

# Voting Advice Applications – Impact on Voting Decisions in the 2011 Swiss National Elections

Andreas Ladner (IDHEAP, University of Lausanne)

Paper to be presented at the 62nd Political Studies Association Annual International Conference in Belfast, 3 - 5 April 2012

## Abstract

In most democracies voting Advice Applications (VAAs) advising citizens which candidate or party they should vote for become more and more popular. It is therefore crucial to know more about the functioning and the effects of such tools. After some general remarks about the spread of these tools and their possible effects gathered so far in various studies, this paper presents the latest results from a research conducted in the course of the 2011 Swiss national elections. They confirm that VAAs can lead to better informed voters and are likely to have a positive impact on electoral turnout. Additionally it can be shown that the Swiss VAA smartvote made voters change their voting intention and that they voted for a different party. This was particularly advantageous for the Green Liberal Party. At the moment, only a minority of voters rely on the voting recommendation by smartvote. This might change dramatically with the introduction of e-voting. Once people can vote electronically, there are hardly any possibilities to prevent voters from transferring their selection of candidates based on the recommendation given by a VAA into the official electronic ballot paper. If this is possible, e-voting will become more popular than postal voting.

Voting Advice Applications (VAAs) offer help and advice for citizens in deciding which party or candidates to vote for in the course of elections. They compare voters' preferences with respect to different political issues with the preferences of parties or candidates and indicate those parties or candidates who are politically close. Nowadays, one or several VAAs are on offer at practically all national elections in Europe and they are used by millions of voters. Given their widespread use it is astonishing that so far political scientists have hardly dealt with VAAs and their possible effects on electoral behaviour and election results.

In the course of the 2011 elections of the Swiss national parliament Swiss voters had - after 2003 and 2007 - for the third time the possibility to seek voting advice on a VAA called smartvote.<sup>1</sup> Quite an important number of voters did so. The providers estimate that about 437'000 voters took this exercise seriously, revealed their political preferences and received a voting recommendation. This amounts to about 8.5 per cent of the electorate and a bit more than 17.6 per cent of the citizens taking part in the elections.<sup>2</sup>

<sup>1</sup> Additionally, smartvote has also been offered in an important number of cantonal and local elections.

<sup>2</sup> The corresponding figures for the previous elections are 91'815 or 4.2 per cent of the voters in 2003 and 350'000 or 14.7 per cent of the voters in 2007.

After a short introduction into the functioning of VAAs and their theoretical implications with respect to voting, I will start by presenting empirical evidence on the use and the impact of VAAs on electoral behaviour gathered so far. Then, I will turn my attention more specifically to the Swiss case. Since the impact on participation is likely to depend on the electoral system, I will first present the Swiss voting systems and the specific characteristics of the Swiss VAA called smartvote. Then, I will address the question whether this tool had an influence on the results of the 2011 elections and worked in favour of specific parties. This will lead us to some more general reflections such as the possibility of linking VAAs with electronic voting.

The empirical evidence presented in this paper stems from a research project conducted within the framework of a National Center of Competence in Research with the name “Challenges to Democracy in the 21st Century” (NCCR Democracy) which is funded by the Swiss National Science Foundation (SNSF).

## 1. What are VAAs and how do they work?

VAAs are issue-matching systems. Their basic functions are simple. At first, a catalogue of issues reflecting the most important political discussions and problems serves to identify the positions of the parties or candidates (for a party election or a personal election respectively). These political positions are saved in the form of a profile. As a next step, the website allows voters to construct their own profile by means of the same catalogue of issues. This profile can then be compared with the profiles of the parties or candidates. The VAAs then calculate the congruence between voters and parties or candidates and display the results as rankings. All VAAs have this basic system in common.

Online voting aids are thus based on the normative idea of so-called issue voting which they implement in an almost ideal fashion (Klein 2006: 595). Issue voting is based on Downs’ (1957) spatial model of politics and on his notion that the congruence between voter and party or candidate with respect to the essential political issues should be the decisive criterion of an election. In its original form, this model assumes that a rational voter will vote for the party which is closest to his or her own views. This approach is thus also referred to as proximity voting.

The Dutch *Stemwijzer*<sup>3</sup> is generally regarded as the very first voting aid. Its earliest version was developed in 1989 in a printed form to be used in teaching politics at school. In 1994 a first computer-based version was developed and several thousand disks were sold. In the forefront of the parliamentary elections in 1998, a first online-version was introduced which was used 6,500 times (De Graaf 2010). In Finland, a VAA had been developed independently two years earlier. In the following years, new voting aids were added by and by, so that no fewer than 20 different online-voting aids were on offer for the parliamentary

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<sup>3</sup> Cf. <http://www.stemwijzer.nl> (20.01.2012).

elections of 2007 (Ruusuvirta 2010: 47-49). In other European countries a veritable VAA boom began in the years following the millennium. Today it is difficult to find a European country that does not offer several online voting aids during electoral campaigns.<sup>4</sup> Besides a multitude of independent websites, three “families” of VAAs can be distinguished:

The *Stemwijzer* family, based on the Dutch example, is used in many other countries. Its best-known representative must be the German *Wahl-O-Mat*.<sup>5</sup> *Stemwijzer* versions have also been employed in France, Italy and Bulgaria. The *Stemwijzer* is a reliable and simple voting aid, characterised by a high degree of user-friendliness. The second family is based on the *Kieskompas*<sup>6</sup>, also developed in the Netherlands and in direct competition with the *Stemwijzer*. The *Kieskompas* differs from the *Stemwijzer* in that the positions of the parties with respect to political issues are not identified by means of questioning but rather by means of an analysis of the programmes of parties and election campaigns. In addition, the *Kieskompas* makes use of a diagram in a two-dimensional system of coordinates rather than a list for the results obtained – in other words it provides a kind of map of the political space. This family comprises the *EU Profiler*<sup>7</sup> (a VAA for the EU elections of 2009), the Canadian *Vote Compass*<sup>8</sup>, the Portuguese *Bussola Eleitoral*<sup>9</sup>, a Turkish version<sup>10</sup> and the US-American *Electoral Compass*<sup>11</sup>.

