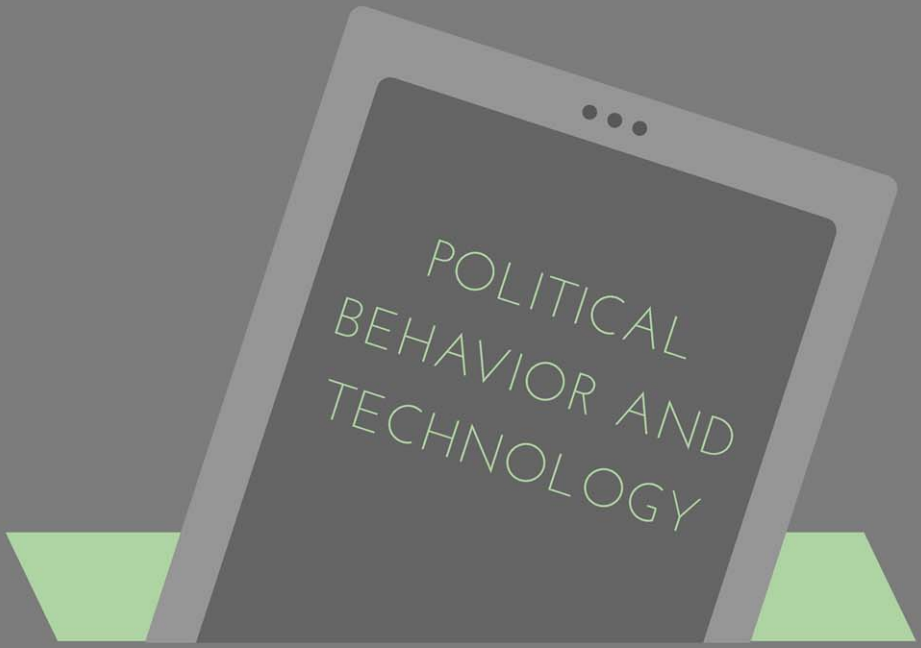

Voting Advice Applications in East Asia

EDITED BY DA-CHI LIAO, BOYU CHEN,
AND MICHAEL J. JENSEN

POLITICAL BEHAVIOR AND TECHNOLOGY

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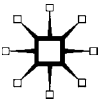

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CHAPTER 1

INTRODUCTION

Michael J. Jensen, Da-chi Liao, and Boyu Chen

Internet use by parties, citizens, and various organized interests has been transforming political participation across much of the world. While much of this research has searched for internet effects on political participation (Boulianne 2009; Bimber 2003; Best and Krueger 2005; Gibson and Cantijoch 2011; Tolbert and McNeal 2003; Gainous and Wagner 2011), more recent work has turned its attention to the manner in which the internet has become imbricated in political processes and contexts (Jensen, Jorba, and Anduiza 2012; Vaccari 2013; Crozier 2012). That is to say, the internet is more usefully conceived of not as an independent variable related to behavior but a communication space in which political life takes place along with the sundry other spaces of political communication. And despite the common technical architectures of these online spaces, the factors that give rise to their use, the political identities performed, and the consequences of this activity are subject to the wider political context in which they operate. For this reason, it is useful to investigate the use and implications of online political tools and communication in locations outside of familiar Western contexts (Anduiza, Jensen, and Jorba 2012; Howard and Hussain 2013). This book considers the operation of computerized voting advice applications (VAAs) and the consequences they have

on voters in East Asia's three consolidated democratic systems: Japan, South Korea, and Taiwan.

VAAs have become a widespread feature of European elections. They were first introduced with the development of *StemWijzer* ("vote smarter") in the Netherlands in 1989 (Garzia et al. 2014). VAAs intervene in an increasingly crowded space of campaign communications in which the production of information is not an instrumental process for achieving a result but rather an end in itself as various parties continually contest and seek to define issues (Crozier 2012). The recent emergence of VAAs in the East Asian democracies of Japan, South Korea, and Taiwan is a natural extension of online use in these countries, which rank among the heaviest users of the internet (Internet World Statistics 2015). Nevertheless, the use of the internet by political parties and others for campaign purposes has been significantly restricted in Japan and South Korea whereas in Taiwan, it is common to make widespread use of social media and other online spaces to conduct formal and informal campaigning (Wilson 2012). In South Korea, the restrictions on political speech are agreed to by both of the major parties of the left and the right as a way to contain the emergence of other parties. So restrictive are these rules that in recent years, Freedom House has downgraded South Korea's freedom of the press to "partly free" (Haggard and You 2015). VAAs, however, participate in the extensive online flows of electoral information, shaping the organization of political space in Taiwan. Given the constraints on online campaigning in Japan and South Korea, VAAs play a unique role in providing online information about parties and candidates, as they do not constitute formal campaigning for any candidate or party. VAAs in Japan and South Korea, therefore, are not subject to the same restrictions on online campaigning and therefore can exercise influence on a less crowded stage.

Although VAAs are an indirect form of campaigning, they may have consequences for the wider campaign and electoral context. In European practice, the results of VAAs have been shown to influence how parties campaign, reacting to information

from voters' use of the applications, and it has been found that they legitimate parties that otherwise would have received little consideration by voters (Garzia et al. 2014). As the use of VAAs is growing beyond the large party systems of European parliamentary democracies into an Asian context, new questions are emerging about the nature of political information, its role in shaping vote choices, the implications of VAAs for parties, and the cultural and institutional mediation of these technologies.

Consequences of VAAs on Political Campaigning

VAAs and Voter Guides

Voter guides have been around as long as people have been voting on a mass scale. Voting advice used to be predominantly a function of political parties and formal organizations such as churches, unions, or other civil society groups. Whether the advice is dispensed through paper or a digital format is not what makes VAAs particularly interesting as a topic of study. Two factors distinguish computer-based VAAs from paper voter guides, which have existed for as long as elections have been held. First, whereas voting guides indicate what positions parties and candidates favor or provide reasons to vote for one party or against another, these computerized applications guide users through a series of questions, and then users are matched with parties based on preference proximity, which can lead voters to be identified with unexpected parties or candidates. VAAs therefore can, in principal, have a transformative impact on voters, however limited those effects may be empirically (Garzia et al. 2014, 33). Second, computerized VAAs are often organized by groups of academics and/or journalists for research purposes. Consequently, VAAs are potentially independent of the agendas often promoted by voter guides that are produced and funded by various interest groups with an agenda in mind. This is not to say that VAAs are neutral advice platforms, as academics and journalists construct the issue space of the election according to some criteria and devise the algorithm for spatially rendering users in relation to parties and candidates. Issue selection and the algorithmic representation of

political space can have significant consequences for the voting advice these applications render. Different algorithms for representing the proximity of candidates and parties to voters have been shown to produce different voting advice (Louwerse and Rosema 2014). These applications thus play a role in computationally rendering political space and political relationships, which themselves can become the subject of political contestation by parties and candidates.

Electoral Campaigns and Political Information: Downs and Beyond

Electoral campaigns perform many functions. Campaigns enable candidates and party leaders to demonstrate leadership; activate supporters to engage in fundraising and organizing; provide social integration of supporters and various constituencies; create an aesthetic experience and candidate narrative; and perform instrumental functions associated with defining issue spaces and persuading voters (Gronbeck 1978). In Anthony Downs's account of electoral democracy, the informational instrumental aspects of campaigning implicate the "basic logic of voting" (1957, 36). In Downs's view, if voters are assumed to be rational utility maximizers, they will select parties and candidates with policies that are closest to their own preferences. Knowledge about policies in party manifestos is one aspect of the informational requirements of functioning electoral democracies. However, as Robert Dahl (1989, 338–339) argues, closing the gap between elites and citizens requires reducing the knowledge gap regarding policy trade-offs, risk assessment, and the like so that informed choices can be made. Such demands go beyond what a VAA can provide, particularly given the role played by events, on the one hand, and by networks of persons within the civil service and other agencies inside and outside of government, on the other hand, in shaping the policies that are adopted and their manner of implementation (Kooiman 2003; Bang 2003; Rhodes 2007). Candidate and party manifestos are but one of many potential considerations in vote choices. The complexity of political systems today renders vote

choices based solely on pre-election policy positions a weak basis on which to democratically steer political systems.

Though the informational demands of contemporary democracies exceed what VAAs can bring to the table, they may have effects on political campaigning and political behavior that are ultimately significant. As campaigns have incentives to convince voters of their proximity where no such connection exists, VAAs have been introduced to address the problem of connecting voter preferences with party policies. However, contemporary information dynamics are more complex, rendering VAAs not a neutral tool for maximizing voter utility satisfaction. Instead, they may be playing a more active role in shaping the informational space of political campaigns, particularly in these three Asian countries. How VAAs impact campaign informational space is in part connected to two related events, changes in the electoral systems of Japan, South Korea, and Taiwan, and changes in the electorate and their relationship with political parties. We will begin with changes in the informational space of political campaigns and its effects on the relationship between parties and voters.

Trends in Party Identification

Political parties have been undergoing significant transformation over the last 40 years or more. These changes have been driven by three trends. First, increasing complexity in societies, indicated by the growing differentiation of subsystems, has given rise to highly varied identifications that belie a stable, unidimensional ideological organization of political space (Swanson and Mancini 1996). The stable links between social cleavages, formal political organizations, and political parties have yielded to more fluid identifications and organizational practices. Although a mass party in its pure form has never really existed, cartel parties have emerged as an alternative model, focusing more on the provision of a package of policies marketed to electorates than an ideologically coherent set of policies addressing the interests of a particular cleavage (Katz and Mair 1995; 2009). This removes

ideological shortcuts and the cues supplied by one's cleavage to inform vote choices.

A second trend is the growth of "cognitive mobilization." Traditionally, political parties were the primary source of political information for most people (Michels 1966; Swanson and Mancini 1996). However, with improving levels of education and the increasing availability of political information produced by sources apart from parties and candidates, voters are becoming informed on their own (Dalton 1984; Dalton 2007b). In particular, online information sources often make available to a greater degree marginal or dissident views, which translates into support for nontraditional politics and ideologies (Gainous, Wagner, and Abbott 2015). VAAs are an extension of this process, providing independent accounts of the policy positions that the parties claim to advocate. Cognitive mobilization and modernization and growing social complexity, and the resulting decline in party membership and identification have undermined the stable identification between voters and parties in the West, where these relationships had endured for some time.

The consequences of the weakening of the cleavage system and the growth of cognitive mobilization have given rise to widespread declines in party identification. Across industrialized democracies in both the West and Asia, there has been a significant decline in strong and stable identification with political parties (Dalton 2007a; Dalton and Wattenberg 2002). This is not to say the era of political parties has come to an end, as in places such as Spain where there has been a significant erosion of trust in the largest parties, new parties are emerging at an incredible pace (Tormey 2015). But those parties often form and disappear quite quickly without gaining significant and enduring followings.

To the extent ties between political parties and electorates have been in decline in the West, there are historical and institutional factors that further weaken party identification in East Asian democracies. Japan, South Korea, and Taiwan all have experienced electoral domination by a center-right party for

most of their recent experience with democracy, with a brief period of governance by the main opposition party (Grofman 1999). The South Korean party system is weakly institutionalized with little widespread identification (Hicken and Kuhonta 2014). The Japanese experience of historical domination by the Liberal Democratic Party (LDP) has continued under electoral reforms that have reduced proportional outcomes in urban areas and continued LDP success in the countryside (Jou 2010). The idea of distance from a party or a party as "a way of perception" resonates better than Western notions of party identification, but these measures of proximity or acceptance of party frames remains weak (Matsumoto 2015, 95). The Kuomintang (KMT) party in Taiwan has likewise commanded legislative majorities for most of the country's existence postdemocratization (Grofman 1999). Yet party attachments in Taiwan are weak and volatile, with large numbers of voters not strongly identified with any party (Ho et al. 2013).

Elections and Electoral Systems

Japan, South Korea, and Taiwan each have their unique histories in transitioning to democracy, but there are some commonalities as well. Each of these countries, following a transition to democracy, has seen a period of dominance by a single party and the emergence of electoral systems that combine electoral districts, with voters selecting candidates in multimember districts using a single nontransferable vote with proportional representation based on party lists (Grofman 1999). These systems have been replaced by a combination of single-member districts and party lists (Rich 2014; Gallagher 1998). The use of VAAs emerged in the Benelux countries, in which parliamentary democracy combined with proportional representation have given rise to a large number of parties with parliamentary representation and, often, coalition governments. Such conditions create greater informational demands for voters as compared to two-party systems, in which the choice is a matter of two competing policy agendas, leadership qualities, and governing capacities.

To compare the level of electoral competition in Japan, South Korea, and Taiwan, we consider the effective number of parties in parliament of these three countries in comparison to their European counterparts, in which the use of VAAs was originally popularized. To compare the party systems in these European countries and those of Japan, South Korea, and Taiwan, we use a measure of the *effective number of parties* developed by Laakso and Taagepera (1979). The effective number of parties is calculated as $1/\Sigma\ p_i^2$, where p denotes the fractional seat share for the i^{th} party summed over parties 1 to n, the total number of parties with representation in parliament. Although the effective number of parties can be calculated based on vote share, the seat share results are more robust and intuitive across cases (Lijphart 2012). The properties of this measure range from 1, where all of the seats are held by the same party, to S, the total number of seats in a legislative body. An effective number of parties equal to S would indicate that each seat is held by a different party. Although there are other measures of concentration such as entropy measures, and the Herfindahl-Hirshman measure of concentration, entropy-based measures tend to overstate the significance of very small parties, and the concentration measures tend to understate the significance of party systems with larger numbers of parties (Taagepera 2007). The effective number of parties based on seat share is calculated for the last

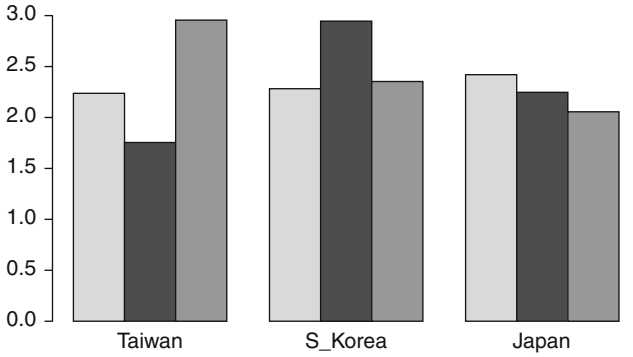

Figure 1.1 Effective number of parties in last three elections.

three legislative elections in each of these countries. The results are presented in Figure 1.1.

Across the Benelux and Scandinavian party systems, the effective number of parties in parliament is generally high, ranging from four to six effective parties (Lijphart 2012; Budge et al. 2014). This is not the same situation faced in Japan, South Korea, and Taiwan, which have been roughly two-party systems across all three countries over the last three election cycles. Despite their parliamentary form of government and historical use of proportional voting systems, such as the single nontransferable vote and party lists, the effective number of parties in these three cases is between 1.7 and 3, the same effective number of parties as commonly found among majoritarian systems (Bormann and Golder 2013).

These figures hide the dominance of the majority winning party in most of these elections, which bring these countries functionally to a one-party system. Dunleavy and Boucek (2003) suggest averaging the effective number of parties with the fractional seat share of the largest party. While no measure is perfect, for the sake of conceptual clarity, we keep these measures separate as each denotes different properties. The fractional share of the largest party seat share is calculated as $1/p_i$. In contrast to the effective number of parties, this measure indicates the extent to which changes in the electoral system, campaigning, or other

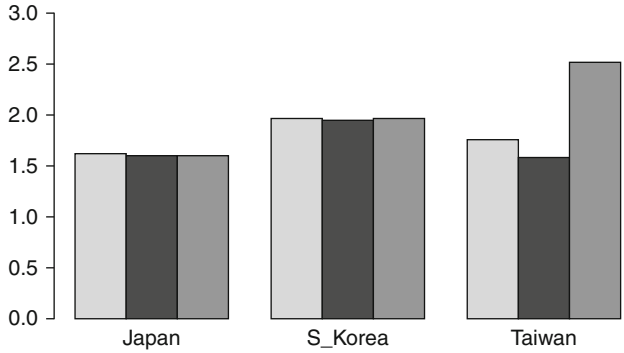

Figure 1.2 Largest party vote share in last three elections.

factors have impacted the dominance of the party with the largest vote share. The vote shares of the largest party for each of the last three elections held in Japan, South Korea, and Taiwan are presented in Figure 1.2.

With the exception of Taiwan in the 2012 legislative election, these figures have remained quite stable across countries and over time. This suggests that there are significant and systemic factors operating in each of these countries, which make likely parliamentary majorities rather than coalition governments. The informational demands of voters appear relatively small as most voters are choosing between two main parties, one of which achieves a significant majority, forming a government on its own. This repeated scenario produces simple questions of accountability when parties face subsequent elections.

The East Asian democracies, therefore, constitute curious cases for the emergence of VAAs: they do not possess large multiparty systems, which motivated the creation of VAAs in Western Europe, and it would seem that VAAs further erode already weak partisan attachments in these countries.

Case Selection and Comparative Logic of the Cases

This book is composed of case studies that embed VAAs within the particulars of each country's political system. The research design does not compare differences in system-level attributes reified as logically comparable across cases. To do so would obscure the implications of these attributes in relation to other aspects of each of these systems from which their particular qualities derive (Easton 1990). Taking the use of VAAs by parties, candidates, and voters as an independent variable across cases would bias the analysis by presuming that system-level differences do not make a difference and question whether a comparative research design was necessary to begin with: if system-level properties are irrelevant to the explanation, what analytical leverage is gained through the study of multiple cases? Political institutions, structures, and the like can influence the consequences stemming from the uptake of digitally mediated political activities (Jensen, Jorba, and Anduiza 2012). The

contributions of this book stem from the unique historical experiences and system-level properties of the East Asian democracies, which have given rise to East Asian experiences with VAAs and trajectories that are quite different from what we have seen in the European cases.

Case Selection

Japan, South Korea, and Taiwan are very similar in many respects, having undergone transitions to democracy during the latter half of the twentieth century. These three countries are rated by Freedom House as the only fully consolidated liberal democracies in East Asia (Diamond, Plattner, and Chu 2013). They have made transitions from the single nontransferable vote to single-member districts and proportionally apportioned votes for party lists within similar time frames, and have similar experiences with largely one-party rule, with limited time in government by the largest opposition party.

The book is comprised of two parts. The first part provides a general introduction to VAAs in Japan, South Korea, and Taiwan respectively, and how VAAs were received in each country. The authors are either founding persons or one of the contributors to VAA in their countries. The second part provides empirical studies of the effects of VAAs and an evaluation of VAAs' impact on democratic politics.

In chapter 2, Uekami and Tsutsumi aim to outline the characteristics and history of VAAs in Japan and discuss future issues surrounding them. From 2003 on, Japan's political parties touted their manifestos in the national elections, attracting the attention of a large number of voters. Voters were encouraged to use the parties' policy platforms to help them decide whom to vote for, and VAAs began to gain popularity. Subsequently, Japan's major newspapers and media outlets began offering VAAs, which received media coverage each time there was a national election. But there are several restrictions on VAAs in Japan. For instance, the primary users for online tools such as VAAs are thought to be young people, but the younger generation displays little interest in politics.

The history and development of Korean-style VAAs are introduced by Park, Jang, Jeong, and Yook from a comparative perspective by tracing the common traits of Korean-style VAAs since 2004. The VAAs under review in chapter 3 are 2004, 2012, and 2014 VAAs that were used for the different types of elections. This chapter discusses how issues were selected for each VAA and how the issue positions of VAA voters and parties or candidates were calculated for the different types of elections in Korea.

Chapter 4 introduces Taiwan's first VAA—iVoter—including its application and ongoing development. The name iVoter is intended to refer to "I vote," "informed vote," "intelligent vote," and "internet vote." This system was first used for the 2012 Eighth-term Legislative Yuan elections. From October 2011, when the iVoter site officially went online, until 2012, 1,400 people became iVoter members and completed an issue position diagnostic registration, while over 40,000 people (from different IP addresses) visited the website. In this chapter, Liao and Chen begin with a brief introduction of Taiwan's political landscape and its relationship with the design of the iVoter website. Then they explain the process of creating the iVoter Issue Position Test. Hereafter, user profiles are discussed. Finally, they discuss the ongoing development and design of the iVoter website as a platform for bridging the gap between representatives and voters, including the utilization of online meetings.

After introducing VAAs in each country, the book analyzes the effect of VAAs in each of these cases. In chapter 5, Tsutsumi, Uekami, and Inamasu show a potential effect of VAAs in Japan by asking the following research questions: To what degree do Japanese voters recognize parties' policy positions correctly? Can Japanese voters identify and vote for the party closest to their policy preference? Whom should VAAs target? By analyzing the internet survey data of the 2010 House of Councillors election, they show that quite a few Japanese voters could not find or incorrectly identify a party close to their policy preference, and that voters who have a small amount of correct information are

more likely to vote incorrectly. They also found that VAAs is likely to be effective for young, female voters and those who are not usually exposed to political information and are indifferent to politics.

Chapter 6, entitled "Hurdles for VAAs in the Politics of Opacity," poses a question concerning the effect of VAAs on democratic politics. Kim in this chapter focuses on analyzing and discussing the prospects and limits of using VAAs in Korean politics. The author asks the following questions: What are the significant developments in using VAAs in the 2012 election in Korea? What are the hurdles for VAAs in Korean politics? How can we view the meaning of VAAs in a larger context of democracy and citizenship? The author concludes that VAAs are in a sense a most contemporary invention for informing citizens and facilitating deliberation on election issues. However, VAAs have limits as tools of deliberation. They may even have some risks in terms of making the electoral process a simple matchmaking or policy-shopping game. Despite those limits, however, the authors conclude that VAAs have strong merits in helping voters be alert regarding their choices.

To estimate the connection and effectiveness of VAA, Wang exploit data from the iVoter program in Taiwan's 2012 legislative election, which is introduced in the fourth chapter of this book. Empirical analysis shows that candidates who are young and familiar with the internet tend to participate in the iVoter process. Contrary to the prediction, incumbents were more involved than challengers, and there is no difference between candidates from major and minor parties in terms of the level of participation. Analysis of the registered participants reveals that they were mostly young, male, and well educated. Overall, 80 percent of the participants considered iVoter as helpful, and this supportive attitude correlates with more online political participation among the least-engaged participants. Even though iVoter did not boost election turnout, a considerable proportion of iVoter participants showed up to support minor parties on election day. Implications and suggestions for future VAA development are finally discussed.

In the conclusion, Jensen and Lin point out the consequences of VAA use for users. First, across all three cases we find VAA use gives rise to greater political engagement. Second, VAA users in these countries, like internet users, are generally younger and highly educated, which is the same segment of the population that is otherwise more disengaged from electoral politics. Third, there is evidence that VAAs increase both issue voting and political discussion regarding policy issues. In addition, they also indicate that VAAs complicate political campaigns in two ways. First, they provide voters with an alternative source of information relating candidates and parties to voters. This information is beyond the control of the campaigns themselves. Second, VAAs render the terms of the campaign with respect to policy issues rather than alternative criteria on which candidates and parties may wish to campaign.

CHAPTER 2

VOTING ADVICE APPLICATIONS IN JAPAN: AN OVERVIEW

Takayoshi Uekami and Hidenori Tsutsumi

Introduction

In this chapter, we aim to outline the history and characteristics of voting advice applications (VAAs) in Japan and discuss future issues surrounding VAAs.

First, we explain the characteristics of VAAs and the underpinnings of their diffusion. In Japan, VAAs are provided by major newspapers and internet companies. Underlying this fact and the subsequent diffusion of VAAs is an increase in the number of internet users, coupled with changes in the relationship between political parties and voters stemming from electoral system reforms and party dealignment: this suggests that party policies have come to play an important role in elections. Next, we discuss how VAAs were developed, the mechanisms underlying their operation, and their effects. In Japan, the process of VAA development has not always been clear, but the issues and interfaces used in the different applications share many similarities, and some research has suggested that VAAs may be useful in helping voters make voting decisions. Finally, we examine the issues surrounding VAAs. It is important to relativize the impact that VAAs have on voters' voting decisions not just by examining the bias in how existing VAAs were created and the voting advice they dispense but also

by helping those people in charge of developing new VAAs. The chapter concludes with our comments on the important roles that researchers will play with respect to this matter.

Postwar Japanese Party Politics

In this section, we briefly discuss Japanese political institutions and describe the development of postwar party politics before discussing VAAs in Japan.

After losing World War II, Japan was occupied by the United States-led Allied Forces and underwent democratization on various fronts. According to the country's new democratic Constitution, sovereignty would lie with the citizenry, and the country would employ a parliamentary system of government. Accordingly, a National Diet comprising two chambers, the House of Representatives (HR) and the House of Councillors (HC), was established. Although the authority of both Houses was equal, the Constitution afforded the HR more power in several areas, including the selection of the prime minister. For this reason, HR elections are considered more important.

Rules for National Diet elections are stipulated in the Public Offices Election Act. The HR electoral system is a mixed system of 295 single-member districts and 11 proportional representation blocks (from which 180 members are elected). As outlined below, this system was first adopted in 1994. Before that time, a single nontransferable vote system, or SNTV, was used in multimember districts. With this system, between three and five victors were selected for each district, so the large parties were forced to run multiple candidates in the same district. Meanwhile, the HC electoral system combines multimember districts (of one to five seats) with one at-large proportional representation block for the entire country. This system was first used in the 1983 HC election. Before then, the system was a combination of multimember districts and one nationwide majoritarian block from which 50 HC members were elected. Since then, save for a minor revision to proportional representation, the electoral system for the HC has remained unchanged.

Postwar party politics in Japan can be summarized as a long period of one-party dominant rule by the Liberal Democratic Party (LDP) followed by a regime change, and this is explained in the following section.

One-Party Dominant Rule by the LDP

In 1955, the Japan Socialist Party (JSP), which had been divided into right-wing and left-wing factions, unified, but not long after that, Japan's conservatives, who felt threatened by this newly united JSP, joined forces to establish the LDP. The LDP was the "conservative" party that advocated capitalism, a pro-American foreign policy and prewar values, and it demanded the revision of Article 9 of the Constitution, which outlawed the maintenance of armed forces. Meanwhile, the JSP was the "progressive" party that espoused socialism and an anti-American foreign policy, while rejecting prewar values. It supported the pacifist Constitution. Although the LDP, which held a majority of Diet seats, was the ruling party, the JSP and the Japan Communist Party (JCP), held more than one-third of the seats in both the HR and the HC, so the LDP could not revise the Constitution, which requires a concurring vote of two-thirds or more of all the members of each House to initiate amendments to it. This disagreement over Article 9 remained unresolved throughout the entire postwar period. Eventually, LDP-led administrations came to adopt a basic stance, which was rooted in the alliance with the United States, of establishing a lightly armed force and promoting economic growth.

In the early stages of the postwar era, the conservative-progressive standoff reached its peak in 1960 when the United States-Japan security treaty was amended. Once this crisis had died down, the public turned its attention to economic growth. This was a time of sustained and rapid growth for Japan, and the people saw their standard of living increase significantly. By 1968, Japan's gross national product (GNP) had become the second-largest economy after the United States; however, not every segment of the population benefited from the postwar economic miracle.

One of the LDP's biggest jobs was to redistribute the fruits of this growth to those regions and industries that had been left behind. Flush with tax revenues generated by economic growth, LDP-led administrations invested in roads, railways, harbors, and other social infrastructure while ensuring preferential prices for rice, Japan's staple food. In this way, the LDP maintained stability primarily by appeasing rural voters. Although the LDP was passive in its response to public opinion and the opposition parties, it also worked to tackle the environmental problems brought on by economic growth and expand social security. For instance, the Environmental Agency was established in 1971.

LDP lawmakers in the National Diet also used central government resources and regulations to benefit rural areas, thereby developing clientelistic networks. While the first oil crisis of 1973 put an end to Japan's postwar economic miracle, these networks survived stronger than ever, and led to various forms of corruption.

The End of the Cold War and Political Reforms

The end of the Cold War between the United States and the USSR had a profound impact on Japan's party politics by turning the conservative-progressive dichotomy into an anachronism. This impact was most keenly felt by the JSP, but the LDP, which had defined itself as a bulwark against socialism, also suffered a significant existential crisis. By now, the public could no longer tolerate the political corruption of LDP-led administrations. The mass media reported vociferously on the need to reform, so to remedy this, the HR electoral system was overhauled (Reed and Thies 2001).

Reform of the SNTV system used in the Japanese House of Representatives reflected political compromise between the LDP and opposition parties. The SNTV intensified competition among LDP candidates and led to the money-driven politics of the era. To prevent political corruption, lawmakers felt that a system of single-member districts would be better since it would keep LDP candidates from competing with each other. However,

the opposition parties opposed this idea because single-member districts leave smaller parties at a disadvantage. In the end, a system combining single-member districts with proportional representation was adopted in 1994, and it was first used in the 1996 general election.

With the growing emphasis on political reforms, the opposition parties struck first. Just before the 1993 general election, a handful of LDP Diet members, arguing for reforms, left the party to form two new parties: the Japan Renewal Party and the New Party Sakigake. In the election, the LDP lost its majority, and a coalition government consisting of every party except the LDP and the JCP came into power. This was essentially the first time since 1955 that a party other than the LDP had taken power. However, after the coalition achieved its goal of reforming the electoral system, the parties could not find another goal that they agreed upon, and the coalition fell apart in less than a year. The LDP came back into power in 1994 in a coalition government with the JSP and the New Party Sakigake. The partnering of the LDP and the JSP, which would have been unthinkable in the past, was proof that the prototype for postwar party politics that had been in place since 1955 had completely disintegrated.

After this, the Komeito joined the LDP as coalition partner, and together they ran the government until 2009. During this time, many opposition parties, except for the ever-intransigent JCP, went about forming new parties through a process of trial and error because, with single-member districts, they needed a large party that could field candidates to pit against the LDP. The New Frontier Party (NFP) that was formed in 1994 did not fare well in the 1996 general election. A more successful attempt at forming an opposition party came in 1996 when members of JSP and the New Party Sakigake established the Democratic Party of Japan (DPJ) right before the general election. Then, after the NFP folded, most of its Diet members joined the DPJ. Although the Junichiro Koizumi-led LDP won the 2005 general election, the DPJ made steady gains afterward (Uekami and Tsutsumi eds. 2011).

Not long after this, the DPJ won a landslide victory in the 2009 general election and took control of the government. Despite having members with wide and varying backgrounds, the DPJ maintained political coherence by presenting a manifesto ahead of the election. However, as the DPJ attempted to run the government, the manifesto's lack of feasibility quickly came to light. The party split into two main factions, those who wanted to raise the consumption tax to secure funds for social security, and those who opposed a tax hike since it violated the campaign promises made in 2009 (Maeda and Tsutsumi, eds. 2015). The public strongly criticized the DPJ for this infighting, and the party gave up the reins of government when it lost the 2012 general election. Another LDP-Komeito coalition took charge and has been in power ever since.

History and Development of Japanese VAAs since 2006

The history of VAAs in Japan is relatively short. The concept was first introduced in the academic literature by Sato (2003) and Uekami (2006). The first reported use of VAAs was in the 2001 HC election, but this was limited to Tokyo Prefecture. The first nationwide deployment was in the 2007 HC election. After that, Japan's major newspapers and media outlets began offering VAAs, which received media coverage each time there was a national election, and it became commonplace for voters to broadcast their results via social networking sites.

Traits of VAAs in Japan

There are several well-known VAAs in Japan, and Table 2.1 lists the characteristics of five such applications.

All of these applications share a handful of traits. The first application is called Votematch. The Votematch program was first discussed in Japan by Uekami (2006), who described the Dutch version of Votematch, after which VAAs began to make serious inroads into Japan. In the Netherlands, Votematch is known by

the Dutch term *StemWijzer*, which is recognized as the first VAA in the world.

Another feature of VAAs is that they are usually provided by newspapers. There are several major newspapers in Japan. The *Yomiuri Shimbun* and the *Asahi Shimbun* have daily circulations of 10 million and 8 million, respectively, followed by the *Mainichi Shimbun*. All three companies have nationwide distribution networks and are highly influential.

One could argue that the reason most VAAs are offered by major newspapers and internet companies is due to competition among those companies. Since popular applications like VAAs can be accessed online, companies compete for the most hits to their homepages. During national elections, major newspapers and internet companies conduct surveys with political parties and candidates, and the response rates are usually extremely high. Operating a VAA requires one to have an accurate understanding of the political position of the parties and/or the candidates, and newspapers and internet companies can do this by conducting such surveys. This puts these companies at an advantage in terms of VAA development.

Japanese voters vote for both a candidate and a party, and VAAs assess users' political proximity to either a given candidate or party. Most of the VAAs offered by major newspapers measure user

Table 2.1 Types of VAAs in Japan

	Implemented by	*Diet Election*	*Measuring distance from*
Japanese Votematch	Yomiuri Newspaper Company	2007HC, 2009HR, 2010HC, 2012HR	Party
Mainichi Votematch	Mainichi Newspaper Company	2007HC, 2009HR, 2010HC, 2012HR, 2013HC	Candidate
Asahi Votematch	Asahi Newspaper Company	2013HC	Candidate
Manifesto Match	Yahoo! JAPAN	2009HR, 2010HC, 2012HR, 2013HC	Party
Vote Matching	Nihonseiji.com	2012HR, 2013HC	Party

proximity to candidates, while the bulk of all other VAAs measure proximity to parties. Most of the major newspapers survey all of the candidates before national elections, which enables them to identify the political positions of the candidates. Therefore, VAA users can be easily matched to candidates by answering the same questions as candidates on an online survey. However, the prevailing approach for assessing one's political proximity to a given party is to use the party manifesto as a basis for the determination.

The assessment of political proximity to a candidate or a party is largely contingent on the types of issues covered and the types of questions used. The newspapers and internet sites that provide VAAs use a disparate array of development processes. Uekami and Tsutsumi (2008) shed light on the methods employed to extract issues from party manifestos by way of quantitative analysis, and the methods for question formulation. These methods were used in Japanese Votematch, which is discussed below in this chapter. Another method, which is employed by Mainichi Votematch, is to determine issues based on discussions of opinion leaders.

VAAs were developed primarily to help voters select parties and/or candidates, but since they are provided by newspapers, they are not closely tied to citizenship education. This stands in contrast to Europe, where VAAs are widely used as teaching tools in schools. While we will further explore this below, it should be mentioned here that school education in Japan is rooted in a firm belief that it should be politically neutral, so there has been a strong resistance to discussing actual politics in schools. This is why VAAs are not being used as tools for educating citizens, as they are in the Netherlands and Germany.

Background of the Diffusion

Figure 2.1 shows the number of Mainichi Votematch users over time, and one can see that more people use the application in HR elections than HC elections.

