Chapter 12

The Engagement of European Political Scientists with Parties and Citizens

The Case of Voting Advice Applications

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1. INTRODUCTION[1]

Political scientists' engagement with democratic politics and society is not limited to their direct involvement in a diverse range of advisory roles (Bleiklie et al., in this volume). The latter become ever more important as data becomes increasingly available. If the spread of survey methodology after World War II went hand in hand with the behavioral revolution in the social sciences, then computational techniques, big data, and online access to internationally coordinated data gathering efforts open up entirely new avenues for research (Dalton, in this volume). Politics and society become beneficiaries of these developments, increasingly seeking evidence-based analyses of policy impact and change (Hemerijck, in this volume). Alongside such direct forms of political scientists' engagement in (mainly institutional) politics, the growing interest of the discipline in digital transformations and the emerging potential of "civic technology" led to novel forms of engagement. In this chapter, we concentrate on a concrete example of such novel engagement with parties, candidates, and voters. The example concerns elections in the digital age, where myriad online tools for fostering voter engagement and civic competence abound. These include information-providing tools that help voters find their way around the electoral offer. These tools—originating in Europe in the late 1980s and now prominent throughout all continental democracies—are commonly labeled "Voting Advice Applications" (hereafter VAAs).

VAAs are online applications that facilitate voters' decision-making by comparing their policy preferences with the positions of political parties and/

or candidates on these policies. In doing so, VAAs engage with the supply side of politics (in order to map their policy positions) and with an unprecedented proportion of voters in the few-week span of an election campaign. As we shall detail below, the last two decades have seen VAAs become a standard feature of election campaigns in most European countries (and beyond) with millions of users resorting to them. Since 2009, VAAs have been also implemented supranationally in the context of European Parliament elections. Whenever a supranational VAA is implemented, the number of political scientists needed to facilitate such a large-scale endeavor lies in the hundreds. Admittedly, very few social science projects can count both on such large-sized research teams and on an immediate societal impact on public opinion, affecting millions of citizens. Not to mention that many VAA providers develop their tools *in collaboration* with political parties and candidates—thus expanding further the perimeter of their sociopolitical engagement. For these reasons, we believe that VAAs offer a timely and telling example of the ways in which European political science can fruitfully engage with the political process in the current information revolution.

We argue that, in addition to the traditional role played by political science in electoral processes, where preelection surveys, spin-doctoring, election night commenting, media consultancy, and postelection analyses provide for scientific—and often not-so-scientific—input; the spread of digital online technology has transformed political scientists into co-shapers of public opinion formation processes. VAAs, as we will show below, have emerged within civil society organizations, among politically interested do-gooders, and even state-sponsored initiatives. However, given the enormous and fast-growing success of these tools, political scientists began to not only be interested in the large amount of data generated by VAAs, but also in measuring, for example, their impact on public opinion and election outcomes. Increasingly, they become VAA providers themselves, working closely with tool manufacturers or even designing their own applications.

The increased involvement of political scientists in VAAs and the study of their functioning and effects are, however, not normatively void of essence. Quite to the contrary, political scientists who actively engage in such civic technology tend to adopt a particular view of democracy, elections, and political accountability. Without delving too deeply into the classic literature on types of representation, we assume that VAAs are mainly seen as tools that help maximize substantive representation, that is, a democracy, in which voters choose among parties and candidates that best represent their substantive views in politics. In times of declining party identification, sinking levels of trust, party system fragmentation, and volatility, VAAs are deemed to offer substantive information to undecided, uncertain, noninformed, and disillusioned voters. They may also serve well-informed, politicized partisans

to confirm their attachments and, generally, hold the elected accountable for their electoral promises.

VAAs are also seen, by their promoters, as tools for "bringing the citizens back in," that is, for giving voters a feeling of empowerment through personalized, customized, and tailor-made information about the electoral offer. By creating transparent and politically neutral information shortcuts, voters can locate themselves more easily in the political landscape. The advantages for citizens, so the argument goes, are manifold: VAAs help citizens to escape partisan-biased propaganda; they can foster political interest and competence through a ludic form of information aggregation; and they can help immunize electoral campaigns from fake news, rumors, and other forms of information hacking in times of increasing affective polarization, social media, and the globalization of elections.

The question of whether VAAs fulfill these promises cannot be answered in this chapter. But we posit that the increased engagement of political science with VAAs and the growing academic output that has progressed from the world of obscure journals and publishing houses to the top journals in the discipline is sufficiently deep to exemplify the scholarly emancipation that has brought political science closer to citizens, public opinion, and elections. We therefore dedicate this chapter to a discussion of what VAAs are, where they come from, what effects they have, and how political science in this field is likely to develop. In doing so, we also speak to more general questions of engagement and their implications for the role of political science.