The third family, finally, has its origins in Switzerland. In 2003 *smartvote*<sup>12</sup> began to operate and it has since been used in Scotland, Bulgaria, Lithuania, Luxembourg<sup>13</sup> and Austria<sup>14</sup>. *Smartvote* is a relatively complex online-voting aid, containing a simple list presentation and two different graphical presentations detailing the party positions. In addition, *smartvote* enables voters to compare their own positions not only with those of the parties but also with those of the individual candidates.

Most VAAs have their origins in the context of universities. Scientists interested in electoral and party research are often strongly involved. Early on, institutions engaged in civic education expressed their interest. They then employed VAAs in the context of informing people and as an instrument to strengthen the political participation of young and new voters (Fivaz/Nadig 2010). This is typically and ideally the case for the *Stemwijzer*, the *Wahl-O-Mat* and the Austrian *Wahlkabine*<sup>15</sup>. *Smartvote* works in close conjunction with various universities, though it has been developed and operated by a non-profit organisation, while *Kieskompas* is a project of a market-oriented enterprise.

Online voting aids are also employed in new democracies in the context of projects aimed at establishing or furthering democracy and as such they are often financed by state agencies for cooperative development or by NGOs. This was the case in the transitional countries of

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<sup>4</sup> A good overview of the rapid expansion of VAAs can be found in Walgrave et al. 2008b as well as in Cedroni/Garzia 2010.

<sup>5</sup> Cf. <http://wahl-o-mat.de> (22.01.2012).

<sup>6</sup> Cf. <http://www.kieskompas.nl> (22.01.2012).

<sup>7</sup> Cf. <http://www.euprofiler.eu> (3.2.2012).

<sup>8</sup> Cf. <http://votecompass.ca> (3.2.2012).

<sup>9</sup> Cf. <http://www.bussolaeleitoral.pt> (3.2.2012).

<sup>10</sup> Cf. <http://www.oypusulasi.org> (3.2.2012).

<sup>11</sup> Cf. <http://www.electoralcompass.com> (3.2.2012).

<sup>12</sup> Cf. <http://www.smartvote.ch> (3.2.2012).

<sup>13</sup> Cf. <http://www.smartvote.lu> (3.2.2012).

<sup>14</sup> Cf. <http://www.politikkabine.at> (3.2.2012).

<sup>15</sup> Cf. <http://www.wahlkabine.at> (3.2.2012).

Eastern Europe and more recently in certain countries of the Middle East against the background of the Arab spring. In 2011, versions of both *Stemwijzer* and *Kieskompas* were employed in Egypt, Tunisia and Morocco.

## 2. The impact of VAAs<sup>16</sup>

In view of the ever increasing use and importance of VAAs it is surprising that the question whether they have an influence on the electoral behaviour of their users has only moved to the foreground of VAA research in the past two or three years. Indications for such an influence have already been visible for some time. In Finland, for instance, before elections VAAs are the most important source of information for young voters (Ruusuvirta/Rosema 2009: 2). In Switzerland surveys among the users of *smartvote* show the crucial role of this website with regard to the information gathering and processing: 86% of *smartvote* users have referred to it as an important source of information, while other online media were relegated to second position with 68% of users; television channels and newspapers jointly took third position with 61% each (Ladner et al. 2010: 115).

With respect to the impact on electoral behaviour, three questions can be posed (Garzia 2010: 23): First, do VAAs change the way in which users get hold of relevant information on elections and the way in which they handle this information? Second, do VAAs have an impact on electoral participation? And third, finally, do VAAs have a direct influence on the electoral decisions of their users and on the election results?

As for the impact on the way in which users get hold of and treat information, the so-called *cognitive effects*, several studies arrived at clear and positive results. Marschall/Schmidt (2010) showed that in Germany about 60% of people interviewed have been stimulated by *Wahl-O-Mat* to look for further information on the elections in general and on the parties and their positions in particular. 70% even claimed to have discussed the received voting recommendation with family members or friends. It is of particular interest that even among those users who hardly talk about politics, 63% were stimulated by *Wahl-O-Mat* to discuss the elections with others (Marshall/Schmidt 2010: 83-84). Comparable figures also exist for Switzerland and thus confirm the German results: 55% of Swiss VAA users went on to look for further information and 70% were led to discuss the elections with other people (Ladner/Pianzola 2010). Besides political knowledge and interest, which is strengthened by the use of VAAs (Garzia 2010: 22), it has further been shown that users do not accept voting recommendations uncritically (Fivaz/Nadig 2010). Often the voting recommendations are simply taken as a starting point for further reflections in the course of finding a decision. Thus the first question can be answered in the positive. These results rebut fears that VAAs lead to an “instant democracy” in which the voters deal with political contents and actors in a hasty and superficial fashion.

In many Western countries, low or declining voter turnout can be observed. Even if it is clear that technological progress alone cannot increase rates of political participation, it is

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<sup>16</sup> This section strongly relies on a book chapter to be published later this year, see Ladner/Fivaz (forthcoming).

nevertheless a hope which is time and again expressed not only in connection with the introduction of e-voting but also in the context of the widespread use of online voting aids (Cedroni 2010: 256).

