Structural Patterns in the Rise of Germany’s New Right on Facebook

Sebastian Schelter  
Technische Universität Berlin  
sebastian.schelter@tu-berlin.de

Felix Biessmann  
felix.biessmann@gmail.com

Malisa Zobel  
Europa-Universität Viadrina, Frankfurt (Oder)  
zobel@europa-uni.de

Nedelina Teneva  
University of Chicago  
tteneva@uchicago.edu

Abstract—In the last years a new right-wing, populist and eurosceptic party emerged in Germany, the Alternativer für Deutschland. Topics that were used by the party to draw attention to their program included the Euro-crisis and the so-called ‘refugee crisis’. We investigate some aspects of social media use of the AfD. Our goal is to relate the rise of this party to some quantitative measures of their social media usage. A particular focus will be placed on users that interact with AfD content as well as with content of other parties. Our analysis is based on more than 11 million interactions of more than one million users with the public Facebook pages of the major German political parties during the years 2014 and 2015. Investigating the time courses of social media activity and user interaction, we find that the rise of the AfD can be associated with an amount of social media coverage and user engagement that is unprecedented in the German political landscape. One main effect of this campaign is a substantial increase of user interactions with other parties from the right spectrum, suggesting a migration of voters from established right wing parties. In order to better interpret the dynamics of social media activity, we relate the analysed metrics to the textual content of the posts and classical survey data. These results suggest that the intense use of social media platforms poses a major success factor of this newly emerging right-wing party.

I. INTRODUCTION

Political parties increasingly leverage online social networks to propagate their policies and draw attention to them. One party in the German political landscape that was particularly successful in gaining attention and votes in recent years is the Alternative für Deutschland (english: Alternative for Germany or AfD) [1]. As this party is very young it is difficult to assess what policies it stands for. Knowing the policies and ideas of a party however is of paramount importance when it comes to voting for them. Political scientists are actively debating on where in the political spectrum this party should be positioned [2]. One aspect that is in the focus of these studies is how the AfD leverages social media in order to gain attention. In this paper, we investigate some aspects of the AfD social media activity that could help understanding where in the political spectrum the party stands and how this standing evolved.

Our analysis is based on more than 11 million interactions of more than one million users with the public Facebook pages of the major German political parties during the years 2014 and 2015. We combine these Facebook data with data obtained form surveys and news papers for improved interpretation. Our results demonstrate that activity of the AfD on social media, and in particular on Facebook, constitutes a main factor in the success and the political evolution of the party. In the next paragraphs we will shortly highlight some of the main characteristics of the AfD. The following sections will then explain the data acquisition and preprocessing methods in section II the results will be presented in section III and we conclude and present some ideas for future research in section V.

A Short History of the AfD. The political life of the AfD began in September 2012 when a group of university professors (mostly from the field of economics) and former members of the Christian democratic governing party (Christlich Demokratische Union, CDU) founded an alternative voting list (Wahlalternative 2013). By July 2013, the party had attracted more than 10,000 members, had set up branches in all 16 states of Germany and reached 4.7% of the votes in the national elections. While this result only slightly missed the 5% threshold for representation in parliament, it was the best result of any party in their first elections since 1953. In the 2014 election for the European Parliament the AfD scored 7.1%, which translates to 7 seats, more than established German parties such as the FDP (liberal party) or CSU (bavarian charter of the christian democrats) obtained. The rapid rise of the AfD was accompanied by several internal debates related to leadership and ideological orientation, none of which seemed to have affected the popularity of the AfD. By the end of 2015, the party had unprecedented successes in three German state elections and had subsequently entered parliaments in these states. The AfD scores above 10% nationwide in representative surveys in the beginning of 2016, see [3].

AfD Ideology: Right-wing and Eurosceptic. The two main topics that helped this party in gaining attention were the financial crisis of the European Union in 2010 onwards [4] and the ‘refugee crisis’ that peaked in 2016. Both topics were ideally suited to attract voters that could not identify with the policies of the major established parties. The AfD has been described as right wing (soft) eurosceptic [2], but radicalized its platform since the exit of the more moderate wing around former party leaders Bernd Lucke and Hans-Olaf Henkel [4]. whose neoliberal economic ideas once led to the foundation of the AfD party.