The chapters proceed as follows. In section 2, we offer a brief overview of the long-standing debate on the foundations of (political) science's public engagement. In section 3, we locate the VAA phenomenon within this debate. We highlight the distinguishing innovations brought about by the digital revolution and how this expanded the potential outreach of political science research and practice beyond academia. In section 4, we describe the origins of VAAs and map their existence and spread across Europe and beyond. We demonstrate that, over the last two decades, VAAs have become a truly global phenomenon. Section 5 then offers a brief description of the main characterizing features of VAAs, their underlying methodology, and how the "making of" VAAs corresponds to actual engagement with political parties and candidates running for election. In section 6, we review the academic literature dealing with their impact on users' political attitudes and behavior. The large amount of readily available information provided by VAAs to their users have been shown to contribute to reducing the transactional costs involved in gathering relevant political information. VAAs increase interest in, and knowledge of, political matters, leading to higher turnout figures. We then address, in section 7, the potential flaws and current limitations stemming from the implementation of VAAs. For this, we illustrate the conditions

for the making of a "good VAA," building upon the *Lausanne Declaration* delivered in 2014 by a large group of academic VAA developers and researchers. Finally, we come back to the larger theme of political scientists' engagement with society and draw lessons from VAA research and implementation to address the normative implications of directly engaging with our chief objects of study.

2. POLITICAL SCIENCE AND ITS PUBLIC ENGAGEMENT: AN OVERVIEW OF THE DEBATE

The first issue that needs to be addressed is a definitional matter: What does engagement mean? Our reading of the existing literature finds that public engagement can range from the mere social media presence of academics (Wood, 2019) to their actual involvement as elected politicians (Boswell, Corbett, & Havercroft, 2019)—and everything in between (e.g., spin-doctoring, media consultancy, divulgation, and punditry). Considering the encompassing nature of this (nonexhaustive) list, we decided to rely on the epistemological understanding of engagement's nature, recently brought forward by Wood (2019). He proposes to situate engagement practices within the divergent views about the status of knowledge political science should produce. For these purposes, he distinguishes between "those who view political science as a relatively rigid *paradigmatic* set of rule-based practices aimed at generating knowledge of a privileged status . . . and those who view political science in a *pragmatic* way as a set of common rule-based practices for contributing in an eclectic manner to broader interdisciplinary or extra-disciplinary debates" (Wood, 2019, p. 4).

The paradigmatic approach is best defined by Moravcsik (2014, p. 667), who sees "scholarship as a collective enterprise—a conversation among scholars, sometimes extending to those outside academia as well." In this view, engagement equates with dissemination of research findings, whose implications will unfold autonomously on the sole basis of the normative assumptions upon which the research is initially based. The contrasting pragmatic approach is best exemplified by Sil and Katzenstein (2010, p. 418), who advocate the generation of "concrete implications for the messy substantive problems facing policymakers and ordinary social and political actors." The most recent contribution to the debate, forcefully patronizing a pragmatic understanding of public engagement, is Rainer Eisfeld's (2019) *Empowering Citizens, Engaging the Public: Political Science for the 21st Century*. He makes the case for political science to engage more deeply with the current social and political problems that the world faces, and to do so via broadly accessible public narratives, including solution-orientated normative notions.

Arguments in favor of the discipline's active engagement with the public have been increasingly voiced over the last two decades (alongside some critical voices; see Flinders and Pal, 2019). They build upon assorted grounds. For example, it is maintained that as scientific research is paid for by the public, they should receive some demonstrable benefit from it (Bandola-Gill, Brans, & Flinders, 2019). Partly related to this, it is claimed, on epistemological grounds, that by producing knowledge about the public, science bears the obligation of sharing that knowledge (Ostrom, 1998). The urgency of the call for more engagement has strengthened over the last ten years. In response to "politicians and commentators demanding 'value for money', particularly since the 2008 global financial crisis, research councils and funders now regularly integrate 'impact and engagement' criteria into their funding rules, promotion criteria reflect this, and research excellence assessments require statements of successful impact" (Wood, 2019, p. 2). Among these pleas for increasing engagement with the public, a few should be singled out as they are directly aimed at our main object of inquiry. Putnam (2003) believes that one of the key responsibilities of contemporary political science should lie with "our contribution to public understanding and to the vitality of democracy." The aforementioned Eisfeld (2019) goes as far as declaring support for active citizenship as being "mandatory" for twenty-first-century political science.

Many academic (or at least partly academic) initiatives have unfolded along these lines over the last two decades. This acceleration is due, in all probability, to a combination of factors. On the one hand, the increasing pressure to move away from the ivory tower may have provided the initial trigger. On the other hand, the digital revolution and the spread of ICTs created prime conditions for such initiatives to reach out to the wider public autonomously from all previous forms of knowledge intermediation. In all these respects, VAAs represent a specimen of political science's successful, large-scale engagement with the public in the digital age. Importantly, for our purposes VAAs also fit well with all the characteristics that are deemed constitutive of the pragmatic approach to engagement. First, because they represent a concrete example of engaged scholarship designed to bear a potential impact on millions of users in election campaigns (and beyond). Second, because they engage with their object of inquiry by (a) producing knowledge about the public, (b) sharing that knowledge with the public, and (c) doing so in real time. Indeed, this is similar to the idea of "co-production" where scholars seek to directly "co-create" research with those outside the academy (Geddes, Dommett, & Prosser, 2018). Third, because their impact is normatively loaded, since VAAs are explicitly designed to help citizens better deal with the complex issues that face the social and political world today and to increase democratic participation.