A number of studies based on user interviews has looked into the question whether the use of VAAs leads to an increased *participation rate*. These studies all conclude that there is a positive effect on participation; however, the figures found differ strongly depending on country and study. For Finland it can be shown that the use of an online voting aid increases the probability that the user participates in the elections by up to 23%. For Switzerland, the corresponding figure is 15%, for the Netherlands it is 12% and for Germany it is 8% (Garzia 2010 and Ladner/Pianzola 2010).

On the basis of these results alone it is difficult to estimate how big an impact VAAs have on actual participation. The studies were based on direct interviews with users. These tend to overestimate the impact of VAAs when asked directly. It must also be taken into account that some of the users would have taken part in the elections without the VAAs. Cautious estimates conclude that *smartvote* increased the participation in 2007 in Switzerland by 0.6 to 1.0% (Ladner/Pianzola 2010: 220).

Just as for the testing runs for e-voting systems, VAAs have been shown to have a rather small impact on electoral participation (Ruusuvirta/Rosema 2009). An important explanation may have to do with the fact that these instruments are primarily preaching to the converted (Norris 2003). Among the VAA users those groups are overrepresented which are already characterised by an above average participation rate (e.g. those with a strong interest in politics). Even for VAAs it is difficult to persuade those who do not take part in elections to show an interest. Among young and first-time voters it appears to be possible to some extent to further their interest in politics and their electoral participation by means of online voting aids (Fivaz/Nadig 2010).

From the perspective of the public and above all from the perspective of the parties and other political actors, the question of *the impact of online voting aids on the electoral decisions* of their users is, of course, of outmost importance. If this question is put directly to the users, it appears perfectly plausible that there is a considerable impact of VAAs on electoral decisions. About 70% of users interviewed stated that *smartvote* had directly influenced their decisions (Ladner et al. 2010b). This is an unusually high figure, which, however, mirrors the complexity of the Swiss electoral system and the far-reaching possibilities involved in voting compared to other countries (see next section). For this reason it was asked more precisely in which way the *smartvote* recommendation had an impact on the voting decision. Only 15% of those asked stated that they had adopted the recommendation in its entirety and copied it onto the ballot paper. The other users adopted the recommendation only partially. Many users stated that on the basis of the recommendation they voted for candidates they had previously not known and would therefore not have voted for. And about a third of users claimed to have consciously not voted for particular candidates on the basis of the recommendation received (cf. Ladner et al. 2010).

In other countries the question to be asked was whether the use of VAAs had led to voting

for a party other than the one originally intended. The resulting figures vary strongly depending on the country. In the Netherlands, between 15 (Aarts/van der Kolk 2007) and 10% of users (Kleinnijenhuis/van der Hoof 2008) claimed to have adjusted their electoral decisions due to the recommendation received. For Germany this figure is six per cent (Marschall 2005) and for Finland as low as three per cent (Mykkänen/Moring 2006).

These research results are viewed rather critically by the VAA researchers themselves. A series of considerable methodological difficulties gives rise to justified doubts as to their validity. Most of the studies are based on surveys conducted before the elections. Correspondingly, what is captured are voting intentions and not real voting decisions. A second point of criticism concerns the quality of the survey data. Most studies are based on online surveys of VAA users.<sup>17</sup> Such surveys can neither produce representative data for the entire electorate nor for Internet users. A further problem arises with respect to causality. Even if VAA users can be shown to vote for another party than originally planned, it cannot be concluded with certainty that this is due to the voting recommendation.

Before we turn our attention to the latest results stemming from the 2011 Swiss national elections, which also address the questions whether some specific parties took advantage of smartvote, we have a brief glance at the Swiss electoral system and the functioning of the platform smartvote.

### **3. The Swiss Electoral System and the Functioning of smartvote**

The functioning, the use and the usefulness of VAAs depend to some extent on the party system, the electoral system and the elections themselves. It makes a difference whether voters have to decide between two candidates running for presidency or whether they can choose among a huge number of political parties. The bigger the offer and the more possibilities the voters have to express their preferences the more information do they need to make up their minds.

Switzerland is according to Lijphart (1999) and many others an almost perfect model of a consensus democracy. Its social and cultural heterogeneity is reflected in a highly fragmented party system (see Ladner 2002) supported by PR-voting as well as other elements of power sharing. Federalism and decentralisation additionally increase the complexity of the party systems. The 26 cantons vary on aspects like language, denomination and economic structure. Subsequently the cantonal party systems differ widely for example regarding the number of parties and the degree of party competition (see Ladner 2004 and 2004b). Switzerland has thus many parties with a relatively low share of the votes and the national parties are decentralised with cantonal and local sections disposing of far-reaching autonomy and independence. It is not unusual that on important national issues there are different political positions within the same national party.

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<sup>17</sup> Usually the users are asked on the VAA website after the recommendation is given whether they would participate in a scientific survey. Only few studies deviate from this pattern and use data from representative surveys of electoral research (e.g. Marschall/Schultze 2011 and Ladner et al. 2010).

Electoral districts for the national elections are the 26 cantons. The 200 seats of the National Council are assigned to the cantons according their population size: the six smallest cantons have only one seat; whereas the canton of Zurich, the largest canton, has 34 seats. Since the members of the national council are elected in a PR system, the entry hurdles for parties in bigger cantons with more seats are very low, in Zurich, for example around 3 per cent. This leads to a large number of parties running for office. In 2007, in the canton of Zurich, the voters had to decide among 29 party lists making it rather demanding to get to know all the parties and the differences between them.