One important factor underlying the spread of VAAs in Japan is the increase in the internet penetration rate. According to a Ministry of Internal Affairs and Communications survey in 2013,

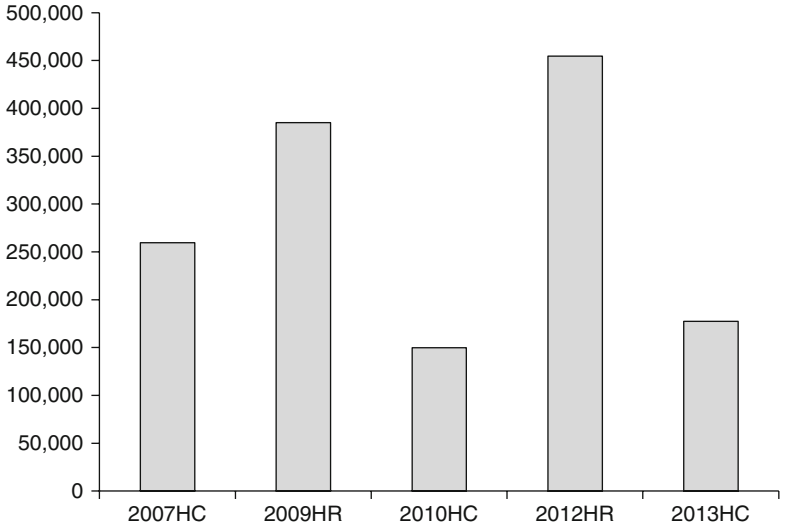

Figure 2.1 Number of users: Mainichi Votematch.

Source: Mainichi Newspaper.

82.8 percent of Japanese use the internet regularly,[1] and in particular, more than 95 percent of people aged 13 to 49 are internet users.

Although the internet and other technological advancements are necessary to ensure the diffusion of VAAs, they alone are not enough. As we explain below, the relationship between political parties and voters has changed dramatically, and party manifestos have come to play a vital role in election campaigns.

The LDP took back the reins of government by winning the 2012 HR election, but the party had changed significantly compared from when it was previously the dominant party. These changes included both changes in the organizational structure of the party and the manner in which they contested elections. In the past, the LDP practiced pork barrel politics focused primarily on public works projects in rural areas, and it worked to build a clientelistic network of regional politicians and voters headed by national political leaders and their supporting Diet members. However, as the economy stagnated and the population aged,

Japan was faced with a massive deficit and was forced to change its spending priorities.

In addition to this, a party-centered election style fostered by a new electoral system was a great blow to the clientelism of the LDP and led to the emergence of the DPJ, which tried to win voters' support by issuing a manifesto, instead of advocating individual interests. Before the adoption of a single-member district system for the HR in 1994, three to five candidates typically were elected in each district, and each voter cast his or her ballot for one candidate. Victorious candidates were then selected in the order of the total number of votes garnered. Since major parties such as the LDP would run multiple candidates in each district, the elections became competitions over the services that each candidate promised to provide, instead of differences in political parties. The individual relationships that developed between politicians and voters were a breeding ground for clientelism (Curtis 1971; Scheiner 2006).

In more recent years, Japan's political parties have touted their manifestos in the national elections, attracting the attention of a large number of voters. Voters were encouraged to use the parties' policy platforms to help them decide whom to vote for, and VAAs began to gain popularity. Since each party only puts up one candidate under the single-member district system, the competition shifts from being candidate based to being party based. In 2003, the DPJ prepared a manifesto for the campaign leading up to the general election for the HR, after which the LDP and other parties followed suit. Party platforms and manifestos soon became important campaign tools, and voters began paying more attention to each party's policies (Kabashima and Steel 2010; Rosenbluth and Thies 2010). However, the party manifestos were voluminous, so it was no easy task to make a decision by comparing the policies of multiple parties. This is when VAAs first came into play.

Another issue we cannot ignore is the impact of party dealignment. Electoral reforms weakened the organization of the LDP, and as is the case in many advanced nations, a period of rapid economic growth after World War II ushered in an era of prosperity,

thus leading to a reduced number of party members and supporters (Dalton and Wattenberg 2000). Since voters stopped exhibiting a clear preference for one party over another, the need arose to reassess which party was closest to their political views by using VAAs.

How do Japanese VAAs Work?

How are VAAs in Japan created and how do they work? As an example, we will describe Japanese Votematch, a VAA that we developed.[2]

The Making of Japanese Votematch

Japanese Votematch poses questions on 20 to 25 issues. The issues that are mentioned the most are selected by quantitatively analyzing each party's manifesto and other policy documents. First, the party manifestos and policy documents are converted to plain text, and each clause is classified, by both humans and computers, into the respective policy issue to which it refers. At this point, policy issues are cross-referenced with a preset policy code table that covers a wide range of policy areas. Next, manifestos are analyzed and parties are surveyed to identify each party's stands on respective issues in order to narrow down the issues into those on which the parties take different stands. This means the application uses salient and positional issues (Uekami and Tsutsumi 2008; Uekami and Sato 2009). The party positions on the issues that have been selected are then programmed into a web application, that is, the VAA. After users access the server in which the VAA is stored and answer the questions, the VAA computes their political proximity and identifies their closest party.

Japanese Votematch 2007

The following is a detailed explanation of how we developed Japanese Votematch. Although Japanese Votematch was used four times between the 2007 HC election and the 2012 HR election, here we will focus on the 2007 election, which was the first time a VAA was used in Japan. Although there were some minor changes

to how we created Japanese Votematch for subsequent elections, the basic pattern for the application is based on the one used for the 2007 HC election.

As described above, Japanese Votematch was created based on the manifestos that each party releases ahead of the election, and the issues used in the applications measure the distance between users (i.e., voters) and the parties. For this reason, the creators of VAAs must take care not to arbitrarily select the issues to be used in the applications.[3] This can be avoided by quantitatively analyzing the manifestos and creating the VAA based on the results of that analysis. When VAAs are created based on the policy issues raised in the party manifestos, voters can use the results when they vote, and we believe this enables them to become involved in the actual policymaking process once the elections are over.

We conducted a content analysis on the manifestos prepared for the previous national election by the major parties.[4] For the 2007 HC election, the content of the manifestos for the 2005 HR election was analyzed to create Japanese Votematch. In any case, there are two reasons for using previous manifestos. The first reason, which we will discuss below, is the shortness of Japanese election campaign periods. In Japan, parties and candidates can only campaign for 12 days for HR elections and 17 days for HC elections. Since each party releases a manifesto right before it initiates its campaign activities, there is not enough time to develop VAAs based on current manifestos and provide them to voters beforehand. Therefore, as a workaround, we must analyze the content of manifestos from the previous election. The second reason, which is related to the first, is that content analyses require a huge amount of effort.[5]

The content of the manifestos is analyzed to clarify the policy areas that each party emphasizes. First, using the codes developed by Shinada (2006), we classified various policies into 16 policy areas (which were further classified into 125 subcategories), then counted the number of times each coded policy area was mentioned by the various parties. Next, we calculated each party's rates of mentions for each coded policy area. By calculating these average rates of mentions, we were able to determine the relative

weight parties placed upon each policy area. Then, by comparing these rates of mentions, we determined the number of issues to prepare for each policy area.

Once this was complete, we created agree-disagree questions for each issue, based on the content of party manifestos. While the final Japanese Votematch asked users 20 to 25 of these agree-disagree questions, we initially developed 50 questions because, as mentioned below, some of the issues were ones upon which most of the parties agreed.

After deciding on the questions to be used in the VAA, our next task was to identify each party's position on the issues. More specifically, we predicted whether each party would agree or disagree with a certain issue, and then we sent that information to the parties. If their actual positions did not match our estimation, we asked them to make adjustments,[6] and if applicable, provide additional information or comments on the positions for each issue. We made these comments visible to VAA users when their results were displayed. Before the campaign for the 2007 HC election started, we had surveyed seven parties and received responses from every party except the People's New Party.

Once the survey results were collected, we finalized the issues to be used in the VAA. We had to whittle down the initial 50 questions to between 20 and 25 questions, and the first factor in determining the issues was saliency. The second factor was polarity. When you attempt to match a VAA user to a party on issues upon which all parties agree or disagree, there is no meaning in measuring political proximity for these issues. Therefore, we chose to only use issues upon which the parties had differing opinions. For the Japanese Votematch used in the 2007 HC election, we selected issues in the following manner. First, we eliminated all issues upon which all parties agreed or disagreed or upon which only one party took a different stance from the other parties. Then, we sorted the remaining issues in order of the frequency of mentions in the previous election's manifesto to finalize the issues to be used in the VAA. In the end, the final version of Japanese Votematch that we provided to voters had only 20 to 25 questions.

Similarities between VAAs

The process behind Mainichi Votematch, in contrast, was not systematic, but more qualitative. The data for this VAA came from the results of a survey that the *Mainichi Shimbun* had conducted with candidates. The survey questions were decided by a committee that included outside experts, but the company has not revealed the criteria and process for the selection of questions.[7]

Table 2.2 compares the question topics used in Japanese Votematch and Mainichi Votematch for the 2010 HC election. Japanese Votematch used 25 questions, while Mainichi Votematch used 20.

Table 2.2 Similarities between question topics

Question Topics of JV 2010	*Question Topics of Mainichi 2010*	*Similar to JV 2010*
1. Greenhouse gases	1. Revision of the Constitution	4
2. Alternative energy	2. Collective self-defense	
3. Eco-friendly car tax breaks/Eco Points	3. Nuclear armament	
4. The Constitution	4. Japan-United States security treaty	8
5. Free high school education	5. Foreign policy toward North Korea	
6. Teacher license renewals	6. Futenma air base	
7. Consumption tax hike	7. Macroeconomic policy	
8. Japan-United States security treaty	8. Consumption tax hike	7
9. Strengthening international economic relations	9. Environmental tax	3
10. Consolidation of pension systems	10. Basic pension funding	11
11. Establishment of a minimum pension	11. Child allowance	
12. Health care for the elderly	12. Free highway	15
13. Social insurance number	13. Separate family name	
14. Raising the minimum wage	14. Banning corporate donations	19
15. Investment in highways	15. Bureaucrats answer in Diet session	
16. Deregulation of postal savings/ insurance	16. Open program review	
17. Reduction of rice acreage	17. Coalition partner	
18. Corporate acquisition of farmland	18. Two-party system	
19. Banning corporate donations	19. Voting rights of permanent residents	
20. Reducing seats elected by proportional representation	20. More transparency in investigations	22
21. Lay judge reforms	21. Decentralization	25
22. More transparency in investigations		
23. Procurement reforms		
24. Subsidy reform		
25. Regional state system		

Looking at the Japanese Votematch questions, five topics (No.4, No.7, No.8, No.19, and No.22) were almost identical to those on Mainichi Votematch, and four topics (No.3, No.11, No.15, and No.25) were similar, which means nine questions covered similar content. As mentioned above, the development processes for these VAAs were different, but in the end, they both contained the same kinds of questions.

How Japanese Votematch Works

In Japanese Votematch, users view the questions and respond with either "Agree," "Disagree," or "Don't Know." Issues for which users responded "Don't Know" are not used to match users to political parties. Since the parties' responses are already known, the users' responses are matched to those patterns, and the degree of congruence is calculated from the number of matching answers. If a party did not provide a response for a particular issue, then Japanese Votematch treats all users as not in alignment with said party for that issue. As an added function, users can double the weight given to those issues they feel are important to them. If the positions of users and parties match on those issues that users feel are important, then the degree of agreement is rated higher than that for those issues that were not given double weight.

Now, let us explain the Japanese Votematch 2010 user interface. In this program, each screen contains four issues and response buttons. Users can select three responses, "Agree," "Disagree" or "Don't know," and they can choose which issues they deem important. The same basic design is also employed in Mainichi Votematch, but there is only one question per screen, and users can select from three responses: "Agree," "Disagree," or "No answer."[8]

Once a user answers all of the questions, those responses are compared with the parties' views, and the closest match is displayed. The screen also displays a bar graph showing the user's level of political agreement with the various parties. In other words, if the bar for the DPJ is the highest, that means the user's responses are most closely in alignment with the DPJ.

Like European VAAs, Japanese VAAs employ a user's responses to questions about issues to match him or her with a political party or a candidate.

Effects on Voters

VAAs are designed to help voters cast their votes based on policies. Casting votes based on policies means voters must have an idea of each party's political positions and be able to compare them with their own views in order to identify the party that is the most politically similar to them (Campbell et al. 1976). This requires voters to shoulder large information costs. If voters do not understand or misunderstand the political views of the parties, they run the risk of voting on the issues inaccurately. If voters use VAAs, they do not need to bear any information costs, and they can identify which party is the closest to their own political views.[9]

When we surveyed people who used Japanese Votematch for the 2009 HR election, 55.9 percent said the results were "as expected" and 44.1 percent said they were not, which means more than half of the users accurately recognized the closest party.[10] That being said, the fact that the application recommended a different party than expected for more than 40 percent of respondents cannot be ignored. Therefore, the question remains as to how accurately voters understand the political platforms of the parties. Tsutsumi and Uekami (2013) analyzed voter recognition for the 25 issues used in Japanese Votematch for the 2010 HC election. According to this analysis, 31.5 percent of voters mistakenly perceived a party with different views as a party similar to themselves. For the six major parties, the average rate of congruence with the party voters perceived as being the most similar to themselves on overall policy was 66.1 percent. As this shows, voters do not always correctly recognize the political platforms of the parties. Furthermore, when we analyzed the kinds of voters who accurately recognize the party that is closest to their views, we found that possessing accurate information on the issues and having more opportunities to be exposed to information about policies played important

roles. This suggests that VAAs, which match voters and parties on a range of policy issues, can be effective tools for voters who have a poor understanding of or little interest in politics. The potential impact of VAAs in Japan is analyzed in detail in Chapter 5.

Future Prospects of Japanese VAAs

So what lies in store for VAAs in Japan? Let us discuss the difficulties and opportunities for VAAs.

Difficulties

The first difficulty facing VAAs is that they are only effective in cases in which the ruling party is selected based on its manifesto, as was the case in the 2009 general election. Examples of this include the 2005 general election, which the ruling LDP declared as a referendum on postal privatization, and the 2012 general election, which focused on the performance of the DPJ administration. Another issue is that trust in manifestos declined after the DPJ failed to fulfill its campaign promises. If voters do not believe that a party will bring its promised policy initiatives to fruition, then there is less of a possibility that they will vote for the party that a VAA has determined to be their closest party. Since there are not necessarily many elections in which VAAs can be effective, their impact cannot be overestimated.

The second difficulty facing VAAs is the arduousness of the Japanese election system. For voters to cast votes based on their assessment of the policies, they need to collect a vast amount of information, compare policies with their own preferences, and select the party that is most suited to them. This takes time, but Japan's Public Offices Election Act prohibits campaigning outside of the designated campaign period, which is extremely short. Only 12 days and 17 days are allocated for HR and HC elections, respectively, and parties are prohibited by law from distributing any materials outlining their campaign platforms outside of these time frames. For this reason, the parties are unable to sufficiently publicize their policies to voters, and policy discussions

among politicians and among voters remain superficial. VAAs came into use precisely because of these restrictions, but if no one is seriously debating the policies, then only a handful of voters may attempt to use the applications to find the party closest to them.

Another restriction, in place until the HC election of 2013, was the prohibition on using the internet for campaign activities. This internet ban was lifted with the revision of the Public Offices Election Act, but several restrictions remain. For instance, voters are not allowed to use e-mail to urge other voters to go to the polls, and minors under the age 20 are forbidden from engaging in any and all online campaign activities. Distributing printouts of the homepages established by parties or candidates is also forbidden. In particular, the prohibition of minors from campaign activities contributes to keeping young people disinterested in politics. This restriction could be considered a hindrance to the diffusion of VAAs among the younger generation—the segment of the population with the least resistance to internet usage.

The third difficulty facing VAAs is that the young people usually do not have much interest in politics. The primary users for online tools such as VAAs are thought to be young people, but the younger generation displays little interest in politics. Figure 2.2 shows voter turnout rates by age in the HR elections from 2005 to 2009. As the graph reveals, the lowest voter turnout is the group aged 20 to 24, while the highest is the group aged 65 to 69, and the difference between the two is nearly 40 percent. If the younger generation remains disinterested in politics, then the use of VAAs may not spread.

The poor level of citizenship education in Japan is partly responsible for the low interest in politics among the younger generation. The Basic Act on Education, the fundamental Japanese law on school education, prohibits political activities in schools, so teachers have been careful to avoid engaging in discussions on politics. This restriction stems from a bitter standoff between the Ministry of Education, Culture, Sports, Science and Technology and the unions to which elementary school, junior high school, and high school teachers belong.

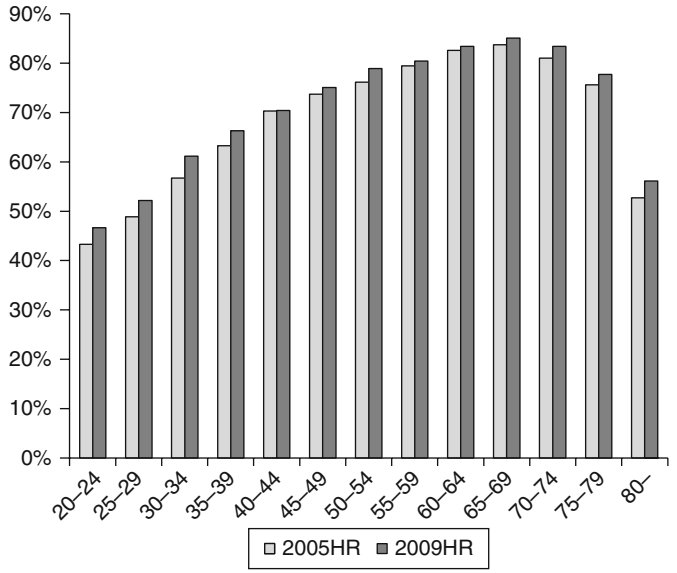

Figure 2.2 Turnout rates for House of Representatives elections.
Source: The Association for Promoting Fair Elections.

As a result, citizenship education in Japan's schools has been limited to learning about the democratic system and voting methods. In other countries, it is not unusual to hold mock elections in class, but almost no schools in Japan do this. Instead of trying to heighten young people's interest in politics to promote the use of VAAs, we should think about piquing their interest in politics by having them use VAAs. In any case, this will require further consideration.

Opportunities

Having discussed the restrictions on VAAs, what kinds of opportunities must be taken advantage of to ensure the diffusion of these applications throughout Japan?

First, there needs to be diversification of VAA developers. As mentioned earlier, the main VAAs in Japan have all been developed by major newspapers. As such, the questions about parties

and candidates tend to follow the same pattern, and the user interfaces are all similar, making it difficult to discern how the applications are different.

In addition to these existing VAAs, there is surely room for VAAs developed by many different segments of the population, including students, women, and senior citizens. For example, VAAs focused on youth unemployment, irregular employment, education spending, and other issues in which young people are interested would be useful for university students. VAAs developed with students in mind could also be used to provide citizenship education in schools.

VAAs should also be developed for regional elections. Although they used to be higher, voter turnout rates in regional elections now tend to be lower than those for national elections, and voters tend to express little interest in the races. In most cases, candidates rely on their personal networks to run campaigns, and they have not traditionally stressed their political differences with their opponents. However, the promotion of decentralization is gradually leading to situations in which regional politicians must make decisions on important policies, so the role of VAAs for regional elections is expected to grow.

If a diverse array of developers creates VAAs for many different elections, then new ideas will be born, and innovative concepts and technologies will likely follow. The pace of innovation will accelerate if VAA developers actively exchange information and discuss improvements.

The role of researchers, first and foremost, is to analyze and assess VAAs. As Table 2.1 shows, there are several primary applications that appear similar, but surely they also have some differences. For example, if the same user were to employ different applications, would he or she receive different results as to which party or candidate was most in alignment with him or her politically, and if so, why? Generating different results from different VAAs is probably not unusual, but we still need to know that it happens. We also need to shed light on the VAA development process so that users can accurately understand the features unique to each application. It seems likely that the same user generating

different results would stem from differences in issue selection and matching methods.

Also, since VAA results are not definitive, before voters use them to make a voting decision, they should learn to view them in context and not place too much faith in them. One possibility here would be to have voters discuss VAA results with each other. In any case, methods need to be developed to ensure that VAAs are used properly. It is up to researchers to analyze and assess these applications and notify users about them. If a wider variety of VAAs comes into play, then users will need to be guided to these applications based on their goals. By studying various countries' VAAs, researchers can provide advice on how they can be improved from a neutral standpoint. Diversifying the developer pool will require researchers to supply specialized knowledge.

Notes

1. Source: Ministry of Internal Affairs and Communications (2014, Chapter 5),
2. Japanese Votematch was developed by a team of scholars affiliated with the Yomiuri Newspaper Company from 2008 to 2012. Japanese Votematch 2009 and 2010 were provided exclusively by Yomiuri Online.
3. According to issue ownership theory, the policy areas for which voters give high ratings to the parties differ. Therefore, if the issues used in a VAA are biased toward a particular policy area, the results will more easily skew to those parties with better reputations on the policy area.
4. This analysis focused on six parties: LDP, DPJ, Komeito, JCP, Social Democratic Party (SDP) and People's New Party (PNP). In other words, the parties that satisfy the definition of a political party in the Political Party Subsidies Act (i.e., parties with at least five members of the Diet or parties that have at least one member in the Diet and won at least 2% of the votes in the most recent national election) were analyzed.
5. For Japanese Votematch since the 2009 HR election, a computer-aided content analysis was also used (Uekami and Sato 2009). Issues were selected using the method explained above, and as soon as all of the manifestos for the election were published, their content was analyzed with a computer program to calculate each party's rate of mentions for the 16 policy areas. Using this, the issues that should be included in Japanese Votematch were recalculated, and additional issues were added if there were not enough issues for a certain policy area. Each party was then surveyed about these additional issues.

6. Since there are no manifestos for new parties that did not exist in the previous election, we cannot predict their responses. Therefore, we ask new parties to indicate their agreement or disagreement with each issue (instead of requesting them to adjust our predictions). This is the process we used for the New Party Nippon (NPN) in the 2007 HC election.
7. *Mainichi Shimbun* (August 12, 2007).
8. In Mainichi Votematch, most of the questions are agree/disagree questions, but there are a few issues with three or more response options (excluding "No Answer").
9. Some scholars have argued that voters can use a variety of heuristics to reduce information costs (e.g., Downs 1957; Lupia 1994), but many others have pointed out the limitations of heuristics (e.g., Lau and Redlawsk 1997; 2001).
10. Optional survey conducted with Japanese Votematch users during the 2009 general selection (N = 16750).

CHAPTER 3

ISSUE VOTING: THE INTRODUCTION AND DEVELOPMENT OF VAAS IN KOREA

Myungho Park, Minsu Jang, Seon-Ah Jeong, and Chanhee Yook

Introduction

This chapter aims to introduce the history and development of Korean-style Voting Advice Applications (VAA) from a comparative perspective. The history of VAAs in Korea is relatively short compared with that of other countries. The first reported use of VAAs in the Korean elections was the 2004 general election, and VAAs have evolved since then to their most recent form used in the 2014 local elections. Each VAA under review in the chapter has a different design process and different names. The process of building VAAs has developed over time. Therefore, this chapter compares the different versions of Korean-style VAAs that have appeared since 2004 in order to show how they have developed.

VAAs are is of the most recent technical innovations for the purpose of providing voters with information on vote choices. A VAA is designed to allow voters to express their preferred policy positions on a wide range of issues that are the focus of attention at the time of elections and to provide information about where each party or candidate stands on these issues "online." The success of VAAs depends on a certain level of internet access and internet skills so that voters can access the computer programs.

Given the high level of internet integration in daily life, Korea presents the best example for testing how VAAs have been used by the electorate and parties and candidates in elections.

The use of VAAs in elections provides the electorate with information on which a party or candidate will represent his or her opinions and interests in the best way. Assuming that democratic politics requires informed citizens, they require the best information available on parties or candidates' issue positions in elections. Using Downsian logic, voters take advantage of simplified information such as issue positions or party ideology as a heuristic tool to reduce information cost.

Against this backdrop, this chapter traces the common traits of Korean VAAs since 2004. The VAAs under review in the chapter are the 2004, 2012, and 2014 VAAs that were used for the different types of elections. The 2004 VAA was for the general election, the 2012 VAA for the presidential election, and the 2014 VAA for the local election. Therefore, it appears reasonable to compare the different versions of Korean VAAs over time in order to determine the common characteristics of VAAs. Thus different types of elections require different sets of issues for the electorate and parties or candidates for VAA.

Specifically, this chapter discusses how issues were selected for each VAA and how the issue positions of VAA voters and parties or candidates were calculated for the different types of elections in Korea. Also, this chapter explains the general background of politics such as parties, candidates, and electoral rules for each different type of election to help readers understand how the issues were selected, and how the issue positions of voters and candidates or parties were calculated for the respective elections under consideration in the chapter.

Preview: Korean Politics and VAAs

Competitive elections have taken place in Korea since the restoration of the democratic process in 1987. With the country having a strong presidential system, these elections have been high stake and contested. Therefore, all the presidential elections since 1987

have recorded a close margin of victory and no winner, although Ms. Park Geun-hye in 2012 received a majority of the popular vote. The winner of the Korean presidential elections is decided by a simple plurality rule, and the president is subject to a term limit of five years, and one term only.

Korea has maintained a fairly stable party system since 1987. The effective numbers of parties for the National Assembly elections have fluctuated between three and four, making the Korean case one of a moderate pluralism. Even though the labels of Korean political parties varied frequently, political parties' leaders, supporters, and organizations have remained almost the same. Korean voters elect their representative with the first-past-the-post electoral system. Major political parties have received highly concentrated political support from their home regions-party leaders' and/or presidential candidates' home region, resulting in regional party systems.

In addition, since 2002, Korean politics has become different from the previous era due to the absence of the "Three Kims" in the Korean political arena. The "Three Kims" represented regionalist party politics, that is, the concentration of political support along regional lines. Without these charismatic political leaders, Korean politics needed a brand new vision for the country's political development. It was a policy based on party politics. Academia, citizen-led organizations, and the press emphasized the importance of policy-based choices of parties or candidates by voters. Against this backdrop, Korean VAAs were introduced by the press or citizen-led organizations with the assistance of academia. Political parties seemed to be reluctant to show their stance vividly on issues. They were pressed to express their views on issues by nonpolitical sectors. At first, the issues included in VAAs were selected by the sponsors of VAA programs. They incorporated issues they believe important for voters and parties. As time passed, however, the issue-selection process improved to survey voters for the purpose of representing voters' needs and preferences.

Table 3.1 shows numerous types of VAAs in Korea. The Citizens' Coalition for Economic Justice (CCEJ) is the only

Table 3.1 Types of VAAs in Korea

	Implemented by	*Elections*	*Measuring distance from*
Party Choice Helper	CCEJ	2004GE, 2008GE, 2012GE	Party
Candidate Choice Helper	CCEJ	2006LE, 2007PE, 2010LE, 2012PE, 2014LE	Candidate
Partisan Policy Comparison Program	KBS	2004GE	Party
DAUM Candidate Choice Helper	DAUM	2012PE	Candidate
Montazu Blind Candidate Policy test	Montazu	2012PE	Candidate

supplier, which has provided the application frequently since 2004, while the others offered it just once. In 2004, the CCEJ developed a VAA for the first time in Korea by adopting the German application "Wahl-O-Mat," which was produced and run by the German Federal Agency of Civic Education, as the 2004 general election was the first election in which voters could vote for a party directly that they supported. In addition, the table shows that when the general election was held, VAAs provided information on parties' attitudes toward diverse issues. However, users could compare their positions on the issues with those of candidates during the presidential or local elections. All VAAs show the ratios on the results screen indicating how close the users' responses were to the candidates' or parties' positions.

The way different VAAs choose the issues varied among the applications. The CCEJ, a consistent VAA provider, chooses 20–150 issues in different fields, such as politics, the economy, society, foreign affairs and unification, the environment, and human rights before making up the question sets. Afterward, they send the questionnaire to each party to find out each party's stance on the issues. Finally, they select the questions for which the responses are obviously different among parties or the issues in which the voters are the most interested. Daum and Montazu, in contrast, designed

their respective VAAs based on the campaign pledges and candidates' positions as reported in the media.

2004 General Election and VAA

Overview

The general election takes place every four years when the members of the National Assembly finish their service. The 2004 general election has attracted much attention among the Korean people. It was because the general election adopted a new mixed electoral system, which involved a revision of the *Political Party Law* (Chung 2005): the combination of first-past-the-post voting for 243 local constituencies and party-list proportional representation for 56 seats in the National Assembly. That resulted in the Democratic Labor Party succeeding in winning seats in the National Assembly for the first time.

In the 2004 general election, two organizations provided VAAs: KBS, one of the most influential broadcasters, and the CCEJ, one of the biggest nongovernmental organizations (NGOs) in Korea. In this section, we explain only KBS's application to show how the VAA is designed and for what purpose, as the materials related to the CCEJ's application are no longer available. As the KBS clearly articulates, its purpose is to help voters get an idea of what their political tastes are and what party policy is compatible with them. There are 22 questions, and they cover political, economic, and social issues at the time of the 2004 general election in Korea. However, all the questions in the VAA are not going to be mentioned here. Rather, it will be sufficient to mention only a few questions that reflect the political, economic, and social climate in South Korea. Every section starts with the general circumstances concerning events that have affected Korean society, followed by questions relating to those circumstances.

In December 2002, the late then-president Roh Tae-woo came to power. Securing his presidency meant the second consecutive victory of the progressive against the conservative party, the Hannara Party (or Grand National Party). The previous president came from a minor party that had been marginalized from

Table 3.2 Issues in 2004 general election

Fields	*Issues*	*Contents*
Political Issues	The voting age	- Lowering the voting age to 18
	The role of USFK after unification	- Whether US forces should remain after unification
	National Security Law	- Abolishing the *National Security Law*
Economic Issues	Raising taxes	- Imposing higher taxes for the rich - Increasing corporate tax rate
Social Issues	Online-Real-Name policy	- Binding online-real-name policy

the mainstream, and had long been dominated by the major and ruling party back then. The main features of his government can be described as exceptional and unusual. The way he treated the Korean people and what he tried to achieve during his tenure were far different from his predecessors as well as his fellow politicians. As a result, he clashed with the establishment over various issues that had a huge impact on Korean society.

Political Issues

As soon as the president took power, he gave a broad hint that he was willing to change the political culture not only in the society but also in the National Assembly. In his eyes, Korean politics had been shaped by privilege, supported by the ruling party. It was the major party that had put the political health of the society in danger. Some of former and even current politicians at the time had created political partisanship mainly based on a certain region, and their strong relationship with the big conglomerates called chaebol had caused political and social unrest. In particular, at the time of every election, it was believed that the conglomerates competed to fund the ruling party in the National Assembly in order to obtain economic guarantees from them. In this regard, the president put forward the idea that his government and the less privileged would take on a new political battle aimed at political reform. Moreover, they overlapped the pursuit of political reforms with the past

struggle for democratizing Korean society. The major party, which was targeted for reform, feared it would be a potential loser if it failed to stop these changes. In this political climate, Korean society intensely divided into two camps, one was the traditional conservative and the other was the liberal progressive. The society became deeply polarized (Lee 2004). The policy issues to which these conflicts gave rise are presented in Table 3.2.

When it comes to the redistribution of power, the voting age is a critical factor that determines the fate of the candidates and the future of a party. It is believed that candidate Roh succeeded in winning the presidential election thanks to the group of voters between ages 20 and 40. It is often said that younger people tend to favor the liberal and progressive party, while older people stick to their support for the traditional and conservative party. For this reason, the conservative party is in favor of upholding the voting age of 20, and does not wish to lower the voting age to include those 18 to 20.

KBS asked users to choose their stance toward the statement among five options: *(1) Strongly Agree, (2) Agree, (3) Disagree, (4) Strongly Disagree, (5) No Idea*. The following statement was given to the participants: *"Those aged 20 years old and above should have the right to vote, and this law should remain unchanged."*

Roh's administration was, more or less, a successor of Kim Dae-jung, who was an architect of an engagement policy toward the North, the so-called Sunshine Policy. The way he dealt with the North Koreans was similar to that of his predecessor. He tried to engage the North, bring them into the international community, and provide them with humanitarian and economic support. His government originated from the more liberal idea that South Korea should attain interdependence for their security needs from the United States by taking over the wartime control. In contrast, the conservatives regarded the United States as a guarantor of stability in the Korean Peninsula, supporting the continued presence of US forces on Korean soil.

There were two questions related to these issues in the VAA. The first question was about economic aid and North Korean

nuclear issues. They asked, "*Should economic aid to the North be related to the resolution of the North Korean nuclear crisis?"* The second question was about the role of US military forces after the unification: *"Should the USFK (US Forces in Korea) remain on the Korean Peninsula even after the unification?"*

The *National Security Law*, which was enacted in 1948 and revised most recently in 1997, was originally designed as an anti-communist law just before the Korean War. This law is still in force, and South Koreans who praise the North Korean system or ideology can be punished for doing to. The law has been criticized because it can be, and even was during the authoritarian regimes, used as a way for the government to wield power over its own people. During the general election season, it emerged as one of the most controversial issues: upholding the *National Security Law*. KBS asked if the participants agreed or disagreed with the following statement: *"The National Security Law should be retained."*

Economic Issues

President Rho devised a series of reforms, aiming at revising the Korean legal apparatus with regard to issues of market principles. The reforms were enumerated as follows: introducing class-action suits related to a bond, preventing accounting fraud, and expelling stock price manipulation from market. Both small stockholders and progressive intellectuals were in favor of his proposals because they regarded them as a necessary measure to correct the distortion caused by the conduct of certain enterprises, whereas many enterprises did not show support at all for it because it might restrain their autonomy in the market. The enterprises were supported by the conservative-right party, the Hannara Party, and also the conservative journalists took the initiative in calling for "holy warriors to revive our economy" for them.[1] To oppose the conservatives, the Uri Party—the relatively left and liberal party—supported the president, and it shared the same view on the class-action suits with him. This polarization between the Roh government

and the opposition was just a prelude to what Koreans were going to see (Lee 2004).

The most intriguing result of the 2004 general election in South Korea was that the National Labor Party succeeded in entering the National Assembly for the first time. The National Labor Party, a far left, activist party, ran on a platform based on the socialist ideology representing the working class. In particular, under authoritarian regimes, the working class mobilized to democratize Korean society and form independent unions. But not surprisingly, they were oppressed by these regimes because they were connected with socialist views. Even after democratization, they have failed to organize independent unions. Unions are still under the control of the government and enterprises and failed to obtain representation in the National Assembly since South Korea was established. Moreover, average Koreans were sensitive to a "Red complex," and they attempted to censor themselves under the circumstances of confronting the North, which could cause workers to be deserted by average Koreans. Another feature of the party is that it is union friendly. Its distinctive character was articulated by its election slogan "taxes go to the rich, welfare goes to the commons" and by a campaign that pledged to create a wealth tax (Kang 2004).

There were two questions dealing with a tax increase in the battery of VAAs. The first one is about a tax increase for the rich, stating, *"A higher income group should pay higher taxes."* The second one was about the corporate tax rate. KBS asked if the participants agreed with the following statement*: "Taxes for enterprises should be lowered."*

Social Issues

There are several studies related to the effects of the internet on elections. One study shows that the 2002 presidential election could be analyzed as an internet election. This was because half of the electorate was under 40, and a key strategy of the Roh campaign was to target young voters (Park 2004) and build his image on the internet as a representative of the ordinary person,

a reformist, and a pacifist against the opposition candidate as a noble, conservative, and cold warrior (Yun 2004). By doing so, Roh won the election. The other study examines what was the most influential media among university students in the 2004 general election and finds that the traditional press had greatest impact on voting participation. However, what stood out was the relation between the frequency of internet usage and the choice of candidates. Students who more often participated in online activities such as engaging in online pools, changing their messenger name to reflect support for a campaign, and engaging in *pum*, which literally means paste and post anything on the internet, tended to support the left parties, the *Uri* Party and the National Labor party. In contrast, those who were less enthusiastic about participation on the internet tended to vote for the right party, the Hannara Party (Lew 2004).