A normative assessment of VAAs as an ideal type of academic engagement is especially useful to illuminate the changes brought about by the information revolution in the relationship with our main objects of study. Today, VAAs and related technologies have (at least partly) taken on board some of the tasks undertaken, until recently, by more *paradigmatic* research projects based on, for example, mass and elite surveys. A case study of VAAs can thus shed light on the conditions under which a larger engagement perimeter, as made possible by the information revolution, can have positive spillover effects on our research populations. Obviously, we will concentrate equally attentively on those instances in which engagement could trespass the line between fostering public understanding and actually (re-)shaping people's reality.

3. PRAGMATIC OVER PARADIGMATIC: LOCATING VAAs WITHIN EXISTING ENGAGEMENT PRACTICES

Traditional methods of analysis of elites and public opinion can, by and large, be ascribed to the paradigmatic approach to public engagement. We begin by offering a brief review of established methodologies, focusing on elite surveys and mass surveys of public opinion in turn. Their core societal implications will then be compared to the more "engaging" features brought about by the availability of VAAs and related online technologies.

Over the years, political scientists have devised a multitude of techniques to assess parties' and candidates' positions on ideological and policy/issue dimensions (Marks, 2007). Established techniques include, most notably, expert surveys, such as the Chapel Hill Expert Survey program, and manifesto coding exercises, such as the Comparative Manifesto Project. More interesting for our purposes, however, are the studies conducted on the basis of internal party expertise; starting with Daalder and van der Geer's (1973) analysis of Dutch parliamentary parties, the discipline has widely resorted to surveys of political elites. Among the projects that are most representative of this approach, one must single out the Comparative Candidate Survey (Zittel, 2015). This project collects data on candidates running for national parliamentary elections through a common core questionnaire to allow for cross-country comparison. CCS Module I was conducted between 2005 and 2013, while Module II was conducted between 2013 and 2018. Both modules feature over thirty countries and thousands of candidates. Regardless of their scale, however, elite surveys' impact on the attitudes and opinions being analyzed can be considered negligible. The findings of these studies pertain mostly, if not only, to a specialized academic audience. Usually the data is analyzed and presented in an aggregated form. In other words, this makes it

virtually impossible for the public to find out about a given party or candidate's attitudes and opinions.

Another major area—if not *the* major area—of political science's direct engagement with its object of study is public opinion and voting behavior analysis. Again, if the surveys are intended for academic purposes only, minimal effects can be expected. However, not all surveys are used for strictly academic purposes. In some instances, they are designed with the intention of directly manipulating voters' opinions under the guise of conducting an opinion poll, that is, the so-called *push polls*. In some other instances, polls may lack such manipulative intentions, but can still bear an indirect impact on voters when the results are made public by mainstream and new media. By providing information about the intentions of the voting population at large, opinion polls can affect voters in two different ways; these can be labeled bandwagon effects and strategic voting effects. Bandwagon effects are thought to occur whenever voters are prompted to back the party or candidate that the polls indicate as the potential winner. Empirical research in this domain shows that bandwagon effects do take place in democratic elections, though their actual impact is much lower than often purported, with the proportion of voters being influenced ranging from around 2 to 3 percent of the eligible voting population (Irwin & van Holsteyn, 2000). Strategic voting effects are relatively more common and pertain to the possibility that voters shift from their sincere preference to vote for a less preferred but generally more popular candidate. Nevertheless, existing research highlights that opinion polls only conditionally affect patterns of tactical voting through the timing of voting decisions. Undecided voters are more prone to the effects of the polls; yet, they are also potentially affected by a large array of last-minute campaign influences (McAllister & Studlar, 1991).

This picture of "minimal effects" stemming from research practices to the respective study populations was bound to be heavily affected by the spread of Information and Communication Technologies (ICTs)—for both political communication and academic engagement. Indeed, one of the defining characteristics of online political communication lies with its interactive potential. Its proliferation and peculiar effects have been hypothesized to stem from the delivery of "more detailed information [that] can be customized to a greater extent" (Prior, 2005, p. 579). In this way, users receive information—including political information—in the light of their own preferences. Parties and politicians also increasingly took advantage of the interactive possibilities of the internet to directly connect with citizens and potential voters. Existing research shows that more personalized online communication and the use of interactive features increases political involvement among online citizens (Kruikemeier, Van Noort, Vliegenthart, & De Vreese, 2013). In this picture, VAAs should be singled out as a flagship endeavor of pragmatic engagement

with the public. First, because they engage directly with both the demand and the supply side of electoral politics, based on the respective emerging demands for visibility and guidance in the online world. Second, because this real-time interaction can potentially affect both sides. When parties and candidates are aware that their positions will be made visible to voters, their opinions will inevitably be subject to strategic considerations. At the same time, the users will be directly primed to consider what is their best matching party—after all, at the core of every VAA there is *voting advice.* And indeed, this will be provided to millions of voters, with potential attitudinal as well as behavioral effects of an unseen magnitude in the polling effects literature.

4. THE SPREAD OF VOTING ADVICE APPLICATIONS AMONG COUNTRIES AND CITIZENS

Over the last two decades, VAAs have mushroomed across the globe. VAAs assist and inform voters by comparing their policy preferences with the political stances of parties or candidates running for election. The users of these tools mark their positions on a range of policy statements. After comparing the user's answers to the positions of each party or candidate, the application generates a rank-ordered list or a graph indicating which party or candidate is most closely aligned to the user's policy preferences (see figure 12.1).