Furthermore, the electoral system is very open giving citizens the possibility to decide not only among parties but also among candidates. Every voter has as many votes as there are seats in the constituency (e.g. in the small canton of Uri with 1 seat, voters have 1 vote and in the much larger canton of Zurich with 34 seats they have 34 votes). Secondly, voters can split their votes between candidates from different parties (e.g. in the canton of Zurich a voter can give 4 votes to candidates from party A, 10 to candidates from party B and 20 to candidates from party C). This is called “Panaschieren” or split-voting. Thirdly, voters can support their favourite candidates by giving them two votes instead of one (so-called cumulative voting, e.g. in the canton of Zurich a voter could vote for 17 candidates with two votes for each). These rules allow for composing a customized ballot list according ones personal political preferences. Taking again the example of Zürich in 2007, the voters could thus elect 34 candidates among 804 candidates running for office. Here it is obviously more demanding to gather the necessary information about parties and candidates than in a two-party-system. A VAA for the Swiss national elections has thus at least to be able to manage the differences between the cantons as well as the possibilities to vote for different candidates.

The core of smartvote is like in most VAAs the issue-matching module. A couple of month before the elections, all candidates receive the smartvote questionnaire, either by e-mail or by letter and they are asked to answer the questionnaire completely and to return it. The questionnaire consists of up to 70 questions on the most important political issues (like e.g., “Do you think that nuclear power plants should be shut down?”). Possible answers are “yes”, “rather yes”, “rather no” and “no”. Candidates do not have an opting-out possibility; they have to answer all questions and confirm their answers before they are saved in the smartvote database. Once they have confirmed their answer set it is no longer possible to change them.

About six weeks before the elections the smartvote website is made accessible to the voters and leads them in three steps to their individual voting recommendation. First, the voters have to specify their political profile. They are asked to answer the same questionnaire as the candidates but they can choose between the “deluxe version” consisting of 73 questions in 2007 and the “rapid version” consisting of 36 questions only. Unlike the candidates the voters also have a “no answer” option if they wish to leave out a number of questions and they can weight the answers according to the importance the issues have for them. For each question additional background information and explanations including pros and cons to every question are provided on the website. Secondly, voters have to select the constituency (electoral district) in which the vote, respectively for which they want to receive a voting recommendation. Depending on the electoral system they can also decide whether they wish

to receive a voting recommendation for lists/parties or for individual candidates. Finally, smartvote compares the answers of the voter with the answers of a candidate including the weighting factors the voter has given to the questions. The higher the congruence of the answers between a voter and a candidate, the more “congruence points” a candidate gets. This process is repeated over all questions and for every candidate in the selected constituency and results in a voting recommendation in form of a list with a decreasing ranking of the candidates according to their total congruence score. If a voter wishes to receive a voting recommendation for lists/parties the procedure is similar. Here smartvote uses the mean value of all answering candidates of a list or party.

Additionally, smartvote provides some more features to inform the voters. The website contains a database with all candidates, including extensive portraits with political profile (smartvote questionnaire, information about their political career, their political agenda, and so on), and information about their personal profile (e.g., educational, professional and family background). The database also includes links to personal websites or to video files. The website provides also tools to visualize political preferences: the so-called smartspider and smartmap charts. Both analytical graphs are based on the candidates’ and the users’ answers to the smartvote questionnaire. The smartspider shows the agreement or disagreement on eight major political issues dimensions formulated as political goals (e.g. more law and order, more environmental protection, or a strong welfare state) in a spider net graph. The values on the eight axes range from 0 to 100 – 0 standing for complete disapproval of the formulated political goal and 100 for full approval. The smartmap is based on a system of coordinates with two major ideological cleavages serving as axes – the “north-south axis” for the cleavage between liberal and conservative standpoints and the “west-east axis” for the left-right cleavage.

#### **4. Impact of smartvote in the 2011 elections according to the users**

Based on experiences with previous elections smartvote users in the 2011 national elections were confronted with a whole battery of questions asking whether smartvote had an impact on their voting behaviour and – and this was new this time – in which direction they changed their voting behaviour, i.e. to which party they changed their vote to.

The online survey was conducted after the elections among those users who left their email address on the website. About 14’000 smartvote users filled in the questionnaire.<sup>18</sup> Although this is a quite important number of respondents, the sample is, of course, far from representative with respect to the electorate or even smartvote users themselves. There are good reasons to believe that smartvote is more often used by a special part of the voters (male, younger, better educated and rather left wing) and that only a special part of these users (probably those particularly interested in such tools) participated in the survey. Whenever we want to make some general statements about the importance of smartvote or

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<sup>18</sup> The exact number of participants in the post-electoral survey is 14’067 (or 21.6%) of the 65’211 contacted persons which were registered on the smartvote website with their own account. We do also have data from a pre-electoral survey with 6272 respondents which were asked about their voting intentions, 2582 out of these answered another online questionnaire after the elections. These two latter surveys are not taken into account in this paper.

about the real effects of smartvote on the elections we do have to take this double selection bias into account.<sup>19</sup> We are, however, perfectly able to talk about those who belong to our sample. If some of them changed their voting decision after having consulted the list recommend by smartvote, this results in additional votes for the party recommended. What remains to be seen is whether the cause for a change of the voting decision can really be attributed to smartvote and whether they tell the truth when they claim that this was the case, but this problem is inherent to almost all surveys.<sup>20</sup>

The results for 2011 almost perfectly match the results of previous studies. Smartvote helped to increase their interest in this year's elections for about half of the users and for more than eighty per cent it increased their knowledge about the elections (see Table 1). Smartvote did not – as it has been seen before – lead to a hasty and superficial voting. On the contrary the users claimed that they tried to inform themselves better about specific parties or candidates, tried to learn more about political issues at stake or started to discuss politics with their colleagues, friends and their family. And about 10 per cent stated that smartvote made them participate in the elections. As far as their voting decision was concerned, about 60 per cent stated that smartvote had an influence. In most cases (about 80 per cent) smartvote made

Table 1: How did smartvote influence the users?

