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Communication about Voting Advice Applications in Social Media: Talking about the Wahl-O-Mat on Twitter

Katharina Gerl, Kay Hinz, Stefan Marschall Contact: gerl@diid.hhu.de

ABSTRACT

The importance of social media as platforms for political information, mobilization and participation has increased in the last years. Beside social media, Voting Advice Applications (VAAs) which provide information about parties and their political positions prior to elections are popular online tools. Research shows that using a VAA stimulates interpersonal communication about politics which in turn can lead to wider political engagement.

Since little is known about the political communication of VAA users, we looked at the interplay of using the German VAA Wahl-O-Mat and the communication about the tool on Twitter. Using the case of the federal election in North Rhine Westphalia in May 2017 we analyzed a) how much resonance the Wahl-O-Mat got on Twitter and b) what content VAA users share with their Twitter networks.



Katharina Gerl is a post-doctoral researcher at the Düsseldorf Institute for Internet and Democracy.

Kay Hinz holds a PhD in Communication and Media Science from Heinrich-Heine-University Düsseldorf.

Stefan Marschall is professor for Political Science at Heinrich-Heine-University Düsseldorf.

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Introduction

Voting Advice Applications (VAAs) have become well-established online tools in the field of political communication providing information about parties and their political positions prior to elections. VAAs assist and inform voters by comparing their policy preferences with the political stances of parties and candidates running for elections. The users are invited to mark their positions on a range of policy statements. After comparing the individual user's answers with the positions of each party/ candidate, the applications generate a result in the form of a rank-ordered list or a graph indicating which party or candidate is closest to the user's policy preferences.

Although VAA research has been flourishing in the last years, very little is known about the frequency and content of VAA users' communication about the tool. Addressing this research gap, we look at the interplay of using the Wahl-O-Mat, the most popular VAA in Germany, and the communication about the tool on Twitter, a social media platform which proved to be a relevant application for political communication and campaigning (Jungherr 2015; Hinz 2017).

Communication about VAAs as follow-up communication

Although we have empirical evidence that using VAAs results in more communication, there is almost no research that tries to take a closer look on how and what users communicate about their VAA experience. Instead, VAA effect studies are centred around direct and indirect as well as cognitive and behavioural effects (Garzia 2010, p. 23). This is in part because follow-up communication takes place in private or in closed settings, which are not easily accessible for researchers. This has changed over the last years. At least some parts of how citizens communicate about politics is now visible and thus analysable through social media platforms like Twitter. With our rather explorative research we connect to studies that deal with individual political communication online, for instance by examining user-comments or political communication on social media (Ziegele 2016). We can also link our research to studies that analyse event-based online communication (Jungherr 2014).

When dealing with VAA-related Twitter data, we face digital and online follow-up communication (Engesser 2013): Twitter communication is interpersonal or mass communication mediated through digital technology. This has several implications: First, Twitter communication is public in the sense that it is visible and traceable for others. Second, tweets might not necessarily be part of a "conversation". Nevertheless, a tweet can open up interactions with others and thus instigate an exchange, even though this might not have been the original intention. Third, this again has implications on the time dimension, as the conversations that emerge might not be synchronized with offline conversations. Fourth, we do not really know how the media perception corresponds with tweeting about it on the temporal dimension. Still, the digital character opens the opportunity to trace and capture follow-up communication that is clearly related to and triggered by the Wahl-O-Mat.

Twitter communication can address a specific topic or event, related to a perceived media content, characteristics of the medium or the media content itself. Applying this perspective to digital followup communication about VAAs, we expect users to tweet about

- the policy issues presented in a VAA,
- the parties participating in the election,
- the parties' positions/perspectives on the list of statements,
- the voting advice the tool issues or
- the general quality of the tool (usability, design etc.).

Turning to our specific VAA case in question, the Wahl-O-Mat usually has several integrated options that allow for sharing the link to the tool (via Facebook, Twitter, E-mail) or to one of the policy issues (via Twitter and E-mail). Due to this feature, we expect tweets that inform about the tool as well as tweets that discuss policy issues presented by the tool to make up the largest share of the digital follow-up communication about the Wahl-O-Mat on Twitter.