Whereas the advice provided by the VAA is considered a form of political communication, it must be also noted that it differs considerably from most of the campaign messages that citizens traditionally receive. Like traditional media, they relay information about parties' and/or candidates' positions to voters. Unlike other sources, however, they provide customized political information. VAAs offer an explicit ranking of viable options with the implication that this ranking is tailored according to the user's political opinions. In other words, VAAs reveal to the user the structure of the political competition *in light of her own preferences.* The ability of VAAs to reduce the costs of information at election time is one of the keys to understanding their growing success among voters (Alvarez, Levin, Trechsel, & Mair, 2014).

Nowadays, the existence of at least one VAA has been witnessed in virtually all Western democracies. An early attempt to map the distribution of national and transnational VAAs, in 2014, found almost complete coverage of the European democracies (Marschall & Garzia, 2014). On the basis of a more recent census, conducted in 2018, the global spread of this phenomenon has become even more evident. Multiple VAAs have been deployed all over the Western world, and there is now almost complete coverage of Central and South American democracies. The existence of VAAs has been also
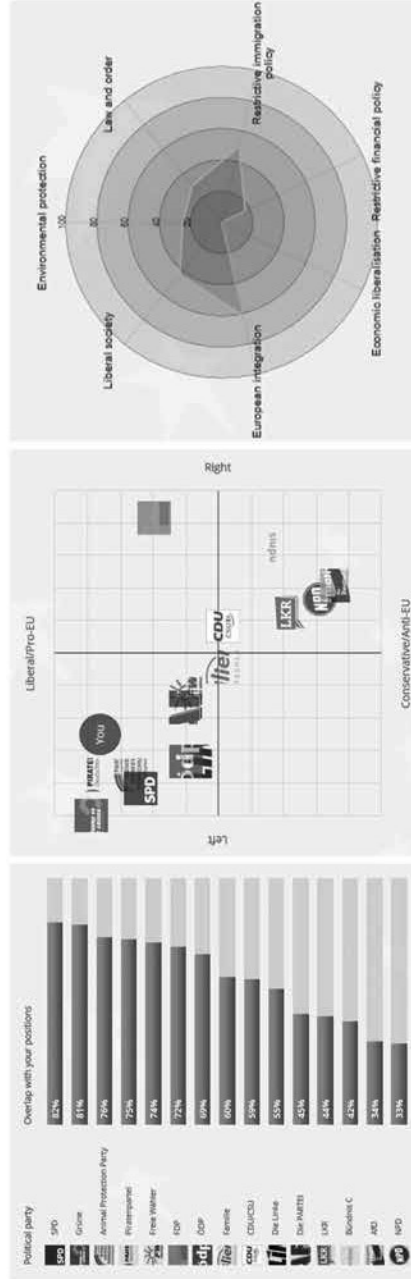
Figure 12.1   Common VAA outputs: matchlist (left) and bi-dimensional political space (centre) and spidergram (right). *Source:* http://www.
euandi.eu.

witnessed in North Africa and in the emerging global economies of Asian countries. VAAs have indeed become a truly global phenomenon (see figure 12.2).

Originally developed in the Netherlands, as paper-and-pencil civic education questionnaires for first-time voters in the 1980s, by the turn of the century VAAs had reached usage figures in the millions. To mention just a few examples: the pioneering Dutch VAA *StemWijzer* was used almost seven million times in the run-up to the parliamentary election of 2017. The German VAA *Wahl-O-Mat*, developed for the federal election of the same year, peaked at over 15.7 million users. Moving from number of *usages* to number of *users*, figure 12.3 presents updated evidence from representative national election study datasets, showing the proportion of the voting population declaring to have used (at least) one VAA during the campaign.[2]

In both Scandinavia and the Benelux, the proportion of citizens resorting to VAAs at election time now falls between one-third and a half of the entire voting population. In Germany and Switzerland, *Wahl-O-Mat* and *smartvote* consistently attract over 10 percent of voters. In Southern Europe, the penetration of VAAs in society appears to be more limited.

5. THE MAKING OF A VAA: ENGAGING WITH POLITICAL PARTIES AND CANDIDATES

Among the basic features that are constitutive of the VAA family, the "nonpartisan nature" of these tools must be highlighted. The seminal *StemWijzer*-type VAAs developed in the Netherlands and Germany both originated in state-funded nonprofit organizations with a civic education background. However, the last decade has also witnessed the blossoming of academic-centered VAA endeavors such as *Stemtest,* developed by a team of political scientists at the University of Antwerp since 2004, and *smartvote*, developed in collaboration with the Universities of Lausanne and Bern in Switzerland. Supranational elections proved to be an extremely fertile ground for the development of large-scale collaborations among social and political scientists all over Europe. The series of VAAs developed for the European Parliament (EP) elections since 2009, by the European University Institute in Fiesole, have benefited from the collaboration of over 250 political scientists.