See also http://www.bbc.com/news/business-13856580
While other European parties at the right end of the political spectrum, such as the Front National in France, are different from the AfD in that they have much stronger anti-EU opinions, the AfD exhibits similar ideas, such as ethnocentrism and xenophobia. The AfD also displays nativism which forms the ideological core of the radical right party family, and denotes a combination of xenophobia with ethnic nationalism and the perception that the ‘homogenous nation’ is under threat. In this vein the party heavily criticised the policies pursued by the German chancellor Angela Merkel in reaction to the high influx of Syrian refugees into the EU zone from 2015 onwards. The lowest point in this criticism was reached when AfD representative Beatrix von Storch advocated on Facebook to shoot children seeking asylum in the European Union, a heavily debated statement.

Social Media and the AfD. An important means of communication of the AfD are social media and in particular Facebook posts, (especially because German PR agencies refuse to work with the AfD). While the party has a regularly updated webpage, its Facebook activity appears to be much larger than the activity on the party website; on Facebook, the AfD usually tries to draw attention to news articles related to the party policy. These links and posts create an enormous amount of user responses in the form of likes and comments.

Previous studies have already analysed some aspects of these posts and comments, such as the most frequently mentioned words. In our study we aim at complementing these results by focussing on a comparison of the Facebook activity of the AfD and other parties. The idea is to gain some insights as to how the AfD uses social media, and in particular to analyze the temporal dynamics of user interaction on the page of the AfD and other parties. Such user interaction between the AfD and other parties is of interest because it points towards common interests and shared concerns. A overlap of users between the AfD and other parties might thus hint at potential competition for voters in certain segments of society.

II. DATA ACQUISITION

In order to obtain a representative sample across the political spectrum, we extracted the publicly available texts, comments and likes of posts on the Facebook pages of the AfD and the major German political parties Die Linke (a socialist left party), Die Grünen (the green party), SPD (the social democrats), CDU (the christian democrats) and NPD (extremist right). The structure of the data collected is sketched in Figure 1. Parties publish posts on their public Facebook page. Users then issue ‘likes’ for the posts, create comments on the posts and issue likes for such comments. We additionally extracted all hyperlinks contained in the textual contents of posts and comments, and crawled the corresponding external websites. Overall, we collect more than 11 million user interactions, occurring on 78,667 posts with 101,147 external links, in the years 2014 and 2015. Note that we could not determine the exact time of likes issued, therefore we assign them to the week in which the liked post or comment had been created. We think this is reasonable due to the short-lived nature of communications in social networks.

Texts of posts were tokenised and transformed into Bag-of-Words (BOW) vectors with thresholds on the document frequency. Words that occurred in more than 50% of the posts and words that occurred in less than 0.001% of the posts were discarded. This resulted in a vocabulary size of 178,709.

III. RESULTS

We first examined some basic properties of the data. The corresponding numbers in Table 1 show that the AfD is exceptional in terms of the most basic indicators of social media activity.

<table>
<thead>
<tr>
<th>party</th>
<th>posts</th>
<th>comments</th>
<th>likes</th>
<th>users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Die Linke</td>
<td>5,742</td>
<td>74,557</td>
<td>737,437</td>
<td>144,340</td>
</tr>
<tr>
<td>Die Grünen</td>
<td>10,031</td>
<td>85,797</td>
<td>581,874</td>
<td>191,022</td>
</tr>
<tr>
<td>SPD</td>
<td>1,811</td>
<td>105,234</td>
<td>691,105</td>
<td>111,583</td>
</tr>
<tr>
<td>CDU</td>
<td>1,033</td>
<td>133,426</td>
<td>647,348</td>
<td>84,316</td>
</tr>
<tr>
<td>AfD</td>
<td>55,586</td>
<td>422,052</td>
<td>3,666,894</td>
<td>306,724</td>
</tr>
<tr>
<td>NPD</td>
<td>4,464</td>
<td>378,537</td>
<td>3,791,557</td>
<td>532,999</td>
</tr>
</tbody>
</table>

Table 1: Party-specific interaction data used in our study.