Tweets about the Wahl-O-Mat could be sent out in a directed or undirected way. Employing the @-operator, users can specificly address persons within or outside their personal networks. Using the hyperlink structure of the web, tweets about the Wahl-O-Mat can also include links to other websites that offer additional information. Regarding the functions of follow-up communication, tweeting could be regarded as an attempt to influence the opinion-formation process of others. Especially in the context of elections, tweets that inform about the tool can have the character of "get out the vote" (GOTV) calls for action. Mobilising tweets like this be combined with recommendations to vote for and/or to discredit parties.

VAA research shows that these tools are used to get political orientation, to get a recommendation about which parties match a users preference best or to approve an already existing party preference/ voting intention. Thus, the result of using a VAA could be (a) surprising, (b) supportive/affirmative or (c) contradictive to an already existing party preference. Accordingly, users might tweet differently about their Wahl-O-Mat result: They could express astonishment, identification or satisfaction as well as irritation or dissatisfaction with it. In the latter case, the communication could be framed by generally questioning the competence or quality of the Wahl-O-Mat, which is one typical strategy to cope with cognitive dissonance. Since irritation can also result in reconsidering a given voting intention, tweets could also give voice to cognitive processes of this kind (Israel et al. 2017).

Data & Methods

For examining the quantity and quality of Wahl-O-Mat-related digital follow-up communication on Twitter, we conducted a resonance analysis (quantity) and a content analysis (quality). We draw our data from the Wahl-O-Mat for the state election in North Rhine Westphalia 2017. The data collection started on the 24t^h of April and lasted until the 14th of May 2017. It covers the three weeks between the online launch of the Wahl-O-Mat and election day. For measuring how resonance and content of tweets concerning the Wahl-O-Mat developed within these three weeks, the time of investigation is divided into three periods of seven days each. To have a point of reference for our analyses, we included the week prior to the the online launch of the Wahl-O-Mat and the week after the election (see Figure 1).

Tweets are collected by means of the social media monitoring tool TAGSv6.1. This tool gathers all tweets with keywords of interest within a defined period of time. In our case, every public tweet and retweet that was posted between the 24th of April and May 14th that contained the expression "Wahl-O-Mat" or "Wahlomat" was captured. Tweets that refer to elections other than the state election in North Rhine Westphalia were excluded from the data set. Consequentially, we collected all tweets during the three weeks – resulting in a complete survey of Twitter activities related to the VAA.

Resonance is measured by the frequency of mentions of the Wahl-O-Mat. The amount of tweets shows the resonance of the Wahl-O-Mat, while the number of retweets indicates the resonance of the communication about the Wahl-O-Mat. Observing the development of the resonance over time, we can analyse to which extent users communicate about the Wahl-O-Mat via Twitter.

In terms of resonance, we analysed the following aspects:

- overall amount of tweets related to the Wahl-O-Mat,
- development of resonance over time,
- relation between tweets and retweets,
- salience of tweets concerning the Wahl-O-Mat compared to other topics discussed on Twitter.

We also investigated on how many days within the examination period the Wahl-O-Mat belonged to the Top 50 discussed topics on Twitter. These data have been collected using the social media monitoring tool Trendogate.

The content of tweets is analysed applying a coding scheme that stems from theoretical considerations about digital follow-up communication about the Wahl-O-Mat. Tweets were coded by seven different persons. 20% of the tweets (425 tweets in total) were randomly chosen for being coded by two different coders. The intercoder reliability accounted for 93.3% (values ranging from 91.7% to 95.4%) – indicating that the coding scheme generated largely identical results independent of the respective coding person.

The tweets were coded manually and categorised according to their content. Other factors, e.g. facets of the Twitter profile of the users like names, gender or self descriptions, were not part of the analysis. In contrast to the resonance analysis, retweets were not coded for the content analysis. Often, tweets are not shared because of their content but because of the person who posted the tweet. If tweets of well-known and strongly connected Twitter users are retweeted often, these tweets would be overestimated within our content analysis. Tweets that were no longer retrievable were also removed when we analysed the data sometime after the election day.

The coding scheme comprises three main categories with several sub-categories. The first main category covers tweets that refer to the content of the Wahl-O-Mat. The second comprises tweets that are used to share the Wahl-O-Mat result. We have generated a separate category for those tweets because of the relevance of this feature to the users. Elements of interactivity and mobilisation were coded within the third main category. Since these categories are not mutually exclusive, one tweet can be assigned to more than one category.