Regarding their focus, VAAs are predominantly predictive and exclusively issue oriented. They restrict themselves to the main issues at stake in the campaign, leaving aside valence considerations (e.g., retrospective evaluations of government performance and the economy). Statement selection matters because it sets the perimeter of the battleground. Different combinations of statements prime users with different understandings of the current
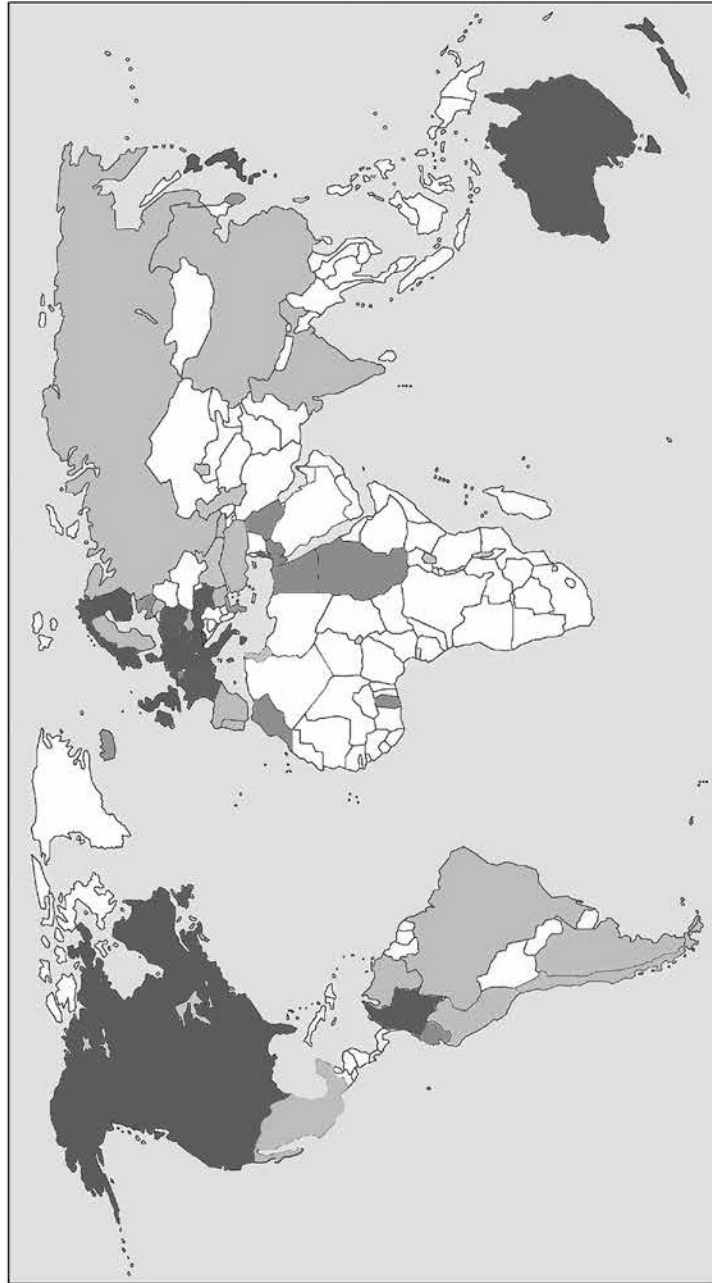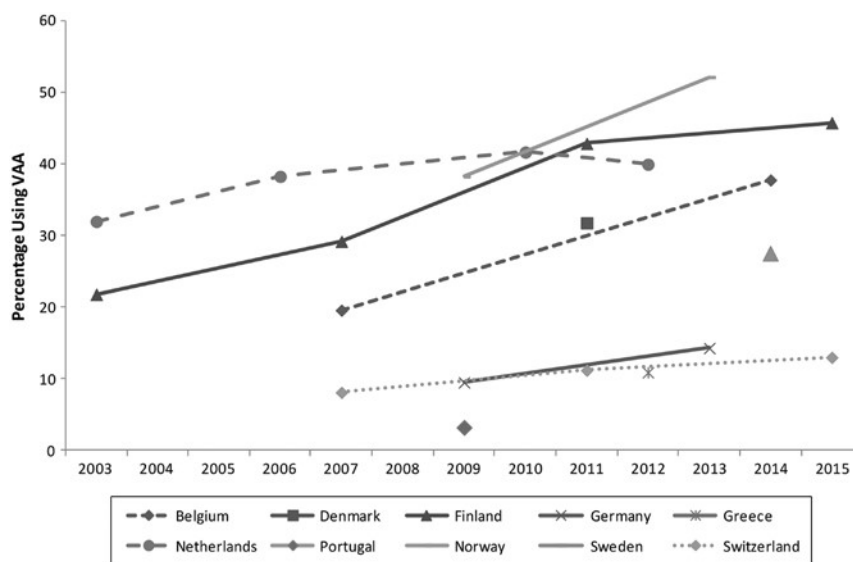
Figure 12.2   Global Distribution of VAAs. *Source:* Wahl-O-Mat-Forschung, University of Düsseldorf (last update: May 2018).

Figure 12.3 Proportion of VAA users among the voting population in selected countries.
Source: Garzia and Marschall, 2019.

dimensions of political competition, and can ultimately affect the voting advice they receive (Walgrave, Nuytemans, & Pepermans, 2009). Diverse routes lead to the development of the list of policy statements at the core of the VAA exercise. In most cases, the production of statements is undertaken by the VAA's developers, often alongside experts such as journalists and political scientists. State-linked VAAs like *Wahl-O-Mat*, however, include party actors in the production of the statements by, for example, inviting party representatives to VAA development workshops.