Just before the 2004 general election, the National Election Commission prepared a legal measure requiring that internet users should follow an online real-name policy in online forums. The commission introduced the policy because the internet is a medium in which anonymity is guaranteed, and internet users can easily provoke one another over political controversies. Before long, however, the law was not welcomed at all by a number of individuals as well as groups such as NGOs, internet users, the Online Newspaper Association, and even the National Human Rights Commission. Indeed, they all held strong views opposing the online real-name policy. It seemed that the policy was a red-hot issue during the election. In the end, the law was suspended because of severe criticism from people in all walks of life (Park, Kim, and Choi 2005). In the application, the VAA asked if the users agreed that an *"Online real-name policy should be enacted."*

2012 Presidential Election and VAAs: CCEJ and Daum

Overview: Korean Presidential Elections and 2012

In the mid-1980s, owing to the decades under an authoritarian dictatorship elected by the Electoral College, Korean citizens

were eager to establish a new constitution, which guarantees a single-term presidency elected directly by the public. As a result of the long and persistent efforts to establish a democratically elected government, the constitution was amended in 1987, ensuring that the president must be elected through a direct election under plurality, and may be in an office for five years only. In December 1987, the first presidential election after democratization was held. In 2012, Park was elected as the eighteenth president of the Republic of Korea, and the sixth under the current constitution.

In 2012, two major elections were held nationwide: the nineteenth general election on April 11 and the eighteenth presidential election on December 19. Despite negative evaluations toward the Lee Myung-bak administration, the ruling party, the Saenuri Party (or New Frontiers Party),[2] won the general election and occupied the majority of the National Assembly. Though the opposition parties lost the election, the Democratic United Party, the main opposition, won 127 seats out of 300, and made for a polarized legislature. Soon afterward, three major figures emerged as presidential candidate hopefuls: Park, from the party in office, and Moon Jae-in and Ahn Cheol-soo as members of the opposition.

On August 20, the Saenuri Party nominated Park, the daughter of the late former president Park Chunghee, as the presidential candidate. On September 16, meanwhile, the most influential opposition party—the Democratic United Party—designated Moon for its election candidate. Ahn, a well-known entrepreneur in the area of computer vaccine programs and their success, declared his candidacy as an independent on September 19. All the polls suggested that Park was the leading candidate, while Moon and Ahn were competing for the second place within the margin of error (Gallup Korea 2013; Park 2013a). On November 6, the two opposition candidates, Moon and Ahn, agreed to put forth a single candidacy to beat the leading competitor, Park. Both participants, however, failed to reach agreement on not only common policies but also a way of unifying support behind the single opposition candidate. Ahn eventually announced his withdrawal

from the race on November 23, as the negotiations fell into a serious deadlock. Finally, the race had become a two-way race.

On December 19, Park, of the Saenuri Party, won the election with 51.55 percent of the total vote, while Moon, of the Democratic United Party, received 48.02 percent of the vote. She was the first candidate to win the presidency with a majority of the total vote following the democratization. The election itself was contest between two dominant candidates who obtained 99.57 percent of the total vote.

The existence of the dominant candidates made the eighteenth presidential election one that was characterized as an ideological confrontation between liberals and conservatives rather than issue voting (Park, Kim, and Woo 2013). Both candidates presented similar policies as they had to get more votes from centrist voters than their rival. This made it difficult for the voters to differentiate between Park and Moon in terms of their policies. For this reason, numerous studies insisted that the affective attitude toward the candidates was the dominant factor that influenced voters' candidate choice (Jang 2013). In spite of the common features in both candidates' agenda setting, there were noticeable differences among their policies in the details (Juang and Yoon 2013).

In the CCEJ's application, there were 25 questions in total dealing with different fields. Thirteen of them were about economic issues such as increasing taxes, privatizing public enterprises, and implement regulations on circular shareholding. It also included eight questions related to political issues such as abolishing the *National Security Law*, legislation related to North Korean human rights, and the withdrawal of May 24 measures. The remaining questions were related to social issues about education and an online real-name policy. Daum's questionnaire, however, consisted of 15 questions: 7 were related to economic issues, 3 were about politics, and 5 dealt with social issues.

Hereafter, we explain main issues in the 2012 presidential election in three different fields: political, economic, and social issues. In addition, we explain how the issues were included in the VAAs run by different organizations such as the CCEJ, Daum,

and Montazu.[3] Finally, we compare the differences between two applications, and the questionnaires in previous elections.

Political Issues

In the 2012 presidential election, there were three major issues in the political field: policies toward North Korea, construction of the Jeju naval base, and the extension of voting hours. North Korean issues have always been one of the most controversial topics in modern Korean politics. Liberals prefer building cooperative relations with the North, while conservatives are hard-liners on North Korean issues. The first issue related to the North was whether the government should maintain the May 24 measures. The second issue concerned the legislation on North Korean human rights law. As the human rights violations were getting worse, conservatives wanted to oppose the North harder by establishing a North Korean humans right law. The next issue in the political field was about the construction of a naval base on Jeju Island, as those who opposed construction insisted that the site should be preserved because of its natural value. The last issue was about extending voting hours as turnout had been decreasing

Table 3.3 Issues in 2012 presidential election

Fields	*Issues*	*Contents*
Political Issues	Policies toward North Korea	- Maintaining May 24 measures - Enacting North Korean human right law
	Jeju naval base	- Reconsidering the naval base construction on Jeju Island
	Extension of voting hours	- Extending the voting hours to improve the turnout
Economic Issues	Economic democratization	- Regulating circular shareholdings
	Public welfare	- Increasing tax rates for the rich to provide universal welfare
Social Issues	College tuition cut	- Cutting college tuition in half
	Improving public education	- Reducing expenditure on private education and strengthening public education

continuously since the 2002 presidential election. These policy issues are listed in Table 3.3.

When the conservative president Lee Myung-bak, came into office in 2008, inter-Korean relations became strained. Moreover, when the South Korean naval vessel the *Cheonan* was sunk by a North Korean torpedo attack in March 2010, the situation grew worse. The Lee administration, as a result, declared a new policy called the "5.24 (or May 24) Measure," which severed ties between the two Koreas, including bans on South Koreans visiting the North, regulating new investment toward them, and even halting humanitarian aid.

In the 2012 presidential election, one of the key issues became whether or not to withdraw the May 24 measure. Park, of the ruling party, insisted that only when the North took reasonable actions, including a sincere apology for the provocations—the *Cheonan* ship incident and an artillery attack made toward Yeonpyeong—and set out measures to prevent a recurrence, would the May 24 measure be lifted (Lee 2012). But Moon insisted that the measure should be withdrawn immediately without any conditions and that he would resume inter-Korean economic cooperation.

The second issue related to North Korea had to do with enacting a North Korean human rights law. Park, basically, was for it, insisting that human rights are universal values for all human beings, and that the human rights of people in North Korea should also be preserved as in the rest of the world. Moon, on the other hand, was against the law as he considered that the situation would not be changed by humiliating the North Korean government, but rather, that the South Korean government should lead them to do so by encouraging them government to improve the situation on their own (Kim 2012).

These two issues related to North Korea were included in VAA question sets in different ways. The first issue, on withdrawing the May 24 measures, was included in both of the VAAs provided by Daum and the CCEJ. Instead of mentioning withdrawal of the measure directly, Daum asked, *"How we should treat North Korean government?"* Users had to choose one of three statements they agreed with: *(1) "It can be flexible, but we should take a firm*

approach toward the North Korean nuclear issue." (2) "If we treat them trustworthily, North Korean will react so as well." (3) "Have no idea." In the CCEJ application, in contrast, the respondents were asked whether they agreed with the idea that the May 24 measures should be withdrawn. The second issue, enacting a North Korean human rights law, was not contained in the set of questions in Daum, while, the CCEJ application asked the participants to choose whether they agreed with the idea that such a law was necessary.

As protests started in earnest in 2011 against the construction of a naval base on Jeju Island, this became one of the most controversial issues as well. Park insisted that the construction should continue, as it would vitalize the local economy, and it was an essential element for national defense. Moon, however, said that he would reconsider the construction because it had gone against its original purpose: building a civil-military complex harbor.

This issue was included in both of the VAAs. The options given by Daum were the following: *(1) "It must be continued to vitalize the local economy and ensure national security." (2) "It must be stopped and considered again."* In the CCEJ's battery of questions, they asked, *"The construction should be stopped and reconsidered from the beginning; Agree or Disagree."*

The third issue in the political field was about the extension of voting hours. As voter turnout had fallen continuously since the sixteenth presidential election in 2002, how to raise it was widely discussed. Moon insisted that an extension of voting hours would give people who had to work for a living an opportunity to vote on election day. Park, however, argued that a steady decrease in turnout is not a matter of how long the voting hours are, but rather how much people distrust politics.

Daum was the only supplier that included this issue in the questions. Daum asked respondents to choose their positions on the issue, by giving them three statements: *(1) "It is a better idea to make it possible to vote anywhere the voters want to vote, rather than extending voting hours." (2) "Voting hours should be extended to 9 p.m. to guarantee genuine universal suffrage." (3) "Have no idea."*

Economic Issues

The most influential factor that has an effect on voters' candidate decision is their economic policy preferences. In 2012, two issues were the most controversial in the economic field: economic democratization and public welfare. As the industrial structure had been asymmetrical, how to regulate conglomerates and make the structure balanced emerged as a pending issue. Park and Moon agreed on the necessity of economic democratization, but there were plenty of differences between them. In particular, regulating circular shareholdings was the most controversial among economic reform issues. The next major issue was about the public welfare. Because of people's negative evaluation of then-president Lee's economic policy, both candidates tried to differentiate themselves from him. Tough both candidates suggested that they would guarantee broader welfare coverage; however, the way in which they would finance it was different.

Park concentrated on establishing a fair economic order and assuring coexistence and a balance between conglomerates, and small or medium-sized enterprises. Moon, however, concentrated more on regulating conglomerates. For this reason, the two candidates had different stances on circular shareholding regulations. Park insisted that only new circular shareholdings of conglomerates should be banned. Moon, in contrast, took a tougher stand on this issue, arguing that all circular shareholdings should be banned in three years (Park and Kang 2012).

The topic was included in both of the VAAs. The CCEJ asked whether the users agreed with the following statement: *"It should be obligatory to dissolve existing circular shareholdings, to reform corporate governance structures."* In Daum's VAA questions, respondents had to choose one of three statements: *(1) "Only new circular shareholdings should be banned, not the existing ones." (2) "All circular shareholdings must be banned, including current existing and new ones." (3) "Have no idea."*

Even though Park represented the conservatives, she also supported the need for universal welfare. She insisted that she would secure the budget for public welfare by restructuring government expenditures, not by increasing taxes. Moon, however, argued that

it was inevitable that taxes should be increased, especially for the rich, to provide universal public welfare. This issue was naturally related to the issue of raising corporate taxes. Moon, as a result, insisted that it was necessary to raise corporate taxes to secure revenue, while Park opposed this, as it might lead to a decrease in corporations' investments.

Daum asked two questions related to tax increase issues. The first question was about the way to extend public welfare: *(1) "It is needed to raise taxes to expand public welfare." (2) "It should not be expanded if it threatens fiscal soundness." (3) "Have no idea."* The second question was about a corporate tax increase. They asked whether, *(1) "It is necessary to raise taxes for the conglomerates." (2) "Corporate taxes should be kept low to encourage investment." (3) "Have no idea."* The CCEJ, in contrast, had only one question related to a tax increase. They asked the following: *"Do you agree that the tax rate for the rich should be raised?" And "Do you agree with that taxes on real estate holdings should be raised?"*

Social Issues

Issues related to education have always been a major issue as well. In 2012, two topics had emerged: overpriced college tuition and how to strengthen public education. As college tuition had increased rapidly for a decade, the lowering of tuition became one of the most important issues in the social field. In addition, as Korean households were suffering from soaring spending on private tutoring, supporting public education was also one of the current issues during the election.

Both candidates shared the view that college tuition should be cut in half, but their approach to tackling the problem was different. Moon insisted that college tuition should be lowered by half for all students and universities. However, he faced criticism that he was also responsible for the rise in tuition as it had increased rapidly during the previous liberal administration, in which he had participated. Park took another view, insisting that tuition rates should be decided in relation to students' income level. In addition, she suggested that she would reduce "the burden of

tuition" by increasing governmental scholarships for those with a lower income, and by decreasing interest rates for student loans.

In the CCEJ VAA, they asked, *"Do you agree that it is necessary to increase finances and establish regulation measures to cut college tuition in half?"* This issue was not included in Daum's questions.

Both candidates also shared their education policy, which included education reforms. Moon approached this issue by emphasizing "educational equality," and insisted that he would gradually convert the elite high schools (or special purpose high schools) to regular schools; abolish the standardized exams; and establish a centralized university entrance system. Park, however, suggested "reforms within the current system." She therefore insisted that she would not turn the elite high schools into regular schools, but would expand government support for regular schools. In addition, she agreed to abolish the standardized exams for elementary school students; however, exams for middle and high school students would be retained. Furthermore, she insisted on giving more authority to universities.

The CCEJ asked *whether the users were in favor of giving more authority to universities.* Daum, in contrast, asked two questions related to education issues: maintaining special purpose high schools and abolishing the standardized exams. The statements related to specialized high schools were the following: *(1) "The government should expand support for regular schools, but maintain specialized schools." (2) "Specialized school should gradually be converted to regular schools."* The next question, which was about the standardized exams, asked, *(1) "The exams for middle and high school should continue, but exams for elementary school students should be abolished." (2) "All standardized exams should be replaced by sample examinations."*

Implications: Comparing VAAs in 2012, and Previous Versions of VAAs

Though both candidates shared plenty of policy outlines, the ways in which they approached the issues were different, and it was possible to compare the two competitors based on their policies.

VAAs have helped voters choose which candidate is closer to his or her perspective, and compare two candidates' policies. As the presidential election in 2012 was one of the fieriest elections following Korean democratization, numerous organizations, such as portals, the media, and nongovernmental organizations (NGOs), tried to present a comparison of the candidates' stance on the issues.

The main difference among the VAAs provided in 2012 was "how the users answer questions." Daum asked the respondents to choose the statements representing each candidate. By doing so, the users could compare their perspectives with those of the candidates. The CCEJ, however, offered a statement for each issue and asked the users whether they agreed with it or not. Then, it showed how similar the response from the user was to the position of each candidate. The second difference was "how the candidates' opinion is reflected in the questions." Daum gave the statements from open sources, such as each candidate's pledge books and interviews done by the media. The CCEJ, however, sent a document asking the candidates to respond with their stance on the different issues. According to the suppliers' own statistics, about 50,000 people used the CCEJ's VVA, while 900,000 participated in Daum's VAA.

In spite of the differences in the VAAs, they had a common feature: users could put more weight on specific issues in order to make it easier to find out which candidate was closer to their preference. They were the first VAAs that made a hierarchy of the list of the questions, which was not able in previous VAAs. Participants in the Daum VAA could give a score related to how important each issue was: low, medium, and high. In the CCEJ's VAA, in contrast, users could check a question if they thought the issue was more important.

Some studies have pointed out that political issues were not a dominant factor that had effects on candidate choice in South Korea. VAAs try to change this behavior by encouraging voters to compare candidates on the basis of policy stances. The aim of VAAs is to shift attention among voters to policy differences between candidates as the basis for vote selection.

2014 Local Election and VAA

Overview

In Korea, local elections began to be held in 1952, with elections for city, town, and village council members, but with President Park's declaration of the Yushin system, local elections were discontinued. After the democratization of Korea, however, local councils were reintroduced in 1991, and nationwide local elections, including those for the heads of local governments, were held in 1995. Now Korea has over 20 years' history of local autonomy up to the latest nationwide local elections in 2014 (Kang 2014). The local election is the core of local autonomy and grass-roots democracy for electing public officials who are capable of carrying out public services and equipped with the abilities and qualifications to represent local residents and promote local development, and therefore local issues and commitments should be spotlighted in the election. However, past local elections in Korea were dominated by central political issues. For this reason, people interpreted the results of a local election as an interim evaluation of the ruling and opposition parties. What is more, the national disaster of the *Sewol* ferry just before the local election in 2014 made it even harder to implement the local election for its original purpose. Accordingly, it was necessary to change the local election to a policy election in order to prevent the local election from being subordinate to central politics and being distorted by issues not relevant to the election, and the CCEJ operated VAA in 2014 as it had done before in order to provide useful information to help voters make the right choice.

In the 2014 local election, a VAA consisted of 15 common questions on major current issues in various areas of Korean society such as politics, the economy, and society, and 5 questions on local pending issues in each city or province; therefore, a total of 20 questions focused on the candidates for the 17 municipal, provincial, and metropolitan administrators throughout the country.

Like the previous ones, the 20 questions ask about differences in the positions among the candidates.

For a more detailed explanation, this study divided the VAA questions for the 2014 local election that were used in order to measure the conformity to policies between candidates and voters into the areas of politics, economy, and society, and then, selected the major issues in each area, and presented them in Table 3.4. The table was made based on major policies and issues common in Korea and pending issues in Seoul City, the most closely contested constituency in this local election.

Table 3.4 Issues in 2014 local election

Fields	*Issues*	*Contents*
Political Issues	Party nomination system	- Introduction of the "party nomination responsibility system" that prohibits the nomination of a candidate by his or her party once just after the revocation of the candidate's election - Abolition of the "party nomination system" for candidates for local administrator and municipal council positions
	Paid policy assistant system	- Introduction of the "paid policy assistant system" for municipal, provincial, and metropolitan council members
Economic Issues	Normalization of real estate tax	- Normalization of real estate tax by raising the tax base to the market price
	Rent ceiling system	- Introduction of the rent ceiling system, which limits the rate of increase in rents
	Municipality bankruptcy system	- Introduction of the "municipality bankruptcy system"
Social Issues	Local police system	- Introduction of the "local police system" for local self-governing bodies, including cities, counties, and districts
	For-profit hospital	- Introduction of "for-profit hospitals"
	Autonomous private high school	- Abolition of special-purpose high schools and autonomous private high schools
	Restoration of the four major rivers and Cheonggye-cheon Stream	- Restoration of the four major rivers - Restoration of the Cheonggye-cheon Stream into a natural stream - Resumption of the "Han River waterway to the West Sea" project

Political Issues

The policies spotlighted as major pending issues in 2014 the local election were the party nomination system and the paid assistant system. First, with regard to party nomination, the individual who is nominated as the candidate representing the party reflects the nature of the political party as an internal power, and becomes a factor in determining the future direction of the party. Moreover, a nomination has a very significant meaning because a party's candidate nomination may have a direct impact on the outcomes of the election (Choi 2012). Thus, the questions on *the introduction of the "party nomination responsibility system,"* which makes the individual or his or her party pay the expenses of an election in case a re-election/by-election is held due to corruption or intraparty dynamics. In addition, there was an item concerning *the abolition of the "party nomination system"* for local elections (local administrators and municipal council members), for developing responsible political practices had been discussed continuously, and as such, there were clear differences in local election candidates' commitments. While candidate Jeong, who emphasized responsible politics, supported the system, candidate Park argued for careful examination of the system and the need to wait for social consensus. The local election issues used in the formulation of the VAA are presented in Table 3.4.

The "paid assistant system," which was proposed for reinforcing the expertise of the local councils and council members' activities, brought forth controversies because of negative public opinion against local councils and extravagant budgeting. There was a clear difference not only in public opinion but also between the two candidates. Different from candidate Jeong, who opposed the paid policy assistant system for metropolitan council members, candidate Park supported it, saying that it was necessary for supervising the administration of the metropolitan councils, containing the councils, and reinforcing the councils' policymaking capability. This issue was reflected in a VAA with the question, *"The paid policy assistant system should be introduced for municipal, provincial, and*

metropolitan council members," through which the coincidence of preference agreement between candidates and voters could be assessed.

Economic Issues

Unlike other policy areas, the economy is directly related to people's lives. For this reason, persistent social interests and issues were raised, and especially the "real estate tax" and the "rent ceiling system" were found in both the 2012 and 2014 CCEJ VAAs. While the 2012 VAA said simply, "The real estate tax should be raised for those owning real estate such as lands or buildings," the 2014 VAA said, *"Real estate tax should be normalized by using the market price of real estate as the tax base,"* indexing taxation based on the current price. Different from the question in 2012 asking about the abolition of the system in which apartments are sold at a price lower than the market price, the 2014 VAA included a question on **"***restricting the rate of increase in rents in the real estate market."* As sensitive as this issue was, the two candidates' opinions also sharply contrasted with each other. Candidate Jeong opposed both, saying that the base of the real estate tax was already high in terms of an effective tax rate and that, instead of the rent ceiling system, housing transactions should be normalized. In contrast, candidate Park argued that a higher real estate tax was a global trend for tax equity and that both should be adopted for tenants' residence stability and the expansion of residence welfare.

Government financing was another critical topic. The *"municipality bankruptcy system,"* which prevents local self-governing bodies from accumulating unsustainable debt and promotes responsible financing. Under this policy, the central government settles debts for a financially faltering local self-governing body and, at the same time, deprives the body of sovereignty over their budgets. If this system were enacted, the self-governing bodies with the highest risk of bankruptcy would be Incheon, Daegu, and Busan, and other areas would not be safe either because

their finances are getting worse. These cities opposed the municipality bankruptcy system, calling it a policy that undermines the foundation of local autonomy while the government and the ruling party supported the policy as a means of normalizing local governments' finances. As this issue surfaced as a major subject of controversy with the local election coming up, it was reflected in the VAA questions.

Social Issues

Lastly, different from those questions on political and economic policies, questions on social policies were mostly about current issues in individual localities. First, there were questions on the "local police system," in which the local police takes charge of community policing activities for residents such as traffic and security, while the national police carries out other important policing functions, and on open investment medical corporations, namely, "for-profit hospitals" for enhancing the quality and competitiveness of medical services. As there had been long debates on for-profit hospitals, this issue was also found in the VAA by the CCEJ just before the presidential election in 2012. While the 2012 question—*"For-profit hospitals should be allowed in special economic zones"*—was limited to special economic zones, however, the 2014 question—*"For-profit hospitals should be introduced for better medical services"*—extended the scope to wide areas because the foundation and operation of for-profit hospitals were permitted to foreign hospitals within special economic zones. As the policy was introduced along with hot debates over the pros and cons, moreover, the two candidates also held quite different opinions. That is, candidate Jeong advocated for-profit hospitals for the reason that they would contribute to the national interest through Korean advanced medical services, but candidate Park opposed them out of the concern that they might damage the public nature of health care.

In 2010, the "autonomous private high school" was introduced, which could be operated autonomously without the

government's intervention in the curriculum, the recruitment of students and teachers, the setting of tuitions, and so forth, in order to solve the problem of high school leveling. This policy became a big social issue from the beginning in 2001 and when autonomous private high schools were expanded in 2003, and as a result, it was included in the 2004 CCEJ VAA—*"Autonomous private high schools should be extended,"* it triggered continuous controversy concerning consequences for the effectiveness of the policy and its effects on equality. Finally, the abolition of autonomous private high schools came to the surface. In the 2014 local election as well, the candidates assumed different positions. Candidate Jeong approved the abolition of special-purpose and autonomous private high schools, thinking that they were degrading education by making young children have to prepare for entrance to such schools from an early age, and candidate Park maintained the position that it was too early to make an objective judgment and that there should be further close and comprehensive examination. This issue was also reflected in the 2014 CCEJ VAA, which contained the question *"Special-purpose and autonomous private high schools should be abolished."*

In addition, the VAA questions reflected issues related to the "four major rivers," "Cheonggye-cheon Stream," "Han River waterway to the West Sea," and so on, which have an important impact on the local environment. These issues were included because the Four-River Project promoted by the Lee government had caused serious environmental damage, and the restoration of the rivers through the removal of the girders was discussed. Moreover, the Cheonggye-cheon Stream wasted budgets for increasing maintenance expenses, and it was necessary to restore it to a natural state. Controversy over the two issues was triggered also when the projects were eliminated from the Outstanding Cases of Nature-Friendly River Restoration selected by the Ministry of Land, Infrastructure and Transport in March 2014, and, with the local election coming up, the candidates put out conflicting positions on and commitments to the issues. Moreover, the "Han River waterway to the West

Sea" project intended to connect Incheon, Gimpo, and Seoul through the first inland canal in Korea was scrapped in 2012 due to low economic feasibility and lack of social consensus, but as the resumption of the project was proposed recently, the issue was included in the 2014 VAA with the following question: *"The Han River Waterway to the West Sea (Development of Infrastructure for Transportation by Ship through the Han River Waterway to the West Sea) project should be promoted again."*

Implications

For 20 major issues for which the candidates held dissimilar positions, the CCEJ VAA for the 2014 local election provided information so that voters could compare the candidates' policies with their own preferences and choose the candidate whose perspective was the closest to theirs. Based on this, the present study reviewed key issues in the areas of politics, the economy, and society, and made a comparative analysis of the positions held by Seoul mayor candidates Jeong Mong-joon and Park Won-soon representing, respectively, the Saenuri Party and the New Politics Alliance for Democracy.

As the program provided most recently, the 2014 VAA is highly meaningful because it includes not only national issues but also local issues, which is different from previous VAAs for the presidential election and the National Assembly election. However, it has a limitation in that it applies only to elections for metropolitan administrators without providing information on elections for local administrators and metropolitan council members.

Conclusion

This chapter has introduced the history and development of Korean-style VAAs from a comparative perspective. For this purpose, the study reviewed three different versions of VAAs in Korea since 2004, including the 2004 National Assembly elections, the 2012 presidential election, and the 2014 local

elections. As we have seen, Korean-style VAAs have developed over time and been tailored to help voters make political choices in elections.

VAAs in Korea were designed to allow the electorate to express their own preferred policy positions on a wide range of issues that were the focus at the time of the elections and provide information about where each party or candidate stands on these issues "online." In the same vein, Korea presented itself as one of the best examples for testing the effects of VAAs on voters' political attitude and choices because Korea ranks highly among Organization for Economic Cooperation and Development (OECD) countries in terms of internet access and use.

Based on the analyses above, we can summarize our findings as follows: first, Korean-style VAAs differ from each other depending on the type of election. This chapter discussed three different types of elections: National Assembly elections, presidential elections, and local elections. Each election has different district magnitude. Whereas the president is selected from a nation-wide district with one member selected, there are 246 local electoral districts for the Korean National Assembly with 54 proportional representation members of parliament from voters' party votes. Also, Korean voters elect their local representatives, governors, and mayors by direct vote. The total number of elected political offices is more than 3,500 across the country.

This point indicates that VAAs have different levels and scopes of issues under consideration in the selection of issues and design of VAAs depending on the types of elections. Specifically, the VAAs for presidential elections covered the widest range of issues that have an influence on most people in the country. The VAAs for National Assembly elections included both national and local level issues to help voters make their political choices. However, the VAAs for local elections dealt with mainly region-specific issues that differed depending on localities. It seems reasonable that different types of elections reflect different levels and scopes of issues for consideration because the selection and design of VAAs are based on voters' preferences for their issue positions.

Second, this chapter finds common issues included in the selection and design of VAAs regardless of election types. These are tax-related issues—tax cuts or tax increases. Unlike VAAs for National Assembly and presidential elections, the VAAs for local elections covered local-level tax issues such as real estate- or property-related tax increases or cuts. This point supports the above-mentioned relationship between the types of elections and the scope and level of issues that are considered for VAAs.

Third, we also find the existence of issues related to political reform over time in the making and design of VAAs in Korea regardless of type of election. Korean politics has put topics concerning political reform at the center of political debates since 2000. All the elections since then have focused on different issues of reform such as lowering the age for voting in the 2004 National Assembly elections, extending the voting time for the 2012 presidential election, and allowing partisan candidate nominations for the 2014 local elections. With the second finding above, the politics of reform and tax increases or cuts have proven to be the most important issues for the electorate and political parties and candidates for the Korean-style VAAs.

Fourth, the method of selecting issues for the creation and design of VAAs in Korea has developed over time, taking into account the preferences of ordinary citizens. When we compare the 2004 and 2014 versions of VAAs, we find different ways of selecting issues for consideration. For example, the 2014 VAAs surveyed the electorate and specialists for the purpose of incorporating the general mood of the society into the VAAs. Elections represent what voters think are the most important issues facing the country and how they understand and evaluate parties' and candidates' positions on issues. A VAA is one of the most recent technical innovations aimed at providing voters with information so that they can use it in making political choices. Therefore a VAA is supposed to cover the issues that voters believe are the most consequential and that divide parties and candidates in terms of cleavage lines.

Notes

1. *The Monthly Chosen*, September 30, 2003.
2. The Hannara Party (or Grand National Party) changed its name to the Saenuri Party in 2012 to shake off its negative image.
3. The website is not available anymore. In addition, we are not dealing with it as we have not gotten any responses from them, although we asked for permission and detailed information about its application.

CHAPTER 4

STRENGTHENING DEMOCRACY: DEVELOPMENT OF THE IVOTER WEBSITE IN TAIWAN

Da-chi Liao and Boyu Chen

Introduction

This chapter introduces Taiwan's first VAA—iVoter, including its application and ongoing development. The name iVoter is intended to refer to "I vote," "informed vote," "intelligent vote," and "internet vote." This system was first used for the 2012 eighth term Legislative Yuan elections. From October 2011, when the iVoter site officially went online, until 2012, 1,400 people became iVoter members and completed issue position diagnostic registration, while over 40,000 people (from different IP addresses) have visited the website.

Compared with South Korea and Japan, which developed VAAs around a decade ago, the development of VAAs came rather late to Taiwan, as it was first introduced there in 2010 by the principal investigator of the VAA project, Da-chi Liao of National Sun Yat-sen University. This VAA was the result of collaboration between a Taiwanese research team and the EU Profiler research team at the European University Institute (EUI). EU Profiler is a

VAA used for European parliamentary elections and was designed by Alex Trechsel and his research team at EUI.

Different from VAAs in other parts of the world, iVoter offers survey questionnaires before and after the election for users to fill out so that the iVoter research team can conduct research based on the collected data. In the 2012 national election, 647 iVoter members returned the survey questionnaires before and after the election.

This chapter begins with a brief introduction of Taiwan's political landscape and its relationship to the design of the iVoter website. We then explain the process used in creating the iVoter Issue Position Test. Hereafter, user profiles are discussed. Finally, we discuss the ongoing development and design of the iVoter website as a platform for bridging the gap between representatives and voters, including the utilization of online meetings.

Taiwan's Political Landscape and Its Relation to VAA

Taiwan is a representative democracy in which the president is the head of state; the premier, nominated by the president, is the head of government; and there is a unicameral legislature (Legislative Yuan). The presidential and legislative elections are national elections that take place every four years. In 1992, the Second Legislative Yuan elections were held to replace all remaining original Legislative Yuan members. These members, originally elected on the mainland, had been forced to retire by a Judicial Yuan decision. The first direct presidential election was held in 1996. The present ruling party is the Kuomintang (Chinese Nationalist Party or KMT), which ruled the island from the late 1940s to 2000, when the largest opposition party, the Democratic Progressive Party (DPP), became the first non-KMT party to rule. The DPP, which advocated de jure Taiwanese independence, was formed in 1986, one year prior to the lifting of martial law. As the largest opposition party, the DPP won 33 percent of the vote and acquired 51 legislative seats in the 1992 election, thus constituting a formidable opposition power in Taiwan's politics.

Currently, there are five political parties in the Eighth Legislative Yuan. Among these, the KMT holds the majority of legislative seats (64 out of 112), and the DPP, the largest opposition party, is second only to the KMT in seat number with 40. The other parties—the People First Party (PFP), the Taiwan Solidarity Union (TSU) and the Non-Partisan Solidarity Union, are rather small—with no more than three seats each. Legislators are elected in a mixed member majoritarian (MMM) system consisting of single-member districts (SMDs) and proportional representation (PR) electoral rules. This system replaced the single nontransferable vote (SNTV) system in 2005.

Since party systems reflect social cleavages in Taiwan, the China factor serves as a main cleavage within society and between political parties. The KMT and the PFP, which tend to advocate for a Chinese identity, in addition to adopting more pro-China and proactive cross-strait policies, are coined the "Blue Camp," while the DPP and the TSU, which stress Taiwan's independence from mainland China and maintain a cautious attitude toward cross-strait relations, are referred to as the "Green Camp." The China cleavage, the most important division, has long existed in Taiwan's party politics, and often encompasses other divisions, such as related to economics and foreign relations. The blue camp's desire for a closer relationship with mainland China as a means of boosting Taiwan's economy and improving its foreign relations contrasts with the green camp strategy of circumventing mainland China in pursuing economic interests and seeking greater international space. The two camps are strongly at odds with respect to the China factor in every election.

In addition to the China cleavage, class cleavage and distribution issues have emerged in recent elections, which have increased the political complexity in Taiwan. Accompanied by an increasingly aggravated wealth gap, class politics have given impetus to Taiwan's party politics (Wu 2013). The blue camp is thought to be more right oriented and the green camp more left oriented.

When it comes to voting, party affiliation or party orientation serves as a heuristic and a long-term determinant of voting decisions. However, surveys conducted by the Election Study Center

at National Cheng Chi University (1992–2012), show that the younger generation in Taiwan is less likely to identify with political parties (Sheng 2010). Evidence also indicates that the better educated within the young generation tend to be independent voters (Tan et al. 2000). While party identification plays a less decisive role in voting decisions within the younger generation, "policy preferences, performance judgment, or candidate images" will carry more weight (Dalton 1996, 346) if voters are well informed on the issue positions of parties or candidates.

A VAA is, thus, a useful device for providing information on policy preferences for parties or candidates and, as a result, allows voters to fully deliberate on major policy issues before casting their vote. Taiwan's sophisticated information technology infrastructure provides good conditions for developing a VAA. In 2014, Taiwan's internet penetration rate hit 80 percent, which ranked thirty-sixth in the world (Internet Live Stats 2014). The beginning of internet campaigning in Taiwan came not long after Bill Clinton used the internet to communicate with the electorate in the 1992 presidential elections, and political parties in Taiwan have been building up their websites since the mid-1990s. In recent Taiwanese elections, most candidates and political parties had their own campaign websites, social media fan pages, and mobile apps. Seventy-three percent of the incumbent legislators use Facebook fan pages. However, prevalent internet campaigning in Taiwan does not necessarily mean voters are fully informed on candidate or party issue positions. To improve the quality of representative democracy and create well-informed voters is one of the main goals of Taiwanese political scientists.