In aggregate | 78,667 | 1,199,603 | 10,116,215 | 1,167,574 |

Figure 1: Schema of our collected data. Political parties publish posts on their public Facebook pages. Users write comments to posts and issue ‘likes’ for both posts and comments. Note that likes on comments issued on a party page do not necessarily translate to endorsement of the party, they can also be a side-effect of highly controversial discussions.

Von Storch later claimed that she had not intended to approve that statement, yet she had accidentally slipped on her computer mouse.

Some speculate that many of these likes are fake.

A single user can interact with more than one party, therefore the aggregate number of users amounts to less than the sum of the numbers of users per party.
more active users on its page than the AfD. In summary, these numbers demonstrate that the way in which the AfD uses social media to communicate is drastically different from other established parties. The party which is most similar in terms of number of comments, likes and user numbers is the extreme right NPD.

Despite the large numbers of the AfD in all of these metrics, there is one aspect in which the NDP, SPD and CDU rank higher: conversion of users, meaning the ratio of users interacting with posts to the number of posts. This could be due to the extremely high number of posts published by the AfD: more than 55,000, some of which obtain few or no comments or likes. The NPD published only less than 5,000 posts but these harvested over 3.7 million likes from more than half a million users (on posts and comments on posts taken together), more than any other party obtains, including the AfD. One possible explanation for this success in engaging users is that the NPD – or comments on posts of this party – create a lot of controversy and thus attract both users pro as well as against their opinions, hence stimulating discussions amongst users. This high conversion ratio of the extreme right NPD is comparable to that of the established parties, however these have much lower absolute numbers. This effect is also reflected in the probability of likes and comments on the party Facebook pages. In [Figure 2] we plot the cumulative distribution of the probability (y-axis, logarithmic scale) of a given number of likes or comments (x-axis, logarithmic scale). Almost all posts of the SPD, CDU or NPD obtain at least ten user interactions. For other parties, like the AfD (publishing an order of magnitude more than those parties), the probability of obtaining at least ten interactions is below 0.1, much lower than for established parties or the extreme right NPD. However there are weeks with an extremely large number of interactions, for both the AfD (e.g., eight weeks with more than 10,000 comments on posts), and the NPD (15 weeks with more than 5,000 comments per week), which differentiates those right wing parties from all other parties.

In the following, we investigate the aggregated interaction data in more detail by analysing their temporal dynamics.

B. Temporal Dynamics of Activity

Inspecting the temporal evolution of social network activity allows us to better understand the underlying trends. The weekly number of comments on posts, as well as the weekly number of users interacting with posts of each party is plotted in [Figure 3]. In order to ease visual inspection, we smooth the data with a centered moving average over four weeks, and plot the original data in a transparent dotted line in the background (Note that we apply this technique to all subsequent time series plots).

In these plots it is evident that overall, both NDP and AfD receive a much larger number of comments and user interactions than the other parties. The most obvious effect however is a strong bump in fall 2015 in the activity of all parties in the right spectrum, the CDU, AfD and NPD, with the peak being strongest for the AfD reaching a total of over 14,000 comments. This peak will reoccur in most other figures (plots).

C. Overlap in Interacting Users with the AfD

In our collected data, more than 13% of users (157,085 out of 1,167,574 users in total) interact with more than one party on Facebook. Analysing the overlap of users that interact with a pair of parties can provide some insights as to where in the political spectrum a party is positioned: parties that share the same users are likely to share interests, irrespective of the polarity of this interest. We emphasize that reducing all user interactions to a binary value is a crude approximation of user interests. Yet the simplicity of this approach allows us to aggregate over a large amount of data and thus gives a clear picture of overall patterns of social network activity. An in-depth analysis of the polarity and type of interaction is necessary to investigate the exact types of interests, and we consider more detailed analysis an important future research direction.

In [Figure 4] we show the time courses of the overlap of users interacting with AfD and other parties, in absolute counts (cf. Figure 4a), as well as in percentage of the number of users of the respective other party (cf. Figure 4b). In absolute terms the number of users that interact with both the
extreme right NPD and the AfD is highest by a large margin, reaching over 2,000 users that interacted on both party pages in fall 2015. This peak coincided with a pronounced peak in published posts and overall activity as shown in Figure 3. Interestingly when looking at the relative number of users the overlap with the christian democratic CDU is the largest: 15% of the users that interact on the CDU page also interact with the AfD page. These figures demonstrate that the social media activity of the AfD is successful in attracting the attention of both right spectrum parties, the extreme NPD as well as the governing, Christian democratic CDU.