The content of a tweet was coded in the following way:

Reference to Wahl-O-Mat Content

- mentioning one or more parties,
- referring to a statement of the Wahl-O-Mat in a direct or indirect way,
- criticising the Wahl-O-Mat, its relevance or its statements,
- focussing on parties' statements on the theses in a direct or indirect way.

Self-expression

Sharing the Wahl-O-Mat results

- without a subjective assessment of the result (neutral),
- indicating satisfaction with the result and the recommended parties (positive),
- refusing/criticising the results and the advised parties (negative).

Interactivity, Networking and Mobilisation

- @-messages in tweets regarding the Wahl-O-Mat,
- calls for using the Wahl-O-Mat,
- calls for taking part in the election,
- including a link to the Wahl-O-Mat website,
- including links to external websites such as parties or mass media.

Tweets that cannot be categorised into one of these categories are summarized in the category "Not to be assigned"; 13.9% of all tweets have been allocated in this category.

Findings

During the investigation period, we gathered a total of 2,122 tweets and 2,343 retweets with respect to the deployment of the Wahl-O-Mat. For resonance analysis, all tweets and retweets are taken into account.

With resonance analysis, we intended to examine the "Twitter prominence" of the specific Wahl-O-Mat from its online launch until election day. As shown in Figure 1, the resonance on the Wahl-O-Mat varies strongly over time.



Figure 1: Total amount of tweets and retweets referring to the Wahl-O-Mat

Most tweets were published during the first days after the online launch of the Wahl-O-Mat. While 1,274 (60% of all tweets concerning the Wahl-O-Mat) were published during the first week, there were only 277 tweets during the second week. The total amount of tweets more than doubled again in the last week before election day, with 571 tweets mentioning the Wahl-O-Mat, accounting for 27% of all collected tweets.

To examine the public attention of the online launch of the Wahl-O-Mat and the mobilising power of the election day, we monitored two reference periods: The week before the online launch of the tool, only 79 tweets mentioning the Wahl-O-Mat, the week after the election 137 tweets addressed the tool. Obviously, the tool gets most attention in the days right after its online launch. The rising amount of tweets shortly before election day shows that communication about the Wahl-O-Mat on Twitter is very much related to this upcoming event.

The distribution of tweets and the degree of interac-

tivity can be measured by the amount of retweets. Like the amount of tweets, the total number of retweets drops significantly from the first week to the third week of the investigation period: Beginning with 1,643 retweets in the first period, there were 408 in the second and only 302 in the third period. This decline in retweets and interactivity is plausible since the amount of retweets depends on the overall amount of tweets in the first place. Therefore, the relation of tweets to retweets becomes relevant. In the first and the second period, there were higher amounts of retweets than tweets. On average, every tweet got 1.3 retweets in the first period and 1.5 retweets in the second period. In the third period there were only about half as many retweets as tweets. It might have occurred that tweets had not been retweeted in the same examination period; however, in online communication, 88% of reactions to a posting, and similarly to a tweet, happen within one day (cf. Google/IPSOS OTX MediaCT, p. 23).

This overall resonance can be put into perspective by comparing the amount of communication about the Wahl-O-Mat on Twitter before the 2017 state election in North Rhine Westphalia with other topics discussed on Twitter at the same time span. The social media monitoring platform Trendogate publishes the Top 50 discussed topics on Twitter for each day. In the 21 days of the examination period, the Wahl-O-Mat was only part of the most relevant Twitter topics in Germany: On April 24th 2017, the day the tool went online, it was ranked the 28th most tweeted topic in Germany. That day, only five topics with political context, for example names of politicians or policy fields were discussed more often. The following day, the Wahl-O-Mat rose to the second most discussed political topic on Twitter in Germany. In terms of all discussed topics on the platform the tool was ranked 4th most discussed topic.

After reporting findings on the overall resonance of the tool, we take a closer look at what Twitter users communicate about the Wahl-O-Mat to gain insights into the quality of the digital follow-up communication. In total, we analysed 1,817 (85.6%) of 2,122 tweets gathered; 305 were excluded in the process of data cleansing.