In light of the different political contexts in Taiwan and European countries respectively, the iVoter research team decided to focus on the issue positions of each candidate rather than those of each party. The reasons are as follows: first, compared with the hundreds of parties in European countries, Taiwan's politics are dominated by the two major parties—the KMT and the DPP. Unlike most of the European countries, where party manifestos are common during the election period, it was not until 2008 that party manifestos were available as the result of electoral reforms

that transformed Taiwan's national electoral system from SNTV to SMD. Instead of party manifestos, all district candidates had to submit their campaign promises to the government in accordance with Taiwanese election laws, and the Election Commission was responsible for sending these in a publication to all voters (Liao, Li, and Chen 2013). Second, the single-member district plurality system leads candidates to place greater priority on the issue positions of their constituencies, and less on those of their party, in order to be elected. It is not uncommon for candidates to disagree with their party's positions and even received punishment for violating party discipline.VAA designs that provided only party issue positions were thus perceived as not applicable to Taiwan's politics.

The iVoter will be expanded in the future to include party issue positions. Since political parties have provided party manifestos since 2008, the platform for providing a party's issue positions is under construction now, and is expected to be up and running for next national election.

The Process of Building the iVoter Issue Position Test

There are three major steps to building the iVoter website: first, selecting major issues for issue position tests; second, creating the questionnaire for the issue position test; last, conducting statistical analysis of data received from candidates to discover the major dimensions that represent Taiwan's political landscape. After completing analysis, the research team established the iVoter website for issue position testing during election periods.

Issue Selection Method

The major issues for the position test were extracted from three sources. First, the research team collected timely issues on which no conclusion had been reached in discussions concerning their direction in the Seventh Legislative Yuan. Second, the team selected presidential election issues that legislative candidates

could not avoid because of the overlap in presidential and Eighth Legislative Yuan elections. After the presidential inauguration, elected legislators must oversee, amend, and vote on presidential policies. As such, basing questions to legislative candidates on issues in the presidential election not only serves as an appropriate point of discussion for the politicians involved, the media, and for the public but also assists voters in making judgments. Last, the iVoter research team and Citizen Congress Watch, a nonprofit organization that has long been overseeing legislators, took part in collaboration on the iVoter project.

The policy issues were in the form of short questions or statements that were worked out by the iVoter research team. The site offered a selection of 21 total issues in its issue position test. For each issue, the iVoter provided 200 words of explanation and the pros and cons of the policy issue. The 21 policy issues could be further categorized into eight fields according to the standing committees in Legislative Yuan in, which those issues were discussed. The eight fields were home affairs; foreign affairs and national defense; economic affairs; finance; education and culture; transportation; judiciary, organic law and status; social welfare and environmental hygiene (Table 4.1).

After the 21 policy issue items were decided upon, the iVoter team created the issue position questionnaire and asked candidates to express their positions. They could choose to strongly agree, agree, disagree, or strongly disagree with the statement, or take a "neutral stance." Before the day of the 2012 election, 95 district legislative candidates, constituting 33.6 percent of all candidates, responded to the issue position test. There were also 18 candidates, constituting 6.4 percent of all candidates, who clearly refused to fill out a questionnaire in their reply. Among the 95 respondents, 27 were KMT members, 25 DPP members, 5 PFP members, and 9 Green Party members, with 14 members belonging to other small parties and 15 non-party affiliated candidates. By examining the number of legislators from each party who replied, we can see the small parties showed a greater interest in replying than the larger ones.

Table 4.1 Question topics of iVoter issue position test

Field of Issue	*Question Topic*
Home Affairs	Q9. Legalizing the sex industry Q19. Referendum to determine whether or not a peace accord should go into effect if the Taiwanese government signs an accord with mainland China
Economic Affairs	Q5. Opening Taiwan to mainland Chinese investment capital Q16. Prioritizing economic growth if there is a conflict between economic growth and environmental protection
Transportation	Q20. The Legislative Yuan utilizing the internet channel IVOD and proceedings records to make party negotiations in proceedings
Social Welfare and Environmental Hygiene	Q6. Petrochemical-related industries paying an energy tax Q12. A two-day weekend for everyone Q17. The operationalization of the Lungmen nuclear power plant after construction is completed
Foreign Affairs and National Defense	Q3. Increasing military procurement budgets every year Q4. Switching from a conscription system to a voluntary enlistment system Q18. The Taiwanese and mainland Chinese governments signing a peace accord
Finance	Q10. Taxation based on actual property value in real estate transactions Q13. Some central ministries being moved from Taipei to other regions
Education and Culture	Q1. University tuition increases Q2. Open Taiwanese universities to students from mainland China Q11. Ending the current high school entrance exam and promoting more educational opportunities at the community level Q14. The prioritization of Chinese culture in government cultural policies Q15. The prioritization of Taiwanese culture in government cultural policies
Judiciary, Organic Laws and Statues	Q7. The Assembly and Parade Act being amended from a licensing system to a filing system Q8. The complete abolition of the death penalty Q21. Lowering the threshold of 5 percent for the allocation of seats in the legislature based on PR seat votes

Issue Axis Selection

With reference to EU Profiler, the iVoter research team utilizes the maximum variation method (Varimax) to find the dimensions of all the issues for which the principal component difference is the greatest.

From the calculation results of these dimensions, we find the first dimension approaches and is largely in keeping with the traditional left-right ideological spectrum. For most of the themes in this category, the lower values show a tendency toward the left (high level of government intervention) or a postmaterialist orientation, while higher values indicate right-leaning tendencies (little government intervention) or a materialist orientation. However, when normal voters use iVoter, they might not be clear on the significance of the left-right dichotomy (Sheng 2005). For this reason, iVoter uses the level of government intervention in making this distinction. In the figure, axis movement toward the left indicates greater left-leaning tendencies, and rightward movement indicates greater right-leaning tendencies. In the second dimension, we can see the second principal component is largely related with cross-strait relations and, in this category, larger values almost completely indicate a greater tendency to desire greater interaction between mainland China and Taiwan, while smaller values indicate opposition to interaction. In terms of terminology, using words like pro-Chinese or unification/independence, as well as similar traditional terms, can indicate enmity or be interpreted in different ways. Therefore, iVoter uses the relatively neutral terms "proactive interaction" or "cautious interaction" in defining this dimension.

According to the data received from legislative candidates, with the exception of the issue "promoting more educational opportunities at the community level," all other 20 policy issues statistically differentiate candidates running for election. Though the iVoter research team excluded the issue in position calculations, it was still included in the issue position test questionnaire for future research.

Table 4.2 Major dimensions of issues

Dimension	*Degree of Government Intervention: Low (+)/High (−)*	*Cross-Strait Relations: Cautious (−)/Active (+)*
issue	Q1. University tuition increases (+) Q3. Increasing military procurement budgets every year (+) Q4. Switching from a conscription system to a voluntary enlistment system (−) Q6. Petrochemical-related industries paying an energy tax (−) Q7. The Assembly and Parade Act being amended from a licensing system to a filing system (−) Q8. The complete abolition of the death penalty (−) Q10. Taxation based on actual property value in real estate transactions (−) Q12. A two-day weekend for everyone (−) Q16. Prioritizing economic growth if there is a conflict between economic growth and environmental protection (+) Q17. The operation of the Lungmen nuclear power plant after construction is completed (+) Q19. Referendum to determine whether or not a peace accord should go into effect if the Taiwanese government signs one with mainland China (−) Q20. The Legislative Yuan utilizing the internet channel IVOD and proceedings records to make party negotiations in proceedings (−) Q21. Lowering the threshold of 5 percent for the allocation of seats in the legislature based on PR votes (−)	Q2. Students from mainland China should be allowed to undertake undergraduate studies in public Taiwanese universities (+) Q3. Increasing military procurement budgets every year (−) Q5. Opening Taiwan to mainland Chinese investment capital (+) Q9. Legalizing the sex industry (−) Q13. Some central ministries being moved from Taipei to other regions (−) Q14. The government giving greater priority to Chinese culture in its cultural policies if it is forced to decide such priorities (+) Q15. The government giving priority to Taiwanese culture in its cultural policies if it is forced to determine such priorities (−) Q18. The Taiwanese and mainland Chinese governments signing a peace accord (+)

The positive or negative sign next to each issue within the columns was the result of statistical calculations to demonstrate whether each issue was positive or negative with respect to dimension (Table 4.2). In performing calculations hereafter, mutual additions and subtractions were performed in the calculation of positive and negative signs in order to produce a score distribution for voters and candidates along the two dimensions.

It is unavoidable that there will be variables within this dimensional method arising from our materials that will be questioned. For example, commentators may feel government intervention in the two issues of yearly increases in military procurement and adopting a voluntary enlistment system should not be on the first dimension. They may also believe the legalization of the sex industry, which is on the second dimension, would be more appropriately placed on the first dimension.

However, careful scrutiny demonstrates the rationality of drawing these conclusions from inferences concerning candidates for the Eighth Legislature. First, with respect to military procurement and military conscription, increases in military spending often mean social welfare spending gets squeezed out, and the draft system is often seen as reducing human rights. These two are often seen as a demonstration of nationalistic power and are situated more closely to right wing thinking. As such, legislative candidates believed these issues were strongly related with other social welfare issues. Therefore, military procurement and military conscription were placed on the first dimension after data was calculated. The legalization of the sex industry, on the other hand, is at odds with traditional Chinese culture. In fact, 64.2 percent of all candidates were opposed to legalization to varying degrees. Therefore, this issue relates closely to issues concerning cross-strait exchanges, and is placed on the second dimension.

Methodology in Issue Position Analysis

After filling out a questionnaire, all iVoter users were distributed along the two large dimensions according to the following formula:

X value = government intervention (the greater the value, the lower the level of intervention)

$$= \frac{Q1 + Q3 - Q4 - Q6 - Q7 - Q8 - Q10 - Q12 + Q16 + Q17 - Q19 - Q20 - Q21}{13}$$

Y value = Cross Strait Relations (the greater the value, the more positive the attitude toward China)

$$= \frac{Q2 - Q3 + Q5 - Q9 - Q13 + Q14 - Q15 + Q18}{8}$$

Calculations performed using this formula placed 95 legislative candidates within the 2 large dimensions of government intervention and cross-strait relations.

With respect to the Eighth Legislative Yuan candidate section, KMT candidates' average cross-strait position is more proactive, but they do not place great emphasis on this issue, while DPP legislative candidates are extremely cautious. Non-party affiliated candidates tend toward the center while those from particular small parties tend to be at the extreme ends of the spectrum. If we examine the degree of government intervention on the X axis, we find almost all legislative candidates tend toward a relatively large desire for government intervention, that is, they tend toward wanting to expand social welfare.

The next step involves calculating the proximity between user and candidate. In determining which legislative candidates were closest to voters on issues, the iVoter Website calculated the Euclidean distance (ED) of all candidates from voters, and those with the shortest distance were determined to be closest to members of the public. The formula is as follows:

$$ED = \sqrt{(Y_{voter} - Y_{Candidate\_i})^2 + (X_{voter} - X_{candidate\_i})^2}$$

In addition, iVoter calculated levels of similarity for voters and various legislators. The formula involved subtracting the percentage for coordinate axis distance from 100 percent as follows:

$$Similarity_i = 100\% - \frac{\sqrt{(Y_{voter} - Y_{candidate\_i})^2 + (X_{voter} - X_{candidate\_i})^2}}{\sqrt{(5 - (-5))^2 + (5 - (-5))^2}}$$

After users complete the issue position test, the iVoter website provides them with voting suggestions. The system gives the user an ordered list with the candidate at the top being the one "closest" to the user on positions (more specifically, it is the candidate questionnaire answers which most closely resemble the issue positions indicated in the user's questionnaire answers). In this manner VAAs can assist users in evaluating these political parties to determine which is the closest and which is the farthest from his or her issue positions.

The Profile of iVoter Users: Peripheral Political Agents

The greatest difference between iVoter and other VAA systems is that, in addition to examining the issue positions of each legislative candidate, iVoter also offers survey questionnaires before and after the election for users to fill out. The results obtained therein serve as a reference for future research and a means to make progress in VAA design. This time, 647 iVoter members returned the survey questionnaires for before and after the election. Their average age was 26 years, and 69.7 percent of them had received at least some college education. This indicates that iVoter users can be characterized as young and well educated, which accords with the profile of VAA users in European countries (Marschall and Schultze 2012).

This study takes the survey findings of iVoter members who returned both the pre-election and post-election surveys questionnaires as its object and hopes to identify and determine the groups involved in online political participation and their motives in order to confirm the ideals and mobilizing logic employed by peripheral political agents. Concerning the

definition of "peripheral" in "peripheral political agent," we define these people as those whose stances on public issues vary from those of the government or major political parties and not as those lacking political information or disadvantaged groups. This study defines a "peripheral political agent" based on three characteristics. First of all, the term "peripheral" indicates these actors are not supporters of any mainstream political party, but rather, they are extremely concerned with particular political topics and diverge from the stances of mainstream political parties with respect to public issues. As such, they represent an organized political minority. While "peripheral political agents" stand on the periphery with respect to political stances, they are neither of a low socioeconomic status nor do they lack resources. Second, "peripheral political agents" are inclined toward "postmaterialism" with respect to public issue positions and espouse respect for freedom of thought in addition to showing a high interest in issues related to human rights such as environmental protection and equal rights for women. Third, these peripheral political agents use social networking sites (SNS) such as Facebook, Twitter, etc., frequently.

Organized Political Minority

While studies discussing VAAs highlight that VAA users are usually young men who live in urban areas and are located on the left of the political spectrum (Walgrave and Nuytemans 2008; Wall et al. 2009; Ladner, Fivaz, and Pianzola 2010), a few studies imply the possibility of leaders of small parties or groups using the internet as an essential tool for mobilization (Norris 2001). While previous literature does not define such groups as "peripheral political agents," related research indicates the internet is used particularly often by groups with non-mainstream political positions. In order to examine whether or not iVoter members have characteristics indicative of peripheral political agents, we first analyze the ratio of the parties' iVoter members supported in party voting during this legislative election and the actual vote percentage in election results for each party. It takes party votes as a reference index

because votes for a particular party are considered "sincere votes" and reflect which party the public "truly desires" (Huang, Wang, and Guo 2008, 2).

The post-election questionnaire sent out by the iVoter website asked members which party they voted for. Both the KMT and the DPP, the ruling party and the largest opposition party respectively, show high rates of support (45.1%, n = 548) among the iVoter members who filled out both questionnaires, 54.8 percent of the member voters voted for a smaller party—this figure is higher than the number of member voters who supported one of the two major parties. Among all the members, 191 voted for the Green Party (35.5%), with its party vote percentage far higher than that for any other political party. However, in the 2012 legislative election, the Green Party actually only got 229,536 total votes, amounting to 1.74 percent. Members of the Green Party concern themselves with the environment, peace, social justice, and similar issues, and for this reason, it is considered an issue-guided political party. Moreover, the Green Party is a peripheral political party.[1] Before 2014, it has not been able to obtain seats in national, county, or city legislative bodies or hold public office in Taiwan. The fact that the Green Party, along with its supporters, is still a peripheral political faction in the Taiwanese political picture is not open to question.

Originally, the iVoter website was a VAA that provided voters with issue position-related information. It was not just meant for use by those who supported smaller political parties. However, it turned out the majority of site users were small party supporters, with the large number of Green Party supporters presenting a unique phenomenon. Coincidentally, Green Party supporters were found to be the majority of users in the first group study using VAAs in Ireland in 2008. However, in the actual election that year, the Green Party did not receive a large number of votes. This means the users of VAAs in Ireland showed party preferences similar to iVoter members (Wall et al., 2009). We intend to further investigate whether or not the iVoter members who support the Green Party are clearly differentiated members who support

other parties in order to confirm their Green Party support is not random.

Non-Mainstream Issue Positions

The trend of postmaterialism is reflected by the main characteristics that public issue positions and peripheral political agents hold. Inglehart (1977) points out that after the economies of various world regions develop to a certain point, their society's value systems starts moving from materialism to postmaterialism. According to Inglehart (1990), in a period of materialist values, citizens will concern themselves primarily with warmth, sufficient food, and other similar economic issues. However, after citizens experience a certain amount of economic development, they start to emphasize on social equality and justice, environmental protection, and other related issues.

This particular postmaterialist tendency possibly reflects the issues and related positions of peripheral political agents. Such issues include pursuits related to human rights, justice, and fairness, such as environment and gender issues. Material issues which the government and mainstream public concern themselves with, such as economic growth, enterprise development, and other issues, are not ones which peripheral political agents care about primarily. In addition, postmaterialism tends strongly toward supporting new kinds of collective action and extrasystemic political actions, while traditional political participation does not interest itself with these aspects. Many researchers point out the postmaterialist tendencies of young people with respect to online political participation (Loader 2007; Theocharis 2011) and believe the extent of political participation in young people has not declined but rather undergone *cultural displacement*. Because traditional modes of political participation cannot accord to contemporary youth culture, these young people are turning to political activities outside of the system that allow them to better express themselves and display their self-identity (Loader 2007, 1–3). This is the reason why the internet is used as a tool in collective action mobilization with respect to

environment and gender issues as well as other topics of concern to young people.

Through the iVoter issue position measurement questionnaire, our study further analyzes these results and examines whether or not iVoter members who support the Green Party differ from other groups on public issue positions. In light of the information emanating from issues continuing on from the Seventh Legislative Yuan, the major issues of the 2012 presidential election and legislative reform together form the 21 themes highlighted in the issue questionnaire for the eighth term Legislative Yuan election.

The 21 issue positions are divided into three orientations: whether or not respondents support or oppose cross-strait exchanges, whether they are on the left or right of the political spectrum, and whether they adopt a materialist or postmaterialist stance regarding issues.

First, cross-strait issues, that is, issues regarding whether Taiwan should reunify with the mainland or become independent, represent the divide between the Pan Green and Pan Blue camps, which are Taiwan's two major factions. This is an area for which no possibility for compromise exists. In the 2012 presidential and legislative elections, the major issues concerning whether or not to expand relations with Mainland China included a peace accord, ECFA, expanding Mainland Chinese capital's access to Taiwanese markets, and other issues.

Second, Lin, Chu, and Hinich (1996) analyze the database pertaining to changes in Taiwanese society created by the Academia Sinica's Institute of Sociology and finds that, in addition to party division based on the reunification issue, a division between progressivism and conservatism, as seen in the American political tradition, also has a certain amount of explanatory power concerning changes in attitudes within Taiwanese society. Related issues include social economic justice, corruption, and the expansion of human rights. While the terms progressive and conservative are not familiar to the Taiwanese electorate, some voters possess these values and can be classified thus. In addition, they consider issues and make voting choices on the basis of these beliefs.

In the third orientation, the difference between materialism/postmaterialism and liberalism/conservatism lies in the fact that postmaterialists concern themselves with issues outside a country's mainstream political parties or government organs and place emphasis on problems like human rights or social rights; their stances often vary from those of the government. Among Taiwan's political parties, the Green Party shows strong postmaterialist tendencies. The issues it advocates include denuclearization, abolishing the death penalty, decriminalization of adultery, and other issues related to the environment and gender. In this regard, they are clearly distinguished from the KMT and the DPP, Taiwan's two major political parties.[2]

For the classification of issues, this study uses the 21 issue position diagnostic items on the iVoter website and the three above-listed orientations. In this classification, one particular issue need not necessarily belong to one orientation only. In the first place, the issue of support or opposition to cross-strait exchanges includes whether or not to allow Mainland students to study in Taiwan, whether or not to expand the Mainland capital's access to the Taiwanese market, whether or not to increase arms purchases, whether or not Chinese culture should take precedence, and whether or not both sides should sign a peace accord. Second, issues involving distinctions between liberalism/conservatism include school tuition increases, possible arms purchase increases, the question of increasing citizen's participation in government (changes for the laws concerning registering for public gatherings and processions), the death penalty, decriminalization of the sex industry, whether or not to levy an actual value real estate tax, the possibility of a two-day weekend, and whether the environment or the economy should take precedence. Finally, postmaterialism primarily concerns itself with issues involving environment, sustainability, and justice for various generations. These include a possible energy tax levy, annual military procurement increases, whether or not to increase citizen political participation (changes in the laws concerning registering for public gatherings and processions), the death penalty question, whether or not the fourth nuclear reactor should go online, whether or

not the economy takes precedence over the environment, the possibility of a referendum over a cross-strait peace accord, and whether or not to decrease the threshold for party vote in legislative seat allotment.

Issue position answers are divided into five items: "strongly agree," "agree," "neutral," "opposed," and "strongly opposed." These answers are represented by numerical values (strongly agree = 5, agree = 4, neutral = 3, disagree = 2, and strongly disagree = 1). With respect to support/opposition to cross-strait exchange issues stance scores, the higher the score, the stronger a respondents support for increased exchanges.[3] Similarly, with respect to liberal/conservative issue scores, higher scores indicate a greater tendency toward conservatism,[4] and concerning the materialist/postmaterialist dichotomy, a higher score reflects a greater tendency toward postmaterialism.[5]

We took the responses of iVoter members who filled out the two questionnaires and divided them into groups based on political party into KMT, DPP, the Green Party, other smaller parties, and no vote.

One-way ANOVA was performed to determine whether or not there exists a significant difference for the issue positions for the groups divided on the basis of political party votes in the three orientations mentioned above. We found that group score differences in all three orientations reached significant levels ($p < 0.001$). First, with respect to support/opposition of cross-strait exchanges, voting members who support the KMT or DPP tend toward one extreme or the other. KMT supporters are significantly more likely than supporters of other parties to favor expanding cross-strait interaction, whereas DPP supporters are significantly more likely than those of other parties to maintain a conservative attitude with respect to cross-strait interaction. The attitudes of Green Party supporters tend toward neutrality with respect to cross-strait exchanges; their issue positions are more conservative than those of the KMT group and more progressive than those of DPP supporters. The differences reach significance between the KMT, DPP, and Green Party for support/oppose

cross-strait interaction orientation, while there is no significant difference with the other two groups.

Second, with respect to the progressive/conservative issues and materialist/postmaterialist orientations, the Green Party group is the most left leaning among all the groups, and the most postmaterialist in its inclinations. In contrast, KMT supporters showed the lowest left-leaning and postmaterialist tendencies. Differences for the KMT, Green Party, other small parties, and those who cast void ballots all reached significance, while differences for the Democratic Progressive Party did not reach statistical significance.

Heavy Internet Users

Supporters of the Green Party are more active in the use of social networking sites than the supporters of other parties. In 2012, the DPP received 4,556,526 votes, but had only 320,000 Facebook fans. If all of the DPP fans were supporters, this would constitute only 7 percent of all their voting supporters. The ruling party KMT received 5,863,379 votes, but had only 42,167 Facebook fans, which constitutes only 0.7 percent of their supporters. The Green Party only received 229,566 votes, but has 22,594 Facebook fans, amounting to 9.8 percent of their supporters. Articles on the Taoyuan, Hsinchu, and Miaoli Headquarter sections of the Green Party fan page were reproduced and shared 100 times, something that did not happen on the DPP or KMT social networking sites. This shows that Green Party supporters are good at disseminating information online.

In the pre-election questionnaires, participants were asked whether or not they used various social networking sites, and our results showed that, among iVoter members, a large proportion of Green Party supporters were social networking site users in comparison to other party supporters, and that the proportion of users of three or more sites is high for the Green Party, showing a significant difference in comparison to the proportion of users for other parties ($p < 0.01$).

Implications of the iVoter User Profile

There is a constant debate regarding whether the "normalization theory," which proposes that online political participation simply reflects the offline situation, or "mobilization theory," which asserts that the internet does have the power to mobilize, is more accurate. The existing literature tends to support the "contextualized model," which allows both to coexist, thus acknowledging that the internet has, to a certain extent, a mobilizing effect. Based on the findings obtained using the contextualized model, this study further proposes a new theoretical concept: the internet is a mobilizing tool for peripheral political agents. We took as the object of our research the activities of iVoter website members who filled out questionnaires prior to and after the 2012 presidential and legislative elections and attempted to prove that the majority of members who participated in iVoter reflect, to a high degree, the characteristics and mobilization logic of "peripheral political agents" proposed by this study. The main discoveries are as follows.

Peripheral political agents are primarily an organized minority, with leaders actively searching for any possible channel to appeal to the ideals of and mobilize the public. In addition to being comparatively young, most iVoter participants support nonmainstream political parties. Second, close to one-third of iVoter members support the Green Party, a much larger proportion than that of the votes obtained by the Green Party in the actual election. They furthermore have clear postmaterialist inclinations in their public issue positions. The third characteristic is that iVoter members who support the Green Party distinctly use social networking sites more often than voters who back other parties. These characteristics indicate that the Green Party may attempt to express its stance on issues through the iVoter website's issue discussion function, and this amounts to advocating for their ideology on the website. In summing up the above points concerning the characteristics of iVoter members, we may state that the internet is a mobilization tool for peripheral political agents, in this case, the Green Party.

The internet-dominated ideology and logic of peripheral political agent mobilization are acknowledgments of the internet's effectiveness in mobilization. However, this does not completely rule out the assertions of normalization theory. From the perspective of this theory, online political participation is a reflection of offline political participation. As such, those persons of high socioeconomic status, with more resources, should show a higher degree of participation. In addition, a higher proportion of voters should support mainstream political parties. The iVoter voters certainly have a relatively high level of education. While supporters of the KMT and the DPP represent a certain proportion of iVoter members, they are fewer in number than the voting members supporting the Green Party. The fact that most iVoter website users are young people is consistent with the predictions of mobilization theory. However, we further ask how small parties like the Green Party use the internet as a mobilization tool, and how young people are mobilized to political participation.

The research has certain limitations. First, iVoter website activities and questionnaires primarily focused on elections. This means members' online political participation occurs at particular times, that is, during elections. Therefore, we cannot know whether there is a difference between the political activities of these members at normal times and during election periods. For example, Karpf (2012) indicated that, at particular times, such as around elections, there is often an increased internet mobilization effect. Second, because the iVoter website provides a public issue position test, it certainly attracts peripheral political agents who want to use it as a mobilization tool. However, this is limited to the online expression of opinion. It will be worthwhile to observe whether or not peripheral political agents use similar political websites as a tool for mobilizing offline political activities. Finally, the question of whether or not the phenomenon of peripheral political agents appears on other political websites needs to be further researched in the future.

Although this study has some limitations, as noted above, it serves as a point of reference for the study of online political

participation and aims to shed some light on VAA-related research. In the future, iVoter will continue to provide voter information services and accumulate more empirical data to share with scholars interested in research concerning online political participation.

Conclusion

The iVoter website is not merely a research tool but also an experiment in democracy. Through iVoter, the dialogue between the academic world and society, as well as the political realm, becomes possible. On top of that, the establishment of the first VAA in Taiwan also marks a social movement launched by academics. In the process of creating the iVoter website, the iVoter research team has taken part in interdisciplinary integration, interacted with legislators, held press conferences, and cooperated with other civil groups. Every step in the process is a precious lesson for being a bridge between representatives and citizens.

In addition to assisting voters in online examinations and evaluations of legislators' policies, the iVoter research project also provides a platform for legislators to meet face to face with both onsite and online meeting participants. Voters can not only examine legislators' expressed campaign promises and legislative performance but also directly ask questions. As such, iVoter is a mechanism for strengthening people's capacity to oversee legislators.

That the iVoter website was well received during the national election in 2012 suggests a promising future for Taiwanese civil society in the digital era. In place of top-down political campaigns run by political parties or candidates, the iVoter website plays a significant role in deepening democracy by virtue of sorting out major public issues, asking for the disclosure of issue positions of legislators, and providing an issue position test for the public as voting information. We also expect the website to attract more users in the near future and, eventually, with an increased number of informed citizens, bring a transformation or changes in democratic practice in Taiwan and exert greater influence on political parties and the Taiwanese political landscape.

Notes

1. The elections in which Taiwan's Green Party has participated from March 1996 to the present include the 1998 county and city council primaries (Taipei County, Hualien County), the 1998 year-end three-in-one election (Taipei City Southern District legislators, Taipei City Council members), the 2001 year-end legislative election (Taipei City Southern District), the 2001 Hualien county magistrate election, the 2002 Hualien county magistrate supplementary election, the 2006 Taipei City Council Election, and the 2008 Seventh Legislative Yuan election, and the 2012 Eighth Legislative Yuan election. Data Source: Taiwan Green Party Website (http://www.greenparty.org.tw/, accessed June 1, 2014).
2. Green Party Website: http://www.greenparty.org.tw/ (Accessed September 2, 2014).
3. Calculation method for expansion/limitations on cross-strait relations: Mainland students to Taiwan + expansion of Mainland investment – annual military procurement + Chinese culture + peace accord.
4. Calculation method for liberal/conservative: increase school fees + increase annual arms procurement – rally registration system – death penalty abolition – sex industry decriminalization – actual real estate price tax levy – two-day weekend – economy first.
5. Calculation method for materialist/postmaterialist: energy tax levy – annual military procurement + rally registration system + death penalty abolition – fourth nuclear power plant operationalization – economy first + peace accord referendum + lower legislative seat threshold.

CHAPTER 5

THE EFFECTS OF VAAS ON VOTER SOPHISTICATION IN JAPAN

Hidenori Tsutsumi, Takayoshi Uekami, and Kazunori Inamasu

Introduction

Over the past several years, scholars have frequently pointed out the weakening of traditional ties between political parties and voters in Japan (Kabashima and Steel 2010; Rosenbluth and Thies 2010). One of the most important issues in Japanese elections today is ensuring that voters can obtain enough information to cast their votes "correctly," and by extension, rebuilding the relationship between voters and political parties and their candidates.

Against this background, we consider in this chapter the roles that voting advice applications, or VAAs, can play in ensuring that voters cast their votes "correctly" in terms of their understanding of policy issues. Developed by the Japanese Votematch Working Group, Japanese Votematch is a VAA that enables users to identify which party is the closest to their own political views by answering questions on whether or not they agree with various policy issues.[1] These kinds of applications are designed to reduce the cost that voters must bear to collect and process information, while making it easier for them to cast votes based on policy issues. Especially in

a Downsian model of representative democracy, it is often assumed that the policy decisions of the government are controlled through elections (Downs 1957);[2] however, it is well known that issue voting entails large costs in terms of collecting and processing information, namely, that voters must develop a correct understanding of each party's political platforms. This is why reducing the information costs of voting is such an important issue.

In this chapter, we have used the results of an online survey to examine the potential effect of VAAs on issue voting, with the July 2010 House of Councillors election serving as our case study. We arrived at three findings. First, when we checked to see how close voters' political positions were to the parties that they subjectively indicated as close to their own views, we found a considerable gap between them. Second, it was clear that most voters vote for the parties to which they subjectively feel close, even though that proximity does not necessarily exist when examined objectively. Third, when we looked at the kinds of voters who vote based on an incorrect recognition of the issues or engage in "skewed" issue voting, we found them to be persons with limited access to political information and younger persons. With regard to those voters who do not correctly understand the issues, it appears that as their interest in politics becomes lower, the accuracy of their recognition falls.

Therefore, the aim of this chapter is twofold: (1) to clarify for which segments of voters and to what extent VAAs are effective, and (2) to demonstrate the effectiveness of VAAs such as Japanese Votematch.

Anticipated Effects of VAAs and Focal Points of Our Analysis

What are the anticipated effects of VAAs like Votematch? The following is a brief overview based on Uekami (2006).

Anticipated Effects of VAAs

To reiterate, the aim of Votematch and other VAAs is to encourage issue voting. According to Campbell et al. (1976, 170), the following conditions must be satisfied for issue voting:

- Voters must recognize the issues.
- The issues must evoke some sort of emotion in the voter.
- Voters must know which political party's stance is close to their own.[3]

Generally speaking, it is no easy task to understand the issues, develop one's own opinion and identify party positions. Moreover, the more issues there are, the harder this becomes. Despite the high information cost associated with voting, the impact of a single voter's vote is extremely small, so remaining ignorant is a rational choice (Downs 1957, Chapter 13). Some scholars pointed out that, to reduce the costs associated with voting, voters end up using information shortcuts and heuristics.

For example, they predict a party's stance on individual issues based on its ideology, analogize a candidate's political stance based on his or her supporters and the party to which he or she belongs, and develop an understanding of issues from the arguments of the so-called elites competing in the election (Downs 1957, Chapter 7; Popkin 1991, 63–65; Rahn 1993; Lupia 1994). Voters also determine their political positions based on their emotional appraisal of groups and leaders (Sniderman et al. 1991; Mondak 1993). However, there are major disparities among voters in the levels at which they conceptualize and understand party ideology, and some studies argue that there are limitations to shortcuts and heuristics (Converse 1964; Bartels 1996; Lau and Redlawsk 2001).

Two previous analyses, one conducted at the aggregate level and one at the micro level, have shown that there is a negative impact on the ability of voters to engage in "correct voting" if the following conditions are not satisfied: the existence of two major candidates; a clear distinction in their ideologies, and an equal distribution of election resources (Lau and Redlawsk 2001; Lau, Andersen, and Redlawsk 2008). Based on those assumptions, "correct voting" is defined here as a "vote decision that is the same as the choice which would have been made under conditions of full information." Even if voters use heuristics, they are more effective when information costs are lower. The elements that voters likely consider when they cast a vote include not

only the political alignment of a candidate but also the opinions regarding and reputation of his or her supporters, among many other aspects.[4]

Uekami (2006) introduced a method for programming an algorithm of voters' decisions and processing them using a computer, called Votematch. This technique significantly simplifies the task of processing information related to voting. By reducing the cost of collecting information, more voters can be expected to participate in elections.[5]

Focal Points of Our Analysis and Data Used

In this chapter, we examine the degree of potential effectiveness of VAAs on various segments of voters, focusing primarily on the following three factors.

First, to what extent do voters correctly recognize the political positions of the parties? As mentioned earlier, collecting information on the various issues, inferring the political positions of the parties, and comparing one's own views with party platforms is believed to incur a large cost. One could argue that the less correct a voter's alignment is with a political party due to an incorrect perception of said party's political position, the more important it is to reduce the information cost associated with issue voting.

Second, to what extent do voters engage in issues voting based on an correct recognition of the issues? If we consider that voters are engaging in issue voting on their own accord, when the alignment between their views and those of a given party are incorrect, the reflection of their policy preferences in the decision-making process—a key aspect of elections in a Downsian model of representative democracy—will be distorted. In this chapter, we attempt to elucidate the degree of this distortion.

Third, what kind of voters possess an incorrect recognition of political platforms, and by extension, what kind of voters engage in incorrect issues voting? Within the voting public, there are voters who can vote based on an correct recognition of party platforms, and those who cannot. By analyzing the factors underlying voters' incorrect recognition of political platforms and incorrect

issue voting, we consider the segments of voters for which VAAs would be effective.

Considering the argument that voters determine whom to vote for by using information shortcuts and heuristics to reduce information costs, even if they cannot correctly recognize a party's political stance on an individual issue, they still may be able to objectively identify a party whose overall views are close to their own. In such cases, they may be able to engage in correct issue voting without relying on a VAA, which comprehensively assesses proximity to a party based on the degree of their congruence with parties on individual issues. This is why we have examined the overall proximity to political stances in addition to recognition of views on individual issues.

To do this, we used the results of an online survey that employed the questions from Japanese Votematch 2010.[6] We conducted this survey on August 17 and 18 with Goo Research consumer monitors and received 556 valid responses. Although questions remain about the representative nature of samples in online surveys, we ensured verifiable results by using the same questions employed in a survey conducted concurrently by the Association for Promoting Fair Elections (APFE). When we examined the results, we found that, while there was some degree of deviation between the two surveys, there was no major bias one way or the other in the responses.[7]

Recognition of Political Positions

In this section, we examine the extent to which voters' perceptions of parties' political positions are accurate.

