.119)***	-
Left	1.826 (.026)***	1.585 (.039)***	1.541 (.079)***	-
Center	-2.109 (.047)***	1.869 (.043)***	3.110 (.063)***	-
Right	1.397 (.030)***	1.393 (.045)***	2.487 (.079)***	-
Right-wing	-0.370 (.035)***	1.844 (.041)***	2.819 (.065)***	-
Weeks (ref=week1)				
Week 2	0.076 (.029)**	-0.028 (.042)	0.030 (.079)	-0.105 (.030)***
Week 3	0.022 (.031)	-0.058 (.044)	0.153 (.083)	-0.104 (.031)***
Week 4	0.094 (.031)**	0.038 (.043)	0.171 (.077)*	-0.261 (.032)***
Constant	-0.383 (.087)***	-3.392 (.124)***	-5.860 (.211)***	-1.187 (.092)***
Pseudo R2	.149	.176	.398	.003
N	41,635	41,635	41,635	41,635

Bibliography

Aarts, K., & Semetko, H. A. (2003). The Divided Electorate: Media Use and Political Involvement. *Journal of Politics*, 65 (3), 759-784.

Abold, R. (2008). 1000 Mini Election Campaigns: The Utilization of Private Weblogs in the Run-Up to the 2005 German Election. In: Farrell, D. M., and Schmitt-Beck, R. (eds.), *Non-Party Actors in Electoral Politics. The Role of Interest Groups and Independent Citizens in Contemporary Election Campaigns*, Baden-Baden: Nomos, 209-235.

Agre, P. E. (2002). Real-Time Politics: the Internet and the Political Process. *The Information Society*, 18 (5), 311-331.

Alexander, J. C. (1981). The Mass News Media in Systemic, Historical and Comperative Perspective. In: Szecskö, T., & Katz, E. (eds.). *Mass Media and Social Change*. Bervely Hills: Sage, 17-51.

Alford, J. R., Funk, C. L., & Hibbing, J. R. (2005). Are Political Orientations Genetically Transmitted?. *American Political Science Review*, 99 (2), 153-167.

AlMaskati, N. A. (2012). Newspaper Coverage of the 2011 Protests in Egypt. *International Communication Gazette*, 74 (4), 342-366.

Alwin, D. F. (1992). Information Transmission in the Survey Interview: Number of Response Categories and the Reliability of Attitude Measurement. *Sociological methodology*, 83-118.

Anderson, J. & Fossen, T. (2014). Voting Advice Applications and Political Theory: Citizenship, Participation and Representation. In: Garzia, D., Marschall, S. (eds.). *Matching Voters with Parties and Candidates*. Colchester: ECPR Press, 217-226.

Andreadis, I. (2014). Data Quality and Data Cleaning. In: Garzia, D., Marschall, S. (eds.). *Matching Voters with Parties and Candidates*. Colchester: ECPR Press, 79-92.

Arnold, C., & Franklin, M. N. (2012). Introduction: Issue Congruence and Political Responsiveness. *West European Politics*, 35 (6), 1217-1225.

Asp, K. (1983). The Struggle for the Agenda: Party Agenda, Media Agenda, and Voter Agenda in the 1979 Swedish Election Campaign. *Communication Research*, 10 (3), 333-355.

Baka, A., Figgou, L., & Triga, V. (2012). “Neither Agree, Nor Disagree”: a Critical Analysis of the Middle Answer Category in Voting Advice Applications. *International Journal of Electronic Governance*, 5 (3), 244–263.

Bakker, P. (2002). Free Daily Newspapers – Business Models and Strategies. *The International Journal on Media Management*, 4 (3), 180-187

Bakker, T., Trilling, D., de Vreese, C., Helfer, L., & Schönbach, K. (2013). The Context of Content: The Impact of Source and Setting on the Credibility of News. *Recherches en Communication*, 40 (40), 151-168.

Ballarini, L. (2008). Presse Locale, un Média de Diversion. *Réseaux*, 148-149 (2), 405-426.

Banducci, S., Giebler, H., & Kritzinger, S. (2017). Knowing More from Less: How the Information Environment Increases Knowledge of Party Positions. *British Journal of Political Science*, 47 (03), 571-588.

Barnhurst, K. G., & Nerone, J. (2009). Journalism History. In: Wahl-Jorgensen, K., & Hanitzsch, T. (eds.). (2009). *The Handbook of Journalism Studies*, New York and London: Routledge, 17-28.

Bartels, L. M. (1987). Candidate Choice and the Dynamics of the Presidential Nomination Process. *American Journal of Political Science*, 31, 1–30.

Bartels, L. M. (1988). *Presidential Primaries and the Dynamics of Public Choice*. Princeton: Princeton University Press.

Bartels, L. M. (1996). Uninformed Votes: Information Effects in Presidential Elections. *American Journal of Political Science*, 40, 194–230.

Bartels, L. M. (2005). Homer Gets a Tax Cut: Inequality and Public Policy in the American Mind. *Perspectives on Politics*, 3 (1), 15-31.

Bassili, J. N. (1993). Response Latency Versus Certainty as Indexes of the Strength of Voting Intentions in a CATI Survey. *Public Opinion Quarterly*, 57 (1), 54-61.

Bassili, J. N., & Fletcher, J. F. (1991). Response-Time Measurement in Survey Research a Method for CATI and a New Look at Nonattitudes. *Public Opinion Quarterly*, 55 (3), 331-346.

Baum, M. A. (2003). Soft News and Political Knowledge: Evidence of Absence or Absence of Evidence?. *Political Communication*, 20 (2), 173-190.

Bayram, S. (2010). Political Parallelism in the Turkish Press, a Historical Interpretation. *Turkish Studies*, 11 (4), 579-611.

Benoit, K. & M. Laver (2006). *Party Policy in Modern Democracies*. London: Routledge.

Berg, H. van den, Mehciz, M., Houtkoop-Steenstra, H. and Holleman, B. (2002). *Opinie-Maken of Opinie-Meten. De Rol van Stellingvragen in Markt- en Opinieonderzoek*. Stichting voor Culturele Studies, Amsterdam.

Bigelow, N. S., Herrnson P. S. (2008). Interest Groups Activity in US Elections. In: Farrell, D. M., and Schmitt-Beck, R. (eds.), *Non-Party Actors in Electoral Politics. The Role of Interest Groups and Independent Citizens in Contemporary Election Campaigns*, Baden-Baden: Nomos, 45-65.

Bird, S. E. (1998). News We Can Use: An Audience Perspective on the Tabloidisation of News in the United States. *Javnost-The Public*, 5 (3), 33-49.

Blei, D. M., Ng, A. Y., & Jordan, M. I. (2003). Latent Dirichlet Allocation. *Journal of Machine Learning Research*, 3 (4-5), 993-1022.

Boy, D. & Chiche, J. (2009). L'Influence Décisive des Images. In: Cautrès, B. & Muxel, A. (eds.) *Comment Les Électeurs Font-Ils Leur Choix?*. Paris: Presses de Sciences Po, 101-126.

Budge, I. (2000). Expert Judgements of Party Policy Positions: Uses and Limitations in Political Research. *European Journal of Political Research*, 37 (1), 103-113.

Berelson, B. R., Lazarsfeld, P. F., & McPhee, W. N. (1954). *Voting: A Study of Opinion Formation in a Presidential Election*. Chicago: University of Chicago Press.