The content analysis shows that tweets predominantly contain criticism of the tool itself, its functionality, relevance and the policy issues chosen. 13%

(n=241) of all tweets were assigned to this category. Although the tool offered the possibility of sharing single theses/policy issues with other users on Twitter, this feature was not used frequently (n=143, 7.9% of all tweets). Both in absolute and relative terms, the number of tweets that comment on the policy issues declines over time: Starting from 122 tweets in the week after the tool went online (12% of all tweets in that week) the numbers drop to 13 tweets in the second period (5.2%) and eight tweets in the week prior to the election (1.5%). Thus, the largest amount of tweets that comment on the policy issues presented in the Wahl-O-Mat was posted in the first week after its online launch - indicating that the policy issues might simply lose their news value over time. The issues that triggered the most follow-up communication addressed whether or not politics should financially support projects against right-wing extremism, whether the state should completely cover the cost of public day-care and whether huntsmen should be allowed to shoot stray cats.

The same dynamic can be observed for tweets about the statements of the parties justifying their positions on the statements (see Figure 2). Overall, 108 tweets were assigned to this category, i.e. 5.9% of all collected tweets. Reading the party statements and commenting on them is more demanding compared to the others types of follow-up communication we analysed. This may be one explanation for the comparatively small amount of tweets in this category. The number of this type of tweet declines constantly from 87 tweets in the first week (8.5% of all tweets in that week) to 16 in the second week (6.4% of all tweets in that week) down to only five tweets in the last week of the investigation period (0.9% of all tweets in that week).

Figure 2 shows the distribution of tweets related to content or characteristics of the Wahl-O-Mat over time. We find the same pattern here as in the resonance analysis: each category has the highest numbers in the first week followed by a decline in tweets in the second week and a modest rise in the third week of the investigation period. But, putting the absolute numbers in perspective shows that the relative amount of tweets containing criticism is higher in the second week (18% of all tweets) than in the first (14% of all tweets) or the third week (9%).





Figure 2: Numer of tweets addressing Wahl-O-Mat content

Sharing the voting advice the Wahl-O-Mat provided represents the most tweeted content: 693 tweets were coded in this category, which is a share of 38% of the total tweets. Looking at the distribution over time, we see that 508 (73%) of these tweets were posted during the first week after the tool went online. Within this first section of the investigation period, this makes up for nearly 50% of all tweets. After the first week, the relevance of tweets that share Wahl-O-Mat results drops significantly compared to sharing other Wahl-O-Mat related content. In the second week, only 27% of all tweets were coded as communicating the VAA result while in the week prior to the election this share drops to 22%.

The confrontation with the result can trigger surprise, compliance or refutation that could find its expression in the follow-up communication. We examined whether and how the users that posted their Wahl-O-Mat result indicates one of these reactions. Our analysis shows that the neutral presentation of the result is the predominant way to tweet the result (see Figure 3). 311 (45%) out of the 693 tweets were coded as "neutral" followed by 253 tweets (36%) coded as "positive" evaluations of the result. "Negative" comments make up for the smallest share of tweets, which were related to the Wahl-O-Mat result. Only 129 tweets (19%) were coded accordingly. On first glance, this distribution might indicate that a larger part of the users get advice that corresponds to their party preference. On the other hand, it could be that receiving a perfectly matching Wahl-O-Mat result reinforces the willingness to express oneself publicly - as opposed to advice which contradicts preexisting preferences and irritates the voters. Still,

these are open questions.

Like for the other types of Wahl-O-Mat stimulated follow-up communication, the largest amount of tweets coded in this category were posted in the first week after the tool went online. 50% of all tweets of this type were posted during that period. In relation to the total number of tweets, this makes up for 11% of tweets in the first week. Over the whole investigation period, the relative amount of tweets in this category was comparatively stable and even modestly increasing with 14% in the second week and 13% in the last week.



Figure 3: Number of tweets sharing Wahl-O-Mat results

We were also interested in the networking and interactions between the users that tweeted about the Wahl-O-Mat, since this is a key aspect of social media. Interaction rates are important for the diffusion and reach of the communication about the tool within the Twitter network. Although tweets with @-mentions are directed to single users, they are not only visible for the interacting partners but to all followers of this person. This means that a high number of @-mentions increases the chance that a topic "goes viral". For tools such as the Wahl-O-Mat, this creates external effects such as an increase of knowledge about the tool and its usage.