Accuracy of Recognition of the Closest Party's Stance on Individual Issues

In this online survey, we asked respondents to indicate which political party was closest to their own views regarding the 25 issues used in Japanese Votematch. Before implementing Japanese Votematch 2010, the Japanese Votematch Working Group

Table 5.1 Recognition of the political position of the closest party (per issue)

Policy Issues	*Correct Recognition*	*Incorrect Recognition*	*Neither Agree Nor Disagree*	*Don't Know Closest Party*	*Closest Party's Position Unclear*
Greenhouse gases	14.0%	4.3%	21.9%	59.2%	–
Alternative energy	27.2%	6.5%	20.7%	45.0%	–
Eco-friendly car tax breaks/ Eco Points	9.7%	4.9%	19.1%	53.4%	12.1%
The Constitution	7.7%	4.9%	36.9%	38.3%	11.5%
Free high school education	17.4%	15.6%	14.2%	52.0%	0.2%
Teacher license renewals	14.4%	14.2%	27.7%	42.8%	0.2%
Consumption tax hike	14.7%	8.8%	19.6%	56.1%	–
Japan-US security treaty	19.2%	12.9%	38.3%	28.4%	0.7%
Strengthening international economic relations	15.8%	5.2%	51.6%	27.0%	0.2%
Consolidation of pension systems	11.9%	7.9%	26.6%	53.1%	0.2%
Establishment of a minimum pension	15.1%	7.6%	40.3%	36.3%	0.4%
Health care for the elderly	12.8%	4.9%	39.2%	42.4%	0.4%
Social insurance number	10.4%	3.8%	36.0%	44.2%	5.2%
Raising the minimum wage	6.5%	7.6%	27.9%	51.6%	5.9%
Investment in highways	16.0%	8.3%	27.7%	46.9%	0.5%
Deregulation of postal savings/insurance	17.1%	6.3%	37.8%	38.7%	–
Reduction of rice acreage	11.2%	7.0%	34.5%	46.6%	0.2%
Corporate acquisition of farmland	6.1%	5.8%	51.8%	34.5%	0.9%
Banning corporate donations	23.9%	3.6%	20.3%	52.0%	–
Reducing proportional representation block capacity	24.6%	3.4%	19.4%	52.3%	–
Lay judge reforms	4.3%	8.5%	42.4%	43.9%	0.4%
More transparency in investigations	11.2%	3.1%	30.2%	52.9%	2.5%
Procurement reforms	13.3%	1.3%	30.2%	52.0%	3.2%
Subsidy reform	12.8%	5.0%	44.2%	37.8%	–
Regional state system	5.8%	2.7%	57.2%	28.2%	5.0%

Notes: Figures in "Correct" and "Incorrect" columns refer respectively to the percentages of respondents whose views match or do not match those of the closest party.
When respondents select "Other party" as their closest party, it is not possible to measure the accuracy of their recognition since the party's position is unknown. This is why the rows do not add up to 100 percent.

confirmed the positions of all of the parties on the issues in question. By looking at the responses of both voters and parties, we could objectively determine whether or not voters were able to correctly recognize the political positions of the parties. In other words, if a voter's stance on a given issue matches the position of the party that said voter thinks is closest to his or her views, then we can assume that said voter is objectively and correctly recognizing the political position of the party.[8] Next, we measured the degree of alignment between the position of a party that a respondent indicates as close to his or her views ("closest party") and said respondent's own views.[9]

Table 5.1 shows the relationships between the responses of the respondents and those of their closest political parties by displaying percentages for (a) voters who correctly recognized the position of their closest party, (b) voters who incorrectly recognized the position of their closest party, (c) voters who neither agreed nor disagreed with the issue, and (d) voters who did not indicate a closest party.[10]

What this table shows us is that, compared to voters who correctly recognized the political position of their closest party, an extremely large percentage of voters did not indicate a closest party. As many have noted and as these results suggest, correctly recognizing the political positions of parties is no easy task for voters.

Next, let us examine how accurately voters recognize the positions of the parties on individual issues. Overall, except for the two issues of "implementing lay judge reforms" and "raising the minimum wage," more respondents correctly recognized party positions than those who did not, but the degree of accuracy varied significantly from issue to issue. Among those respondents who indicated their position, the issue they recognized most accurately was "alternative energy," with 27.2 percent of respondents in alignment with their closest party. This was followed by "reducing seats elected by proportional representation" and "banning corporate donations," two issues for which more than 20 percent of respondents were in alignment with their closest party.[11] In contrast, many respondents replied incorrectly with regard to "free

high school education," "teacher license renewals," and "Japan-United States security treaty," with more than 10 percent indicating views that differed from those of their closest party.

Next, let us look at the views of each party to see how the phenomenon of incorrect recognition occurs. Table 5.2 indicates the accuracy of respondents' recognition of their closest party's views on individual issues, using the DPJ, LDP, and Your Party as examples.

First of all, we must note that the percentage of respondents who were able to indicate their closest party on a per-issue basis was low, but when we limit examination to these respondents, we can see that most of them are in alignment with the party they chose as closest. Looking at the DPJ and Your Party, there were only five issues upon which the parties agreed, but the respondents disagreed and vice versa (i.e., issues for which the percentage of persons unable to correctly recognize party position was less than half). Meanwhile, there were 11 such issues for the LDP.

Looking at the individual issues, "reducing seats elected by proportional representation" was the most correctly recognized issue. However, this issue is one for which there is almost no difference among the parties (i.e., most parties agree with the reduction) and a skewed distribution in respondents' answers, so it ends up being classified as correctly recognized even if respondents do not correctly recognize the positions of the parties. In addition, there were three other correctly recognized issues: "alternative energy," "the strengthening international economic relations," and "deregulation of postal savings/insurance." The only one of these issues on which the parties did not maintain similar positions was "deregulation of postal savings/insurance."

Furthermore, issues that voters clearly perceived incorrectly included the "consumption tax hike," "investment in highways," and "free high school education." For example, even though Your Party disagrees with the consumption tax hike, 65 percent of respondents who chose Your Party as their closest party said they agreed with the increase. Similarly, the DPJ agrees with investment in highways and free high school education, but 61.9 percent of

Table 5.2 Recognition of closest party's political position (per issue/per party)

Policy Issues	*The Closest Party on Each Issue*		
	DPJ	*LDP*	*YP*
Greenhouse gases	93.5%	44.0%	81.8%
Alternative energy	82.8%	87.5%	78.3%
Eco-friendly car tax breaks/ Eco Points		65.9%	60.0%
The Constitution		67.5%	53.3%
Free high school education	38.1%	69.1%	72.2%
Teacher license renewals	77.8%	32.7%	22.2%
Consumption tax hike	74.4%	58.5%	34.8%
Japan-US security treaty	49.2%	76.8%	51.5%
Strengthening international economic relations	81.3%	83.7%	85.7%
Consolidation of pension systems	79.5%	34.2%	93.3%
Establishment of a minimum pension	77.3%	47.8%	68.4%
Health care for the elderly	83.3%	45.5%	73.3%
Social insurance number	76.5%		84.6%
Raising the minimum wage	38.5%		44.4%
Investment in highways	38.1%	82.4%	66.7%
Deregulation of postal savings / insurance	70.0%	82.6%	72.7%
Reduction of rice acreage	90.9%	30.0%	87.5%
Corporate acquisition of farmland	60.0%	33.3%	37.5%
Banning corporate donations	94.2%	42.1%	96.0%
Reducing proportional representation block capacity	98.1%	87.0%	92.6%
Lay judge reforms	21.4%	33.3%	33.3%
More transparency in investigations	100.0%	29.4%	
Procurement reforms	94.7%		96.3%
Subsidy reform	82.9%	43.8%	92.9%
Regional state system		61.5%	90.0%

Note: Empty cells indicate that the party's position is unclear.

respondents who chose the DPJ as their closest party said they disagreed with these issues. The consumption tax hike was a major issue in the 2010 House of Councillors election, and free high school education was a key policy of the DPJ. The issue of

highway investment also received a great deal of press coverage (e.g., *Asahi Shimbun*, March 12, 2010) because a budget for new highway construction was approved during the discussion on a new toll system. In this way, we can see that even issues with which voters could be considered to be familiar are often incorrectly recognized.

Accuracy of Recognition of Closest Party Position (Overall)

Next, we objectively examined the degree to which respondents felt the overall policy stances of those parties were actually close to their own views. In addition to asking respondents to select a closest party for individual issues, our survey also asked them to indicate their closest party on overall policy.[12] Our intention with this was to determine the degree of congruence between these subjectively selected closest parties and those parties objectively identified by VAAs. There are many methods for objectively identifying closest parties, but we used the method employed by Japanese Votematch, which determines the closest party according to the rate of congruence between a respondent's position and the position of the party in question weighted by importance.[13] Simply put, this method calculates the percentage of congruence of those issues for which both the party and the respondent have indicated a clear position and on which they either agree or disagree, after taking into consideration, importance for the respondent.

The average weighted rate of congruence for each party can be found in Table 5.3. On the whole, the highest rate of congruence was with the DPJ, at 70.3 percent ("Total" column), followed by Your Party (62.8 percent), the Social Democratic Party ("SDP") (58.4 percent), and Komeito (54.6 percent). The lowest rate of congruence was with the LDP (42.9 percent). Even if the respondents randomly answered the questions for each issue without weighting their importance, we could probabilistically expect a 50 percent rate of congruence, so the rates we calculated cannot be considered to be that high.

Table 5.3 Average rate of overall political congruence with subjectively selected closest parties

Subjectively Selected Closest Party	*Weighted Rate of Agreement*						*N*
	DPJ	*LDP*	*Komei*	*JCP*	*SDP*	*YP*	
DPJ	**74.9%**	41.1%	56.4%	49.9%	58.6%	64.8%	99
LDP	70.0%	**52.6%**	52.3%	42.9%	48.7%	61.6%	74
Komei	67.8%	45.1%	**66.6%**	56.2%	64.8%	56.0%	9
JCP	60.3%	31.3%	52.4%	**64.3%**	68.7%	60.5%	18
SDP	62.9%	34.8%	62.7%	59.9%	**68.0%**	60.5%	10
YP	72.0%	43.3%	52.8%	46.7%	54.6%	**67.8%**	83
Others	66.8%	45.2%	53.3%	45.5%	55.4%	59.5%	20
DK, NA	69.4%	41.5%	54.7%	53.5%	61.4%	61.4%	236
Total	70.3%	42.9%	54.6%	50.6%	58.4%	62.8%	549

Next, we compared the rates of congruence for each subjectively selected closest party. The DPJ (N = 99), which the most respondents chose as the party closest to them overall, averaged a 74.9 percent rate of congruence with those respondents who chose it as the closest party, making for the highest rate of congruence among all parties. This rate was 5.6 percent higher than the 69.3 percent average rate of congruence for respondents who did not think the DPJ was the closest party to them, making it statistically significant at the 0.5 percent level.[14] The two parties chosen by the second- and third most respondents as the closest parties were Your Party (N = 83) and the LDP (N = 74), respectively, but the party with the highest average rate of congruence with both groups of these respondents was the DPJ.

However, when rates of congruence with each party are compared for respondents who indicated overall closeness with a given party and those who did not, the rates of political congruence were significantly higher for respondents who chose Your Party and the LDP compared to those who did not. For instance, when we look at the LDP, the rate of congruence of respondents who subjectively selected it as the closest party was 52.6 percent, but it was only 41.1 percent for those who chose the DPJ.

Not many respondents chose other parties as their closest party, but those who selected either the SDP or the Japanese Communist

Party (JCP) could be objectively considered to be in close alignment with their respective party's political positions.

As we have shown, those respondents who display a similar degree of political proximity to a given party tend to choose that party as their closest party. In this sense, it appears that the respondents determined their answers with a certain degree of accuracy. That being said, those respondents who felt closest to Your Party and the LDP had higher average rates of congruence with the DPJ as far as we could measure using the method of Japanese Votematch. This means that several respondents believe their views are closer to a certain party even though a politically closer party exists—a clear indicator that their recognition of the former party's political position is incorrect.

Having examined the degree of accuracy with which respondents recognize the political positions of the parties, we have found that the number of issues for which respondents correctly recognize the different party positions is extremely limited and that it is difficult for respondents to select the party they feel is closest to them for individual issues. Although it appears easier for respondents to indicate a party they feel is close to them on the whole rather than on a per-issue basis, the rate of political congruence with said party is not necessarily high, and there are cases in which there are parties that align closer to respondents than the parties they initially indicated. In conclusion, we cannot claim with any certainty that the respondents in this survey accurately recognize the political positions of the parties.

Accuracy of Issue Voting

In this section, we will examine the accuracy of voters' issue voting. First, to determine the extent to which voters engage in subjective issue voting, we will check the rate at which they actually vote for the parties they feel are closest to their views overall (Table 5.4).

Here, the top row is the percentage of respondents who voted for their closest party in the proportional representation tier out of all respondents who said the party was the closest, and the

Table 5.4 Percentage of voters who voted for their subjectively selected closest party

	Closest Party Overall					*N*
	DPJ	*LDP*	*YP*	*Others*	*Total*	
Voter	81.3%	82.0%	79.4%	67.3%	78.4%	269
Focus on party's/ candidate's policies	92.0%	83.3%	69.6%	76.9%	80.4%	87

bottom row is the percentage of voters who voted for their closest party in the proportional representation tier out of those who said they focused on the policies of a candidate or a party.

What we can see here is that approximately 80 percent of respondents who chose the DPJ, the LDP, or Your Party as their closest party actually voted for their respective party. That being said, the percentages are slightly lower for those parties classified as "Others," so it appears that it is easier to subjectively engage in issue voting if one's closest party is the DPJ, the LDP, or Your Party. Looking only at respondents who voted based on the policies of a party or a candidate, more than 90 percent who said their closest party was the DPJ voted for the DPJ, and the trend for the LDP was similar. Meanwhile, the percentage is slightly lower for Your Party. One possible reason for this outcome is the feasibility of policy measures.

As these results show, voters tend to vote for the party whose views they believe are the closest to their own on a wide range of issues. For this reason, the objective degree of political congruence with the party for which a respondent voted appears to be about the same as the degree of political congruence with his or her subjectively selected closest party, as shown in Table 5.3. However, about 40 percent of respondents did not know which party was the closest to them overall, so we had to verify the rate of political congruence with the party for which respondents voted, including these respondents who did not indicate their closest party. When we calculated this rate of congruence, we found that it was about the same as the rate of political congruence with the subjectively

selected closest party, as shown in Table 5.3, although we will not go into the details of this here. What this means is both voters who subjectively feel close to a certain party and those who do not are not always voting for the party with which they have highest rate of political congruence.

Factors Hindering the Correct Recognition of Political Positions

As shown in the previous section, there are slight discrepancies between the political positions of voters and the political positions of the parties voters believe to be closest to their preferences. That being said, rarely would a given voter agree with any specific party on every issue, so it is only natural for differences to exist between voters and parties on some issues. Even if a voter were aware of this point and "relatively" recognized a certain party as the closest to him- or herself across a range of issues, we could consider the problem of voter recognition as a small one if he or she ended up voting for a party with which he or she had a low rate of political congruence.

However, if a voter votes for a party based on a mistaken assumption that said party holds similar views to him- or herself on most issues, then he or ends up voting for a party he or she does not actually want to see in power.

If voters understood the positions that various parties hold on a wide range of issues, mistakes like these would be hard to make, and they would be able to vote correctly. Therefore, the role of a VAA is to correctly calculate the degree of political congruence between a voter (who may not always have enough correct information) and a party by using objective information.

Based on this, we conducted the following analysis on the kinds of correct information that voters have, or do not have, on individual issues. This analysis also serves to identify those voters who do not possess enough correct information, that is, voters for whom VAAs would be a highly effective tool.

As for the accuracy with which respondents recognize party positions on individual issues, we used the net amount of correct

information they possessed regarding said issues, while taking into account the importance of those issues to the respondents, as an indicator.[15] As we have seen thus far, the parties that respondents say are the closest to them overall align to a considerable degree with the parties for which they actually vote, so this analysis also serves to objectively elucidate the kinds of voters who cast ballots for politically discrepant parties.

We looked at five possible factors affecting the accurate recognition of issues: (a) exposure to policy information, (b) sense of political efficacy, (c) level of involvement in politics, (d) possible use of heuristics, and (e) social attributes. It is believed that people with more exposure to policy information would more accurately recognize the issues, while those who are more involved in politics would have a more advanced political understanding. Similarly, the more heightened a person's sense of political efficacy, the more likely he or she would be to shoulder the cost of collecting and processing policy information. Another possibility is that voters use heuristics to help them correctly recognize the positions of political parties.

The independent variables we used to analyze these five factors, respectively, are as follows: (1) "Did you read the manifesto?/ Do you subscribe to a newspaper?"; (2a) [with regard to external efficacy] "Did you feel that politics will not change significantly no matter which party or candidate wins?"; (2b) [with regard to internal efficacy] "Were you unable to clearly understand the differences in the parties' and candidates' policies?"; (3) "Are you interested in politics?/Did you feel that it would not matter if you did not cast your vote?"; (4) Regarding heuristics, we used the intensity of one's support for a given party; and (5) We rounded out the analysis by looking at the social attributes of age, gender, and occupation.[16]

In addition to ordinary least squares (OLS) regression, we also conducted a quantile regression analysis. In a quantile regression analysis, arbitrary percentiles are predicted using a linear equation, so unlike a conventional multiple regression analysis that only predicts average values, the correlations between independent and dependent variables at various locations within the distribution of dependent variables can be examined (Koenker and

Bassett 1978; Hao and Naiman 2007). In the context of this study, using quantile regression analysis enables us to examine the determinants for each degree of voter issue recognition accuracy if they differ. Logically, we can expect that measures will differ for cases in which the accuracy of recognition is heightened in voters who already have some degree of knowledge about the issues and cases in which voters with almost no knowledge of the issues are afforded an introductory level of knowledge thereof, so we anticipate that the efficacy of the quantile regression analysis in this study will be higher.

Results of the OLS Regression Analysis

The results of the OLS analysis can be found in Table 5.5.

First, let us look at the results of Model 2, which employed all of the independent variables. Here, we can see that those persons who have not read any manifestos and those who do not strongly support any political party do not possess much accurate information about individual issues. While the former outcome can be considered common sense, it suggests that voters recognize individual issues more accurately the stronger their support for a party is. Our findings agree with prior research in that it seems that persons who strongly support a given party use the overall policy information of that party as a heuristic to estimate its positions on issues; however, one issue that remains is that there are no information shortcuts for the unaffiliated voters who comprise multiple parties.

In the model without the biggest direct effect derived from the intensity of party support (i.e., Model 1), we found that persons with little interest in politics, those lacking a keen sense of external efficacy, and those who do not read manifestos or newspapers do not accurately recognize individual issues. Therefore, the lower a person's trust in the responsiveness of parties and politicians, the more likely he or she is not to possess accurate information, and unfortunately, this is believed to reduce the interest in politics. As for social attributes, the younger generation and women demonstrated low rates of issue accuracy, while

Table 5.5 OLS and quantile regression analysis for accuracy of perception of parties' policy positions

	OLS				*Quantile Regression Analysis*			
	Model 1		*Model 2*		*50%*		*60%*	
Accuracy of perception of parties' policy positions	*B*	*S.E.*	*B*	*S.E.*	*B*	*S.E.*	*B*	*S.E.*
Read manifestos	0.030	0.012★	0.029	0.012★	0.025	0.012★	0.025	0.012★
Read newspapers	0.023	0.014+	0.022	0.013	0.008	0.012	0.016	0.013
Political interest	0.027	0.013★	0.018	0.013	0.031	0.011★★	0.026	0.012★
Does not matter whether or not I vote	0.005	0.007	0.004	0.007	0.008	0.005	0.005	0.006
Does not make any difference which party wins the election	–0.015	0.006★	–0.010	0.006	–0.010	0.006	–0.012	0.007
Do not understand the difference in parties or candidates on policies	–0.005	0.007	–0.003	0.006	0.001	0.006	–0.001	0.007
Strength of partisanship			0.040	0.009★★	0.041	0.011★★	0.048	0.011★★
Age	0.008	0.003★	0.007	0.003★	0.006	0.003★	0.006	0.003★
Gender (Male)	–0.051	0.017★★	–0.046	0.017★★	–0.020	0.016	–0.047	0.018★★
Occupation (Employed)	–0.007	0.020	–0.010	0.019	0.004	0.013	–0.010	0.016
Occupation (Self-employed, Managerial worker)	0.048	0.021★	0.043	0.021★	0.039	0.026	0.046	0.027
Income	0.003	0.003	0.002	0.003	0.002	0.003	0.002	0.003
Constant	–0.008	0.063	–0.062	0.063	–0.157	0.070	–0.066	0.076
N	411		411		411		411	
Adjusted R^2	0.186		0.220		0.140		0.199	

★★: $p < 0.01$, ★: $p < 0.05$.

Continued

Table 5.5 Continued

Quantile Regression Analysis (cont'd.)

	70%		*80%*		*90%*	
Accuracy of perception of parties' policy positions	*B*	*S.E.*	*B*	*S.E.*	*B*	*S.E.*
Read manifestos	0.043	0.015**	0.044	0.021*	0.070	0.031*
Read newspapers	0.017	0.019	0.026	0.020	0.024	0.026
Political interest	0.024	0.016	0.016	0.021	-0.003	0.031
Does not matter whether or not I vote	0.001	0.007	0.005	0.010	0.008	0.021
Does not make any difference which party wins the election	-0.009	0.009	-0.016	0.010	-0.035	0.014*
Do not understand the difference in parties or candidates on policies	-0.006	0.008	-0.006	0.010	0.003	0.013
Strength of partisanship	0.050	0.014**	0.058	0.016**	0.082	0.020**
Age	0.008	0.004*	0.015	0.005**	0.016	0.007*
Gender (Male)	-0.069	0.025**	-0.088	0.032**	-0.034	0.035
Occupation (Employed)	-0.013	0.022	-0.031	0.024	-0.037	0.029
Occupation (Self-employed, Managerial worker)	0.043	0.035	0.008	0.049	0.091	0.053
Income	0.001	0.004	0.001	0.006	0.001	0.006
Constant	-0.025	0.085	0.049	0.114	0.010	0.166
N	411		411		411	
Adjusted R^2	0.233		0.252		0.272	

**: $p < 0.01$, *: $p < 0.05$.

the self-employed and those in management positions displayed higher accuracy. These results suggest that the sheer number of political experiences in one's daily life is conducive to accurate recognition.

Results of the Quantile Regression Analysis

Next, we examine the results of the quantile regression analysis (see Table 5.5) that we conducted using the *sqreg* command in Stata (Ver. 13). Bootstrapping is one effective way of calculating the standard deviation in a quantile regression analysis, and for this study we conducted 2,000 bootstraps. There is no fixed principle regarding the number of quantiles to be used when making calculations, so we chose to calculate our results at every ten quantiles. However, in the 10th through 40th percentiles, the values for the dependent variable were the same for almost all eligible subjects, so we were unable to generate any predicted values.

What is interesting here is that we were able to confirm the impact of one's interest in politics (which was statistically insignificant in the OLS regression analysis of model that included political party support) at the 50th and 60th percentile. These findings suggest that although an interest in politics does not necessarily improve the accuracy of issue recognition for the whole sample or for those respondents who already possess a highly accurate recognition, a heightened interest in politics among people whose recognition is not entirely correct, results in improved accuracy. One can assume that when a person's interest in politics increases, he or she becomes exposed to more political information and learns how to process it properly, thereby improving the accuracy of his or her recognition of party positions on various issues, but it appears that this process clearly functions even for voters whose recognition of party positions is not very accurate.

The role of VAAs is to match voters' views on policy issues with those of candidates and parties, a task that entails a high information cost. If the use of VAAs can also lead to a heightened

interest in politics, then we believe that those voters who do not possess sufficient accurate information on the issues and who are highly likely to vote for a party with whom their views do not objectively align might be able to increase their ability to vote correctly.

Conclusion

VAAs such as Votematch were designed to reduce the information cost that voters must bear when engaging in issue voting. In this chapter, we used the results of an online survey in which respondents were asked their stance on the issues used in Japanese Votematch 2010 to empirically investigate the potential effects of VAAs, and our findings are as follows.

First, we must note that there are many respondents who were unable to indicate their closest party at the level of individual issues. In other words, the information cost incurred in understanding and comparing the political positions of parties is somewhat high. Despite this, respondents who indicated a closest party tended to accurately recognize the positions of that party on individual issues, and those respondents whose objective rate of congruence with a certain party on a wide range of issues was comparatively high subjectively indicated that they felt "close" to that party.

Meanwhile, we also found some cases in which many respondents inaccurately recognized familiar issues, such as free high school education. Also, the rate of congruence between respondents and the parties to which they said they felt the closest overall ranged between 50 percent and 60 percent, and there were several respondents who said they felt subjectively closer to a certain party even though the objective rate of congruence with another party was higher.

Second, most voters vote for the party to which they believe they are closest overall in terms of policies. As mentioned earlier, the party that a voter has subjectively selected based on its policies may not necessarily be the closest party to them in reality. VAAs such as Japanese Votematch undertake this process objectively, and

the results show that they can serve as tools to enable correct issue voting.

Third, we found that the accuracy of information on the political positions of the parties held by persons with little access to policy information, the young and women, was low. Here, the results of our analysis suggested that if VAAs can help pique voter interest in politics, then those voters with information that is not particularly accurate may be able to increase the amount of accurate information they acquire. It is tough to say which methods should be used to approach these segments of voters, but encouraging them to use VAAs is likely necessary.[17]

Notes

1. The authors would like to take this opportunity to thank *Yomiuri Shimbun* for their cooperation in implementing Japanese Votematch. This chapter is written based on Tsutsumi and Uekami (2013).
2. We do not deny that the policymaking process is usually affected by various factors; however, we still think it is important for voters to hold governments more accountable by making more informed voting choices based on policy issues.
3. This assumes a proximity model, in which a voter votes for a candidate whose opinions are similar to his or her own.
4. In this chapter, we limit our discussion of the reduction of information costs to how it assists voters in determining their political alignment with a certain party. We have done this because, however limited our scope may be, we anticipate that an even more refined analysis will be conducted in the future. It should also be noted that, according to Lupia and McCubbins (1998), the institutional setting has an impact on the effectiveness of heuristics. This is an important point, but we will not address it in this chapter due to space limitations.
5. Horiuchi, Imai, and Taniguchi (2007) examined the effect of policy information on encouraging voting in the 2004 House of Councillors and found a positive correlation.
6. For more details on Japanese Votematch, see Uekami and Tsutsumi (2008) and Uekami and Sato (2009). See also chapter 2 of this book.
7. Goo Research changed its name to NTT Com Research in December 2013. According to its website (http://research.nttcoms.com/panel/index.html), the number of monitors as of December 2013 was 739,849 (including monitors who were not eligible to vote). Prior to this survey, we set a designated sample size (500), then selected respondents from among the monitors and continued conducting the survey until the number of valid respondents reached the designated sample size.

However, NTT Com Research does not disclose its sampling method in detail. Compared with the respondents of the APFE survey, we found that the respondents of our survey were slightly less interested in politics (81.3 percent of respondents to our survey were "very" or "to some degree" interested in politics, while 89.4 percent of those who responded to the APFE survey were interested in politics); many of them considered themselves unaffiliated with any party (48.3 percent for our survey and 38.1 percent for the APFE survey); there was a higher level of support for Your Party (8.2 percent for our survey and 2.8 percent for the APFE survey); and there were lower levels of support for the Democratic Party of Japan (DPJ, 18.2 percent for our survey and 25.3 percent for the APFE survey) and the Liberal Democratic Party (LDP, 16.3 percent for our survey and 25.6 percent for the APFE survey). However, a larger proportion of the APFE survey respondents tended to be older, but the percentage of respondents aged 70 and older in our survey was low. Meanwhile, the percentages for other age groups were about the same (the respondents aged 70 and older in our survey were 3.8 percent and those in the APFE survey were 19.1 percent). Although an inherent problem of representativeness in online surveys remains, we believe the tendencies in the respective survey responses can be attributed to some degree to different generational compositions. See Association for Promoting Fair Elections (2011) for the results of the APFE survey.

8. However, if a respondent says that a party's position on a certain issue is closest to his or her own views without actually knowing the party's position, it is possible that his or her views could match those of the party's by sheer chance.
9. In this survey, we had respondents select only one closest party, so those who felt several parties' views were close to their own views and could not choose one, may have chosen "I don't know." It is also possible that some respondents may have selected a certain party as their closest party based on the relative closeness to their own views, even though their answers one way or another did not always match the party's views.
10. Some respondents indicated a closest party without replying about their own position. They were not considered "incorrect" voters, but were added to the "don't know" column. In some cases, it was not possible to tell whether a respondent's recognition of a party's position was correct or incorrect because the party's position had not been clearly indicated. These respondents are listed in the rightmost column.
11. Even if we assume these respondents indicated their party of affiliation as their closest party without correctly recognizing its position (e.g., they projected their own views onto the party in question), then the tendency for a respondent's position to align with that of any party would be stronger in cases in which there were skewed distributions of responses for both the party and the respondents. Most respondents chose the DPJ, LDP, or Your Party as their closest parties, but when we

attempt to determine the accuracy of their recognition, it must be noted that all three parties and more than 80 percent of all respondents agree with "alternative energy," "strengthening international economic relations," and "reducing seats elected by proportional representation."

12. The actual question we used was this: "Overall, which party do you think is closest to your views on a wide range of issues?"
13. We used the following formula to calculate the values:

$$M_j = \sum_{i=1}^{n} w_i m_i \Big/ \sum_{i=1}^{n} w_i \left| v_i p_{ij} \right| \qquad \begin{cases} m_i = 1 \ \text{if} \ v_i p_{ij} = 1 \\ m_i = 0 \ \text{if} \ v_i p_{ij} \neq 1 \end{cases}.$$

Here, v_i is the respondent's reply to an issue i, and p_{ij} is party j's response to the same issue i. For both variables, if the respondent and party$_j$ agree on the issue, a value of 1 is assigned; if the respondent and party$_j$ disagree, a value of -1 is assigned; and if either response is unclear, a value of 0 is assigned. If a respondent deems issue i important, then w_i is assigned a value of 2; otherwise, it is given a value of 1.

14. Statistical significance for this section was determined using a t-test.
15. The equation we used is

$$R_j = \sum_{i=1}^{n} w_i c_i v_i \Big/ \sum_{i=1}^{n} w_i \left(1 - u_i\right),$$

where v_i is a respondent's response to issue i, and c_i is the closest party's response to the same issue i. For both variables, if a respondent and the party agree on the issue, a value of 1 is assigned; if a respondent and the party disagree, a value of -1 is assigned; and if either response is unclear, a value of 0 is assigned. If a respondent deems issue i important, then w_i is assigned a value of 2; otherwise, it is given a value of 1. Finally, if the accuracy with which a respondent recognizes issue i cannot be measured, then u_i is assigned a value of 1; otherwise, it is given a value of 0.

Here, the issues whose accuracy cannot be measured refer to those issues for which we could not determine whether or not a respondent accurately recognized them even if said respondent indicated an agree or disagree answer or selected his or her closest party (from among nine parties). More specifically, these are cases in which the closest party does not have a clear stance on an issue or the respondent's closest party is not one of the nine parties listed. We measured these ratios to avoid the degree of accuracy or inaccuracy being deemed as small despite the lack of cause attributable to a respondent.

16. The coding of these variables is as follows:
Manifesto—3: I read it; 2: I skimmed it; 1: I didn't read it;
Newspaper subscriptions—0: None; 1: One; 2: Two or more;
Politics will not change significantly no matter which party or candidate wins/I did clearly understand the differences in the parties' and candidates' policies/It would not matter if I did not cast my vote—5: This statement applies ~ 1: This statement does not apply;

Interest in politics—4: Extremely interested ~ 1: Not interested at all;
Age—11 stages in five-year increments from 20 to 70 or older;
Gender—1: Male; 2; Female;
Occupation: Dummy variables for employed and self-employed/management.

17. Although VAAs are useful for voters when they make voting choices, it should be noted that using different applications would produce different recommendations. For a further discussion about the limitations of VAAs, see chapter 2.

CHAPTER 6

HURDLES FOR VAAS IN THE POLITICS OF OPACITY

Shin Dong Kim

Introduction

Voting Advice Applications (VAAs) appeared in Korean politics decade ago but are still at an introductory stage. The last presidential election in 2012 set the stage in a significant way for VAAs as three different types appeared and actually operated during the election process, although they did not have great visibility and a sizable impact on mainstream politics. VAAs may look like simple applications that help voters through a process answering questions and then receiving tips that match the policy preferences of voters with the policies of their candidates or parties. While this is not untrue, the actual developments and uses of the applications can come in various formats, with diverse political and philosophical assumptions behind them. VAAs also directly reflect the conditions and limits of real politics at a given time and in a particular society.

VAAs have enormous potential for advancing democracy through improving the electoral process. The major function that VAAs have in improving the voting process is that they are capable of providing voters with the correct information and

criteria on candidates and their policies. Today, most representative democracies depend on election. Voters are supposed to choose whom or what to vote for depending on the policies they favor. In the real situation of voting, this simple action often becomes complicated as the candidates and their parties tend to produce large number of beautiful and attractive promises, which are neither clear nor reliable at all. Voters are easily confused by these unsorted promises and it is often difficult to for them to distinguish candidates according to their policy differences. The truthfulness (or untruthfulness) of the policies and promises makes the process even more complicated, and can easily lead to voters shunning participation in elections.

Despite these problems, VAAs can be a very useful interactive online tool that can prevent a weakening electoral institution from further declining and contribute to the revival of the modern representative democracy. The function of VAAs may sound simple and clear, but the social conditions necessary for VAAs to work effectively in actual politics are not simple at all. For instance, a high penetration of online interactive communication infrastructure is one of the basic requirements. A high literacy rate, well-established social communication system for enough information flow, and transparent political and administrative processes are some of the basic requirements upon which VAAs are built. For this reason, not many countries can actually enjoy widely adopting VAAs in an electoral situation. In Asia, only Japan, Taiwan, and Korea have developed these applications in the last decade as of 2015. And they are still in an experimental stage for various reasons. In this chapter, I focus on analyzing and discussing the prospects and limits of using VAAs in Korean politics. In so doing, the following issues will be investigated: What are the significant developments in using VAAs in the 2012 election in Korea? What are the hurdles for VAAs in Korean politics? What are the implications of VAAs for the larger context of Korean democracy and citizenship?

Presidential Election 2012 and VAAs

Presidential elections in Korea have long been contests of regional cleavages that structure conflicting political ideologies. The Southeastern Yeongnam Province is the stronghold of the conservative party, whereas the Southwestern Jeolla Province has been the home of the Liberal Democratic Party since the 1960s. The Yeongnam-born late president Park Chunghee tactfully mobilized his citizens to achieve his electoral success, which was followed by his giving partial and continuous favors to his region over three decades of industrial developments. This created a huge gap between Yeongnam region and the rest of the country in terms of social and economic status, and thus translated into a regional rivalry and the deep feeling of relative deprivation in the non-Yeongnam regions. The 2012 presidential election was no exception from this old and destructive regional cleavage in the nation's politics of emotional mobilization. Although politicians and critics have repeatedly preached that the regional divisions of the nation are destructive and prevent it from moving forward toward the ideal of modern democracy, the election results once again confirmed that the nation is divided by regions.