Impact	Per cent		N=
Smartvote increased my interest in this year's elections (rather true, true)	47.8		14067
Smartvote improved my knowledge about the elections (rather true, true)	84.2		14067
Smartvote led me to search for more information about parties and candidates (rather true, true)	53.8		14067
Smartvote led my attention to specific political issues (rather true, true)	46.5		14067
Smartvote motivated me to discuss politics with colleagues, friends and family (rather true, true)	57.7		14067
Smartvote made me participate in the elections	10.3		14067
Smartvote had an influence on my voting decision	60.0		13235
Smartvote made my vote for another party/list		28.5	8295
Smartvote made my vote for other candidates		78.9	8295

<sup>19</sup> One could even argue that there is a triple selection bias since those not taking part in the elections are hardly represented.

<sup>20</sup> For a more thorough discussion of the methodological problems implied see Pianzola/Ladner 2011, Vassil 2011.

them vote for different candidates. About 30 per cent of those claiming that smartvote had an influence on their voting decision voted for a different party.

As we have seen, 60 per cent of our respondents claimed that smartvote had an influence on their voting decision. Now, we would like to know which groups of respondents were particularly influenced by smartvote. The idea behind this question is – of course – that somebody who has strong party ties and voted for a specific party all his life is less likely to be influenced by smartvote than somebody who is young and votes for the first time in his life.

Not unexpectedly it is the younger voters which are more often influenced by smartvote in their voting decisions (see Table 2). The same is true for female voters. Higher education – on the contrary – does not seem to go hand in hand with lesser influence of smartvote. Academic high school compared to an apprenticeship, and university degrees compared to higher

Table 2: Socio-demographical and attitudinal variables and the influence of smartvote on the voting decision

Did smartvote influence your voting decision? (post electoral survey)						
	Yes	N		Yes	N	
<i>All</i>	60.0	13235	<i>Political Interest</i>			
			very interested	50.2	5014	
<i>Gender</i>			rather interested	64.6	7010	
Male	58.4	8259	rather not interested	<b>73.8</b>	1163	
Femal	<b>62.7</b>	4937	not at all interested	71.4	28	
<i>Age</i>			<i>Political Knowledge</i>			
18-35	<b>64.2</b>	6597	low	<b>68.4</b>	1193	
36-50	61.0	4072	medium	61.1	6712	
51-65	47.9	1926	high	56.6	5294	
66+	43.2	539				
<i>Education</i>			<i>Close to a party</i>			
Apprenticeship	53.7	1406	not close to a party	<b>68.9</b>	5304	
Academic High School	<b>61.4</b>	1584	Christian Democrats	46.3	464	
			Liberals	44.8	866	
Higher vocational education	58.7	1125	Swiss People's Party	34.6	462	
University Applied Sciences	<b>63.8</b>	2274	Social Democrats	51.5	1284	
University	60.7	4740	Greens	57.6	548	
			Green Liberals	65.5	891	

vocational education reveal higher percentages of people having changed their voting decision after the use of smartvote. This might to some extent be surprising since one could expect higher education to lead to some sort of resistance against any attempts to influence ones voting behaviour, and now they seem to accept the suggestions made by smartvote more easily.

As for the attitudinal variables low interest in politics, low political knowledge and no specific party ties lead to being more often influenced by smartvote and a change of the voting decision. Interesting to note that even among those revealing sympathies for a certain party a considerable amount states that they have been influenced by smartvote.

The most important question in the course of elections is: Who gets the votes? Is there a specific trend to be found among the users of smartvote toward a particular party, can this trend be attributed to the recommendation given by smartvote, and can the proximity revealed through smartvote to another party be made responsible for the swing to this other party? In order to elucidate these questions and for a better understanding of the results we need to have a look at the results of the 2011 national elections first.

To the surprise of quite many commentators the outcome of the elections was quite astonishing. The five biggest parties, the Swiss People's Party, the Social Democrats, the Liberal Party, the Christian Democrats and the Green Party lost votes to two smaller parties, the Green Liberals and the Conservative Democratic Party.

Table 3 shows those users who stated that they were influenced by smartvote in such a way that they voted for another party or list (we remember that this applies to 28.5 per cent of those voters who stated that they were influenced by smartvote or about 17 per cent of all users taking part in the survey). The big winner among the smartvote users was the Green Liberal Party with 359 additional votes; the big loser was the Liberal Party with 229 losses.

Except for the Green Party the results roughly mirror the results of the elections, at least as far as the overall gains or losses are concerned. The Christian Democrats, the Liberal Party, the Swiss People's Party and the Social Democrats are among the losers and the Green Liberal Party and the Conservative Democratic Party among the winners of the elections. What differs from the election results is the extent to which the parties gained or lost votes. This is due to the distortion of the sample counting much more people from the left side of the political spectrum. In the elections, the Swiss People's Party and the Liberal Party lost 2.3 per cent of the votes, the Christian Democrats 2.2, the Green Party 1.2 and the Social Democrats 0.8 per cent. Green Liberal Party on the other side gained 4 and the Conservative Democratic Party 5.4 per cent of the votes.

Nevertheless, there are good reasons to believe that smartvote was to some extent responsible for changing voting decisions, at least for some of the users. The absolute numbers we can account for seem to be rather minor, at least at first sight. The Green Liberal Party was supported by 131'000 voters in the 2011 national elections, our results account for 360 additional votes. However, considering that only about 3.5 per cent of the smartvote users took part in the survey and assuming that the participants in the survey are somehow

representative for all smartvote users we could expect about 10'000 additional voters for the Green Liberal Party stemming from smartvote. This amounts to a bit more than 7 per cent of all votes the Green Liberal Party received. This figure, however, only accounts for those votes stemming from party lists and neglects votes stemming from single candidates being voted for due to smartvote and being put on another party list. The real percentage could even be higher. On the other hand, it might well be that the double selection bias in the sample favours the Green Liberal Party. Those voters who were not really satisfied with the traditional parties used smartvote more often in order to find a new party to vote for and those who found a new party were particularly motivated to take part in the survey.