One third of all tweets (n=606) were using the @-operator which means that they were proactively directed at other users or were referring to others (see Figure 4) indicating that the digital follow-up communication about the Wahl-O-Mat was at least to a small degree integrated in a network structure and not self-referential.



42% of all tweets were interactive. In relation to all other tweets, tweets with interactive features were mostly sent out in the second week of the investigation period. In contrast to the other forms of tweets, interactive tweets are less or only indirectly triggered by the events such as the online launch of the Wahl-O-Mat – but chiefly by peer-to-peer communication.



Figure 4: Numer of tweets containing @-messages

Tweets about the Wahl-O-Mat can serve to raise awareness about the tool or the elections. We therefore examined if Twitter users try to mobilise others. We coded whether users (a) explicitly mobilise others to use the Wahl-O-Mat with/without direct links to the tool and (b) mobilise others to use the Wahl-O-Mat and to take part in the election, (c) inform about the Wahl-O-Mat without including a link to the tool but other information related to the election (media coverage, events etc.).



The most frequently used mobilising form of communication is posting a link to the tool. In line with our expectation, this might be ascribed to the sharing functionality the Wahl-O-Mat website offered. 343 tweets (19% of all tweets) contained a link to the tool. The number of mobilising tweets seems to be correlated to the proximity of the election day: 35% of all tweets within the week prior to the election are coded as being linked to the tool compared to only 11% in the first week and 16% in the second week. The same dynamic can be observed for tweets that call for using the Wahl-O-Mat without linking the tool and for tweets that are providing links to external in-formation. 297 tweets (16% of all tweets) contain calls for using the tool without linking to it. During the investigation period, the amount increases from 8% in the first week over 26% in the second and 28% in the last week. Mobilising tweets that link to further information were coded 188 times (10% of all tweets).



Figure 6: Wahl-O-Mat tweets by content.

GOTV mobilising efforts did not increase with the same intensity as the other forms of mobilising tweets. 6% (n=113) of all tweets were coded as efforts to mobilise others to vote. The relational amount of tweets increases from 3% in the first week to 12% in the second week and dropped to 9% in the last week. Overall, the distribution dynamic we found for the other categories is reversed for the case of mobilising tweets – except for mobilising tweets that call for voting (at least in relative numbers). Figure 6 outlines the overall distributions for all categories applied for the content analysis.

Conclusion

The aim of this study was to explore VAA-stimulated digital follow-up communication by analysing (a) the overall resonance the tool receives on Twitter and (b) what kind of content was communicated in the tweets relating to the VAA. For our case study, we drew on the Wahl-O-Mat which was offered for the state elections in North Rhine Westphalia in 2017.

In the weeks after the launch of the Wahl-O-Mat, we could register a permanent Twitter communication related to the tool. The usage of the Wahl-O-Mat triggers digital follow-up communication in different ways ranging from simply informing about the tool to mobilising efforts. The most predominant form of Wahl-O-Mat stimulated follow-up communication is posting and commenting the voting advice the tool provided. Moreover, it seems that Twitter users are more likely to communicate their result if it matches their political preferences.

With regard to the temporal dimension, the digital follow-up communication has its peak close to the online launch of the tool. This is true for eight out of the twelve dimensions coded. Only mobilising tweets show a different dynamic: Here, another event – the upcoming election – additionally triggers communication about the Wahl-O-Mat. This distribution might tell us something about VAA user dynamics as well when we assume a correlation between using the tool and communicating about it.

Taking the growing relevance of social media as part of the political public sphere into account, we assume that our approach is instructive for VAA research, as online social networks can serve as a resonance space for this tools and their effects. From the viewpoint of those who design and implement VAAs, the user perspective collected on social media might be relevant in terms of evaluating and improving their tools. Voting Behaviour: An Overview. In: L. Cedroni & D. Garzia (eds): *Voting Advice Applications in Europe. State of the art* (pp. 13-47). Napoli: CI-VIS s.n. c/Scriptaweb.

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