In the 2012 election, the conservative party candidate, Park Geunhye, won and was elected as the current president. After the election, Park and her party confronted serious criticism regarding illegal campaign practices involving the unlawful use of the National Intelligence Service. There are three aspects of VAAs that must be considered in depth. First, the fact that three different types of VAAs were employed is something to be remembered in the study of VAAs because all three showed interesting and unique characteristics and limits. Second, political transparency is a necessary condition for VAAs to function. Third, a well-established media system for a balanced flow of information is another crucial factor for the functioning of the VAAs.

The three kinds of VAAs appeared in the 2012 election, including the Citizens Coalition for Economic Justice (CCEJ)'s candidate choice helper, Daum's candidate choice helper, and

Montazu's blind candidate/pledges choice test. CCEJ is one of the most influential civic nongovernmental organizations (NGOs) in Korea. In 2004, it initiated the use of VAAs in national elections. In the 2012 election, it selected 150 policy issues that would attract the attention of voters, and then sent them to each party and candidate asking for their positions and policies. From the answers, the 25 most important and controversial issues were selected. Users of the app were asked to choose from yes/no/neutral and so forth. After answering all questions, users can add a weight for each question. There were a series of questions developed asking respondents about policy statements as to whether they "should be done." This form of question was most prevalent in the pro-opposition candidate's pledges at a ratio of about 6:4. Allowing voters to assign a weight to each question after answering all of them was obviously designed to differentiate the individual voter's preferences on different topics, but it was difficult to decide how much weight should be given to each item.

Since CCEJ itself was a liberal civic NGO, it was already viewed as politically slanted. The app was installed on its homepage and directly targeted the visitors to its homepage. The reach was profoundly limited, and the participants' political orientation was doubtlessly biased. Nevertheless, the site attracted 50,000 visitors. In contrast to the CCEJ app, the Daum app had a much more significant presence during the election of 2012. Daum is the second-largest portal business and has an enormous number of regular visitors across the country. Long before the presidential election, it decided to launch a special webpage for the 2012 election, and the page was exhibited as a special menu of the Media Daum main page. It was also accessible on the mobile web platform. The app not only checks users' policy orientation but also provides interesting images and information to make the using experience fun. The overall construction included diverse and interesting menus, such as declaring support for a certain candidate, pledging a political donation to the candidate, encouraging people to vote, and so on. Montazu was also a newcomer in the field. It was a venture start-up

founded by a group of young students. It selected test questions on controversial issues that contrasted the two candidates in the five areas of the economy, education, welfare, diplomacy, and administration. After answering the test questions, participants could share the results of their choices on Facebook and Twitter. According to Montazu's website, 27 percent of the early participants in the program said that their test results were different from those of the candidates they supported. Although Montazu attracted only 23,000 participants based on the Facebook and Twitter counts, it provided a new format of VAA with low-cost and quick questions.

(1) The most meaningful development of VAA use in the 2012 election was the Daum case. With its nationwide penetration and influence, Daum could reach a vast number of voters from all walks of life with no political bias, and it attracted 900,000 people to participate in its program. What is more important and noteworthy was Daum's effort to overcome the problem related to the CCEJ's method of collecting policies from the parties and candidates. The CCEJ simply sent questionnaires to the parties and asked them to indicate what policies they supported and suggested. Daum thought it is not proper to simply ask them to speak about whatever they wanted to because during the election period, anybody can make any promise with no guarantee of keeping the promise. Not surprisingly, most election policies and promises made by candidates are quite progressive, and it is difficult to contrast the actual differences between them. Candidates and parties demonstrate enormous generosity in making rosy promises. Therefore, instead of collecting questionnaires, Daum checked public statements made by each candidate. Most of these came from interviews of candidates by various media outlets. The candidates have long been national figures and exposed to the media many times and spoken on issues and problems. Daum collected and sorted those published statements and distilled the policy positions of each candidate. Instead of using subjective

> and hope-inspiring promises that the candidates and their parties circulate during election periods, the reliability of which is in question, Daum went back to record mining in search of clear and reliable policy stances of the candidates. There is a big difference between what one promises to do and what one has said and done. If Daum could have traced what the candidates actually did in every aspect of their public lives, or even their private lives, that related to their potential performance as a president, it would have been even better. According to Daum's project manager, Shin Wangho, who led the Daum VAA and election project in 2012, it was almost impossible to acquire reliable data on the politicians, and that is the highest hurdle to VAAs being developed further in Korea today.[1]

One other noticeable development that Daum attempted in their election page was to combine a VAA with other political actions, such as participants' declaring their choices in public, and links enabling users to donate to the candidate or party they chose, and so forth. Obviously, Daum attempted to make the voting experience more than a silent and secretive political shopping experience. The idea of voting as a private choice has not always prevailed historically. Voting was a rather public experience in colonial America (Schudson 1998). Party loyalty was something to be proud of to the people in colonial Virginia or colonial New England. The notion of a secret ballot for the "private, rational 'informed citizen' that remains the most cherished ideal in the American voting experience today" appeared only at the end of the nineteenth century (Schudson 1998, 6). Was Daum's online campaign meant to bring modern voters back to the old American style of partisan politics? Of course not. Daum intended to raise public attention as much as possible and attract voters to both the VAAs and polling booth. Instead of making a silent and boring choice in privacy, it aimed to make the voting process an online public event that was fun, while raising voters' level of commitment and participation. Public declarations of voting intentions have the implication

of fostering greater deliberation on voters' choices. It does not look like deliberative democratic intentions drove the creation of Daum's VAA, but the online events that they planned and executed were good enough to stimulate acts of deliberation among voters. Through opening up about their choices, voters and their friends or family members easily engaged in talk about whom to support, from a simple chat to a heated debate. VAAs such as Daum's candidate choice helper for the 2012 election raise questions on the possibilities and limits of VAAs in the context of Korean politics. What are the meanings of VAAs in the electoral process? Was it really helpful for the voters to choose their candidates in a public way? Did the voters actually cast their votes for the candidates they found from the VAAs? Did the VAAs motivate people to go to the polling station and eventually raise the participation rate? What are the assumptions behind the VAAs regarding democracy and citizenship in the 2012 election? The three VAAs employed in the 2012 election were different from each other, but they seemed to share a common assumption that voters might shop better with the help of VAAs as they found candidates who matched their own choices. But what if the voters do not really understand the issues that are at stake? What if the candidates are actually deceiving the voters with empty promises? What if the VAAs are not able to check the facts properly and they provide incorrect information?

Informed Citizen and the Social Choice Approach for the Matchmaking VAAs

The VAAs in the 2012 presidential election were typically based on the old and tenacious worries about democracy, "namely, that citizens turn out to be poorly informed, easily swayed, highly irrational" (Fossen and Anderson 2014, 245). In other words, voters are incompetent. Citizens of democracy should be well informed, but for some reason, they are not able to stay well informed. They may be too busy, or the information on public affairs these days may be too complicated, or the candidates and

parties try to provide sugar-coated promises only, and so forth. The result is ill-informed voters who lose interest in going to the polls or in following the important issues so that they are not aware. The basic design of VAAs seems to raise the competence of the voters by providing them with well-formulated questions and information on major policy issues and candidates' positions along with the voters' own preferences. With the help of the VAAs, the voters' competence in deciding who fits their interests and preferences best is upgraded, and they are able to make better choices. The process is like shopping advice. The candidates and parties are out there "on the market" with their merits and faults. Voters are supposed to choose right ones based on the enhanced information provided by VAAs. Fossen and Anderson suggest that this reflects social choice theory in voting and contrasts this approach with two others, namely, the deliberative democracy approach and the contestatory (or agonistic) model (Fossen and Anderson 2014). They argue that the main goal of VAAs in the social choice approach is to raise citizen competence and turn them into better-informed voters, but the ideal of democratic participation becomes one of choosing the policy options on the table, and "democracy is a 'preference-aggregator' which turns individual preferences into collective policies." In other words, democracy in the social choice model of voting does not allow voters to go beyond the boundary of the table on which the choices are already prepared and given. You are given a variety of different pizzas on the table to choose according to your preferences. But if you want a hamburger, we are sorry but you better skip the meal, or just chose something available.

But the electoral process is not only an isolated act of politics. Before the policy options are put on the table in the form of an election, there are the normal and usual processes of noncampaign activities of politics along with continuous media interaction and exposure. Various types of political actions precede the elections. If the pre-election stage of politics did not function properly, the criticism against the social choice approach would make complete sense. But if the politics are operating

acceptably before and after the elections, the matchmaking type of VAAs may have their own value in helping voters reach better decisions.

The idea and ideal of the informed citizen appeared in American politics around the last decade of the nineteenth century and has remained in place for more than a century. Obviously, the idea has spread globally, and now many or most democracies seem to take it granted and accept it as the basis of a working democracy. Unfortunately, however, the ideal of the informed citizen does not seem to have been well realized in the actual political process, including voting. Who is the informed citizen? Can we count someone as informed if he or she reads? How much of an education makes one an informed citizen? What should be informed to the public so that they can be qualified as informed voters? For some critics, informed is not good enough. Entman classifies voters into four categories: knowledgeable voters, ignorant voters, knowledgeable nonvoters, and ignorant nonvoters. Needless to say, the country needs more knowledgeable voters than the other types (Entman 1989, 28). According to his observation, however, American politics have seen decay due to the failure of a responsible media and an ignorant public. The media outlets are growing fast, but ironically Americans know less about politics now than in previous decades. The number of informed and knowledgeable citizens is diminishing as people spend more time on other, private things rather than public affairs. If this is true, can VAAs save ignorant voters from voting against their own interests? For some observers, VAAs may not be a good enough means of washing away deep-rooted, conservative propaganda from the ill-informed and ignorant voters in the republican states in the United States (Frank 2004). According to Schudson, the news media of the United States today are providing materials for "the informational citizen" instead of creating the informed citizen (Schudson 1995, 169). In the age of the information revolution, with the endless invention and innovation of new information and communication technologies, people in the twenty-first century never have a shortage of information, but

unfortunately the abundance of information does not help voters become well informed and knowledgeable citizen.

In 2012, were the voters in the presidential election well informed and knowledgeable in Korea? That is, did they achieve democratic ideals for citizen knowledge? Two components are indispensable for creating informed citizen. The first is voters' own competence, and the second is a well-balanced and reliable news media environment. As for the first, Korea is one of the most educated societies in higher education penetration. The people are perhaps too distracted by overly developed media outlets in which the news has become entertainment and entertainment has become news, to use the word of Schudson once again (1995, 179). The second and fundamentally important factor is a good news media environment that informs the citizen well and supplies him or her with enough accurate news that he or she needs to know.

The landscape of the news media in Korea was muddy in 2012. The incumbent government of President Lee Myung Bak was notorious for its hard-line control of and policy toward the nation's media since his inauguration in 2008. Major newspapers had long been conservative and progovernment, and President Lee had no hesitation in attacking the heads of major public television stations such as KBS, MBC, and YTN. In the case of MBC, which had boasted the greatest credibility in the media market in 2008, it suddenly fell under the destructive control of the new head, Kim Jaecheol, who was parachuted in by the president. The MBC labor union objected to this for almost half a year, but eventually the union's strike was quelled, and the new head sacked many reporters and producers as soon as he took office. Investigative journalists and producers had to leave MBC, and the station immediately turned into a government puppet. This was something that disturbed many people both inside and outside of the influential station. Kim Jaecheol left after his term expired, but MBC never got its influential status back, and its performance is still very disappointing.

Under the Lee Myung Bak administration, four new television news channels were licensed following heated debate on

the matter. News broadcasting was strictly under the control of the government in Korea for many decades. Only three stations were licensed to carry general programming, including news programs, for decades, and there were a few other cable channels only for news reporting. Those cable news channels took very little share and did not have much influence. In this situation, conservative national newspapers applied for a general programming channel and pushed the government hard to finally get a license. As soon as they began broadcasting, the programming was mostly cost-saving talk shows with right-wing speakers. When the presidential election approached in December 2012, there were three traditional over-the-air broadcasters and four new general programming channels, all of which were positioned on the right-to-center spectrum of conservative politics. Contrary to the American case, in which the major media outlets are often criticized for their left-slanted coverage, most major news media in Korea are under the strong control of the ruling regime and big corporations.

The right-wing-dominated news media environment seems to provide a perfect case for VAAs to offer a service for turning ill-informed citizens into a well-informed ones so that they can make better choices as voters. Could this be possible? The social choice model or the matchmaking function of VAAs assumes that the application of VAAs in the electoral process would enhance the capacity of voters through helping them identify which candidates are better matches with their interests and preferences. Short descriptions and explanations should be enough for voters to understand the difference between policy options, assuming that they are too busy to follow the complicated details of the issues in question. What if, then, the short descriptions or explanations on different policies are not encouraging voters to become "informed" on the controversial issues in question? What if the voters are supposed to expose themselves to a certain degree to the media before they test themselves with VAAs? Would VAAs still be useful in terms of providing educational hints and urging the voters to study more on the topics of which they are ignorant? The VAA user

experience may divide the voters into two groups. One group is voters who can easily differentiate the policy positions between the candidates and fully understand the meaning. The other group is voters who do not actually discern the differences in the true implications of the policy positions. For instance, if one candidate may support a hierarchical high school system in which some private schools attract the top students, whereas most public schools are left with the rest, and the other candidate may oppose the policy. This has been a complicated issue for many decades as administrations have changed the school system so many times. Even education experts are always in disagreement on this issue. If a voter has followed the content of the different policies, he or she may know what is at stake, and will not find it difficult to match her preference with one of the candidates. However, if a voter is totally ignorant and not interested in the issue, the choice made based on the simple question would be almost like a blind pick. Even in this situation, however, the VAA experience may, ideally speaking, stimulate the voters to search for more information on the issues with which they are not familiar. So perhaps VAAs can be useful for both types of voters.

Coupled with the failure of the media in producing and providing impartial and objective information on candidates and policies, a more serious challenge exists. What makes the situation much more convoluted is that there are few ways for voters to check the truthfulness of candidates' promises. In the worst case, and quite often, voters are meant to be confused and even deceived. In an election situation, it is not rare to see a conservative party promising very progressive policies, which will later be easily ignored or changed after the election is won. If a candidate is putting forth some policy promises as propaganda, which are contradictory to the party's general position or to the candidate's past behavior, this has to be brought to the public's attention. The news media should and would do the job in an ideal situation. But if the media are already coopted by a conservative politics and behave as part of the campaign, it is difficult to expect them to carry out this natural duty.

When Daum was designing the VAA, they were well aware of the problem. According to Shin, they benchmarked the Vote Smart program of the United States (votesmart.org). Vote Smart has a subprogram, called "I Spy," which claims that it has background fact-checking information on 40,000 politicians. Anyone can easily check the past history of any candidate from Barack Obama to a local commissioner. In other words, the VAA is linked to the database of the candidates' past records, and voters can check whether a candidate is weaving lies or telling the truth. Daum instantly knew the importance of the "I Spy" function for the working VAA. But they also discovered there is no way to build such a database in a short time in Korea. In the United States, government information is accessible on the Web with little effort. Data.gov provides most of the official information on public affairs and figures. However, the Korean government does not have something equivalent to that. Daum tried to find a way on their own to build a database on politicians based on their past records, which was too difficult to accomplish, if not impossible. The public information on politicians should be filed and made available to the public. It is a necessary condition for a working democracy of any kind. Unfortunately, however, this requirement is far from the political reality in Korea. Information on public figures, especially politicians, is murky and mostly not available. Their voting records either do not exist or is incomplete. In the case of new faces running for office, this is even more serious. Voters are often virtually confronting a situation in which they have to choose one candidate with little knowledge other than a photo and brief biographical information related to education and career along with promises that have not been vetted.

Deliberative Democracy, Voting, and VAAs

In the last couple of decades, American political scientists have raised questions about the disappearing public sphere, the collapse of the community, and the destruction of the republican tradition of self-governance (Putnam 2001; Sandel 1998).

Common to these worries is the disappearance of deliberation, a free and committed discussion for decision-making. Did it ever exist? Jürgen Habermas points to a tradition of discussion that formed the public sphere in modern Europe. Americans seem to believe the nation was founded upon deliberation between well-informed gentlemen. The tradition of deliberation existed in the modern democracy until recently, but it was somehow attacked and it collapsed in the last decade of the twentieth century in American society. This is what many scholars have pointed out repeatedly in the last two decades. And one of the reasons why the public deliberation has failed is often due to the commercialized media system, through which entertainment becomes news and news becomes entertainment (Schudson 1995). The media does not create spaces for good public discussion. According to Page (1996, 33), "a small number of professional communicators play a central part in public deliberation, but that they do not always faithfully represent ordinary citizen's values and interests." A diversity of viewpoints is supposed to be an essential part of the free market of ideas, but the media market today is too slanted.

Regarding voting behavior and VAAs, the deliberative approach focuses on a different aspect from the social choice model. Fossen and Anderson contrast the two approaches by saying that "it is not *knowledge of party-positions* that citizens lack but rather *well-considered views about what the parties ought to be defending*" (2014, 247, italics in original). In this approach, who to choose in an election is less important than what should be the policy agenda. Citizens are supposed and encouraged to become active thinkers and players for policy input. Three components are key for being a competent citizen in relation to deliberative democracy (Fossen and Anderson 2014):

(1) There is an emphasis on being well informed about the issues on which one takes a position. A political standpoint that rests on a factual mistake will lead to poor voting.
(2) A political standpoint should be revised once a person realizes there is an inconsistency among various issues.

(3) The importance of the genuinely public exchange between citizens should be emphasized about how best to address pressing issues and what policies can be justified.

In this context, a good deliberative process of policymaking is not choosing something one prefers from the options on the table, but rather is a joint development of legislation by the citizens. The meaning and function of VAAs should also be revised accordingly. A good model of VAA in this approach is supposed to help voters be well-informed about the issues first, and assist them in reflecting on the implications of their views. The VAA will eventually engage voters in public deliberation and lead them to "rational co-legislation" (Fossen and Anderson 2014). The authors argue that deliberative VAAs are conceivable and that they can make big difference in comparison to the matchmaking type of VAAs, as they can attract engaged discussion among the voters. But how could this type of VAA be designed? The current VAAs are often much too complicated and boring for many potential voters. Gamification of the VAAs is an outcome of the attempt to attract more people to take VAAs and eventually lead them to thoughtful ballot casting. Designing VAAs to stimulate deliberation may not be difficult in terms of the words, but it is similar to designing a question, like how to make a college textbook interesting and enjoyable so that even elementary school students can also take look at and learn from it.

I mentioned that the Daum app was significant in the 2012 election as it went beyond an isolated VAA only to provide voting advice to the VAA takers. As Daum was the second-largest nationwide portal business, it was a powerful platform that reached large numbers of voters from all walks of life. A platform for a VAA is critical in terms of securing access. The CCEJ was never successful in reaching out to the general public from both the left and the right because it used its own homepage as a platform. That is like selling your milk to consumers while asking them to visit your shop in the mountainside. Compared with this, the Daum platform is a shop on the busiest corner in New York City or in Tokyo.

Everybody is passing by, and everybody can drop by. But this does not guarantee that everybody will actually drop by. In reality, not many people used VAAs even if they saw them mentioned on the webpage repeatedly. Why? Perhaps people do not think they need any help or advice in choosing a president. They may have already decided whom to vote for. Or whom not to vote for. We assume that most people might need VAAs to make an accurate or better decision. But when there are only two choices, and they are distinct from each other, many observers might think that VAAs cannot provide any change in terms of helping voters make a choice. What if the function of VAAs was advertised not as helping you to choose whom to vote for, but as letting you know how much a candidate will represent your interests? The program actually showed the matching rate between the candidates and the voter, but the focus was on choosing a candidate. When voters have already decided on whom to vote for, a VAA will not attract much interest.

At any rate, Daum launched an election special page that included their VAA along with a declaration of one's choice and a pledge to make a donation. Instead of setting up an isolated VAA, Daum conceived a more integrated web and mobile app and hoped to make some impact on the election. As briefly mentioned above, the approach Daum designed seems to be quite meaningful in the sense that the app is not the end of voting participation but the beginning of it. Once you answer the VAA questions and get to know who your candidate is, you are invited to declare your support for him or her in public on the website. You have a choice not to do so, of course. Once you declare which candidate matches you, you are again invited to make a donation so that your candidate can have better chance of winning. Again, you have a choice not to. Through this series of events focusing on voting behavior, voters are invited to think and talk about the candidates and policies in various ways in both online and offline spaces.

Although Daum did not intend to move or change the usual voting institution from a secretive private selection of a candidate to an open declaration of a matching candidate, it actually resulted in that outcome. This is a very meaningful shift, because the predominant conception of voting in Korean society today is that it

is an isolated and secretive decision that one does not even need to share with a spouse or a close friend.

We can make a conceptual comparison of two different ways of perceiving voting as a social institution. The first is seeing *voting as a right of an individual* in society. It is given to everybody at a certain age by law. It usually consists of the right to cast a ballot to choose one of the options among candidates or parties, or sometimes among policies. You do not have to be involved in any discussion or consultation to make up your mind. Your parents or friends may seek to influence you to make a certain decision, but you are absolutely free in the polling booth. This is a simple and typical model of voting as a right given to the individual, and individual only. No social and public communication or deliberation is attached as a part of the decision-making process, although it is assumed that every citizen is knowledgeable enough to exercise his or her right. An alternative model to this is viewing *voting as a process for reaching a social debate and consensus*. In this perspective, the action of voting is part of the wider sphere of social and political communication, in which the public finds room to associate with their fellow citizens. This second notion of voting is close to the deliberation model of VAAs.

Deliberation, according to the definition in Webster's dictionary, has at least three meanings:

(1) the act of weighing and examining the reasons for and against a choice or measure; careful consideration; mature reflection
(2) a discussion and consideration by a number of persons of the reasons for and against a measure(s)
(3) the quality of state of being deliberate

On deliberative public opinion, Benjamin Page summarized as below:

> Even if the public is capable of a high level of rationality and good sense, public opinion is bound to depend, in good part, upon the political

> information and ideas that are conveyed to it. *If that information is sufficiently full, accurate, and well interpreted, then citizens can decide what policies they want in an informed way, consistent with their basic values and interests.* Then it makes sense to insist that government act accordingly. Democracy can work well. But if the information provided to the public is inaccurate, incomplete, misleading, or full of outright lies, then perhaps even a rational public can be fooled…democracy would not work well. (Page 1996, 2; italics added)

Habermas and Rawls, according to Elster, share a common belief on the ideal of deliberation and good political decision-making: "political choice, to be legitimate, must be the outcome of *deliberation about ends among free, equal, and rational agents*" (Elster 1998, 5, italics in original).

If VAAs can be designed to help voters in the process of deliberation before they vote, it is certainly something to welcome. But if the design of VAAs becomes complicated and difficult for the general public to readily use, it may only discourage wide use of the app. VAAs are in a sense a tool in the political process to help busy and uninterested voters pay more attention and find the right person and party to represent their true interests. If VAAs are expected to be a solution for deliberative democracy, with more serious and complicated components in them, they may result in a quite limited segment of the population taking advantage. VAAs are meant to attract people who have less interest in and/or knowledge about an election rather than well-informed citizens. The well-informed citizen would not need much help from a simplified app like a VAA. Fossen and Anderson's call for a deliberative approach to VAAs seems to be the outcome of a misinterpretation of the practical use of the VAAs, which is in fact targeting a way to provide assistance to less-informed voters in the form of simple and even game-like apps.

Need for Professional Communicators and New Citizenship

More serious deliberation, however, is required for the advancement of contemporary democracy, which has turned into a mediocre mediacracy in which deliberation is lost in the

abundance of information. "Democratic theorists have stressed the importance of providing the public with good information and high-quality political *deliberation* (that is, reasoning and discussion about the merits of public policy)" (Page 1996, 2). The role and responsibility of media in democracy is to provide both quality information and deliberation, as Page argued. It should be the media or through the media that deliberation can find a space and process. For him, however, the media in America do not seem to carry out such a function. He asks, "[H]ow well do professional communicators represent and serve the public? Do they convey information and ideas the public needs for developing informed policy preferences? Or do they, to a significant extent, mislead citizens and distort public opinion?" (Page 1986, 6).

But one thing is clear from his argument. The media is a professional communicator that has to do its social duty and bears the responsibility for carrying out deliberation. For Page, it is that media that should shoulder the heavy duty of deliberation rather than individuals. In relation to this assessment, Schudson suggests that a new concept of citizenship is rising in American society after a century-long domination of the "well-informed" citizen model. Based on this new model, he argues, we should stop expecting everyone to do everything. The new form of citizenship, according to him, rests on citizens who are monitors of political danger rather than walking encyclopedias of governmental news. Together with other observers in sociology and political science, he also admits that "public life is disappearing" as the editors of *Harper's* magazine declared. Even if we know that intellectuals have always complained that "we no longer have citizens" since the days of George Washington, American society at the end of the twentieth century was certainly dominated by liberal individualism in which Americans' participation in public affairs was much reduced (Schudson 1995, 295–296).

But the real problem is the wide and deep privatization of media institutions in most countries, including both the United States and Korea. In the case of Korea, major media institutions

are heavily biased toward right-wing politics and under the control of the incumbent regime. The media's interpretation of campaign pledges and policies dominates election discussion, but it is difficult to find impartial and objective coverage, let alone balanced deliberation. Whenever the media is confronted with tough questions or problems, these institutions hide behind a mechanical neutrality and try to escape from their social responsibility. Fair and impartial coverage and investigative journalism have become extinct species. Still, most of the public information space is colonized by the mainstream media. In these circumstances, VAAs find their location only on the marginal tip of news media-dominated electoral discourses.

Political parties are major actors in the electoral process, which might be interested in the active use of VAAs to increase the voter participation rate. Interestingly, however, political parties in Korea never pay sufficient attention to VAAs. They are actually afraid of encouraging voters to use VAAs, as none of them want to lose their emotional supporters who do not care about the party's policies. These supporters affiliate themselves with a particular party based on regional attachment or/and ideological preferences (such as anticommunism and an anti-North Korea stance). The problem is the number of this kind of voters is never small. As a matter of fact, as I mentioned in the beginning of this chapter, the regional cleavage is structures ideological confrontation has become increasing fragmented and complex in Korean politics. Do some, or many, voters not care about policy-based choices in voting? What if voters want to elect a candidate based on ideological and regional cleavages rather than rational choice? This actually happens, especially when they do not see much difference in the policy stances between the parties, or they do not believe any party would stick to its promises anyway once they are elected. Thus, the failure of class representation and the failure of public trust enter the field of the electoral process.

Political parties and politicians are more afraid of the fact that they have to be clear and concrete in their policies and truthful about their past activities. This means politics are required to be

transparent, much more than they used to be. VAAs are in fact pose not only a good potential for improving the current electoral democracy but also a big threat to the politics of opacity in which politicians and parties can easily slip away from responsibility to keep their promises after winning elections. VAAs can come into the electoral process in any format that consists of a simple set of questions contrasting different parties and candidates, but they can develop into a complicated system of fact checking on politicians and parties. The "I Spy" function can be a safe containing political resources for politicians with clean records, but to politicians with stained records, it can also be a threat that cannot be eliminated. Politicians in Korea today are not happy about opening up their records to the public. Many of them are not happy either with the idea of making their policies and promises clean and clear and concrete. They prefer playing within the grey area between opposing options and trying to satisfy both sides of voters by suggesting they can provide beef while not killing the cow. In leaving their promises vague and uncertain, they may want to change their words after the election. They may want to completely "forget" about their promises depending on their political interests. VAAs are causing trouble to these politicians because they are asked to be clear about their positions on critical issues. In "I Spy," politicians are invited to answer to controversial questions such as about same-sex marriage or nuclear power plants, among many others.

VAAs are in a sense a most contemporary invention to keep the citizen informed and to provide deliberation on election issues. As criticized by Fossen and Anderson, they have limits as tools of deliberation. They may even involve some risks in making the electoral process a simple matchmaking or policy shopping game. Despite those limits, however, they have strong merits in helping voters be alert concerning their choices. In the 2012 election, Korea saw meaningful progress with the Daum VAA and other election programs related to it. It reached large number of people through a refined program that helped voters avoid depending on the candidates' subjective answers on policy positions. Due to the structural limits of a murky information environment, and also to

a slanted news media that was neither informative nor objective, the operation of VAAs in the 2012 election was not able to produce a sizable impact on the nation's election process. But it had valuable significance for future development and left a positive impression. Whether Daum will take the lead again in the next national election is not certain at the moment. But the seed has been planted and VAAs will be a regular part of Korean politics in the years to come.

Note

1. I conducted an in-depth interview with Shin Wangho who was the Project Manager of Daum's election project, including the VAA. He devoted an entire year to the project, and Daum put great effort into the project, thanks to the founder's personal commitment, when there was actually no financial gain at all for Daum from the project. They took it on as a social responsibility and service on the one hand, and perhaps also thought it would raise the reputation of and pride about the company in society on the other. But the effort required to do the project was no small task, and he was not sure whether Daum would do the same in the next presidential election, especially since the founder, Lee Jaewoong, sold the company to Kakao, which gave birth to Daum-Kakao, a trendy business merger of an internet platform and a mobile platform. The interview was done at Daum's Jeju office on November 22, 2014.

CHAPTER 7

THE CONNECTION AND EFFECTIVENESS OF IVOTER IN TAIWAN'S 2012 LEGISLATIVE ELECTION

Austin Wang

Introduction

As discussed in the first chapter of this book, the ultimate goal of voting advice applications (VAAs, hereafter) is to make citizens better informed and therefore to deepen democracy. To reach this goal, the building of a VAA consists of three consecutive steps. On the supply side, those who work on the VAA collect information that is helpful for making a vote choice. On the demand side, voters use the VAA. And on the outcome side, voters will be better informed and then make a vote choice accordingly. Ideally, a VAA can glean and summarize all of the information in elections, and send the information to every voter, and an informed voter can then make a better decision, and in the end the election results will reflect the will of the people.

However, the reality is far from the ideal. During the information-gathering process, parties and candidates may not participate with the VAA; they may not express a view on some of the important political issues; or they may refuse to announce

their policy stance (Page 1976). As a result, voters can hardly compare all the candidates on the ballot by using the VAA with only incomplete profiles. While information is provided, a VAA may thus not be accessible to every voter. The analysis of the background of VAA users can help in the promotion of VAAs in the future for unreached target groups. After the information is transmitted, receivers may not update their views, the information may conflict with a VAA user's existing beliefs (Lodge and Taber 2005; Lau and Redlawsk 2006), or the new information may cause cognitive overload (Boatwright and Nunes 2001).

The aim of this chapter is to explore the reality of the three steps of VAA, based on data from the iVoter program in Taiwan's 2012 legislative election. iVoter asked candidates from all the parties about their position on several important political issues and created a matching application based on the responses.[1] Voters could then match themselves with the candidates based on the voters' own policy positions. In this election, 95 of 283 candidates responded and uploaded their policy orientation on the iVoter website. Over 40,000 internet users from different IP addresses visited the website, of whom 647 were recruited by providing an iPad lottery, and they completed both the pre- and postelection questionnaire about their feelings, vote choices, and political participation.

Exploratory analysis of the data from iVoter can address the following questions. First, why are some candidates willing to make clear their policy stance, while others choose to hide their positions? Second, who are VAA users? Third, is the information provided by iVoter helpful to the users? Did they change their political behavior because they used iVoter? The analysis in this chapter can not only help in reexamining the mechanism and effectiveness of iVoter but also provide suggestions for further employing VAAs in the future.

Why Do Candidates Cooperate with a VAA?

Information about candidates' policy orientations is a crucial aspect in order for iVoter to build a matching mechanism. The

policy orientation of the candidates can be measured by different methods, all of which have their unique limitations. Many researchers apply text mining to congressional records, roll-call voting, or news articles to systematically calculate candidates' policy stance or ideological score (Garzia and Marschall 2012; Poole and Rosenthal 2001; Yu, Kaufmann, and Diermeier 2008). However, these sources strongly favor incumbents and well-known candidates, which undermines the original goal of a VAA—voters may already know the policy orientations of these candidates. Moreover, not every candidate will publicly speak out his or her position on all political issues, which makes them unable to be compared in the VAA matching mechanism. For example, the "Doe de Stemtest!" in Belgium only lists a selection of parties, which is described as the "narrow approach" by Garzia and Marschall (2012).

A solution to the problem of noncomparability is intuitive—we can ask all of the candidates about their policy orientations on all of the important political issues. If every candidate and party responds, VAA can calculate the policy or ideological distance between the user and all candidates, and then give precise suggestions on vote choices. The establishment of EU Profiler is one of the most famous examples of an application for conducting surveys of all of the parties (Trechsel and Mair 2011). This is also what iVoter did during Taiwan's 2012 legislative election.

The intuitive solution in practice encountered some challenges. Some candidates refused to cooperate with iVoter.[2] They rejected the opportunity to be included on the iVoter website and to be matched with potential supporters. On the one hand, by participating in the VAA candidates can attract voters with a similar policy orientation, a candidate can gain more media exposure, and he or she can become familiar with this new technology. After all, campaigning through the internet has become an irreversible trend (Williams and Girish 2013).

On the other hand, however, numerous disadvantages may undermine a candidate's willingness to participate. First, candidates may avoid taking a position on controversial issues, which

may distract supporters. Hillygus and Shields (2014) point out that partisan supporters can be persuaded to vote for the opposite side when one of their policy attitudes conflicts with the party elite. Second, a clear policy stance may also cause intraparty conflict with other party member (Garzia and Marschall 2012), and therefore tarnish the party brand (Aldrich 2011, chapter 2). Third, a candidate's responses on policy position questions can be seen as a commitment before the election, which implies that the candidate will be watched carefully and may lose space for negotiating among interest groups in the future.

The positive and negative factors related to cooperating with a VAA have different effects on candidates with different backgrounds. A candidate's strategy on cooperation may be systematically influenced by individual characteristics. First, the size of a candidate's party matters. Small parties need more media exposure to make themselves known to voters. Since the traditional news media is usually dominated by major parties, a VAA would be a better chance for minor parties to connect with potential supporters. Moreover, members of a small party may experience less intraparty conflict since it has fewer members and therefore it would be easier to negotiate.

H_1: *Candidates from small parties tend to cooperate with VAA (+).*

Second, challengers would quite likely participate in the VAA. Jacobson (1978) shows that a challenger's campaigning is especially important because it helps the challenger become known by the voters. A VAA can broadcast a challenger's policy orientation to the voters. Moreover, incumbents have won election at least once, and they possess official resources for the next election (Jacobson 1989). The incumbent advantage implies that he or she has already attracted a number of supporters large enough to win election without the help of a VAA. In contrast, a VAA will post his or her policy orientation to the public, which may drive away his or her original supporters. Hence,

H_2: *Incumbents are less likely to participate (–).*

Third, less competitive candidates are much more likely to participate in a VAA. Following vote-maximization assumptions, a candidate who is at a relatively disadvantaged starting point in an election will find any way to promote him- or herself. Even though the effect of cooperating with a VAA is uncertain, less competitive candidates would be more risk accepting since they have nothing to lose. In contrast, leading candidates would just like to keep the status quo until election day. The electoral system for Taiwan's 2012 legislative election is single-member district, so the competitiveness of a candidate may not be the same as the size of a party or an incumbency. It is possible that some emerging politicians are much famous than existing ones. Another possibility is that the major party leader may choose not to nominate the incumbent in his or her party owing to a scandal or a violation of party discipline.