Blumler, J. G. (1992). *Television and the Public Interest*. London: Sage.

Blumler, J. G., & Gurevitch, M. (1975). Towards a Comparative Framework for Political Communication Research, In: Chafee, S. (ed.), *Political Communication: Issues and Strategies for Research*, London: Sage, 165-194.

Blumler, J. G., & Kavanagh, D. (1999). The Third Age of Political Communication: Influences and Features. *Political Communication*, 16(3), 209–230.

Bourdieu, P. (1996). *Sur la Télévision, Suivi de L'Emprise du Journalisme*, 33ème édition. Paris: Raisons d'agir éditions.

Brady, H. E., & Johnston, R. (2006). The Rolling Cross-Section and Causal Attribution. In: Brady, H., E., & Johnston, R. (2006). *Capturing Campaigns Effects*. Ann Arbor: Univeristy of Michigan Press, 164-195.

Brady, H. E., Johnston, R., & Sides, J. (2006). The Study of Political Campaigns. In: Brady, H., E., & Johnston, R. (2006). *Capturing Campaigns Effects*. Ann Arbor: Univeristy of Michigan Press, 1-26.

Brandenburg, H. (2002). Who Follows Whom? The Impact of Parties on Media Agenda Formation in the 1997 British General Election Campaign. *Harvard International Journal of Press/Politics*, 7 (3), 34–54.

Brants, K. (1998). Who's Afraid of Infotainment?. *European Journal of Communication*, 13 (3), 315-335.

Brants, K. & McQuail, D. (1997). The Netherlands. In: Østergaard, B. S. (ed.). (1997). *The Media in Western Europe: the Euromedia Handbook*. London: Sage, 153-167.

Bright, J., Garzia, D., Lacey, J., & Trechsel, A. (2016). Europe's Voting Space and the Problem of Second-Order Elections: A Transnational Proposal. *European Union Politics*, 17 (1), 184-198.

Broersma, M., & Graham, T. (2013). Twitter as a News Source: How Dutch and British Newspapers Used Tweets in Their News Coverage, 2007–2011. *Journalism Practice*, 7 (4), 446-464.

Buchanan, B. (2000). Regime Support and Campaign Reform. In: Bartels, L. M., & Vavreck, L. (eds.), *Campaign Reform: Insight and Evidence*. Ann Arbor: University of Michigan, 173-200.

Butler, D., & Stokes, D. (1969). *Political Change in Britain: Forces Shaping Electoral Choice*. London: Palgrave Macmillan.

Campbell, A., Converse, P., Miller, W., & Stokes, D. E. (1960). *The American Voter*. Ann Arbor, MI: University of Michigan Press.

Campbell, J. E. (2000). *The American Campaign*. College Station: Texas A&M University.

Capdevielle, J., Dupoirier, É., Grunberg, G., Schweisguth, É. & Ysmal, C. (1981). *France de Gauche, Vote à Droite*. Paris: Presses de la Fondation nationale des sciences politiques.

Caprara, G. V. (2008). Will Democracy Win?. *Journal of Social Issues*, 64 (3), 639-659.

Cardoso, G. (2011). From Mass to Networked Communication. In: Papathanassopoulos, S. (ed.). *Media Perspectives for the 21st Century*. London and New York: Routledge, 117-136.

Çarkoğlu, A. (2000). The Geography of the April 1999 Turkish Elections. *Turkish Studies*, 1 (1), 149-171.

Çarkoğlu, A. (2002). The Rise of the New Generation Pro-Islamists in Turkey: The Justice and Development Party Phenomenon in the November 2002 Elections in Turkey. *South European Society and Politics*, 7 (3), 123-156.

Çarkoğlu, A. (2010). Introduction, *Turkish Studies*, 11 (4), 513 - 519.

Çarkoğlu, A., & Yavuz, G. (2010). Press-Party Parallelism in Turkey: An Individual Level Interpretation. *Turkish studies*, 11 (4), 613-624.

Çarkoğlu, A. and Kalaycıoğlu, E. (2009) *The Rising Tide of Conservatism in Turkey*, New York: MacMillan Palgrave.

Çarkoğlu, A., Vitiello, T. & Moral, M. (2012). Voter Advice Applications in Practice: Answers to Some Key Questions from Turkey. *International Journal of Electronic Governance*, 5(3-4), 298-317.

Çarkoğlu, A., Krouwel, A. et Yildirim, K. (2013). Post-Arab Spring Elections: A Comparison of Voting Advice Applications Results. Paper at ECPR General Conference, 4-8 September, Bordeaux, France.

Çarkoğlu, A., Baruh, L., & Yildirim, K. (2014). Press-Party Parallelism and Polarization of News Media during an Election Campaign: The Case of the 2011 Turkish Elections. *The International Journal of Press/Politics*, 19 (3), 295-317.

Carmines, E. G. & Huckfeldt, R. (1996). Political Behavior: An Overview. In: Goodin, R. E. and Klingemann, H.-D. (eds.). *A New Handbook of Political Science*. New York: Oxford University Press, 223–254.

Carmines, E. G., & Stimson, J. A. (1980). The Two Faces of Issue Voting. *American Political Science Review*, 74 (1), 78-91.

Castells, M. (2002). *The Internet Galaxy: Reflections on the Internet, Business, and Society*. Oxford: Oxford University Press.

Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate behavioral research*, 1(2), 245-276.

Cautrès, B., & Jadot, A. (2009). Le Processus de la Décision Électorale. In: Cautrès, B. & Muxel, A. (eds.) *Comment Les Électeurs Font-Ils Leur Choix?*. Paris: Les Presses de Sciences Po, 27-43.

Cautrès, B., & Muxel, A. (2011). The process of electoral decision making. In: Cautrès, B., & Muxel, A. (eds.). *The New Voter in Western Europe, France and Beyond*. New-York: Palgrave Macmillan, 11-26.

Chalaby, J. K. (1996). Journalism as an Anglo-American Invention: A Comparison of the Development of French and Anglo-American Journalism, 1830s–1920s. *European Journal of Communication*, 11 (3), 303-326.

Chiche, J. and Dupoirier, É. (2013). De la Défaite de Nicolas Sarkozy au Triste Dixième Anniversaire de l'UMP. In: P. Perrineau (ed.) *Le Vote Normal. Les Élections Présidentielle et Législatives d'Avril-Mai-Juin 2012*. Paris: Les Presses de Sciences Po, 154-180.

Coleman, S. (1999). The New Media and Democratic Politics. *New Media & Society*, 1 (1), 67-74.

Connell, I. (1998). Mistaken Identities: Tabloid and Broadsheet News Discourse. *Javnost-the public*, 5 (3), 11-31.

Converse, P. E. (1962). Information Flow and the Stability of Partisan Attitudes. *Public Opinion Quarterly*, 26 (4), 578–599.

Converse, P. E. (1964). The Nature of Belief Systems in Mass Publics. In: Apter, D. E. (ed.). *Ideology and Discontent*. New York: Free Press.

Converse, P. E., & Pierce, R. (1986). *Political Representation in France*. Cambridge and London : Harvard University Press.

Costa Lobo, M., Vink, M. & Lisi, M. (2010). Mapping the Political Landscape: a Vote Advice Application in Portugal, In: Cedroni, L. & Garzia, D. (eds). *Voting Advice Applications in Europe. The State of the Art*, Napoli: ScriptaWeb, 143–185.