VAAs are generally very inclusive in terms of the parties and candidates they select. Tools like the German *Wahl-O-Mat* or the Dutch *Stemwijzer* encompass all candidates or parties in the elections, in line with their civic education background as well as their primary purpose (i.e., finding one's way through the increasingly complicated issue space of extreme multiparty systems). On the other hand, academia-based VAAs like the Belgian *Stemtest* only take into account a selection of parties. Often, this decision is grounded on both the need to exclude the numerous "irrelevant" parties on the ballot in many electoral systems, and on scientific research strategies (e.g., maximizing the attention toward parties worth studying). Interestingly, the latter type of VAAs tend to force parties to take a stance on each and every policy statement—with the tricky side effect of artificially shaping the political space to align with political science standards.

When it comes to the identification of candidates' and parties' positions, two different macro-groups of VAAs can be identified. On the one hand, candidate-based VAAs rely exclusively on the collaboration of candidates along the lines of the Comparative Candidate Survey project. Besides theoretical considerations, this operational choice is somewhat dictated by the large number of candidates targeted for inclusion. As an example, during the Swiss federal election campaign of 2019, approximately 3,900 candidates participated and answered the *smartvote* questionnaire, corresponding to a participation rate of 84 percent. Equally complex is the scenario faced by party-based systems, which host the large majority of all VAAs currently in operation. As parties are, by definition, nonunitary actors, one option for VAA developers is to determine party issue positions solely on expert assessment of the party platforms and other publicly available documentation. On the other side of the spectrum, designated party representatives are invited to identify their issue positions without these being subject to change by the tool's providers. Up until recently, however, these techniques have been used in isolation, with the unfortunate consequence that parties have been able to "manipulate" their position in the absence of an impartial check by expert observers (for the often quoted case of CDA in the Dutch election of 2006, see van Praag, 2007; see also Walgrave, van Aelst, & Nuytemans, 2008 for the case of Belgium). To avoid these drawbacks, an *iterative* method, consisting of a combination of expert judgment and party self-placement, has been pioneered by the Dutch VAA *Kieskompas* (Krouwel, Vitiello, & Wall, 2012); it has been exported to numerous countries in Europe and beyond, and it has been applied to the EP elections since 2009 (Sudulich, Garzia, Trechsel, & Vassil, 2014; Garzia, Trechsel, & De Sio, 2017).

Transnational VAAs, like the *EU Profiler* or **euandi**, represent a telling example of how their underlying methodological choices can shape the degree of pragmatic engagement with the political supply at election time. For one thing, more and more parties are agreeing to be involved in the party placement exercise. While 38 percent of all the parties contacted in 2009 by the *EU Profiler* team engaged in this cooperative endeavor, the figure rose to above 50 percent in the context of the **euandi** projects of 2014 and 2019. On the one hand, these figures are testimony to the increasing willingness of parties to be involved in—as in, be studied by—the VAA in exchange for visibility among users/voters. On the other hand, they highlight a considerable diversity in parties' strategic approach, ranging from full cooperation to explicit conflict. Examples of unconditional cooperation include the case of the Green Party of Greece in 2009, which went so far as to change some of their positions following a discussion with the academic coding team, which convincingly argued that the party's real position was—on the basis of publicly available

documentation—different. A similar story applies to the Czech Pirate's Party in 2014. In other instances, the expert teams found themselves in the position of igniting a process of deliberation within the parties that led them to turn a nonattitude into an actual policy position.[3] When it comes to instances of open conflict, some parties even threaten legal action—as was the case with Fine Gael in Ireland, in 2009, and with Dimiourgia Xana in Greece, in 2014.

6. THE EFFECTS OF VAAs ON POLITICAL ATTITUDES AND BEHAVIOR: ENGAGING WITH USERS/CITIZENS

It is likely that electoral returns are the core motivation of parties' interest in VAA endeavors. Indeed, a growing body of scientific evidence points to the idea that VAAs do have an electoral effect on their users. Originally embedded in citizenship education initiatives, one central purpose of VAAs is to strengthen the capacity of citizens to engage in the political process. Having political resources, such as information and knowledge, is a key precondition for participation. With more information, citizens are better able to make sense of their own position relative to the electoral supply and thus more likely to cast their ballot in elections. In this respect, the wide amount of readily available information about politics and political parties provided by a VAA contributes to reducing the transactional costs involved in gathering relevant political information. The first studies investigating the impact of VAAs on electoral participation show that in both the 2005 and the 2009 German federal elections, more than 10 percent of users felt more motivated to vote solely due to having used *Wahl-O-Mat* (Marschall & Schmidt, 2010). In the 2007 federal elections in Switzerland, over 40 percent of respondents declared that using the *smartvote* had at least a slight and sometimes even a decisive influence on their decision to go to the polls (Ladner, Felder, & Fivaz, 2010). Later studies, relying on representative samples of the voting population and more sophisticated statistical techniques, largely confirmed these initial insights. Gemenis and Rosema's (2014) analysis of Dutch Parliamentary Election Study data estimates, by means of propensity score matching, that the presence of VAAs was responsible for over 4 percent of the reported turnout in the 2006 election. Another study by Dinas, Trechsel, and Vassil (2014), on European Election Study data, shows that even after controlling for a wide set of socio-structural, attitudinal, and behavioral variables, the probability of casting a vote in the EP election of 2009 was fourteen percentage points higher for VAA users compared to nonusers. A recent comparative study by Garzia, Trechsel, & De Angelis (2017), relying on twelve national election study datasets from Finland, Germany, the Netherlands, and Switzerland, found that—even after controlling for an exhaustive list of

individual-level predictors of electoral participation—having used a VAA increased users' probability of casting a vote in elections by between two and twelve percentage points.[4] While focusing on the portion of the electorate that is mobilized due to VAA exposure, their study also finds that VAA exposure does not simply cause higher mobilization; it does so among groups in the electorate that are prone to electoral abstention: women, the young, and those less interested in politics.