H_3: *Less competitive candidates tend to participate (+).*

Fourth, age may be another influential factor in using a VAA. Young candidates may be more familiar with the internet, and thus willing to engage with new technology like VAA. Moreover, many young candidates are less known or lack grass-roots mobility, which increases the necessity of promoting them through a VAA.

H_4: *Young candidates tend to participate (+).*

In the end, candidates who are familiar with the internet may choose to participate in a VAA. Since VAAs have been established only recently, their effect remains unknown to candidates. As is discussed above, uncertainty causes doubt and then rejection. However, if the candidate already knows the internet well, which can be observed by building a website, interacting with internet users online, or using a social network profile like Facebook, he or she may be able to understand the benefit of a VAA. Therefore, the candidate's willingness to cooperate would be higher. Previous studies in Europe show that young people and those who are prone to use new technology tend to employ the VAA (Alvarez et al. 2014; Cedroni 2010; Marschall and Schultze 2012), and similar sociodemographic factors would also apply to the candidates.

H_5: *Candidates familiar with the internet tend to participate (+).*

Data and Analysis

Examination of the candidate's cooperation with a VAA is based on data from the iVoter program in 2012. A questionnaire consisting of 21 items about policy orientation was sent to all 283 candidates three months before election day, and employees of iVoter called the campaign offices of the candidates several times to ask for a response. Overall, 95 of 283 candidates (33.6%) replied with their answers, 18 refused to answer, and 170 did not responded.[3]

When it comes to independent variables, a candidate's party, incumbency, and age can be found on the Central Electoral Commission's website.[4] A candidate's competitiveness is measured by vote share in the 2012 legislative election.

In the end, a candidate's familiarity with new technology is measured by whether the he or she ran a Facebook page for campaigning. According to a report by internet World Stats,[5] 57 percent of Taiwanese used Facebook in 2012. In 2014, the percentage jumped to 88 percent. Since it has become one of the most important channels of social networking and political communication, having a profile on the Facebook would be a good proxy for familiarity with the internet. A candidate's name and district were set as keywords on Google and Facebook searches, and those who had a personal page, group, or profile with content related to the election were coded as 1. Before election day, January 14, 2012, 72.9 percent of candidates had set up a website on Facebook.

Table 7.1 Cross-table of candidate's party and cooperation with VAA

Partisanship	*Cooperation*		*Reject/Nonresponse*		*Sum*
KMT	27	(36.0%)	48	(64.0%)	75
DPP	25	(35.7%)	45	(64.3%)	70
Minor parties	28	(33.7%)	55	(66.2%)	83
Non-partisan	15	(27.3%)	40	(72.7%)	55
All	95	(33.6%)	188	(66.4%)	283

Note: $x^2 = 1.332, p = 0.724$.

Table 7.1 is the contingency table of a candidate's partisanship and cooperation with a VAA. A chi-square test shows that there is no clear relationship between party brand and cooperation. Candidates nominated by the two major parties in Taiwan (the ruling Kuomintang [KMT] party and the major opposition party, the Democratic Progressive Party [DPP]) were not less likely to cooperate, while candidates from small parties did not make the best use of iVoter to promote themselves. There is a difference in the level of cooperation among small parties, but the difference cannot be explained by the characteristics of the party. For example, candidates from the Green Party (90%) and Run-min-tsue-da (People-Are-The-Boss) Party (80%) had a high level of cooperation, while candidates nominated by the Free Medical Insurance Party (0%) and the Taiwan Citizen Conference Party (10%) tended not to respond. To sum up, data from iVoter does not support H_1.

Apart from partisanship, incumbency may be another reason for declining cooperation. Table 7.2 shows the distribution of a candidate's incumbency and cooperation with iVoter. Contrary to H_2, incumbent legislators were quite willing to share their policy stances with VAAs and voters. In contrast, challengers were cautious about exposing their policy attitudes on important political issues. The difference between incumbents and challengers are almost statistically significant ($p = 0.06$).

A logit regression model is then used to control the covariates and examine the five hypotheses. Figure 7.1 is the coefficient plot of all of the explanatory variables. The line around the point is the 95 percent confidence interval, while the bold part is 60 percent. There is no serious problem of collinearity

Table 7.2 Cross-table of incumbency and cooperation with VAA

Office	*Cooperation*		*Reject/Nonresponse*		*Sum*
Incumbent	31	(42.5%)	42	(57.5%)	73
Challenger	64	(30.5%)	146	(69.5%)	210
All	95	(33.6%)	188	(66.4%)	283

Note: $x^2 = 3.492$, $p = 0.06$.

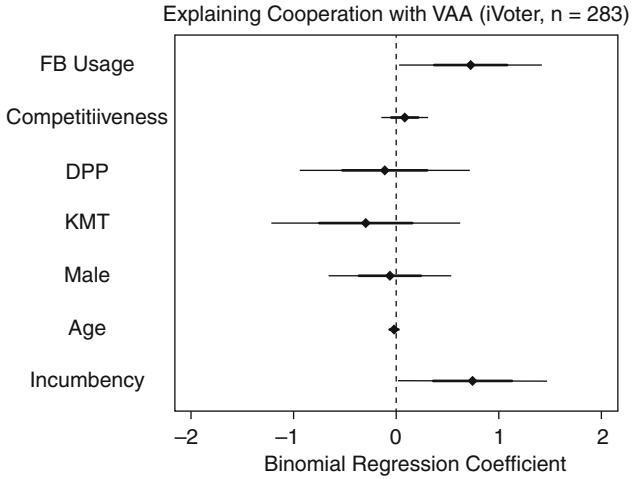

Figure 7.1 Coefficient plot of logit model explaining candidate's cooperation with iVoter.

among covariates. Based on the estimation of logit model, a candidate who is an incumbent ($p = 0.04$), is running a Facebook page for a campaign ($p = 0.04$), and is young ($p = 0.15$) is much more likely to cooperate with iVoter. Partisanship, competitiveness, and gender have no significant effect on one candidate's participation in iVoter. Empirical data supports H_4 and H_5, fails to support H_1 and H_3, and reveals the opposite result for H_2.

One possible explanation for the unexpected findings is that the 2012 legislative election was the debut of the iVoter program. Since the influence of iVoter on vote share was uncertain, a candidate's choice of whether or not to cooperate was based on his or her familiarity with the new technology. Young candidates and Facebook-owned candidates responded to iVoter more. This result is similar to previous studies on VAA users (Alvarez et al. 2014; Cedroni 2010; Marschall and Schultze 2012). As time goes by and online campaigning becomes routine, we can be optimistic that in the future more candidates will participate in VAAs.

The size of parties fails to explain the level of participation in a VAA. There is no difference in the level of cooperation between major and minor parties. Moreover, the choice of whether to cooperate is very different among minor parties. The diversity may come from the strategy of the small party. Some parties, like the Green party, may target internet users, while the Free Medical Insurance Party may draw the attention of the elderly and o[ffl]ine voters. This hypothesis needs further exploration in the future.[6]

When it comes to the role of incumbency as a predictor of VAA participation, incumbents might have more knowledge on the issues because the 21-item questionnaire came from congressional records. Another possibility is the resource hypothesis. Williams and Girish (2013) find that in the 2008 and 2012 congressional elections, incumbents were much more likely than their challenger to adopt a Facebook page. Moreover, wealthier candidates are also much more likely to have a Facebook page. They argue that candidates who are better funded have the capability to put more effort into the internet, while poor candidates cannot. However, the logic of running a Facebook page and cooperating with a VAA is different. Candidates need not spend too much money on cooperating with iVoter. Therefore, these explanations need further examination in future research.

Even though incumbents owned the potential advantage in responding to a VAA, this phenomenon does not mean that the problem of a "narrow approach" cannot be mitigated. Because iVoter workers distributed the questionnaire to all of the candidates, the candidates were granted the chance to express themselves and reveal their positions. What VAA workers can do is persuade the candidates to value this channel. Therefore, if more evidence can be provided to show the effect of a VAA on a challenger's vote share, his or her willingness to cooperate may increase. Moreover, the questionnaire may further push a single-issue party to formulate a manifesto that demonstrates concerns about more issues (Garzia and Marschall 2012).

Is VAA Helpful to Voters?

The first half of this chapter focused on the supply side of information in election, and the second half emphasizes the demand side. Since the goal of VAA is to give advice on voting choices, a VAA should be accessible to those who (are assumed to) need advice. Once the advice has been provided, the user of VAA should be informed and hence change his or her political behavior. The following section is composed of three parts: a descriptive analysis of iVoter users, their self-reported evaluation on iVoter, and their behavioral change during the election.

Who Used iVoter?

During the 2012 legislative election, over 40,000 people with different IP addresses visited the iVoter website. An iPad lottery was carried out to recruit participants, and after 647 participants completed both the pre- and postelection questionnaire. In other words, the registered participants are opted-in samples, which limits us on the boundary of inference.

Table 7.3 shows the sociodemographic background of the registered participants. In this table, it is clear that most of the

Table 7.3 Social demographics of iVoter registered user (n = 647)

Variable		*No. of sample*	*Percentage*
Age	19–29	522	80.7%
	30–39	77	11.9%
	40–49	26	4.0%
	over 50	22	3.4%
Gender	Male	439	67.9%
	Female	208	32.5%
Level of Education	High school degree or less	29	4.5%
	Bachelor's degree	419	64.8%
	Master's degree or higher	199	30.8%
Ethnic Identity	Taiwanese	425	65.7%
	Chinese	2	0.3%
	Both	192	29.7%

iVoter users were young, male, and highly educated. This result is similar to previous studies on VAA users in Germany, Switzerland, and Europe (Alvarez et al. 2014; Cedroni 2010; Marschall and Schultze 2012). Moreover, according to the 2014 daily report from the Taiwan Network Information Center,[7] 77.7 percent of Taiwanese citizens use the internet, and most of them are also young, male, and highly educated. Therefore, iVoter users were those who already surf the internet often.

Moreover, Lin and Wang (2007) point out that old, male, and educated Taiwanese citizens have greater political knowledge. In comparison, the young generation has a lower score on political knowledge items. Therefore, one potential benefit of iVoter is that it can provide political information to the young generation and increase their political knowledge. Nevertheless, this hypothesis needs further examination.

Subjective Evaluation of iVoter

In the postelection questionnaire, the last two items asked participants their feelings about iVoter. Table 7.4 shows the proportion of users who agreed that iVoter is helpful. Overall, the participants responded positively, with more people considering that iVoter is especially helpful in providing the policy positions of the parties. The reason for the difference may be because there was a low response rate among the candidates. iVoter users' level of satisfaction is similar to that of EUProfiler, which is also close to 80 percent (Alvarez et al. 2014).

Table 7.4 Do you think the information iVoter provided helps you understand more about…

Variable		*No. of sample*	*Percentage*
Candidates in your district?	No	134	20.7%
	Yes	513	79.3%
Policy positions of the parties?	No	83	12.8%
	Yes	564	87.2%

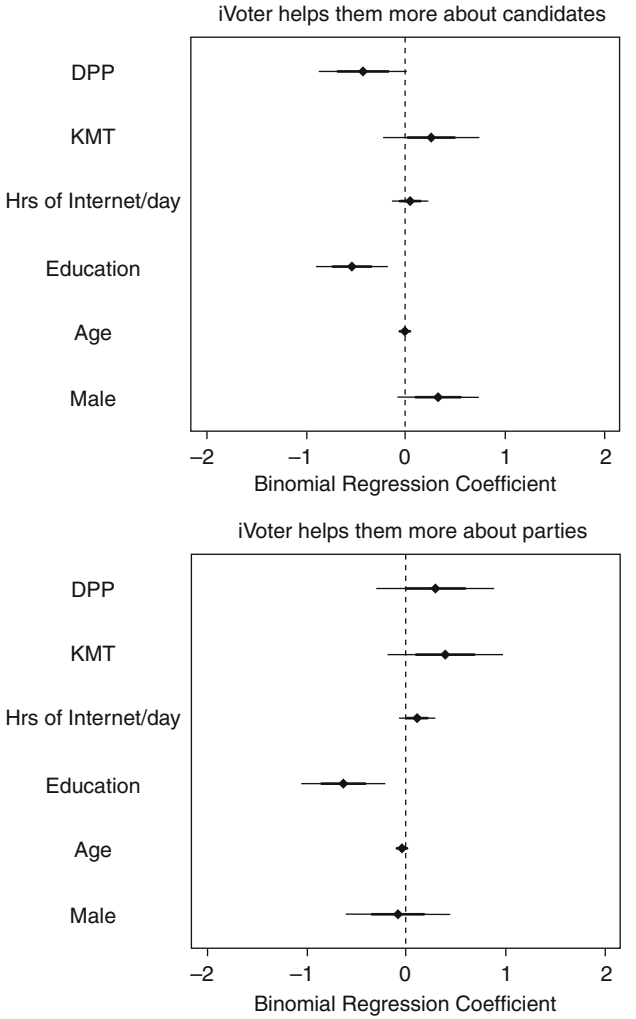

Figure 7.2 Coefficient plot of logit model explaining participants' thinking of iVoter as helpful.

Figure 7.2 shows the results of two logit regressions that explain the participants' evaluation of iVoter. In both of the models, users who were less educated tend to consider iVoter as helpful, after the model controls for participant's partisanship, gender, age, and daily internet usage. If the level of education can be equated with political knowledge, the evidence provided here suggests that iVoter indeed helps those who need to be informed. Furthermore, in both models the estimated coefficient on *age* is negative, and in the right figure, the coefficient is significant ($p = 0.003$). When a participant is younger by one year, his or her possibility of supporting iVoter would increase 0.6 and 3 percent, respectively. This result indicates that the iVoter program benefits the young generation in learning more about the political parties in Taiwan.

Moreover, there is no difference in the participants' partisanship and supportive attitude toward iVoter, which suggests that iVoter can maintain its neutrality on providing information independent of partisan bias. The result also responses to the role of mass media in digital age, as discussed by Mutz (2001): Compared with face-to-face communication, people who use the internet are much likely to have contact with information from opposite side. Therefore, the problem of selective exposure can be reduced with the help of the new technology.

Effectiveness of iVoter

Once a voter is informed by a VAA, he or she is expected to change his or her political habits and vote choice. Previous studies focused on the effect of a VAA on turnout (Ladner and Pianzola 2010; Marschall and Schultze 2012), the motivation to collect more information (Marschall and Schultze 2012), and vote choice (Garzia and Marschall 2012). This section compares the result of iVoter to previous studies.

In both waves of the questionnaire, the registered iVoter participants were asked about their vote choice, turnout, and online political participation during the election. The first wave was applied before they used the iVoter matching program,

while the second one was conducted after the election. The effect of iVoter can be estimated by the correlation between a participant's evaluation of iVoter (treatment) and the change in his or her political behavior (outcome). One advantage of this approach is that the participant's behavior before and after using iVoter was recorded by self-report. Hence, the change in behavior after using iVoter would be a better estimator than the

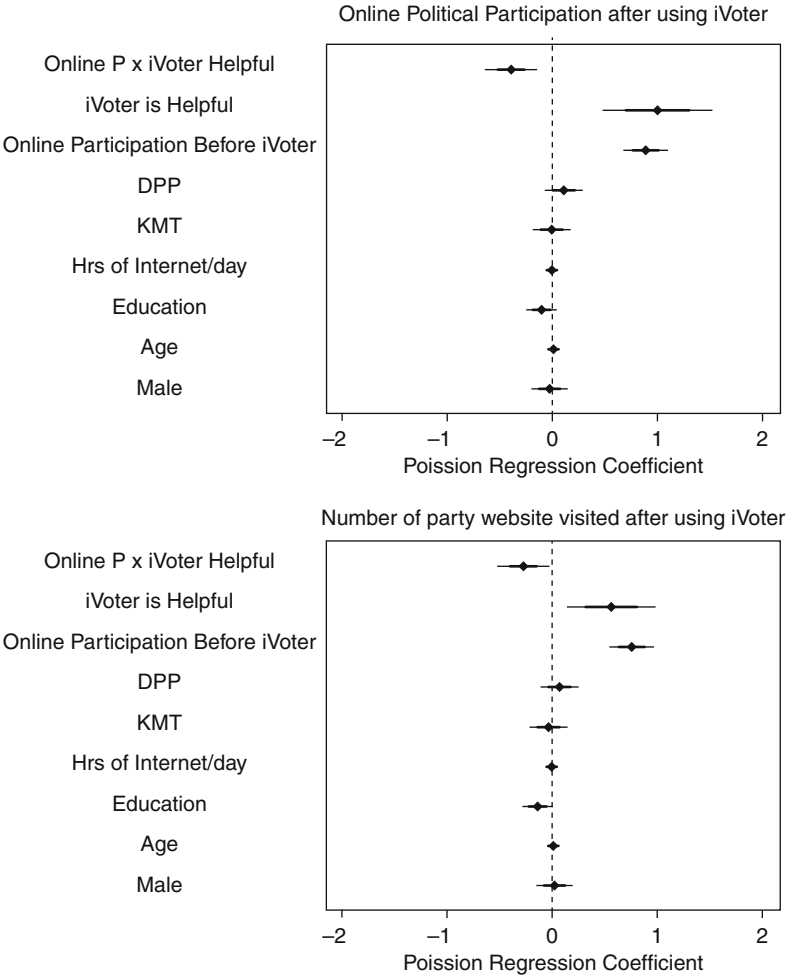

Figure 7.3 Effectiveness of iVoter for online political participation.

motivation of collecting more information on measuring the effect of VAA.

Figure 7.3 shows the estimation of the effect of iVoter on online political participation. The dependent variable in the left plot is the number of forms of online political participation in the postelection questionnaire, including signing a petition, watching a video ad, donating, reading the introductions of the candidates, and so on. The dependent variable in the right plot is the number of party websites visited in the postelection questionnaire. In both plots, the first line is the interaction effect between the participant's online political behavior before using iVoter and his or her subjective evaluation on iVoter, estimated by Poisson regression.

In Figure 7.3, the two independent variables positively correlate with the dependent variable, while the interaction term is significantly negative—this result indicates that iVoter can increase the online political participation among the least-engaged voters. If one voter had never visited any party website, the experience of using iVoter would on average encourage him or her to visit one more website and do something on it. With the aid of panel data, this study provides evidence that a VAA can indeed enhance online political participation (not only motivation), especially among those who were the least engaged.

A similar approach is used in measuring the effect of iVoter on turnout, which is shown in Figure 7.4. However, both the subjective evaluation of iVoter and the interaction term are not significantly different from zero, indicating that VAA has a trivial effect on turnout. In comparison, the only significant explanatory factor is one's willingness to vote before using iVoter and before the election. This result conflicts with previous studies in Europe (Ladner and Pianzola 2010; Marschall and Schultze 2012). One possible reason for the nonfinding is that the turnout rate in Taiwan is already high (74.7% in 2012 legislative election). Hence, the additional information provided by a VAA may not overcome other factors that prevent people from getting out and voting. Overall, the iVoter participants

have a higher turnout rate (78.7%) than the whole population, but a causal relationship cannot be drawn here due to data limitations.

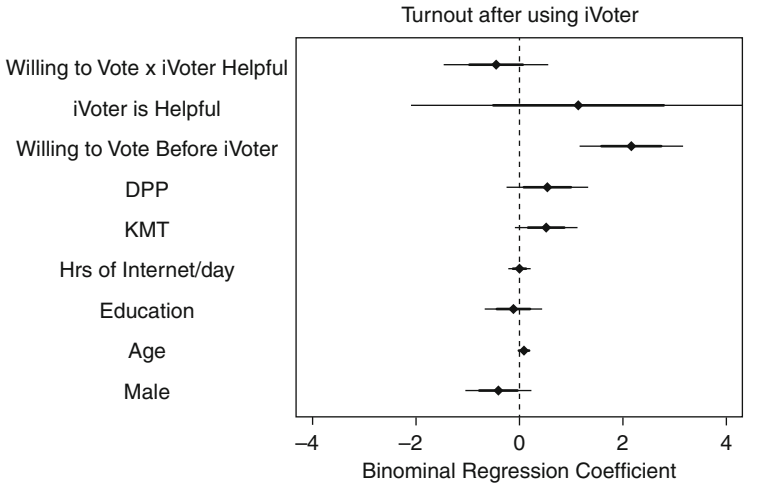

Figure 7.4 Effectiveness of iVoter for turnout.

Table 7.5 Vote choice before × after election

Tendency before Election	*Vote Choice in Election*				*Total*
	KMT	*DPP*	*Minor*	*Undecided*	
KMT	98	6	28	14	146
	15.1%	0.9%	4.3%	2.2%	22.6%
DPP	3	77	29	18	127
	0.5%	11.9%	4.5%	2.8%	19.6%
Minor	8	15	186	31	240
	1.2%	2.3%	28.7%	4.8%	37.1%
Undecided	23	13	52	46	134
	3.6%	2.0%	8.0%	7.1%	20.7%
Total	132	111	295	109	647
	20.40%	17.16%	45.6%	16.85%	100%

In the end, Table 7.5 is the cross-table on participants' vote choice before using iVoter and after the election. In this table, the most interesting phenomenon is that t iVoter pushed people to support minor parties. Almost one-fourth of major party supporters (4.3% of 22.6%, 4.5% of 19.6%) and one-third of undecided voters (8.0% of 20.7%) switched to choose minor parties on election day, which boosts the vote share of the minor parties by 8.5 percent. In comparison, most of the minor party supporters (28.7% of 37.1%) were not moved in the election. However, there is no correlation between the change in choice and the subjective evaluation of iVoter.

How did this happen? I argue that it is because the VAA provides a relatively neutral platform that evenly presents information on all parties and candidates. In the real world, well-funded candidates and major parties can buy numerous campaign ads to bombard voters, which is unfair for minor parties. However, a VAA can help mitigate the problem, at least based on the evidence here.

Toward a Better VAA

In the basic spatial voting model (Downs 1957), both voters and candidates know the policy position of each other, and vote-maximizing candidates approach the median voter's ideal point, while voters choose the candidate with the smallest policy distance. The iVoter program tries to realize Downs's model by matching the candidates and the voters based on the 21-item policy preference questionnaire. However, a practical challenge emerged in each step of realization, which is worth exploring for future VAA development.

Based on the data from the iVoter program in the 2012 Taiwan legislative election, this chapter provides evidence to show how a VAA actually works. In the information supply side, candidates who are young, familiar with the internet, and incumbent tend to participate in iVoter. There is no difference in the level of cooperation among candidates from major and minor parties. In the information demand side, iVoter-registered participants were

mostly young, male, and well educated. Four-fifths of the participants considered iVoter as helpful, and this supportive attitude correlates with more online political participation among the least-engaged voters.

Even though iVoter did not boost turnout, Table 7.5 implies that iVoter made the minor party much attractive to voters, in that one-fourth of the voters who originally preferred a major party or were undecided, cast a ballot for a minor party on election day. This evidence may be helpful on persuading more minor party candidates to cooperate with a VAA in the future. With the advancement and the spread of internet technology, it is possible to be optimistic that in the future more candidates and voters can be matched through a VAA.

Numerous questions remain for future research. First, why did incumbents, not challengers, tend to cooperate with a VAA? Are candidates accountable for the pre-election answers they provided after they are elected? Once we have provided evidence that iVoter is beneficial for minor party candidates, will major party members keep participating in the VAA process? How do we successfully provide our application to those who really need the campaign information? Some of the questions above cannot be answered by the iVoter debut, but the experience of iVoter here can enhance the future development of a VAA, which can keep exploring the connection between policy, candidates, and voters.

Notes

1. The choice of policy is based on data mining and expert judgment of the congressional record of the Legislative Yuan during 2008–2010. Please see chapter 4 of this book for detailed information.
2. The major difference between iVoter and EUProfiler is that EUProfiler chooses the party as a unit, while iVoter targets the individual candidate. The advantage of iVoter's approach is that it is possible to discover intra-party conflict among partisan candidates. Moreover, individual-candidate-level data can help us understand how candidates strike a balance between the median voter and the order from the whip. However, one potential weakness of this approach is that it may decrease the response rate.
3. A similar process was conducted in Swiss Federal elections by the *smartvote* program (Ladner and Pianzola 2010), in which 85 percent of the candidates answered a set of 73 questions.

4. http://db.cec.gov.tw/histMain.jsp.
5. http://www.internetworldstats.com/asia.htm.
6. Thanks to the reviewer, Michael Jensen, on this point.
7. http://www.twnic.net.tw/NEWS4/135.pdf.

CHAPTER 8

CONCLUSION: VOTING ADVICE APPLICATIONS, INFORMATION, AND DEMOCRACY

Michael J. Jensen and Jih-wen Lin

Though the origins of VAAs developed from a normative social choice account of democracy as a contest between competing packages of policies that rational, egocentric utility maximizers choose between, the evidence presented in this volume suggests their effects are more transformative. Political life has become increasingly digitized. Paradoxically, there is more information available to voters than ever before, but this increases the incentives for voters to be rationally ignorant given the high information costs involved in evaluating competing claims made by parties and candidates.

With the erosion of ties between political parties and social cleavages, parties are left without natural constituencies, and need to attract a minimal winning coalition among the electorate. For campaigns, this means an approach of strategic ambiguity in policy positions, enabling campaigns to position themselves as all things to everyone and avoid a series of commitments to which they may later be held accountable. Voting advice applications (VAAs) have emerged as a response to this situation. In European contexts, VAAs emerged within large party systems with relatively high degrees of electoral volatility. In East Asia, VAAs have appeared

against the backdrop of a rather ossified party system. The current electoral systems used in East Asia are mixed-member majoritarian systems, while proportional representation system is more popular in Europe, which may explain the different attitudes of VAAs users toward their parties.

Each of the chapters in this volume has outlined the history, operation, and empirical effects of VAAs in Japan, South Korea, and Taiwan, focusing on somewhat differing aspects. In this conclusion, we identified overlapping themes and consequences of VAAs for contemporary democratic practice in East Asia. For citizens in democratic systems, policy reticence by parties and issue complexity create for voters a difficult task in deciding between alternatives. Without clear choices, voters have little idea of what they are voting for, which undermines the function of elections as an institution for converting aggregated preferences into legitimized governments. At the same time, democracy requires that citizens participate, at least minimally during elections. In European contexts, VAAs have been one innovation in democratic practice to reduce the informational complexity and facilitate electoral choices by matching users with parties and candidates on the basis of issues. However, the contributions to this volume suggest that in East Asia, the effect has been the opposite: VAAs may be encouraging greater electoral complexity through the provision of additional information about parties, particularly minor parties, which otherwise would receive little attention.

Although the operation and consequences of VAAs vary between the three countries studied in this volume, each has identified effects of VAAs on voters and on the behavior of political parties. First, these case studies have found that VAAs have consequences for voters and voting behavior. Such effects include increasing political knowledge and awareness, and increasing political engagement and voting probability. Second, VAAs in these cases involve efforts to algorithmically reconstruct the space of political competition with respect to issue voting, challenging the terms of political competition the parties themselves would otherwise offer. These sets of observations correspond to

the burdens democracy places on citizens and the demands citizens place on democratic political systems, respectively. We begin with the implications of VAAs for the responsibilities of citizens in democratic political life.

Consequences of VAAs for Citizens

VAAs in East Asia's democracies are an extension of the widespread domestication of the internet. To the extent that the internet is used by citizens in most other aspects of their lives, political uses fit accordingly (Venkatesh 2008; Haddon 2011; van Deursen and van Dijk 2011; Jensen, Jorba, and Anduiza 2012). As in other domains in which the online ordering and organization of information reduces information costs and facilitates usability, VAAs reduce information access costs in a concrete actionable domain. The research presented in this volume finds evidence that in general, the use of VAAs gives rise to higher levels of political engagement.

Several of the authors in this volume inquired into the consequences of VAA use for users. There were three discrete findings across the cases. First, across all three cases we find VAA use gives rise to greater political engagement. Political alienation has spread through many of the advanced industrial democracies. Partisan dealignment is significant and consistently decreasing across Western democracies, while dissatisfaction with political authorities is widespread (Dalton and Wattenberg 2000; Hay 2013; Dalton 2013). This dissatisfaction is particularly concentrated among younger cohorts, who see politics as something done to them more than a field of activity in which they participate (Marsh, O'Toole, and Jones 2007). Younger cohorts in particular are generally less likely to identify with political parties or vote in elections (Dalton 2007a; Dalton 2014).

Against this torrent of pessimism, there is consistent evidence that younger cohorts are more likely to become engaged online and that this online engagement translates into broader political involvement (Anduiza, Jensen, and Jorba 2012). The process of answering questions about policy matters and relating

policy positions to parties and candidates also involves more young people to engage in politics online. The use of VAAs therefore serves an educational function in the first instance that has secondary mobilizing effects. For instance, in Taiwan, between the pre- and post-VAA surveys, users reported that they were more likely to visit campaign websites and otherwise become engaged. Similarly, Kim argues in Chapter 6 that the structure of one of the most significant VAA platforms in South Korea gave rise to greater deliberation and debate about the election and policy issues as users were encouraged to publicly declare support for their preferred candidates. Beyond the informational aspects of VAAs, these chapters show VAAs also independently serve as motives for further engagement in the campaign.

Second, VAA users, like internet users more generally in these countries, tend to be younger and highly educated, which is the same segment of the population that is otherwise more disengaged from electoral politics. The evidence from Japan suggests that a significant number of VAA users had no partisan preference and that those without strong partisan preferences tended to be unfamiliar with party policy positions. These findings hold when controlling for age, which is also a statistically significant predictor of correct identification of party positions. In Taiwan, Liao and Chen observe that younger citizens have lower levels of party identification, and Wang finds that older voters tended to have more familiarity with the political system, but younger cohorts were more likely to use the iVoter VAA platform and subsequently more likely to be engaged in the campaign. In contrast to early concerns that online political engagement reinforces participatory stratifications (Bimber 2003; Best and Krueger 2005; Gibson, Lusoli, and Ward 2005; Hill and Hughes 1998; Ward and Gibson 2009), these results suggest that less participatory segments of the electorate are most likely to make use of VAAs and subsequently become more involved in politics.

Third, there is evidence that VAAs increase both issue voting and political discussion regarding policy issues. This is not to say

that issue voting is the only criterion for vote choice as voters regularly select candidate traits, party competence, strategic considerations, and the like to make choices. Tutsumi, Uekami, and Inamasu find most issue voters in Japan support the two main parties—the Liberal Democratic Party (LDP) or the Democratic Party of Japan (DPJ)—though supporters of minor parties such as the Japanese Communist Party have a high level of congruence with the policy positions outlined in their manifesto. In Taiwan, by contrast, Wang observes that iVoter users gave more consideration to minor parties that were favorably aligned with their policy preferences. Though it is unclear, at this point, the extent to which voters are shifting their voting patterns as a result of using VAAs, these tools provide voters with an alternative basis and set of information by which to select between political parties.

Consequences of VAAs for Political Parties

VAAs complicate political campaigns in two ways. First, they provide voters with an alternative source of information that describes the parties in relation to voters, information which is outside the control of the campaigns. Second, VAAs render the terms of the campaign with respect to policy issues rather than alternative criteria, which campaigns may prefer to frame the electoral contest. Both of these actions that VAAs precipitate have the consequence of decreasing the role of political campaigns in directly shaping a campaign narrative. Issues included on VAAs in the cases discussed in this volume have been selected from party manifestos, presidential agendas, or independent bodies of experts. Each of these decisions, along with the manner in which issues are operationalized as policy questions for users and the algorithmic translation of users' answers into representations of political space, independently reconstitute the terms of a political campaign.

Though independent fact checking provided by media outlets intervene campaign discourse by verifying the veracity of campaign claims, VAAs represent a more fundamental change in the

relationship between parties/candidates and voters. Fact checking and reporting on elections is not so easily removed from the relations of antagonism and interdependence between media outlets and politicians (Blumler and Gurevitch 1995). VAAs orient voters to parties in a holistic manner based on a voter's own policy preferences. Within the terms of the electoral campaign, it would be hard for candidates and parties to contest the issue selection or the manner in which voter preferences are related to political parties. Indeed, European experiences have indicated that parties have at times shifted their positions in relation to the results of VAAs (Garzia et al. 2014). This shows that VAAs are not only informational for voters, potentially influencing vote choices, but also provide feedback for political parties, potentially influencing policy positions.

VAAs present voters, particularly those without strong partisan identification, with schema for thinking about vote choices in an election. The normative rationale for VAAs is an issue-based approach to voting. Wang shows in chapter 7 that one consequence of the shift to a focus on issues is that it lends legitimacy to minor parties that otherwise receive little consideration. As VAAs are agnostic about the size of a party's current parliamentary representation or standing in the polls, they may lead voters to consider different parties than they otherwise would.

Given the relative dominance of single parties during the recent democratic eras in Japan, South Korea, and Taiwan, VAAs may be a disruptive force that changes the terms of political contestation, at least at the margins. Despite experiments with different forms of proportional representation, the effective number of parties in population-apportioned houses of parliament has remained relatively small and consistent with the party systems in majoritarian electoral systems. However, recent experience suggests that electoral systems do not determine party systems, as recent experience in countries such as the United Kingdom indicates (Dunleavy 2005). As issue space becomes more complex and expands beyond the urban-rural cleavages that have remained salient in Japan, South Korea, and Taiwan, the emergence of new issues may give rise to new parties and

increase the vote shares of existing minor parties. VAAs, therefore, may be participating in the intensification of this tendency in East Asia's democracies.

Though VAAs represent an issue-based intervention in electoral politics, the process by which they organize issue space differs. First, variations in the manner of issue selection across VAAs in the three case studies result from particularities in each case. Methods of issue identification and political positions have been determined through an analysis of party manifestos, surveys, and press releases and reporting. For example, Park et al. show in chapter 3 that there is some variance across the five VAA platforms that have been widely used. First, these platforms were implemented by four different organizations. The Citizens' Coalition for Economic Justice (CCEJ), for example, is an interest group, though that need not make it uninformative for those who do not necessarily agree with the positions of the CCEJ. Daum, in contrast, is an online media group, and the Japanese Votematch VAA is also organized in conjunction with a major news service (see Ukami and Tsutsumi in chapter 2). Further, the Daum and Montzu VAAs in South Korea are developed on the basis of campaign statements, whereas Votematch relies on manifesto positions.

Whether or not party manifestos are used in part depends on a second differentiation in VAAs: some VAAs match voters with parties, while others match voters with individual candidates. In the mixed electoral systems that exist in these East Asian democracies, these differences render the VAA relevant to separate parts of the ballot. Several of the more popular VAAs in South Korea (see Chapters 3 and 5) identify voters with candidates rather than parties. Likewise, Taiwan's iVoter currently uses candidate surveys, matching voters with candidates in single-member districts (see Liao and Chen in Chapter 3). This difference is important because iVoter matches voters only to the members selected from single-member districts but not to choices between parties for seats allocated through party lists, though that may be a feature in the future.