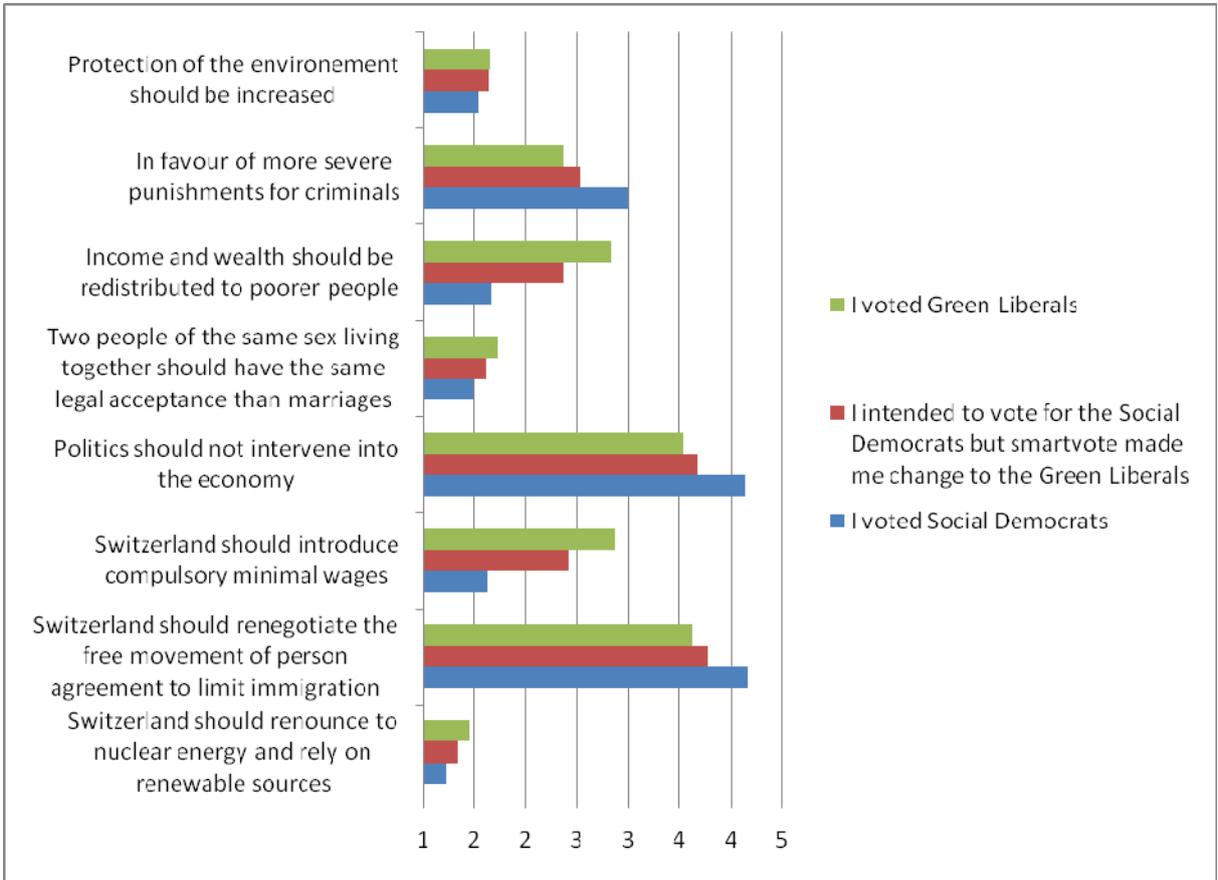
Table 3: Voting intention and vote after the use of smartvote (only voters being influenced by smartvote)

Which party/list did you want to vote for before the use of smartvote? (absolut numbers/percentages)	Which party/list did you vote for because of smartvote?							Vote losses	Balance among these parties
	Christian Democrats (CVP)	Liberal Party (FDP)	Swiss People's Party (SVP)	Social Democrats (SPS)	Green Party (GPS)	Green Liberal Party (GLP)	Conservative Democratic Party (BDP)		
Christian Democrats (CVP)		17	5	36	12	77	15	162	-19
		10.5	3.1	22.2	7.4	47.5	9.3		
Liberal Party (FDP)	46		11	15	4	192	36	304	-229
	15.1		3.6	4.9	1.3	63.2	11.8		
Swiss People's Party (SVP)	15	25		5	0	32	29	106	-85
	14.2	23.6		4.7	0.0	30.2	27.4		
Social Democrats (SPS)	33	7	1		119	150	11	321	-96
	10.3	2.2	0.3		37.1	46.7	3.4		
Green Party (GPS)	7	1	0	101		62	3	174	9
	4.0	0.6	0.0	58.0		35.6	1.7		
Green Liberal Party (GLP)	31	20	1	64	44		23	183	359
	16.9	10.9	0.5	35.0	24.0		12.6		
Conservative Democratic Party (BDP)	11	5	3	4	4	29		56	61
	19.6	8.9	5.4	7.1	7.1	51.8			
Vote gains	143	75	21	225	183	542	117	1306	0

Since smartvote and its voting recommendation is based on the concept of issue or proximity voting, it can be expected that those people voting for another party than previously planned, changed their opinion because they did have more issue similarities with the new party they elected than with the old party they originally intended to vote for. Whether this is the case can also be tested with our survey data. Ideally we should do that on the basis of the questions used by smartvote and the recommendation given by the tool. Unfortunately these data is not available yet so we have to look at the answers to eight different questions on political issues being asked in the survey.