The fact that the overlap between NPD and AfD is the highest in absolute terms is noteworthy. Apparently a pool of potential voters follow both parties, and a look at the most strongly covarying words (see Table II) points towards the refugee issue being a prime concern. Potential voters being faced with two parties sharing common positions might turn to the AfD as they appear more moderate and socially acceptable than the NPD. The latter has been labeled extremist and anti-democratic, therefore making it psychologically difficult to vote for them because of social desirability norms.

The large relative user overlap with the Christian democratic party CDU suggests that dissatisfied CDU supporters are following the AfD on Facebook. The right and more conservative flank of the CDU has long been discontent with chancellor Merkel’s move to the centre on a range of policy issues, but particularly the so-called ‘refugee crisis’ has estranged more right-leaning CDU voters. The feeling that the mainstream parties have converged on major policy has been associated with a rise in radical right voting in many countries, as those unsatisfied with the move to the center switch their alliance to the more extreme competitor (cf. [9], [10], [11]).

D. Textual Features associated with User Cointeraction

In order to better understand the cases when users interacted with the Facebook posts of the AfD and other parties, we examined the textual features extracted from the posts. For each week the texts of all posts and comments were concatenated and transformed into a bag-of-words representation. In order to investigate which content is associated with the increased cointeraction of users active on AfD and Facebook pages of the other parties, we ranked the BOW features extracted from the posts of each respective party according to their covariance with the overlap of interacting users (shown in Figure 4a).

The resulting top words (excluding names and stopworlds) are listed in Table II. Clearly the dominant topic is the so-called ‘refugee crisis’, indicated by the word flüchtlinge (refugees) and some other words representative for the parties’ view, e.g., gutmenschen (pejorative for do-gooder) for the extreme right NPD.

<table>
<thead>
<tr>
<th>Party</th>
<th>Top Words (on Facebook page of respective party)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Die Linke</td>
<td>flüchtlinge, pegida, griechenland, hartz, afd, links, türkei, rechts, syrien, nazis, waffen, hetze, banken</td>
</tr>
<tr>
<td>Die Grünen</td>
<td>flüchtlinge, islam, pegida, afd, nazis, muslime, grenzen, religion, türkei, syrien, asyl</td>
</tr>
<tr>
<td>SPD</td>
<td>flüchtlinge, ttip, mindestlohn, pegida, afd, hartz, sozialdemokratische, grenzen, griechenland, familien</td>
</tr>
<tr>
<td>CDU</td>
<td>flüchtlinge, kanzlerin, afd, grenzen, islam, asyl, heimat, Wähler, gesetz, volkes, syrien, grundgesetz, asylanten</td>
</tr>
<tr>
<td>NPD</td>
<td>flüchtlinge, ausländer, deutsch, raus, asylanten, islam, dumm, heimat, gutmenschen, grenzen, fresse, afd</td>
</tr>
</tbody>
</table>

E. Links and Link Content in Posts of the Parties

We extracted the links contained in the Facebook posts on the respective party pages to investigate to which external sites the posts were leading to. Table III lists the most frequent domains to which posts of each party were linking. Many links point to videos on Youtube, but most links referenced news articles or blog posts. Some of these were of a clear position in the political spectrum, as e.g. hasshilfe.de, an anti-racist initiative. Interestingly, the most popular links in the...
AfD context include German mainstream newspapers such as Die Welt, Der Focus or Der Spiegel, although many of the AfD’s supporters claim that they reject the mainstream media. It might be worthwhile to deeper investigate this finding in the future with respect to the polarity of the interactions.

We extracted the texts of all linked pages and transformed them into bag-of-word vectors, analogous to the post texts. The top covarying words (with respect to the user interaction time series in Figure 4a) of Facebook posts that covary most with the user interaction overlap between each party and the AfD (c.f. the time series in Figure 5) are shown in Table IV. Analogous to the actual texts of the posts, the dominant topic in the linked content is the ‘refugee crisis’.