Besides their ability to motivate undecided voters to participate in elections, VAAs have also been found to affect actual patterns of vote choice. In their seminal analysis of the Flemish *Stemtest*, Walgrave et al. (2008) find that the reported intention of changing behavior as a result of having used a VAA is not often matched with actual changes in voting behavior. The authors conclude that among the 8 percent of respondents who said that *Stemtest* made them doubt about their vote, only a half actually changed preferences. Interestingly, similar figures are reported in another study of VAA impact, this time focusing solely on patterns of party preference. In their cross-national analysis of the 2009 EP election, Alvarez et al. (2014) found about 8 percent of *EU Profiler* users reshuffling their party preferences to the top party proposed by the VAA. Unfortunately, their prepost design does not allow confirmation of the exact proportion of users remaining loyal in spite of a measurable VAA effect on preferences. More recently, applying a field experimental research design, Pianzola, Trechsel, Vassil, Schwerdt, and Alvarez (2019) found both a causal reinforcement effect of top-party preferences and a multiplication of electorally available parties for Swiss voters.

7. POTENTIAL FLAWS OF PRAGMATIC ENGAGEMENT: LESSONS FROM VAA IMPLEMENTATION

In this penultimate section, we build upon VAA's implementation trajectory to describe inherent risks of contaminating our object of inquiry and the ways to ethically circumvent them. To illustrate, we rely on a recent example of what could be defined as a "good engagement practice" originating in the field: the *Lausanne Declaration* delivered, in 2014, by a large group of academic VAA researchers and developers. The relevance of this declaration for the purposes of this chapter is twofold. On the one hand, it offers a paradigmatic example of the responsibility placed on the shoulders of political scientists when mingling with the political attitudes and behaviors of millions of citizens/voters. On the other hand, it also testifies to the awareness of such responsibility on behalf of political scientists as VAA developers, thus offering indications that extend far beyond the VAA realm—and, potentially,

to every realm in which citizens are both analyzed and affected by means of political science methods and applications.

The signatories of the Lausanne Declaration agreed that, as a general rule, VAAs should be "open, transparent, impartial and methodologically sound" (§1.1). To enhance users' perception of impartiality, it is imperative that all "institutions, organisations, associations, groups, private companies and individuals financially supporting a VAA have to be made visible. Funding has to be made transparent" (§2.1).

While there is hardly any doubt that a VAA "should be freely available to all citizens" (§3.1) it is still a point of contention whether each and every party and/or candidate should be included in the VAA. *Should political scientists be put in charge of actually defining the set of parties which voters should consider?* According to the Lausanne Declaration, a VAA "should aim at the inclusion of as many parties/candidates that are on the ballot as possible" (§3.2). Moreover, it states that "parties and candidates should not be excluded from the tool for ideological reasons" (§3.3). These provisions highlight the contention that political scientists should refrain from altering in any way the political reality presented to citizens—regardless of the theoretical as well as methodological reasons suggested by their disciplinary knowledge—in line with the established practice of publicly funded VAA endeavors.[5]

Another critical issue raised in the Lausanne Declaration is that of statement selection. Early research provided clear evidence that the respective choice, composition, and wording of statements make a difference in the result indicated by a VAA. Drawing on a large-scale simulation of 500,000 different configurations of thirty-six statements, the aforementioned study by Walgrave et al. (2009) demonstrated that every possible configuration of statements produced a benefit to some parties, depending on the specific statement composition. In some instances, certain parties' shares of VAA advice multiplied several times between the least and the most favorable statement configuration. For this reason, VAA makers "ought to carefully watch that the design does not favor a party/candidate in a systematic matter" (§4.2).

Besides having an effect on the advice itself, statement selection is likely to have priming effects which have not yet been studied. A biased selection of statements may distort users' perception of the actual issues at stake in a given election—for instance, if certain relevant topics are excluded, or if certain other, less relevant, topics are included. What if VAA makers decide to exploit their visibility among the public and reshape the agenda (i.e., the list of statements) along the lines of more immediate, cognitively loaded concerns (i.e., the statements themselves) and more evocative language (i.e., question wording)? Studies from communication research can both offer insight into potential answers and raise awareness of the potentially enormous effects stemming from the widespread availability of these

technologies to the general public outside the usual channels of knowledge production and intermediation, that is, a website rather than an academic journal, a few milliseconds' upload rather than a long and winding peer-review road, and so forth.