Figure 1 compares voters that voted for the Social Democrats and the Green Liberal Party with such who intended to vote for the Social Democrats first and eventually switched to the Green Liberal Party Party. The results – if we look at the mean values for each group – show clearly that those who changed their mind and voted for the Green Liberal Party instead of the Social Democrats are positioned between the voters of the two parties. This is true for all eight questions. The swing voters are thus less extreme in their positions than the Social Democrats. They probably received a voting recommendation by smartvote directing them toward the Green Liberal Party and they decided to vote for this party.

Figure 1: Average issue positions of voters changing from the Social Democrats to the Green Liberals after the use of smartvote



1 = totally agree; 2 = rather agree; 3 = neither nor; 4 = rather disagree; 5 = totally disagree. N listwise Green Liberals = 2546, Social Democrats -> Green Liberals 139, Social Democrats = 3320

To sum up: Smartvote – if we can believe our respondents – matters! It increases people’s interest in elections, motivates them to participate and makes them vote for a different party. In the course of the 2011 Swiss national elections smartvote most likely worked in favour of one specific party: the Green Liberal Party. Why this was the case, we do not know yet. It might well be, that this party was in this moment particularly attractive for those people using smartvote more often.

What we do not know either is the strength of the effect smartvote has or is likely to have

if it was used by more people. At the moment, it is a relatively small percentage of people using *smartvote* prior to the elections and the influence of the tool is probably far from decisive. What will happen if a majority of the voters rely on such tools before they vote? There is one thing which will increase the popularity of such tools dramatically: the introduction of electronic voting.

## 5. Linking VAAs with e-voting systems

How would someone react if she or he was asked to fill in a booking form by hand or even appear in person at a travel agent's after having found a holiday arrangement including flight, hotel and the car to rent? This is exactly what some *smartvote* users do today. They answer the *smartvote* questionnaire online, receive a voting recommendation and then copy the names of the candidates by hand onto their ballot paper. In the case of the canton of Zurich this can mean up to 34 names including a special code for each candidate.

At the end of the 1990s Swiss Authorities decided to enhance information technologies more actively. One of the projects launched aimed at electronic voting. Supported by the federal authorities, the three cantons Geneva, Neuchâtel and Zurich started to develop their own e-voting systems. On the grounds of their successful attempts, it was decided that electronic voting should be introduced stepwise and rather slowly in the years to come all over Switzerland. In the course of the 2011 national elections Swiss citizens living abroad had for the first time the possibility to take part in elections electronically. This endeavour was limited to five cantons only.

What has been disappointing so far was the rather low number of people using electronic voting and the modest impact on electoral turnout. What might be responsible for this lack of impact is the fact that e-voting does not create a real added value. It is not necessarily faster and simpler than postal voting, which is the standard way of voting in Switzerland.

If voters could rely on an intelligent program helping them to select their parties and candidates by producing a ballot like selection which could then be sent to the polls electronically, this would change everything. It can be assumed that such a tool would become very popular and would be used by a majority of the voters in no time. Electronic voting would replace postal voting.<sup>21</sup>

A linking of the act of choosing with the act of voting seems perfectly obvious from a process-oriented point of view. But what will be the consequences for electoral campaigns and for political parties? Are there ways of influencing the voting recommendation given by VAAs? For these reasons, scientists should address early on the challenges of such a step. Since VAAs have, as I have tried to show in this paper – an impact on electoral decisions, they will become a very decisive element in the course of elections.

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<sup>21</sup> For those who don't believe in electronic voting, they could simply print out the list the candidates selected, sign it, and send it to the polls by ordinary mail.