F. Correlation with Weekly Poll Data

Most of the data analysed so far was collected from Facebook; these data are a very biased sample. Not all voters have a Facebook profile or interact with the Facebook page of a party. In order to get a more representative sample of the voting population of Germany, we compared the Facebook activity data with the representative surveys of Infratest Dimap. In their regular Sonntagsfrage (sunday poll), a representative sample of voters is asked What party would you vote for if next sunday would be national elections? The raw data is plotted in Figure 5 along with the user overlap figures from

<table>
<thead>
<tr>
<th>Party</th>
<th>Top Words (in blog posts and news articles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Die Linke</td>
<td>flüchtlinge, pegida, griechenland, hartz, afd, links, türkei, rechts, syrien, nazis, waffen, hetze, banken</td>
</tr>
<tr>
<td>Die Grünen</td>
<td>flüchtlinge, islam, pegida, afd, nazis, muslime, grenzen, türkei, syrien, asyl, nazien, griechenland, schuld</td>
</tr>
<tr>
<td>SPD</td>
<td>flüchtlinge, tüt, mindestlohn, pegida, afd, hartz, grenzen, griechenland,familien, syrien, lösung</td>
</tr>
<tr>
<td>CDU</td>
<td>flüchtlinge, kanzlerin, afd, grenzen, islam, asyl, volkes, bundeskanzlerin, syrien, grundgesetz</td>
</tr>
<tr>
<td>NPD</td>
<td>flüchtlinge, ausländer, raus, islam, heimat, gutmenschen, grenzen, religio, kultur, sprache, wahrheit</td>
</tr>
</tbody>
</table>
Figure 4b. The results of the survey are relatively stable until fall 2015, where the AfD scores just about 5% of the votes, which is the threshold for entering the parliament in Germany. The pronounced peak in user interaction overlap between the established parties (CDU/SPD) and AfD starts at the end of 2015, and coincides with a clear drop in the votes for the CDU and SPD, as well as a drastic rise in the votes for the AfD. These figures suggest that all the effects we observed throughout this study in the social network activity of the rising right wing party AfD and their interaction with other parties might be related to the dramatic change in the popularity of the German parties at the beginning of 2016.

IV. RELATED WORK

The rise of populist radical right parties in Europe has been extensively researched. While other countries, such as France, Denmark, Belgium, and Austria, have experienced high levels of voting for populist radical right parties, for a long time Germany seemed to have been an exception with regard to the radical right in Western Europe [2]. With the rise of the AfD, Germany now also becomes part of the ‘pathological normalcy’ [12]. The term denotes that populist right-wing ideology is a radicalization of mainstream values [12], such as ethnic nationalism, anti-immigrant sentiment and authoritarian values. These attitudes have been present within a segment of the population even before the rise of the AfD, but have not been represented within mainstream party politics before. Scholarship on the conditions of radical right success have associated it with a convergence of the mainstream parties on the left and right, leaving a representational gap for the radical right to move in [9, 10, 11]. (yet some are sceptical of this ‘convergence of the middle’ thesis [13]). Yet, Norris also admits that the strategies of all parties in the system matter in determining radical right party success [13]. Thus, if the grand coalition between the two major parties of the left and right continues and the immigration and refugee issue also continues to be salient the AfD will continue to be successful at the polls.

Furthermore, several researchers focussed on the activity of the German political parties on social media, e.g. Elter investigated social media activity with respect to the local elections in 2011, and (in contrast to our works) could not identify differences in the social media activity depending on the political orientation of the parties [14].

V. CONCLUSION AND FUTURE WORK

In this study we have analysed the social network activity of the AfD in the context of other parties with a special focus on user conteractions between pairs of parties and the temporal evolution of social network activity. Our results suggest that the position in the political spectrum of the AfD is between the extreme right NPD and the conservative right party CDU – as previously reported in analyses of the manifesto content of the AfD [2]. The comparison of the social network activity time courses with representative surveys on voting behaviour suggests that the social network activity is highly correlated with the strong increase in popularity of the AfD, as well as with the marked decrease in popularity of the governing parties CDU and SPD. In future work we intend to investigate the reported metrics in more detail with respect to controversy or polarity of user interaction. This will require more sophisticated analysis methods, but it could allow to gain more insight into the mechanisms that govern the observed user interaction patterns.

REFERENCES