Couldry, N., Livingstone, S., & Markham, T. (2016). *Media Consumption and Public Engagement: Beyond the Presumption of Attention*. Hampshire and New York: Palgrave Macmillan.

Craig, S. C., Kane, J. G. & Gainous, J. (2005). Issue-Related Learning in a Gubernatorial Campaign: A Panel Study. *Political Communication*, 22 (4), 483–503.

Dahl, R. A. (1971). *Polyarchy: Participation and Opposition*. New Haven and London: Yale University Press.

Dalton, R. J. (1984). Cognitive Mobilization and Partisan Dealignment in Advanced Industrial Democracies. *The Journal of Politics*, 46 (1), 264-284.

Dalton, R. J. (2007). Partisan Mobilization, Cognitive Mobilization and the Changing American Electorate. *Electoral Studies*, 26 (2), 274-286.

Dalton, R. J. and Wattenberg, M. P. (2000). (eds.). *Parties Without Partisans Political Change in Advanced Industrial Democracies*, Oxford: Oxford University Press.

Dalton, R. J., & Wattenberg, M.P. (2000). Unthinkable Democracy: Political Change in Advanced Industrial Democracies. In: Dalton, R. J. & Wattenberg, M. P. (eds.). *Parties Without Partisans Political Change in Advanced Industrial Democracies*. Oxford: Oxford University Press, 3-16.

David, C. C. (2009). Learning Political Information From the News: A Closer Look at the Role of Motivation. *Journal of Communication*, 59 (2), 243–261.

De Luca, M., & Venturino, F. (2015). Democratizing Candidate Selection in Italy and France In: Sandri, G., Seddone, A., & Venturino, A. P. F. (eds.). *Party Primaries in Comparative Perspective*. Farnham and Burlington: Ashgate, 129–144.

Delli Carpini, M. X., & Keeter, S. (1996). *What Americans Know About Politics and Why It Matters*. New Haven: Yale University Press.

Denni, B., Lê, V. T. O., & Astor, S. (2012). Probabilités de Vote: Comportements et Préférences des Électeurs pour la Présidentielle de 2012. <http://sondages2012.ensai.fr/>. 7ème Colloque francophone sur les sondages, Nov. 2012, Rennes, France. Last accessed on 06 November 2017 via <http://hal.univ-grenoble-alpes.fr/halshs-00995597/document>.

DeVellis, R. F. (2016). *Scale development: Theory and applications* (Vol. 26). London: Sage publications.

Dervin, B. (1994). Information-Democracy: An Examination of Underlying Assumptions. *Journal of the American Society for Information Science*, 45 (6), 369-385.

van Dijk, C., Krouwel, A., & Boiten, M. (2013). Do parties and voters pursue the same thing? Policy Congruence Between Parties and Voters on Different Electoral Levels. Paper presented at the *2nd European Conference on Comparative Electoral Research*, last accessed on 06 November 2017 via: [http://true-european-voter.net/sites/default/files/Policy%20Congruence%20on%20Different%20Electoral%20Levels%20\(First%20Draft\).pdf](http://true-european-voter.net/sites/default/files/Policy%20Congruence%20on%20Different%20Electoral%20Levels%20(First%20Draft).pdf).

Doody, O., & Noonan, M. (2013). Preparing and Conducting Interviews to Collect Data. *Nurse Researcher*, 20 (5), 28-32.

Downs, A. (1957). *An Economic Theory of Voting*. New York: Harper and Row.

Dumont, P., & Kies, R. (2012). Smartvote.lu: Usage and Impact of the First VAA in Luxembourg. *International Journal of Electronic Governance*, 5 (3-4), 388–410.

Dupeux, G., Girard, A. & Stoetzel, J. (1960). Une Enquête par Sondage Auprès des Électeurs. In: Association Française de Science Politique. Le Référendum de Septembre et les Élections de Novembre 1958. Paris: Presses de la Fondation nationale des sciences politiques, 119-193.

Dupoirier, É., & Frogner, A.-P. (2009). Les Temporalités de la Décision Électorale: Approche Comparée de la France et de la Belgique (Wallonie). *Revue Française de Science Politique*, 59 (3), 507-533.

Durkheim, É. (1965). *The Rules of Sociological Method*, New York: Free Press.

Van der Eijk, C., Van der Brug, W., Kroh, M., & Franklin, M. (2006). Rethinking the Dependent Variable in Voting Behavior: On the Measurement and Analysis of Electoral Utilities. *Electoral Studies*, 25 (3), 424-447.

Ettema, J. S., & Glasser, T. L. (1987). Public Accountability or Public Relations? Newspaper Ombudsmen Define Their Role. *Journalism Quarterly*, 64 (1), 3-12.

Evans, G., Heath, A., & Lalljee, M. (1996). Measuring Left-Right and Libertarian-Authoritarian Values in the British Electorate. *British Journal of Sociology*, 93-112.

Evans, J. A. J. (2004). *Voters and Voting – An Introduction*, London: Sage Publications.

Eveland, Jr., W. P., & Scheufele, D. A. (2000). Connecting News Media Use with Gaps in Knowledge and Participation. *Political Communication*, 17 (3), 215-237.

Farrell, D. M., & Schmitt-Beck, R. (2008). Introduction: The Age of Non-party Actors? In: Farrell, D. M., & Schmitt-Beck, R. (eds.), *Non-Party Actors in Electoral Politics. The Role of Interest Groups and Independent Citizens in Contemporary Election Campaigns*. Nomos, Baden-Baden, 13-24.

Ferenczi, T. (1993). *L'Invention du Journalisme en France: Naissance de la Presse Moderne à la Fin du XIXe Siècle*. Paris: Plon.

Fiorina, M. P. (1990). Information and Rationality in Elections. In: Ferejohn, J. A., & Kuklinski, J. H. (eds.) *Information and Democratic Processes*. Urbana: University of Illinois Press, 329-342.

Fiorina, M. P., & Levendusky, M. S. (2006). Disconnected: The Political Class Versus the People. In: Nivola, P. S., & Brady, D. W. (eds.). *Red and Blue Nation? Characteristics and Causes of American Polarized Politics*. Washington: Brookings Institution Press, 49-71.

Fiorina, M. P., Abrams, S. J., & Pope, J. (2006). *Culture war?: The myth of a polarized America*. New York: Pearson Longman.

Fivaz, J., & Schwartz, D. (2007). Nailing the Pudding to the Wall – E-Democracy as Catalyst for Transparency and Accountability. Paper presented at the International Conference on Direct Democracy in Latin America, Buenos Aires, Brazil, last accessed on 06 November 2017 via https://www.researchgate.net/profile/Daniel_Schwarz8/publication/252545019_Nailing_the_Pudding_to_the_Wall_-_E-Democracy_as_Catalyst_for_Transparency_and_Accountability/links/53faf44d0cf20a4549702a56.pdf

Fossen, T., & Anderson, J. (2014). What's the Point of Voting Advice Applications? Competing Perspectives on Democracy and Citizenship. *Electoral Studies*, 36, 244-251.

Fournier, P., Nadeau, R., Blais, A., Gidengil, E., & Nevitte, N. (2004). Time-of-Voting Decision and Susceptibility to Campaign Effects. *Electoral Studies*, 23 (4), 661-681.