A third distinction in the operation of VAAs in the counties analyzed in this volume concerns the manner in which proximity between voter preferences and political positions are operationalized. In Japan, Votematch asks users whether they agree or disagree with a position and whether the issue is important to the user. In contrast to the categorical approach, Taiwan's iVoter uses a scale of agreement. The manner in which these questions are operationalized is important in a second sense as it implicates how voter preferences and policy positions become transformed into political space. Categorical and ordinal data may be subject to different algorithmic transformations into spatial distances based on the properties of the available data (Jacoby 1991). Further, whether distances are treated as Euclidean space, whether distances between parties is maximized to indicate clearer differentiations, or whether space is curved and the number of dimensions calculated can lead to different renderings of the political space.

As VAAs and other online innovations emerge during campaigns, questions about the way party and candidate positions are operationalized and the algorithms by which party and candidate proximity are calculated may become more relevant. First, if over time VAA usage produces patterns that advantage certain parties, and by implication therefore disadvantage others, the construction and operation of VAAs may not be able to stand above the political fray for long. The organizations operating VAAs and the results of VAAs may become the target of campaigns that feel disadvantaged by the process. Second, on a more abstract level, VAAs are an extension of the growth of computational processes in political life. The "ground game" involving personal contact between campaign representatives and voters has long figured prominently in campaigns and voter decision-making (Nielsen 2012). Campaigns have emphasized the creation of a personal connection between voters and candidates/party leaders (Blumler and Gurevitch 1995; Swanson and Mancini 1996). VAAs substitute the human contact and personalized relationship with a computational process predicated on an issue-based rationality rather than candidate-centered personality. In place of vote choices formed through human interaction, VAAs substitute a computational process that extracts

information for voters from information supplied by voters. VAAs are far from the only application rendering political life in informational terms. But, as voting constitutes a critical focal point in democratic practice, their role in influencing voting patterns and the consequences of their use will be of enduring interest for scholars of politics as well as political parties and candidates themselves.

BIBLIOGRAPHY

Aldrich, John H. 2011. *Why Parties?: A Second Look*. Chicago: University of Chicago Press.

Alvarez, R. Michael, Ines Levin, Alexander H Trechsel and Kristjan Vassil. 2014. "Voting Advice Applications: How Useful and for Whom?" *Journal of Information Technology & Politics* 11(1):82–101.

Anduiza, Eva, Michael James Jensen, and Laia Jorba. 2012. *Digital Media and Political Engagement Worldwide: A Comparative Study*. Cambridge: Cambridge University Press.

Association for Promoting Fair Elections. "Summary of Survey Results: 22nd Elections to the House of Councillors" (in Japanese), published on the website in March 2011. http://www.akaruisenkyo.or.jp/wp/wp-content/uploads/2011/07/22sangaiyo.pdf.

Bang, Henrik Paul. 2003. *Governance as Social and Political Communication*. Manchester: Manchester University Press.

Bartels, Larry M. 1996. "Uniformed Votes: Information Effects in Presidential Election." *American Journal of Political Science* 40:194–230.

Best, Samuel J., and Brian S. Krueger. 2005. "Analyzing the Representativeness of Internet Political Participation." *Political Behavior* 27(2): 183–216. doi:10.1007/s11109-005-3242-y.

Bimber, Bruce. 2003. *Information and American Democracy: Technology in the Evolution of Political Power*. New York: Cambridge University Press.

Blumler, Jay, and Michael Gurevitch. 1995. *The Crisis of Public Communication*. New York: Taylor and Francis.

Boatwright, Peter and Joseph C. Nunes. 2001. "Reducing Assortment: An Attribute-based Approach." *Journal of Marketing* 65(3): 50–63.

Bormann, Nils-Christian, and Matt Golder. 2013. "Democratic Electoral Systems around the World, 1946–2011." *Electoral Studies* 32(2): 360–369. doi:10.1016/j.electstud.2013.01.005.

Boulianne, Shelly. 2009. "Does Internet Use Affect Engagement? A Meta-Analysis of Research." *Political Communication* 26(2): 193–211.

Budge, Ian, Lan Budge, Professor of Government Ian Budge, and Kenneth Newton. 2014. *The Politics of the New Europe: Atlantic to Urals*. New York: Routledge.

Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1976. *The American Voter* (Unabridged edition). Chicago: University of Chicago Press.

Cedroni, Lorella. 2010. *Voting Advice Applications in Europe: The State of the Art*. Napoli: Scriptaweb.

Choi, Jun-Young. 2012. "The Korean Candidate Selection System: Recent Research Trend and Future Research Agenda." *Korean Association of Party Studies* 11(1): 59–85 (in Korean).

Chung, Jin-min. 2005. "New Party Organizations and the Limit of the Member-Centered Party Management after the Abolition of the Local Branches of Korean Political Parties." *Journal of Parliamentary Research* 1: 5–27 (in Korean).

Citizens' Coalition for Economic Justice. 2014. *Voting Advice Applications*. Accessed January 21, 2015. http://vote.ccej.or.kr/index.php.

Converse, Philip E. 1964. "The Nature of Belief Systems in Mass Public" In *Ideology and Discontent,* edited by David E. Apter, 206–261. New York: Free Press.

Crozier, Michael P. 2012. "Governing Codes: Information Dynamics and Contemporary Coordination Challenges." *Administration & Society*, November. doi:10.1177/0095399712461913.

Curtis, Gerald L. 1971. *Election Campaigning Japanese Style.* New York: Columbia University Press.

Dahl, Robert A. 1989. *Democracy and Its Critics*. New Haven, CT: Yale University Press.

Dalton, Russell J. 1984. "Cognitive Mobilization and Partisan Dealignment in Advanced Industrial Democracies." *Journal of Politics* 46(01): 264–84. doi:10.2307/2130444.

———. 1996. "Comparative Politics: Micro-Behavioural Perspectives." In *A New Handbook of Political Science*, edited by Robert Goodin and Hans-Dieter Klingemann. New York: Oxford University Press.

———. 2007a. *Democratic Challenges, Democratic Choices: The Erosion of Political Support in Advanced Industrial Democracies*. Comparative Politics. Oxford: Oxford University Press.

———. 2007b. "Partisan Mobilization, Cognitive Mobilization and the Changing American Electorate." *Electoral Studies* 26(2): 274–286. doi:10.1016/j.electstud.2006.04.009.

———. 2013. *The Apartisan American: Dealignment and Changing Electoral Politics*. Thousand Oaks, CA: CQ Press.

———. 2014. "Interpreting Partisan Dealignment in Germany." *German Politics* 23(1–2): 134–144. doi:10.1080/09644008.2013.853040.

Dalton, Russell J., and Martin P. Wattenberg eds. 2000 [2002]. *Parties without Partisans: Political Change in Advanced Industrial Democracies*. New York: Oxford University Press.

Diamond, Larry, Marc F. Plattner, and Yun-han Chu. 2013. *Democracy in East Asia: A New Century*. Baltimore: JHU Press.

Downs, Anthony. 1957. *An Economic Theory of Democracy*. 1st ed. New York: Harper and Row.

Dunleavy, Patrick. 2005. "Facing Up to Multi-Party Politics: How Partisan Dealignment and PR Voting Have Fundamentally Changed Britain's Party Systems." *Parliamentary Affairs* 58(3): 503–532. doi:10.1093/pa/gsi049.

Dunleavy, Patrick, and Françoise Boucek. 2003. "Constructing the Number of Parties." *Party Politics* 9(3): 291–315. doi:10.1177/1354068803009003002.

Easton, David. 1990. *The Analysis of Political Structure*. New York: Routledge.

Elster, Jon. 1998. *Deliberative Democracy*. Cambridge: Cambridge University Press.

Entman, Robert. 1989. *Democracy without Citizens: Media and the Decay of American Politics*. New York: Oxford University Press.

Fossen, Thomas and Joel Anderson. 2014. "What's the Point of Voting Advice Applications? Competing Perspectives on Democracy and Citizenship." *Electoral Studies* 36: 244–251.

Frank, Thomas. 2005. *What's the Matter with Kansas?: How Conservatives Won the Heart of America?* New York: Holt Paperbacks (Reprint Edition).

Gainous, Jason, and Kevin Wagner. 2011. *Rebooting American Politics: The Internet Revolution*. Lanham, MD: Rowman & Littlefield.

Gainous, Jason, Kevin M. Wagner, and Jason P. Abbott. 2015. "Civic Disobedience: Does Internet Use Stimulate Political Unrest in East-Asia?" *Journal of Information Technology & Politics* 0 (ja): null. doi:10.1080/19331681.2015.1034909.

Gallagher, Michael. 1998. "The Political Impact of Electoral System Change in Japan and New Zealand, 1996." *Party Politics* 4(2): 203–228. doi:10.1177/1354068898004002004.

Gallup Korea. 2013. *Trial-Heats of the 2012 Presidential Election*. Seoul: Gallup Korea.

Garzia, Diego and Stefan Marschall. 2012. "Voting Advice Applications under Review: the State of Research." *International Journal of Electronic Governance* 5(3): 203–222.

Garzia, Diego, Alexander H. Trechsel, Kristjan Vassil, and Elias Dinas. 2014. "Indirect Campaigning: Past, Present and Future of Voting Advice Applications." In *The Internet and Democracy in Global Perspective*, edited by Bernard Grofman, Alexander H. Trechsel, and Mark

Franklin, 25–41. Studies in Public Choice 31. Springer International Publishing. http://link.springer.com/chapter/10.1007/978-3-319-04352-4_3.

Gibson, Rachel K., and Marta Cantijoch. 2011. "Comparing Online Elections in Australia and the UK: Did 2010 Finally Produce 'the' Internet Election?." *Communication, Politics & Culture* 44(2): 4.

Gibson, Rachel K., Wainer Lusoli, and Stephen Ward. 2005. "Online Participation in the UK: Testing a 'Contextualised' Model of Internet Effects1." *The British Journal of Politics and International Relations* 7(4): 561–583. doi:10.1111/j.1467-856X.2005.00209.x.

Grofman, Bernard. 1999. *Elections in Japan, Korea, and Taiwan Under the Single Non-Transferable Vote: The Comparative Study of an Embedded Institution*. Ann Arbor: University of Michigan Press.

Gronbeck, Bruce E. 1978. "The Functions of Presidential Campaigning." *Communication Monographs* 45(4): 268–280. doi:10.1080/03637757809375973.

Haddon, Leslie. 2011. "Domestication Analysis, Objects of Study, and the Centrality of Technologies in Everyday Life." *Canadian Journal of Communication* 36(2): 311–323.

Haggard, Stephan, and Jong-Sung You. 2015. "Freedom of Expression in South Korea." *Journal of Contemporary Asia* 45(1): 167–179. doi:10.1080/00472336.2014.947310.

Hao, Lingxin, and Daniel Q. Naiman. 2007. *Quantile Regression*. Thousand Oaks, CA: Sage Publications.

Hay, Colin. 2013. *Why We Hate Politics*. New York: John Wiley & Sons.

Hicken, Allen, and Erik Martinez Kuhonta. 2014. *Party System Institutionalization in Asia: Democracies, Autocracies, and the Shadows of the Past*. Cambridge: Cambridge University Press.

Hill, Kevin A., and John E. Hughes. 1998. *Cyberpolitics: Citizen Activism in the Age of the Internet*. Lanham, MD: Rowman & Littlefield. http://portal.acm.org/citation.cfm?id=551242.

Hillygus, D. Sunshine and Todd G. Shields. 2014. *The Persuadable Voter: Wedge Issues in Presidential Campaigns*. Princeton, NJ: Princeton University Press.

Ho, Karl, Harold D. Clarke, Li-Khan Chen, and Dennis Lu-Chung Weng. 2013. "Valence Politics and Electoral Choice in a New Democracy: The Case of Taiwan." *Electoral Studies*, Economics and Elections: Effects Deep and Wide, 32(3): 476–481. doi:10.1016/j.electstud.2013.05.012.

Horiuchi, Yusaku, Kosuke Imai, and Naoko Taniguchi. 2007. "Designing and Analyzing Randomized Experiments: Application to a Japanese

Election Survey Experiment." *American Journal of Political Science* 51:669–687.

Howard, Philip N., and Muzammil M. Hussain. 2013. *Democracy's Fourth Wave?: Digital Media and the Arab Spring*. Oxford University Press.

Huang, Chi, Wang, Ding-Ming, and Kuo, Ming-Feng. 2008 "Hunhe xuanzhi xia xuanmin zhi yizhi yu fenlie toupiao 1996 nian riben zhongyiyuan xuanju zimindang xuanpiao zhi fenxi" (Straight-And Split-Ticket Voting in a Mixed-Member Majoritarian System: An Analysis of the 1996 House Election in Japan). *Xuanju Yanjiu* (Journal of Electoral Studies) 15(2):1–32.

Inglehart, Ronald. 1977. *The Silent Revolution: Changing Values and Political Styles among Western Publics*. Princeton, NJ: Princeton University Press.

———. 1990. *Culture Shift in Advanced Industrial Society*. Princeton, NJ: Princeton University Press.

Internet Live Stats. 2014. http://www.internetlivestats.com/internet-users-by-country/.

Internet World Statistics. 2015. "Human Development Indicators and Internet Penetration Rates." http://www.internetworldstats.com/list4.htm.

Jacobson, Gary C. 1989. "Strategic Politicians and the Dynamics of US House Elections, 194686." *American Political Science Review* 83(03): 773–793.

Jacoby, William G. 1991. *Data Theory and Dimensional Analysis, Quantitative Applications in the Social Sciences Series, No. 78*. Thousand Oaks, CA: Sage.

Jang, Seung-Jin. 2013. "Did the Democratic United Party Lose the Election Because of Its Movement to the Left?" *Korean Journal of Legislative Studies* 9(2): 73–98 (in Korean).

Jensen, Michael J., Laia Jorba, and Eva Anduiza. 2012. "Introduction." In *Digital Media and Political Engagement Worldwide: A Comparative Study*, edited by Eva Anduiza, Michael J. Jensen, and Laia Jorba, 1–15. New York: Cambridge University Press.

Jou, Willy. 2010. "Toward a Two-Party System or Two Party Systems? Patterns of Competition in Japan's Single-Member Districts, 1996–2005." *Party Politics* 16(3): 370–393. doi:10.1177/1354068809342991.

Junag, Hoon and Yoon, Jong-Bin. 2013. *2012 Korean Presidential Election Structures and Issues*. Seoul: ORUEM Publishing House (in Korean).

Kabashima, Ikuo, and Gill Steel. 2010. *Changing Politics in Japan*. Ithaca, NY: Cornell University Press.

Kang, Won-Taek. 2004. "Turning left: The Democratic Labor Party in the 2004 National Assembly in South Korea." *Political Science in Asia* 2: 143–165 (in Korean).

———. 2014. *The Current State of Korean Local Autonomy and Tasks for Reform*. Seoul: Sapyoung Academy (in Korean).

Karpf, David. 2012. *The MoveOn Effect: The Unexpected Transformation of American Political Advocacy*. New York: Oxford University Press.

Katz, Richard S., and Peter Mair. 1995. "Changing Models of Party Organization and Party Democracy the Emergence of the Cartel Party." *Party Politics* 1(1): 5–28.

———. 2009. "The Cartel Party Thesis: A Restatement." *Perspectives on Politics* 7(04): 753–66. doi:10.1017/S1537592709991782.

Kim, Da-Sol. 2012. "'North Korean human right issues excluded', Sanuri said." *MK Business news*, December 10 (in Korean).

Koenker, Roger. W., and Gilbert Bassett, Jr. 1978. "Regression Quantiles." *Econometrica* 46: 33–50.

Kooiman, Jan. 2003. *Governing as Governance*. Thousand Oaks, CA: Sage.

Laakso, M., and R. Taagepera. 1979. "Effective Number of Parties-Measure with Application to West Europe." *Comparative Political Studies* 12(1): 3–27.

Ladner, Andreas and Jolle Pianzola. 2010. "Do Voting Advice Applications Have an Effect on Electoral Participation and Voter Turnout? Evidence from the 2007 Swiss Federal Elections." In *Electronic Participation*, edited by Efthimios Tambouris, Ann Macintosh, and Olivier Glassey, 211–224. Berlin-Heidelberg: Springer.

Ladner, Andreas, Jan Fivaz and Joëlle Pianzola. 2010. Impact of voting advice applications on voters' decision-making. Paper presented at *Internet, Politics, Policy 2010: An Impact Assessment,* St Anne's College in central Oxford, UK. September 16–17.

Lau, Richard R., and David P. Redlawsk. 1997. "Voting Correctly." *American Political Science Review* 91: 585–598.

———. 2001. "Advantage and Disadvantage of Cognitive Heuristics in Political Decision Making." *American Journal of Political Science* 45: 951–971.

———. 2006. *How Voters Decide: Information Processing in Election Campaigns*. New York: Cambridge University Press.

Lau, Richard R., David J. Andersen, and David P. Redlawsk. 2008. "An Exploration of Correct Voting in Recent U.S. Presidential Elections." *American Journal of Political Science* 52:395–411.

Lee, Man-Woo. 2004. "Reflections on the Populist Politics in Contemporary Korea: A Reading of its Discursive Logic and Cultural Frame." *Journal of Asian-Pacific Affairs* 6: 69–98 (in Korean).

Lee, Sung-Kyu. 2012. "Comparing Policies of Park Geun-hye and Moon Jae-in: North Korean and Diplomatic Policies." *The Kukmin Daily*, November 30 (in Korean).

Lew, Seak-Jin. 2004. "Online Political Activities and Voting Behavior of the University Students: The Case of the 17th National Assembly Election in Korea." *Political Science in Asia* 2: 87–116 (in Korean).

Liao, Da-chi, Cheng-Hsun Li and Boyu Chen. 2013. "Xuanju zhidu yu lifa zhe jingxuan zhengjian ji lifa biaoxian: taiwan lifayuan diliujie jidiqijie quyuliwei zhi bijiao." (The Effects of Electoral Rules upon Legislators' Campaign Promises and Legislative Performance: To Compare the District Legislators of Taiwan Legislative Yuan between Its Sixth Term and Seventh Term). *Xuanju Yanjiu* (*Journal of Electoral Studies*) 20(1): 73–119.

Lijphart, Arend. 2012. *Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries*. New Haven, CT: Yale University Press.

Lin, Tse-Min, Yun-Han Chu and Melvin Hinich. 1996. Conflict Displacement And Regime Transition In Taiwan: A Spatial Analysis. *World Politics* 48(4): 453–481.

Lin, Tsong-Jyi and Shu-Hua Wang. 2007. "Change and Source of Political Knowledge in Taiwan." *Soo-chow Journal of Political Science* 25(3): 93–129.

Loader, Brian. 2007. Introduction: Young Citizens in the Digital Age: Disaffected or Displaced? In *Young Citizens in the Digital Age: Political Engagement, Young People and New Media*, edited by Brian Loader. Oxon: Routledge, pp. 1–18.

Lodge, Milton and Charles S Taber. 2005. "The Automaticity of Affect for Political Leaders, Groups, and Issues: An Experimental Test of the Hot Cognition Hypothesis." *Political Psychology* 26(3):455–482.

Louwerse, Tom, and Martin Rosema. 2014. "The Design Effects of Voting Advice Applications: Comparing Methods of Calculating Matches." *Acta Politica* 49(3): 286–312. doi:10.1057/ap.2013.30.

Lupia, Arthur. 1994. "Shortcuts Versus Encyclopedias: Information and Voting Behavior in California Insurance Reform Election." *American Political Science Review* 88:63–76.

Lupia, Arthur, and Mathew D. McCubbins. 1998. *The Democratic Dilemma: Can Citizens Learn What They Need to Know?* Cambridge: Cambridge University Press.

Maeda, Yukio, and Hidenori Tsutsumi eds. 2015. *Party Government and Party Governance: The Case of the Democratic Party of Japan*. Tokyo: Chikura Shobo (in Japanese).

Marschall, Stefan and Martin Schultze. 2012. "Voting Advice Applications and Their Effect on Voter Turnout: The Case of the German WahlOMat." *International Journal of Electronic Governance* 5(3): 349–366.

Marsh, David, Therese O'Toole, and Su Jones. 2007. *Young People and Politics in the UK: Apathy or Alienation?*. New York: Palgrave Macmillan.

Matsumoto, Masao. 2015. "Seitō-Shiji No Riron (The Theory of Party Identification)." *Social Science Japan Journal* 18(1): 94–97. doi:10.1093/ssjj/jyu024.

Michels, Robert. 1966. *Political Parties: A Sociological Study of the Oligarchical Tendencies of Modern Democracy*. New York: Simon and Schuster.

Ministry of Internal Affairs and Communications, Japan. 2014. *White Paper on Information and Communications in Japan* (in Japanese).

Ministry of Land Infrastructure and Transport. 2014. "The Cases Study of the Nature-Friendly Project for River Construction."

Mondak, Jeffery J. 1993. "Source Cues and Policy Approval: The Cognitive Dynamics of Public Support for Reagan Agenda." *American Journal of Political Science* 37: 186–212.

Mutz, Diana C. 2001. "Facilitating Communication across Lines of Political Difference: The Role of Mass Media." *American Political Science Review* 95(01): 97–114.

Nielsen, Rasmus Kleis. 2012. *Ground Wars: Personalized Communication in Political Campaigns*. Princeton, NJ: Princeton University Press.

Norris, Pippa. 2001. *Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide*. Cambridge: Cambridge University Press.

Page, Benjamin I. 1976. "The Theory of Political Ambiguity." *American Political Science Review* 70(03): 742–752.

Park, Chan-Wook. 2004. "An Essay on the Form of Government in Korea: Towards a Better Working Presidential System." *Political Science in Asia* 1: 83–126 (in Korean).

———. 2013a. "Features of the 2012 Presidential Election," chap. 1 In *Analyzing the 2012 Presidential Election in South Korea*, edited by Chan Wook Park and Won-Taek Kang, 17–49. Paju: Nanam (in Korean).

———. 2013b. "Patterns and Causes of Korean Voters` Candidate Choice in the 2012 Presidential Election." *The Journal of Northeast Asia Research* 28(2): 247–290.

Park, Chan-Wook and Kang, Won-Taek. ed. 2012. *Analizing the 2012 General Election in South Korea*. Paju: Nanam (in Korean).

Park, Chan-Wook, Kim, Ji-Yoon, and Woo, Jung-Yeoop. ed. 2013. *Korean Voters' Choice 2: The 18th Presidential Election*. Seoul: Asan Policy Institute (in Korean).

Park, Han-Woo and Kim, Hyo-Dong and Choi, Kyoung-Ho. 2005. "Web Sphere Analysis for Political Websites: The 2004 South Koreas' National Assembly Election." *The Korean Political Science Society* 1: 293–318 (in Korean).

Poole, Keith T and Howard Rosenthal. 2001. "D-nominate after 10 Years: A Comparative Update to Congress: A Political-Economic History of Roll-call Voting." *Legislative Studies Quarterly* 26(1):5–29.

Popkin, Samuel L. 1991. *The Reasoning Voter: Communication and Persuasion in Presidential Campaigns.* Chicago: University of Chicago Press.

Putnam, Robert. 2001. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.

Rahn, Wendy M. 1993. "The Role of Partisan Stereotypes in Information Processing about Political Candidates." *American Journal of Political Science* 37: 472–496.

Reed, Steven R., and Michael F. Thies. 2001. "The Causes of Electoral Reform in Japan." In *Mixed-Member Electoral Systems: The Best of Both Worlds?* edited by Matthew Soberg Shugart and Martin P. Wattenberg, 152–172. New York: Oxford University Press.

Rhodes, R. A. W. 2007. "Understanding Governance: Ten Years On." *Organization Studies* 28(8): 1243–1264. doi:10.1177/0170840607076586.

Rich, Timothy S. 2014. "Party Voting Cohesion in Mixed Member Legislative Systems: Evidence from Korea and Taiwan." *Legislative Studies Quarterly* 39(1): 113–135. doi:10.1111/lsq.12035.

Rosenbluth, Frances, and Michael Thies. 2010. *Japan Transformed: Political Change and Economic Restructuring*. Princeton, NJ: Princeton University Press.

Sandel, Michael. 1998. *Democracy's Discontent: America in Search of a Public Philosophy*. Cambridge, MA: The Belknap Press.

Sato, Tetsuya. 2003. "A Proposal of Issue Voting Support System in 2001 Election of House of Councilors." *Japanese Journal of Electoral Studies* 18: 148–163 (in Japanese).

Scheiner, Ethan. 2006. *Democracy without Competition in Japan: Opposition Failure in a One-Party Dominant State*. Cambridge: Cambridge University Press.

Schudson, Michael. 1995. *The Power of News*. Cambridge, MA: Harvard University Press.

———. 1998. *The Good Citizen: A History of American Civic Life*. New York: The Free Press.

Sheng, Emile Chih-Jen. 2005. "Yong diaocha yanjiufa celiang shoufang-zhe jiazhi de xianzhi–yi Taiwan minzhong minzhujiazhi timu weili." (The Limitation of Measuring Respondents' Values with Survey

Research—Using Taiwanese Voters' Democratic Value Questionnaire as an Example). *Dongwu Zhengzhi Xuebao* (*Soochow Journal of Political Science*) 20: 47–81.

Sheng, Shing-Yuan. 2010. "Taiwan xuanmin zhengdang renting de wending yu bianqian: dingqun zhuizong ziliao de yunyong."(Stability and Change of Party Identification among Taiwanese Voters: A Panel Data Analysis). *Xuanju Yanjiu* (*Journal of Electoral Studies*) 17(2): 1–33.

Shinada, Yutaka. 2006. "Making the Data of Japanese Electoral Pledges at the General Elections." *Japanese Political Studies* 3: 63–91 (in Japanese).

Sniderman, Paul M., Richard A. Brody, and Philip E. Tetlock. 1991. *Reasoning and Choice: Explorations in Political Psychology.* Cambridge: Cambridge University Press.

Swanson, David L., and Paolo Mancini. 1996. *Politics, Media, and Modern Democracy: An International Study of Innovations in Electoral Campaigning and Their Consequences*. Westport, CT: Greenwood Publishing Group.

Taagepera, Rein. 2007. *Predicting Party Sizes: The Logic of Simple Electoral Systems*. New York: Oxford University Press.

Tan, Alexander. C., Karl Ho, Kyung-Tae Kang, and Tsung-Chi Yu. 2000. "What If We Don't Party? Political Partisanship in Taiwan and Korea in the 1990s." *Journal of Asian and African Studies* 35(1): 67–84.

The National Assembly of the Republic of Korea, last modified January 30, 2015.

Theocharis, Yannis. 2011. "Young People, Political Participation and Online Postmaterialism in Greece." *New Media & Society* 13(2): 203–223.

Tolbert, Caroline J., and Ramona S. McNeal. 2003. "Unraveling the Effects of the Internet on Political Participation?" *Political Research Quarterly* 56(2): 175.

Tormey, Simon. 2015. *The End of Representative Politics*. 1 ed. Malden, MA: Polity.

Trechsel, Alexander H. and Peter Mair. 2011. "When Parties (also) Position Themselves: An Introduction to the EU Profiler." *Journal of Information Technology & Politics* 8(1): 1–20.

Tsutsumi, Hidenori, and Takayoshi Uekami. 2013. "Utility of VAAs under Information Constraint." In *Election Environment in the Disaster-Affected Area after the Great East Japan Earthquake*, edited by Kazunori Kawamura et al., 91–121. Sendai: Tohoku University Press (in Japanese).

Uekami, Takayoshi. 2006. "How It Helps People to Vote: Practice in the Netherlands and Future Perspectives in Japan." *Review of Electoral Studies* 6: 43–64 (in Japanese).

Uekami, Takayoshi, and Hidenori Tsutsumi. 2008. "How to Make a Vote-Assisting Tool: Behind the Scenes of the Japanese VoteMatch." *Review of Electoral Studies* 10: 27–48 (in Japanese).

———, eds. 2011, *Organization and Policies of Democratic Party of Japan: From its Formation to Acquisition of Power*. Tokyo: Toyo Keizai Shinposya (in Japanese).

Uekami, Takayoshi, and Tetsuya Sato. 2009. "Estimating the Policy Positions of Political Actors: An Application of Computerized Coding to the Japanese Policy Documents." *Japanese Journal of Electoral Studies* 25: 61–73 (in Japanese).

Vaccari, Cristian. 2013. *Digital Politics in Western Democracies: A Comparative Study*. Baltimore, MD: JHU Press.

Van Deursen, A. J. A. M., and J. A. G. M. van Dijk. 2011. "Internet Skills and the Digital Divide." *New Media & Society*, 13(6): 893–911. doi:10.1177/1461444810386774.

Venkatesh, Alladi. 2008. "Digital Home Technologies and Transformation of Households." *Information Systems Frontiers* 10(4): 391–395.

Walgrave, Stephaan and Michiel Nuytemans, M. 2008. "Do the Vote Test: Electoral Effects of a Vote Advice Application at the 2004 Belgian Elections." *Acta Politica* 43: 50–70.

Wall, Matthew, Maria Laura Sudulich, Rory Costello, and Enrique Leon. 2009. "Picking Your Party Online—An Investigation of Ireland's First Online Voting Advice Application." *Information Polity* 14: 203–218.

Ward, Stephen , and Rachel K. Gibson. 2009. "European Political Organizations and the Internet Mobilization, Participation, and Change." In *Routledge Handbook of Internet Politics*, edited by Chadwick and Howard, 25–39.

Williams, Christine B. and J. Girish. 2013. "Social Networks in Political Campaigns: Facebook and the Congressional Elections of 2006 and 2008." *New Media & Society* 15: 52–71.

Wilson, Matthew J. 2012. "E-Elections: Law in Asia & Online Political Activities." *Wyoming Law Review* 12: 237.

Wu, Yu-Shan. 2013. "From Identity to Distribution: Paradigm Shift in Taiwan Politics : A First Cut", paper presented at The 55th Annual Conference of the American Association for Chinese Studies, New Brunswick, NJ: The State University of New Jersey at Rutgers, October 11–13.

Yu, Bei, Stefan Kaufmann and Daniel Diermeier. 2008. "Classifying Party Affiliation from Political Speech." *Journal of Information Technology & Politics* 5(1): 33–48.

Yun, Seong-Yi. 2004. "2002 Presidential Election in South Korea and the Effect of the Internet." *Political Science in Asia* 2: 87–116 (in Korean).

CONTRIBUTORS

Boyu Chen is Assistant Professor at the Institute of Political Science at National Sun-Yat-sen University (NSYSU), Kaohsiung. His research focuses on internet politics and international relations of East Asia. Recent articles have been appeared in *East Asia*, *Pacific Focus*, and *International Relations of the Asia-Pacific*. He is now conducting a research project of Taiwan's voting advice application.

Shin Dong Kim is Professor of Media and Communication at Hallym University, Korea, where he has been the founding director of the Institute for Communication Arts and Technology (iCat). His research interests include democracy and media, social and cultural impacts of information and communication technologies, global production and distribution of media culture, and media industries and policy. He is also working closely with Hallym Ageing Research Institute on aging society-related research. He serves on the board of directors of the Knowledge Coop for Good Governance. Dr. Kim has taught at many institutions on visiting invitations from Dartmouth College, Sciences Po Paris, Peking University, City University of Hong Kong, Macquarie University Sydney, University of the Philippines, among others. kimsd@hallym.ac.kr.

Kazunori Inamasu is Associate Professor of Social Psychology at Kwansei Gakuin University. He is engaged in the study of political communication and public opinion. His work has been published in *Communication Research*, *Japanese Journal of Social Psychology*, and *Japanese Journal of Electoral Studies*.

Minsu Jang is pursuing a Master's in Comparative Politics in the Department of Political Science at Dongguk University. He is interested in voters' behavior, elections, and methodologies in political science research.

Michael J. Jensen is a Senior Research Fellow at Institute for Governance and Policy Analysis (IGPA). Prior to his position at IGPA, he was Juan de la Cierva Postdoctoral Fellow in the Department of Political Science and a researcher at the Institute for Government and Public Policy at the Autonomous University of Barcelona and has been a visiting scholar at the Internet Interdisciplinary Institute in Barcelona as well as the New Political Communication Unit at Royal Holloway, University of London. He completed his PhD at the University of California, Irvine, under the supervision of James Danziger, David Easton, and Alladi Venkatesh. His recent articles have appeared in *Journal of Information Technology and Politics*, *Policy and Internet,* and *Information, Communication, and Society*.

Seon-Ah Jeong is currently working on a Master's in Korean politics in the Department of Political Science at Dongguk University. Her main area of interest is Korean political history, the process of nomination of a political party, and the electoral system.

Da-chi Liao is Professor at the Institute of Political Science at National Sun-Yat-sen University (NSYSU), Kaohsiung. From 2004 to 2006, she served as the president of the Taiwanese Political Science Association. She has edited two books, *American Policy in the Asia Pacific Region after 9-11* (2002), and *Democratization, Globalization, and the Role of Parliaments* (2006, in Chinese), and published more than 50 refereed journal articles. She set up Taiwan's first voting advice application—iVoter website (http://ivoternet.org/). She received her PhD in Political Science from the University of Michigan in 1990.

Jih-wen Lin is currently Director and Research Fellow at the Institute of Political Science, Academia Sinica, Taiwan. His research focuses on formal theory and political institutions. His publications cover several areas. First, he has been studying electoral institutions—the single nontransferable vote, in particular—and their political consequences, in arenas like territorial division, party system, and democratization. Second, he is interested in semi-presidentialism, especially its typology and outcomes. His recent project concerns the interaction between the electoral system and the constitutional structure and its impact on Taiwan's governing crisis. His articles have appeared in *Journal of Electoral Studies*, *Issues and Studies*, *Journal of East Asian Studies*, among others.

Myungho Park received a doctorate in Politics in the Department of Political Science at Michigan State University. He is currently a professor in the Department of Political Science and International Relations at Dongguk University. He works on political parties, elections, and parliamentary systems. He has published books, including *17th General Election Field Report*, *4th Local Election Field Report*, and *comparative politics*. Articles include "Analysis of Generation Effect and Age Effect in the 18th General Election," "Achievement and Tasks of 10 Years of the Party Law," and so forth.

Hidenori Tsutsumi is Professor of Political Science in the Faculty of Law at Kagawa University, Japan. His research focuses on party politics, legislative behavior, and election campaigns. Recently, he coedited two books on the party organization of the Democratic Party of Japan (with Takayoshi Uekami and Yukio Maeda). His recent work has also appeared in *Party Politics*.

Takayoshi Uekami is Professor of Political Science at Okayama University. His main research agenda includes elections, political parties, and political institutions. He has published articles in *Journal of Elections, Public Opinion and Parties*, *Political Psychology*, *Japanese Journal of Electoral Studies*, *Annals of the Japanese Political Science Association*, and other Japanese political science journals. He has also authored *Party Politics and Japan's Inconsistent Electoral Systems: National Elections, Local Elections, and Party Leadership Selection* (University of Tokyo Press).

Austin Wang is currently a PhD candidate in Political Science at Duke University. He received a BS in Electrical Engineering, and an MS in Political Science from National Taiwan University. His research interests include experimental design, political identity, and methodology.

Chanhee Yook received a Master's degree in International Relations from the Department of Political Science and International Studies at the University of Birmingham, and she has completed the coursework for a doctoral degree in International Politics in the Department of Political Science at Dongguk University.

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