## References

- Aarts, Kees/van der Kolk, Henk (2007): The Parliamentary Election in the Netherlands, 22 November 2006. In: *Electoral Studies*, 26, 4, pp. 832-837.
- Cedroni, Lorella (2010): Voting Advice Applications in Europe: A Comparison. In: Cedroni, Lorella/Garzia, Diego (eds.): *Voting Advice Applications in Europe. The State of the Art*. Naples: Scripta Web, pp. 247-257.
- Cedroni, Lorella/Garzia, Diego (eds.) (2010): *Voting Advice Applications in Europe. The State of the Art*. Naples: Scripta Web.
- De Graaf, Jochum (2010): The Irrestistible Rise of StemWijzer. In: Cedroni, Lorella/Garzia, Diego (eds.): *Voting Advice Applications in Europe. The State of the Art*. Naples: Scripta Web, pp. 35-46.
- Downes, Anthony (1957): *An Economic Theory of Democracy*. New York: Harper.
- Fivaz, Jan/Nadig, Giorgio (2010): Impact of Voting Advice Applications (VAAs) on Voter Turnout and Their Potential Use for Civic Education. In: *Policy & Internet*, 2, 4, pp. 167-200.
- Garzia, Diego (2010): The Effects of VAAs on Users' Voting Behaviour: An Overview. In: Cedroni, Lorella/Garzia, Diego (eds.): *Voting Advice Applications in Europe. The State of the Art*. Naples: Scripta Web, pp. 13-33.
- Jeitziner, Bruno (2004): Wahlen im Internetzeitalter. Informationsvermittler als politische Berater von Wählern und Politikern. In: Schaltegger, Christoph A./Schaltegger, Stephan C. (eds.): *Perspektiven der Wirtschaftspolitik. Festschrift zum 65. Geburtstag von Prof. Dr. René L. Frey*. Zürich: vdf Hochschulverlag, pp. 47-64.
- Klein, Markus (2006): Jenseits von Distanz und Richtung. Die Verbundmessung von Politikpräferenzen im Vergleich mit dem Distanz- und dem Richtungsmodell des Wählens – empirische Befunde eines Methodenexperiments. In: *Politische Vierteljahresschrift*, 47, 4, pp. 595-617.
- Kleinnijenhuis, Jan/van Hoof, Anita M. J. (2008): The Influence of Internet Consultants. Paper presented at the Annual Meeting of the International Communication Association, Montreal, May 22-26.
- Ladner, Andreas/Felder, Gabriela/Fivaz, Jan (2010): More than Toys? A First Assessment of Voting Advice Applications in Switzerland. In: Cedroni, Lorella/Garzia, Diego (eds.): *Voting Advice Applications in Europe. The State of the Art*. Naples: Scripta Web, pp. 90-123.
- Ladner, Andreas/Fivaz, Jan/Pianzola, Joëlle (2010b): Impact of Voting Advice Applications on Voters' Decision-Making. Paper presented at the conference „Internet, Politics, Policy 2010: An Impact Assessment“, Oxford, September 16-17.
- Ladner, Andreas/Pianzola, Joëlle (2010): Do Voting Advice Applications Have an Effect on Electoral Participation and Voter Turnout? Evidence from the 2007 Swiss Federal Elections. In: Tambouris, Efthimios/MacIntosh, Anne/Glassey, Olivier (eds.): *Electronic Participation*. Berlin: Springer, pp. 211-224.
- Ladner, Andreas/Fivaz, Jan/Schwarz, Daniel (2008): Die Positionierung der Nationalratskandidierenden 2007. Eine explorative Analyse der Antworten auf die Fragen der Online-Wahlhilfe smartvote. Chavannes-près-Renens: IDHEAP.
- Ladner, Andreas (2002): Das Schweizer Parteiensystem und seine Parteien; in: Klöti, Ulrich et al. (Eds.): *Handbuch der Schweizer Politik*; Zürich; pp. 211-258.
- Ladner, Andreas (2004): Stabilität und Wandel von Parteien und Parteiensystemen. Eine vergleichende Analyse von Konfliktlinien, Parteien und Parteiensystemen in den Schweizer Kantonen; Wiesbaden.
- Ladner, Andreas (2004b): Typologien und Wandel. Die kantonalen Parteiensysteme im letzten Drittel des 20. Jahrhunderts; in: *Swiss Political Science Review*; 10 (4); pp: 3-32.
- Lijphart, Arend (1999). *Patterns of Democracy. Government Forms and Performance in Thirty-Six*

Countries. New Haven/London

- Ladner, Andreas (2009): Elektronisch wählen – smart wählen. In: Vatter, Adrian/Varone, Frédéric/Sager, Fritz (eds.): Demokratie als Leidenschaft. Planung, Entscheidung und Vollzug in der schweizerischen Demokratie. Bern: Haupt, pp. 205-224.
- Marschall, Stefan/Schultze, Martin (2011): The Impact of Voting Advice Applications on Electoral Behavior. The Case of the 2009 German Federal Election. Paper presented at the 6th ECPR General Conference, Reykjavik, August, 25-27.
- Marschall, Stefan/Schmidt, Christian K. (2010): The Impact of Voting Indicators: The Case of the German Wahl-O-Mat. In: Cedroni, Lorella/Garzia, Diego (eds.): Voting Advice Applications in Europe. The State of the Art. Naples: Scripta Web, pp. 65-90.
- Marschall, Stefan (2005): Idee und Wirkung des Wahl-O-Mat. In: Aus Politik und Zeitgeschichte, 55, pp. 41-46.
- Mykkänen, Juri/Moring Tom (2006): Dealigned Politics Comes of Age? The Effects of Online Candidate Selectors on Finnish Voters. Paper presented at the Conference of Politics on the Internet: New Forms of Media for Political Action, Tampere, November 24-25.
- Norris, Pippa (2003): Preaching to the Converted? Pluralism, Participation and Party Websites. In: Party Politics, 9, 1, pp. 21-45.
- Pianzola, Joëlle/Ladner, Andreas (2011): Tackling Self-Selection into Treatment and Self-Selection into the Sample Biases in VAA Research. Paper presented at the 6th ECPR General Conference, Reykjavik, August, 25-27.
- Rütsche, Bernhard (2008): Elektronische Wahlhilfen in der Demokratie. Beurteilung im Lichte der Wahl- und Abstimmungsfreiheit, Spannungsverhältnis zu den politischen Parteien, Fragen staatlicher Regulierung. Basel: Helbing Lichtenhahn.
- Ruusuvirta, O. and M. Rosema (2009). "Do online vote selectors influence electoral participation and the direction of the vote?". ECPR Conference, Potsdam, Germany.
- Ruusuvirta, Outi (2010): Much Ado About Nothing? Online Voting Advice Applications in Finland. In: Cedroni, Lorella/Garzia, Diego (eds.): Voting Advice Applications in Europe. The State of the Art. Naples: Scripta Web, pp. 47-63.
- Vassil, Kristjan (2011): Role of Self Selection in Estimating the Effects of Voting Advice Applications. Empirical Evidence on the Basis of Swiss Smartvote Data. Paper presented at the 6th ECPR General Conference, Reykjavik, August, 25-27.
- Walgrave, Stefaan/van Aelst, Peter/Nuytemans, Michiel (2008b): Vote Advice Applications as new Campaign Players? The Electoral Effects of the „Do the Vote Test“ during the 2004 Regional Elections in Belgium. In: Farrell, David/Schmitt-Beck, Rüdiger (eds.): Non Party Actors in Electoral Politics. The Role of Interest Groups and Independent Citizens in Contemporary Election Campaigns. Baden-Baden: Nomos, pp. 237-258.