Fournier, P., Gélinau, F., & Harell, A. (2015). Can Voting Advice Applications be Useful for Electoral Studies?. *Revue Internationale de Politique Comparée*, 22 (2), 269-296.

Franklin, M. N., Mackie, T. T., & Valen, H. (1992). *Electoral Change: Responses to Evolving Social and Attitudinal Structures in Western Countries*. Cambridge: Cambridge University Press.

Freedman, P., Franz, M., & Goldstein, K. (2004). Campaign Advertising and Democratic Citizenship. *American Journal of Political Science*, 48 (4), 723-741.

Garzia, D. (2010). The Effects of VAAs on Users' Voting Behaviour: An Overview. In: Cedroni, L., & Garzia, D. (2010). *Voting Advice Applications in Europe: The state of the art*, Napoli: ScriptaWeb, 13-33.

Garzia, D., & Marschall, S. (2012). Voting Advice Applications under Review: the State of Research. *International Journal of Electronic Governance*, 5 (3-4), 203-222.

Garzia, D., & Marschall, S. (2014). *Matching Voters with Parties and Candidates*. Colchester: ECPR Press.

Gelman, A., Goel, S., Rothschild, D., & Wang, W. (2016). High-frequency polling with non-representative data. *Political Communication in Real Time: Theoretical and Applied Research Approaches*, 89.

Gemenis, K. (2012). Estimating Parties' Policy Positions through Voting Advice Applications: Some Methodological Considerations. *Acta Politica*, 48 (3), 268–295.

Gemenis, K. & van Ham, C. (2014). Comparing Methods for Estimating Parties' Positions in Voting Advice Applications. In: Garzia, D. & Marschall, S. (eds.), *Matching Voters with Parties and Candidates*, Colchester: ECPR Press.

Gemenis, K., & Rosema, M. (2014). Voting Advice Applications and Electoral Turnout. *Electoral studies*, 36, 281-289.

Genova, B. K., & Greenberg, B. S. (1979). Interests in News and the Knowledge Gap. *Public Opinion Quarterly*, 43 (1), 79-91.

Gerber, A. S., Huber, G. A., Doherty, D., Dowling, C. M., & Ha, S. E. (2010). Personality and Political Attitudes: Relationships across Issue Domains and Political Contexts. *American Political Science Review*, 104 (1), 111-133.

Giddens, A. (1990). *The Consequences of Modernity*. Stanford: Stanford University Press.

González Garibay, M., Van den Brande, K., Martins Gistelinck, M., Peels, R., & Vidal, M. (2008). *Political openness: an assessment of democracy*, Leuven: Leuven Centre for Global Governance.

De Graaf, J. (2010). The Irresistible Rise of Stemwijzer. In: Cedroni, L. & Garzia, D. (eds.), *Voting Advice Applications in Europe. The State of the Art*. Napoli: ScriptWeb, 35-46.

Gray, J., Chambers, L., & Bounegru, L. (2012). (eds.). *The Data Journalism Handbook: How Journalists Can Use Data to Improve the News*. Sebastopol: O'Reilly Media, Inc."

Griffiths, T. L., & Steyvers, M. (2004). Finding Scientific Topics. *Proceedings of the National academy of Sciences*, 101 (suppl. 1), 5228-5235.

Groot, L.F.M. (2003). Criteria to Evaluate Voting Indicators and a Recipe for a New One. Working Paper, Utrecht School of Economics.

Gumuscu, S. (2013). The Emerging Predominant Party System in Turkey. *Government and Opposition*, 48 (2), 223-244.

Hall, S., Critcher, C., Jefferson, T., Clarke, J., & Roberts, B. (1987). *Policing the Crisis: Mugging, the State and Law and Order*. London: Macmillan.

Hallin, D. C., & Mancini, P. (2004). *Comparing Media Systems: Three Models of Media and Politics*. New York: Cambridge University Press.

Hansen, J. M. (1998). Individuals, Institutions, and Public Preferences over Public Finance. *American Political Science Review*, 92 (3), 513-531.

Hansen, K. M., & Pedersen, R. T. (2014). Campaigns Matter: How Voters Become Knowledgeable and Efficacious During Election Campaigns. *Political Communication*, 31 (2), 303-324.

Hargittai, E. (2002). Second-Level Digital Divide: Differences in People's Online Skills. *First Monday*, 7 (4).

Hargittai, E. (2010). Digital Na(t)ives? Variation in Internet Skills and Uses among Members of the "Net Generation". *Sociological Inquiry*, 80 (1), 92-113.

Harkness, J. A., Braun, M., Edwards, B., Johnson, T. P., Lyberg, L., Mohler, P. P., Pennell, B.-E., & Smith, T. W. (2010). Comparative Survey Methodology. In: Harkness, J. A., Braun, M., Edwards, B., Johnson, T. P., Lyberg, L., Mohler, P. P., Pennell, B.-E., & Smith, T. W. (eds.). *Survey Methods in Multinational, Multiregional, and Multicultural Contexts*. Hoboken: John Wiley & Sons, 3-16.

Hellström, J. (2008). Who Leads, Who Follows? Re-Examining the Party-Electorate Linkages on European Integration. *Journal of European Public Policy*, 15 (8), 1127-1144.

Hirzalla, F., van Zoonen, L., & de Ridder, J. (2010). Internet Use and Political Participation: Reflections on the Mobilization/Normalization Controversy. *The Information Society*, 27 (1), 1-15.

Holbrook, T. M. (1996). *Do Campaigns Matter?* Thousand Oaks: Sage.

Holbrook, T. M. (1999). Political Learning from Presidential Debates. *Political Behavior*, 21 (1), 67-89.

Hooghe, M., & Teepe, W. (2007). Party Profiles on the Web: an Analysis of the Log Files of Nonpartisan Interactive Political Internet Sites in the 2003 and 2004 Election Campaigns in Belgium. *New Media & Society*, 9 (6), 965-985.

Hooghe, L., Bakker, R., Brigevich, A., De Vries, C., Edwards, E., Marks, G., Rovny, J., Steenbergen, M. & Vachudova, M. (2010). Reliability and Validity of the 2002 and 2006 Chapel Hill Expert Surveys on Party Positioning. *European Journal of Political Research*, 49 (5), 687-703.

Hopmann, D. N., Elmelund-Præstekær, C., Albæk, E., Vliegthart, R., & Vreese, C. H. D. (2012). Party Media Agenda-Setting: How Parties Influence Election News Coverage. *Party Politics*, 18 (2), 173-191.

Hurwitz, J. & Peffley, M. (1987). How Are Foreign Policy Attitudes Structured? A Hierarchical Model, *American Political Science Review*, 81 (4), 1099-1120.

Hultén, O. (2007). Between Vanishing Concept and Future Model: Public Service Broadcasting in Europe on the Move. In: Meier, W. A., & Trappel, J. (eds.). *Power, Performance and Politics: Media Policy in Europe*. Baden-Baden: Nomos, 197-222.

Inglehart, R. (1985). Aggregate Stability and Individual-Level Flux in Mass Belief Systems: The Level of Analysis Paradox. *American Political Science Review*, 79 (1), 97-116.

Inglehart, R. (1990). *Culture Shift in Advanced Industrial Society*. Princeton: Princeton University Press.

Inglehart, R. (1997). *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies*. Princeton: Princeton University Press.