8. CONCLUSIONS

Over the last two decades, VAAs have spread throughout Europe and beyond. Social science research has begun to address the role and the effects of these tools and, especially, to consider their impact on political attitudes and voting behavior. Political scientists themselves have been increasingly involved in the making of these applications—to offer scientific standards and, also, to make use of the huge amount of VAA-generated data for empirical research purposes. Among the crucial findings of this emerging strand of research, scholars have uncovered strong effects of these technologies on their users. VAAs increase interest in, and knowledge of, political matters, and ultimately have a positive effect on individuals' propensity to take part in elections. This, combined with their massive spread among voters, enables them to impact on election turnout rates, thus counterbalancing the perils stemming from declining participation all over the Western world. What is more, VAAs do not only increase turnout. They do so among the categories most prone to electoral abstention: women, the younger generations and all those citizens with low levels of political interest.

Against the background of such encouraging outputs, one could be tempted to conclude that a pragmatic, academically driven approach to public engagement should be encouraged on the grounds of empirically measurable impact alone. However, we believe that VAAs—and related online technologies—operate within a more complex context of ethical constraints. And indeed, we concur that "there are still lingering doubts within the discipline about the ethical implications of doing impact" (Wood, 2019, p. 2). For instance, Flinders and Pal (2019) argue against the alleged obligation of the discipline to support liberal democracy. They do so on two grounds, namely the lack of unanimity in political views among political scientists and the enduring need to subject the relationship between politics and society to critical inquiry under any possible governing arrangement. We will thus conclude this chapter with our reflections about online engagement with VAAs and an attempt to situate it within this crucial disciplinary debate.

If VAAs become omnipresent features of election campaigns, if ever more citizens compare their political preferences with the electoral offer coded by VAAs, and if political scientists become indispensable partners of VAA designers, does this affect the very meaning of modern political science?

We posit that when getting actively involved in electoral campaigns, by shaping the information environment through the design of VAAs, political scientists need to reflect on their own identity. They face the epistemological problem of producing research on the politics of voters and parties while simultaneously transforming these politics. Many observers applaud higher rates of political involvement among the young, or effective instruments against fake news and disinformation. In a similar vein, exploratory studies on VAA's multiple desirable impacts would seem to offer even further hope. Garzia and Marschall (2019) argue that, by the very nature of issue-based applications, VAAs have the potential to prime issues over personality evaluations in the individual voting calculus. If VAAs follow certain criteria, they have the potential to inform voters about the "real" intentions of political parties and candidates. By prioritizing issues, VAAs could also tackle the representative deficit in some democracies in terms of fostering the responsiveness and responsibleness of political parties in office. One way is to conceptualize VAA proposals as promises that, if implemented after the election, could also be registered by modified applications, which would support the delegate model of political representation and serve the increasing number of issue voters with weaker party ties (Ladner, 2016). In all these respects, VAAs represent an undoubtedly fertile ground for disciplinary engagement with the public. Moreover, accumulated political science knowledge in VAAs serves only to provide citizens political information in the light of *their own* preferences. If bias arises, it can be fixed by the very same methods and techniques that led to its discovery in the first place. And it could be argued that it is ultimately up to citizens to decide what to do with their view of democracy when taking that information into account at election time.

This long list of promising opportunities, nonetheless, needs to be coupled with a corresponding number of potential pitfalls. Take, as an example, a VAA's promise of reengaging citizens with the political process by means of fostering turnout. Few would disagree with the general assertion that high turnout rates are a crucial measure for the vitality of a democracy. Yet, we contend that the very same assertion would be subject to much more skepticism if it came with some sort of normatively unwelcome string attached. For instance, that VAAs (or any other get-out-the-vote initiatives) increase participation among groups of citizens with illiberal inclinations—indeed a pressing issue to which we urge future scholarship to turn to. The list of potential pitfalls is large and could extend to ontological malpractice. What if political scientists—tempted by the sheer possibility to satisfy their own personal political views or to become rich and famous—manipulate the design of online engagement platforms in such ways as to help some while harming others? While we do not suggest that a return to the ivory tower may be

the answer to these questions, we urge political scientists to reflect carefully about their role and the foremost societal implications of their research in the digital age.

NOTES

1. We would like to thank Mirjam Dageförde, Russell J. Dalton, Brigid Laffan, and Stefan Marschall for their insightful comments on earlier versions of this chapter, and the editors of this volume for their assistance throughout its development.

2. The data is admittedly incomplete, as it entirely relies on the existence of an item regarding VAA usage in national election studies. Nonetheless, it provides a good longitudinal overview of the developments in VAA usage in an important set of early-implementation countries.

3. Finland's Pirate Party, for instance, launched a web-survey among its EP candidates to identify a unitary party position in response to the *euandi2014* self-placement questionnaire. In Slovenia, Solidarnost even admitted that they had not taken a position on certain questions yet, and asked its self-positioning to be taken as indicative of their positions. The country team agreed to the party drawing up a list of newly taken positions and to the party sending in an official document that could be quoted.

4. This finding is supported by the replication analysis performed on Swiss data by Germann and Gemenis (2019).

5. For instance, in the case of the German *Wahl-O-Mat*, designed by the Bundeszentrale für Politische Bildung, a federal state agency, the initial noninclusion of a small party in Bavaria in 2008 resulted in a court order. In the view of the court, a state agency running a VAA was accountable to the voters and parties and therefore had to include any party contesting an election. Most recently, on 20 May 2019, the *Wahl-O-Mat*'s EP elections VAA was taken offline due to a court order. Indeed, the small German party "Volt" won the legal battle, defending its right to be included in the list of parties contesting the election.

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