Iyengar, S. (2011). What Does Information Technology Imply for Media Effects Research?. In: Papathanassopoulos, S. (ed.). *Media Perspectives for the 21st Century*. London and New York: Routledge, 55-67.

Jamieson, K. H. (1992). *Dirty Politics: Deception, Distraction, and Democracy*. New York: Oxford University Press.

Johnston, C. D., & Wronski, J. (2015). Personality Dispositions and Political Preferences across Hard and Easy Issues. *Political Psychology*, 36 (1), 35-53.

Johnston, R., & Brady, H. E. (2002). The Rolling Cross-Section Design. *Electoral Studies*, 21 (2), 283-295.

Kalathil, S., & Boas, T. C. (2003). Open Networks, Closed Regimes: The Impact of the Internet on Authoritarian Rule, Washington, D.C.: Carnegie Endowment for International Peace.

Kalaycıoğlu, E. (1999). The Shaping of Party Preferences in Turkey: Coping With the Post-Cold War Era. *New Perspectives on Turkey*, 20, 47-76.

Kam, C. D. (2007). When Duty Calls, Do Citizens Answer? *The Journal of Politics*, 69 (1), 17-29.

Kamoen, N., Holleman, B., Krouwel, A., Van de Pol, J., & De Vreese, C. (2015). The Effect of Voting Advice Applications on Political Knowledge and Vote Choice. *Irish Political Studies*, 30 (4), 595-618.

Karvonen, L. (2010). *The Personalisation of Politics: A Study of Parliamentary Democracies*. Colchester: ECPR Press.

Katakis, I., Tsapatsoulis, N., Mendez, F., Triga, V., & Djouvas, C. (2014). Social Voting Advice Applications – Definitions, Challenges, Datasets and Evaluation. *IEEE Transactions on cybernetics*, 44 (7), 1039-1052.

Kaya, R., & Çakmur, B. (2010). Politics and the Mass Media in Turkey. *Turkish Studies* 11 (4), 521–537.

Kaymas, S. A. (2011). Media Policy Paradigm Shift in Turkey: Rethinking Neo-Authoritarian Media Systems in the Age of Neo Liberalism. *Acta Universitatis Danubius. Communicatio*, 5 (1), 40-69.

Kenski, K., & Stroud, N. J. (2006). Connections between Internet Use and Political Efficacy, Knowledge, and Participation. *Journal of Broadcasting & Electronic Media*, 50 (2), 173-192.

Key, Jr., V. O. (1966). *The Responsible Electorate*. Cambridge: Belknap Press.

Kleinnijenhuis, J., & Krouwel, A. (2007). The Nature and Influence of Party Profiling Websites. Paper presented in Politicologenetmaal, Antwerp.

Kleinnijenhuis, J. & Krouwel, A. (2008). Simulation of Decision Rules for Party Advice Websites. In: Welsch, F., Carrasquero, J. V., Oropeza, A. & Chen, C. B. (eds.), *Proceedings of the 2nd International Multi-Conference on Society, Cybernetics and Informatics*, Orlando: IIS, 138-145.

Kleinnijenhuis, J. & Krouwel, A. (2009). Dimensionality of the European Issue Space. Paper presented at the NCCR Bern Workshop Vote Advice Applications, 12–13 November 2009, last accessed on 06 November 2017 via :

https://www.researchgate.net/profile/Andre_Krouwel3/publication/268328638_Dimensionality_of_the_European_Issue_Space_1_Dimensionality_of_the_European_issue_space/links/55c4bcaa08aeb9756741e6fd.pdf.

Knight, M. (2012). Journalism as Usual: The Use of Social Media as a Newsgathering Tool in the Coverage of the Iranian Elections in 2009. *Journal of Media Practice*, 13 (1), 61-74.

Knight, K., & Marsh, M. (2002). Varieties of Election Studies. *Electoral Studies*, 21 (2), 169-187.

Kriesi, H. (2008). Political Mobilisation, Political Participation and the Power of Vote. *West European Politics*, 31 (1-2), 147-168.

Krouwel, A., & van Elfrinkhof, A. (2014). Combining Strengths of Methods of Party Positioning to Counter Their Weaknesses: the Development of a New Methodology to Calibrate Parties on Issues and Ideological Dimensions. *Quality & Quantity*, 48 (3), 1455-1472.

Krouwel, A., & Fiers, S. (2008). From Text to Position. Text-Extraction and Authorisation of Party Positions along Dimensions of Political Competition. Paper presented at Voting Advice Applications between Charlatanism and Political Science, Antwerp, May, 16.

Krouwel, A., Vitiello, T., & Wall, M. (2012). The Practicalities of Issuing Vote Advice: a New Methodology for Profiling and Matching. *International Journal of Electronic Governance*, 5 (3-4), 223-243.

Ladner, A., & Pianzola, J. (2010). Do Voting Advice Applications Have an Effect on Electoral Participation and Voter Turnout? Evidence from the 2007 Swiss Federal Elections. In: Tambouris, E., Macintosh, A., & Glassey, O. (eds.). *Electronic Participation: Second International Conference, ePart 2010, Lausanne, Switzerland, August 29 - September 2, 2010, Proceedings*. Berlin: Springer Science & Business Media, 211 – 224.

Ladner, A., Felder, G., & Fivaz, J. (2010). More than Toys? A First Assessment of Voting Advice Applications in Switzerland. In: Cedroni L., & Garcia D. (eds.), *Voting Advice Applications in Europe. The State of the Art*, Naples: ScriptaWeb, 91–123.

Ladner, A., Fivaz, J., & Pianzola, J. (2012). Voting Advice Applications and Party Choice: Evidence From Smartvote Users in Switzerland. *International Journal of Electronic Governance*, 5 (3-4), 367-387.

Langer, J. (2003). Tabloid Television and News Culture: Access and Representation. In: Cottle, S. (ed.). *News, Public Relations and Power*. London: Sage, 135-151.

Lau, R. R., & Redlawsk, D. P. (2006). *How voters decide: Information processing in election campaigns*. Cambridge: Cambridge University Press.

Lavau, G. (1986). L'Électeur Devient-Il Individualiste? In: Birnbaum, P. and Leca, J. (eds.), *Sur l'Individualisme*, Paris: Presses de Sciences Po.

Laver, M., & Garry, J. (2000). Estimating Policy Positions from Political Texts. *American Journal of Political Science*, 44 (3), 619-634.

Lazarsfeld, P. F., Berelson, B., & Gaudet, H. (1948). *The People's Choice: How the Voter Makes up his Mind in a Presidential Campaign*. New York: Columbia University Press.

Le Hay, V. (2009). Le Panel Électoral Français 2007. In: Cautrès, B. & Muxel, A. (eds.) *Comment Les Électeurs Font-Ils Leur Choix?*. Paris: Presses de Sciences Po, 259-284.

Lecheler, S., & Kruikemeier, S. (2016). Re-Evaluating Journalistic Routines in a Digital Age: A Review of Research on the Use of Online Sources. *New Media & Society*, 18 (1), 156-171.

van Leuven, S., Deprez, A., & Raeymaeckers, K. (2014). Towards More Balanced News Access? A Study on the Impact of Cost-Cutting and Web 2.0 on the Mediated Public Sphere. *Journalism*, 15 (7), 850-867.

Lijphart, A. (1971). Comparative Politics and the Comparative Method. *American Political Science Review*, 65 (3), 682-693.

Lodge, M. & Taber, C. (2000). Three Steps towards a Theory of Motivated Political Reasoning, In: Lupia, A., Mccubbin, M. & Popkin, S. (eds.), *Elements of Political Reason: Understanding and Expanding the Limits of Rationality*, Cambridge: Cambridge University Press.

Lupia, A. (1994). Shortcuts versus Encyclopedias: Information and Voting Behavior in California Insurance Reform Elections. *American Political Science Review*, 88 (1), 63-76.

Lupia, A. & McCubbins, M. D. (1998). *The Democratic Dilemma: Can Citizens Learn What They Need to Know?*. Cambridge: Cambridge University Press.

Machill, M., & Beiler, M. (2009). The Importance of the Internet for Journalistic Research: A Multi-Method Study of the Research Performed by Journalists Working for Daily Newspapers, Radio, Television and Online. *Journalism Studies*, 10 (2), 178-203.

Maier, J., & Rittberger, B. (2008). Shifting Europe's Boundaries: Mass Media, Public Opinion and the Enlargement of the EU. *European Union Politics*, 9 (2), 243-267.

Mair, P. (1997). *Party System Change: Approaches and Interpretations*. Oxford: Oxford University Press.

Manin, B. (1997). *The Principles of Representative Government*. Cambridge: Cambridge University Press.

Marschall, S. (2008). The Online Making of Citizens: Wahl-O-Mat. In: Georgi, V. B. (ed.). *The Making of Citizens in Europe: New Perspectives on Citizenship Education*, Bonn: Bundeszentrale für politische Bildung, 137–141.

Marschall, S. (2014). Profiling Users. In: Garzia, D., & Marschall, S. (eds.). *Matching Voters with Parties and Candidates*. ECPR Press, 93-104.

Marschall, S., & Garzia, D. (2014). Voting Advice Applications in a Comparative Perspective: An Introduction. In: Garzia, D., & Marschall, S. (eds.). *Matching Voters with Parties and Candidates*. Colchester: ECPR Press, 1-10.

Marschall, S., & Schmidt, C. K. (2010). The Impact of Voting Indicators: The Case of the German Wahl-O-Mat. In: Cedroni, L., & Garzia, D. (eds.). *Voting Advice Applications in Europe. The State of the Art*. Napoli: ScriptaWeb, 65-90.

Marschall, S., & Schultze, M. (2012). Voting Advice Applications and Their Effect on Voter Turnout: the Case of the German Wahl-O-Mat. *International Journal of Electronic Governance*, 5 (3-4), 349–366.

Marks, G., Hooghe, L., Nelson, M., & Edwards, E. (2006). Party Competition and European Integration in the East and West: Different Structure, Same Causality. *Comparative Political Studies*, 39 (2), 155-175.

Marks, G., Hooghe, L., Steenbergen, M. R., & Bakker, R. (2007). Crossvalidating Data on Party Positioning on European Integration. *Electoral Studies*, 26 (1), 23-38.

Mayer, N. (2010). *Sociologie des comportements politiques*. Paris: Armand Colin.

Mazzoleni, G. (1995). Towards a 'Videocracy'? Italian Political Communication at a Turning Point. *European Journal of Communication*, 10 (3), 291-319.

Mazzoleni, G. (1987). Media Logic and Party Logic in Campaign Coverage: The Italian General Election of 1983. *European journal of communication*, 2(1), 81-103.

McAllister, I. (2002). Calculating or Capricious? The News Politics of Late Deciding Voters. In: Schmitt-Beck, R., & Farrell, D.M. (eds.). *Do Political Campaigns Matter? Campaign Effects in Elections and Referendums*. London: Routledge, 22-40.

McAllister, I. (2007). The Personalization of Politics. In: Dalton, R. J., & Klingemann, H.-D. (eds.). *Oxford Handbook of Political Behavior*, Oxford: Oxford University Press.

McCombs, M. E. & Shaw, D. L. (1972). The Agenda-Setting Function of Mass Media. *Public Opinion Quarterly*, 36 (2), 176-187.

McGregor, R. M. (2012). Voter Sincerity and the Time-of-Voting-Decision. *Electoral Studies*, 31 (4), 715-725.

McNair, B. (2009). Journalism and Democracy. In: Wahl-Jorgensen, K., & Hanitzsch, T. (eds.). (2009). *The Handbook of Journalism Studies*. New York and London: Routledge, 237-250.

McQuail, D. (2005). *McQuail's Mass Communication Theory*. 5th edition, London: Sage publications.

McQuail, D. (2006). Media Roles in Society. In: Carpentier, N., Pruulmann-Vengerfeldt, P., Nordenstreng, K., Hartmann, M., Vihalemm, P., & Cammaerts, B. (eds.). *Researching Media, Democracy and Participation*, Tartu: Tartu University Press, 47-58.

Mikhaylov, S., Laver, M., & Benoit, K. R. (2012). Coder Reliability and Misclassification in the Human Coding of Party Manifestos. *Political Analysis*, 20 (1), 78-91.

Messner, M., & Distaso, M. W. (2008). The Source Cycle: How Traditional Media and Weblogs Use Each Other as Sources. *Journalism Studies*, 9 (3), 447-463.

Messner, M., & South, J. (2011). Legitimizing Wikipedia: How US National Newspapers Frame and Use the Online Encyclopedia in Their Coverage. *Journalism Practice*, 5 (2), 145-160.

Mondak, J. J., & Halperin, K. D. (2008). A Framework for the Study of Personality and Political Behaviour. *British Journal of Political Science*, 38 (2), 335-362.

Mondak, J. J., Hibbing, M. V., Canache, D., Seligson, M. A., & Anderson, M. R. (2010). Personality and Civic Engagement: An Integrative Framework for the Study of Trait Effects on Political Behavior. *American Political Science Review*, 104 (1), 85-110.

Moon, S. J., & Hadley, P. (2014). Routinizing a New Technology in the Newsroom: Twitter as a News Source in Mainstream Media. *Journal of Broadcasting & Electronic Media*, 58 (2), 289-305.

Muxel, A. (2001). Les Choix Politiques des Jeunes à l'Épreuve du Temps: une Enquête Longitudinale. *Revue française de science politique*, 51 (3), 409-430.

Nadeau, R., Nevitte, N., Gidengil, E., & Blais, A. (2008). Election Campaigns as Information Campaigns: Who Learns What and Does It Matter?. *Political Communication*, 25 (3), 229-248.

Nadeau, R., Bélanger, É., Lewis-Beck, M.S., Cautrès, B., & Foucault, M. (2012). *Le vote des Français de Mitterrand à Sarkozy: 1988-1995-2002-2007*. Paris: Presses de Sciences Po.

Negrine, R. & Papathanassopoulos, S. (2011). The Transformation of Political Communication. In: Papathanassopoulos, S. (ed.). *Media Perspective for the 21st Century*. London and New York: Routledge, 41-54.

Negrine, R., Mancini, P., Holtz-Bacha, C., & Papathanassopoulos, S. (2007). (eds.). *The Professionalisation of Political Communication*. Bristol: Intellect Books and Chicago: University of Chicago Press.

Neveu, E. (2001). *Sociologie du journalisme*. Paris: La Découverte.

Neveu, E. (2002). The Four Generations of Political Journalism. In: Kuhn, R., & Neveu, E. (eds.). *Political Journalism: New challenges, New Practices*. Routledge. *Political Journalism. New Challenges, New Practices*. London: Routledge, 22-43.

Nisbett, R. E., & Wilson, T. D. (1977). Telling More Than We Can Know: Verbal Reports on Mental Processes. *Psychological review*, 84 (3), 231-259.

Nisbett, R. E., & Ross, L. (1980). *Human Inference: Strategies and Shortcomings of Social Judgment*. Englewood Cliffs: Prentice-Hall.

Norris, P. (2000). *A Virtuous Circle: Political Communications in Postindustrial Societies*. Cambridge: Cambridge University Press.

Norris, P. (2004). *Electoral Engineering: Voting Rules and Political Behavior*. Cambridge: Cambridge University Press.

Norris, P., & Sanders, D. (2003). Message or Medium? Campaign Learning During the 2001 British General Election. *Political communication*, 20 (3), 233-262.

Nie, N., Verba, S. & Petrocik, J. R. (1976). *The Changing American Voter*. Cambridge: Harvard University Press.

Nuytemans, M., Walgrave, S. & Deschouwer, K. (2010). Do the Vote Test: the Belgian Voting Aid Application. In: Cedroni, L., & Garzia, D. (eds.), *Voting Advice Applications in Europe. The State of the Art*, Napoli: ScriptaWeb, 125-142.

Ondercin, H. L., Garand, J. C., & Crapanzano, L. E. (2011). Political Learning during the 2000 US Presidential Election: The Impact of the Campaign on the Gender Gap in Political Knowledge. *Electoral Studies*, 30 (4), 727-737.

Owen, G., & Grofman, B. (2006). Two-Stage Electoral Competition in Two-Party Contests: Persistent Divergence of Party Positions. *Social Choice and Welfare*, 26 (3), 547-569.

Özcan, E. (2010). The Role of the State in Turkish Media in Light of Hallin and Mancini's Comparative Media Systems. Paper presented at the Annual Meeting of the International Communication Association TBA. San Francisco. California.

Panbianco, A. (1988). *Political Parties: Organization and Power*. Cambridge: Cambridge University Press.

Papacharissi, Z. (2002). The Virtual Sphere: The Internet as a Public Sphere. *New Media & Society*, 4 (1), 9-27.

Parasie, S., & Dagiral, E. (2013). Data-Driven Journalism and the Public Good: "Computer-Assisted-Reporters" and "Programmer-Journalists" in Chicago. *New Media & Society*, 15 (6), 853-871.

Patterson, T. E., & Donsbach, W. (1993). Press-Party Parallelism: A Cross-National Comparison. Paper presented at Annual Meeting of the International Communication Association, Washington, DC.

Patterson, T. E. (2000). Doing Well and Doing Good. How Soft News and Critical Journalism Are Shrinking the News Audience and Weakening Democracy. Harvard University, John F. Kennedy School of Government.

Paulussen, S., & Harder, R. A. (2014). Social Media References in Newspapers: Facebook, Twitter and YouTube as Sources in Newspaper Journalism. *Journalism Practice*, 8 (5), 542-551.

Percheron, A. (1993). *La Socialisation Politique*, Paris, Armand Coling.

Perrineau, P. (2013). (ed.). *Le Vote Normal. Les Élections Présidentielle et Législatives d'Avril-Mai-Juin 2012*. Paris: Les Presses de Sciences Po.

Piar, C. (2013). Des Campagnes Sous l'Emprise de la Conjuncture. In: P. Perrineau (ed.) *Le Vote Normal. Les Élections Présidentielle et Législatives d'Avril-Mai-Juin 2012*. Paris: Les Presses de Sciences Po, 20-33.

Picard, R. G. (2004). Commercialism and Newspaper Quality. *Newspaper Research Journal*, 25 (1), 54-65.

Pitkin, H. F. (1967). *The concept of representation*. Berkeley: University of California Press.

Plasser, F., & Plasser, G. (2002). *Global Political Campaigning: A Worldwide Analysis of Campaign Professionals and Their Practices*. Westport : Greenwood Publishing Group.

Van de Pol, J., Holleman, B., Kamoen, M., Krouwel, A. & De Vreese, C. H. (2014). Beyond Young, Highly Educated Males: A Typology of VAA Users. *Journal of Information Technology & Politics*, 11(4), 397-411.

Pollock, P. H., Lilie, S. A., & Vittes, M. E. (1993). Hard Issues, Core Values and Vertical Constraint: The Case of Nuclear Power. *British Journal of Political Science*, 23 (1), 29-50.

Popkin, S. L. (1994). *The Reasoning Voter: Communication and Persuasion in Presidential Campaigns*, (2nd ed.). Chicago: University of Chicago Press.

van Praag, P. (2007). De Stemwijzer: Hulpmiddel voor de Kiezers of Instrument van Manipulatie? Paper presented at the Politicologenetmaal 31 mei en 1 juni Antwerpen.

Prior, M. (2007). *Post-Broadcast Democracy: How Media Choice Increases Inequality in Political Involvement and Polarizes Elections*. New York: Cambridge University Press.

Rabinowitz, G., & Macdonald, S. E. (1989). A Directional Theory of Issue Voting. *American Political Science Review*, 83 (1), 93-121.

Ramonaité, A. (2010). Voting Advice Applications in Lithuania: Promoting Programmatic Competition or Breeding Populism?. *Policy & Internet*, 2 (1), 117-147.

Redlawsk, D. P. (2002). Hot Cognition or Cool Consideration? Testing the Effects of Motivated Reasoning on Political Decision Making. *Journal of Politics*, 64(4), 1021-1044.

Rheingold, H. (2000). *The Virtual Community: Homesteading on the Electronic Frontier*. Cambridge: MIT Press.

Rokkan, S. (1969). Cross-National Survey Research: Historical, Analytical and Substantive Context. In: Rokkan, S., Verba, S., Viet, J., & Almsy, E. (1969). *Comparative Survey Analysis*. The Hague: Mouton, 3-55.

Ruusuvirta, O. (2010). Much ado about nothing? Online Voting Advice Applications in Finland. In: Cedroni, L & Garzia, D. (eds.), *Voting Advice Applications in Europe. The State of the Art*, Napoli: ScriptaWeb, 47-64.

Sartori, G. (1973). What is “Politics”. *Political Theory*, 1 (1), 5-26.

Sartori, G. (1976). *Parties and Party Systems: A Framework for Analysis*, Cambridge: Cambridge University Press.

Scheufele, D. A., & Tewksbury, D. (2007). Framing, Agenda Setting, and Priming: The Evolution of Three Media Effects Models. *Journal of communication*, 57 (1), 9-20.

Schultze, M. (2014). Effects of Voting Advice Applications (VAAs) on Political Knowledge about Party Positions. *Policy & Internet*, 6 (1), 46-68.

Schudson, M. (1998). *The Good Citizen: A History of American Civic Life*. New York: Martin Kessler Books.

Schudson, M. (2010). Political Observatories, Databases & News in the Emerging Ecology of Public Information. *Daedalus*, 139 (2), 100–109.

Schuszler, P., de Graaf, J. & Lucardie, P. (2003). Zin en onzin over de StemWijzer 2002: een reactie, *Beid en Maatschappij*, 30 (3), 194-200.

Seymour-Ure, C. (1974). *The Political Impact of Mass Media*, London: Sage Publications.

Siebert, F. S., Peterson, T., & Schramm, W. (1956). *Four Theories of the Press: The Authoritarian, Libertarian, Social Responsibility, and Soviet Communist Concepts of What the Press Should Be and Do*. Urbana: University of Illinois Press.

Shikano, S. & Küntzler, T. (2013). Identifying the Ideological Space of German State-Level Party Competition Using VAAs. Paper presented at the ECPR General Conference, 4-7 September, Bordeaux, France.

Soroka, S., Lawlor, A., Farnsworth, S., & Young, L. (2013). Mass Media and Policymaking. In: Araral, Jr., E., Fritzen, S., Howlett, M., Ramesh, M. & Wu, X. (eds.). *Routledge Handbook of Public Policy Process*, London: Routledge, 204-214.

Steenbergen, M. R., & Marks, G. (2007). Evaluating Expert Judgments. *European Journal of Political Research*, 46 (3), 347-366.

Stimson, J.A. (2004). *Tides of Consent: How Opinion Movements Shape American Politics*. Cambridge: Cambridge University Press.

Sturgis, P., Roberts, C., & Smith, P. (2014). Middle Alternatives Revisited: How the Neither/Nor Response Acts as a Way of Saying “I Don’t Know”? *Sociological Methods & Research*, 43 (1), 15-38.

Swanson, D. L. (2004). Transnational Trends in Political Communications. In: Esser, F., & Pfetsch, B. (eds.). *Comparing Political Communication. Theories, Cases, and Challenges*. Cambridge: Cambridge University Press, 45-63.

Swanson, D. L., & Mancini, P. (1996). *Politics, Media, and Modern Democracy: An International Study of Innovations in Electoral Campaigning and Their Consequences*. Westport: Greenwood Publishing Group.

Tiberj, V., Denni, B., & Mayer, N. (2013). Un Choix, des Logiques Multiples. *Revue française de science politique*, 63 (2), 249-278.

Tichenor, P. J., Donohue, G. A., & Olien, C. N. (1970). Mass Media Flow and Differential Growth in Knowledge. *Public Opinion Quarterly*, 34 (2), 159-170.

Trechsel, A. H. & Mair, P. (2011). When Parties (also) Position Themselves: An Introduction to the EU Profiler, *Journal of Information Technology & Politics*, 8 (1), 1 - 20.

Vassil, K. (2011). Role of Self Selection in Estimating the Effects of Voting Advice Applications. Empirical Evidence on the Basis of Swiss Smartvote Data. Paper presented at the 6th ECPR General Conference, University of Iceland, Reykjavik, August, 25-27, last accessed on 06 November 2017 via <https://ecpr.eu/Filestore/PaperProposal/feae5a69-4418-494f-9155-e527c381f918.pdf>.

Verba, S. (1969). The Uses of Survey Research in the Study of Comparative Politics: Issues and Strategies. In: Rokkan, S., Verba, S., Viet, J., & Almsy, E. (eds.). *Comparative Survey Analysis*. The Hague: Mouton, 56-106.

Verhulst, B., Eaves, L. J., & Hatemi, P. K. (2012). Correlation Not Causation: The Relationship between Personality Traits and Political Ideologies. *American Journal of Political Science*, 56 (1), 34-51.

Vincent, D. (2000). *The Rise of Mass Literacy: Reading and Writing in Modern Europe*. Cambridge: Polity Press.

Vitiello, T. (2014). Les Études Électorales à l'Ère d'Internet. Les Systèmes d'Information et d'Aide au Vote: le Cas de 'La Boussole Présidentielle'. In: Gerstlé, J., & Magni-Berton, R. (eds.). 2012, *La Campagne Présidentielle. Observer les Médias, les Électeurs, les Candidats*. Paris: Ed. Pepper-L'Harmattan.

Vitiello, T., & Krouwel, A. (2015). Voting Advice Applications as A New Analytical Tool to Analyse Campaign Dynamics: the Case of the French Boussole présidentielle. *Revue internationale de politique comparée*, 22 (2), 203-229.

de Vreese, C. H., & Boomgaarden, H. G. (2006a). Media Message Flows and Interpersonal Communication: The Conditional Nature of Effects on Public Opinion. *Communication Research*, 33 (1), 19-37.

de Vreese, C. H., & Boomgaarden, H. G. (2006b). Media Effects on Public Opinion about the Enlargement of the European Union. *Journal of Common Market Studies*, 44 (2), 419-436.

Wagner, M., & Ruusuvirta, O. (2011). Matching Voters to Parties: Voting Advice Applications and Models of Party Choice. *Acta Politica*, 47(4), 400-422.

Walgrave, S. (2008). Again, the Almighty Mass Media? The Media's Political Agenda-Setting Power According to Politicians and Journalists in Belgium. *Political Communication*, 25 (4), 445-459.

Walgrave, S., & Van Aelst, P. (2006). The Contingency of the Mass Media's Political Agenda Setting Power: Toward a Preliminary Theory. *Journal of Communication*, 56 (1), 88-109.

Walgrave, S., Van Aelst, P., & Nuytemans, M. (2008). Do the Vote Test: The Electoral Effects of a Popular Vote Advice Application at the 2004 Belgian Elections. *Acta Politica*, 43 (1), 50-70.

Walgrave, S., Nuytemans, M., & Pepermans, K. (2009). Voting Aid Applications and the Effect of Statement Selection. *West European Politics*, 32 (6), 1161–1180.

Wall, M., Sudulich, M. L., Costello, R., & Leon, E. (2009). Picking Your Party Online – An Investigation of Ireland’s First Online Voting Advice Application. *Information Polity*, 14 (3), 203–218.

Wall, M., Krouwel, A., & Vitiello, T. (2014). Do Voters Follow the Recommendations of Voter Advice Application Websites? A Study of the Effects of Kieskompas.nl on Its Users’ Vote Choices in the 2010 Dutch Legislative Elections. *Party Politics*, 20 (3), 416-428.

Webb, P., Farrell, D., & Holliday, I. (2002). (eds.). *Political parties in advanced industrial democracies*. New York: Oxford University Press.

Webster, F. (2011). Information and Democracy: the Weakening of Social Democracy. In: Papathanassopoulos, S. (ed.). *Media Perspectives for the 21st Century*. London and New York: Routledge, 21-40.

Wheatley, J. (2012). Using VAAs to Explore the Dimensionality of the Policy Space: Experiments from Brazil, Peru, Scotland and Cyprus. *International Journal of Electronic Governance*, 5 (3-4), 318–348.

Wilensky, H. L. (1964). The Professionalization of Everyone?. *American Journal of Sociology*, 70 (2), 137-158.

Wlezien, C. (2005). On the Salience of Political Issues: The Problem with ‘Most Important Problem’, *Electoral Studies* 24 (4), 555-579.

Wright, S. (2012). Politics as Usual? Revolution, Normalization and a New Agenda for Online Deliberation. *New Media & Society*, 14 (2), 244-261.

Zaller, J. (1992). *The Nature and Origins of Mass Opinion*. New York: Cambridge University Press.

Zaller, J. (2003). A New Standard of News Quality: Burglar Alarms for the Monitorial Citizen. *Political Communication*, 20 (2), 109-130.