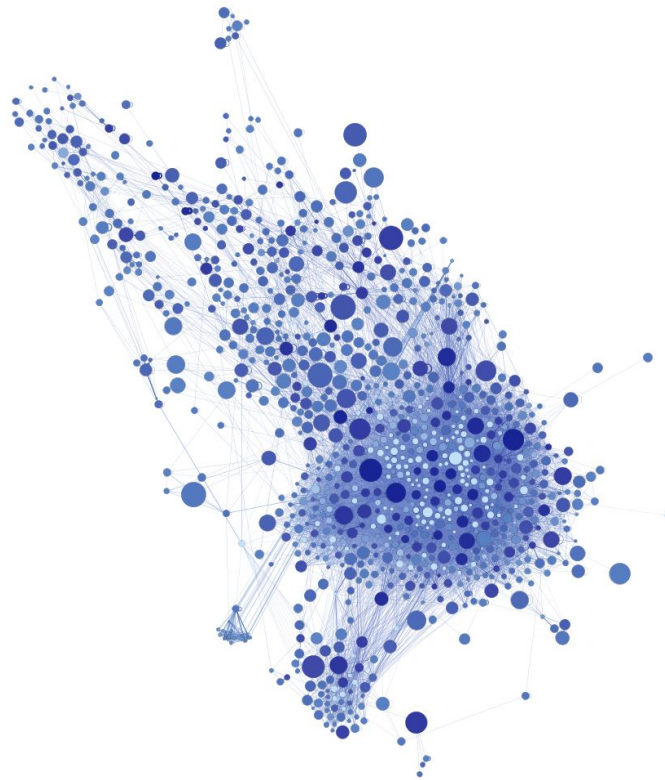# TWITTER COMMUNICATION AND THE 2019 EUROPEAN PARLIAMENT ELECTION

Actors and Network Structures

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INTRODUCTION

The European parliamentary elections are the second largest democratic elections in the world (after those in India). Every five years, voters in the member states – currently 28 countries – head to the ballot boxes to determine the composition of the European parliament, which votes on EU laws and elects the President of the European Commission.

The upcoming 2019 elections are especially contested. Far-right parties look set to win a much higher share of seats than ever before, and the two largest parliamentary groups are projected to lose their majority. The election will determine the fate of the European Union for the next five years, and potentially affect its future for much longer than that. To understand which actors and issues shape the discussion, we turn to social media.

Twitter is a social networking site that allows users to connect by publishing short messages called "tweets" up to 280 characters in length, and to "follow" each other to stay up to date with others' messages. They can also forward content they see to their own followers by "retweeting" it. The importance of Twitter in political communication has repeatedly been highlighted, for example by its use by US president Donald Trump.

Discussions between users who do not necessarily follow one another are facilitated on Twitter by the use of hashtags, which are words or phrases preceded by the symbol "#". The use of hashtags is encouraged by Twitter. Hashtags can be clicked, which takes the user to a page listing Twitter-wide search results for this hashtag. This is one of the most common ways for users to interact with content by people other than those they already follow.

This report examines which Twitter users are the most central to the English- and German-language 'hashtag' conversation about the upcoming EU Parliament elections, and which issues are the most prominently discussed.

THE DATASET

Key Facts	
Total number of tweets	643,182
Total number of accounts	168,948
Number of verified accounts	34,819 (20.6%)
Median number of tweets per author	8.931
Median number of followers per author	598
Median number of followees per author	694

Roughly 170,000 authors were responsible for writing the 643,000 tweets in the dataset, or about 3.8 tweets per author. Of the authors, only a minority (~20.6%) were verified accounts. Looking at the average statistics of the active authors, the dataset contains accounts that are, in general, rather active with almost 9,000 tweets per author (over the entire lifespan of the account) and 600–700 followers and followees per account (median).
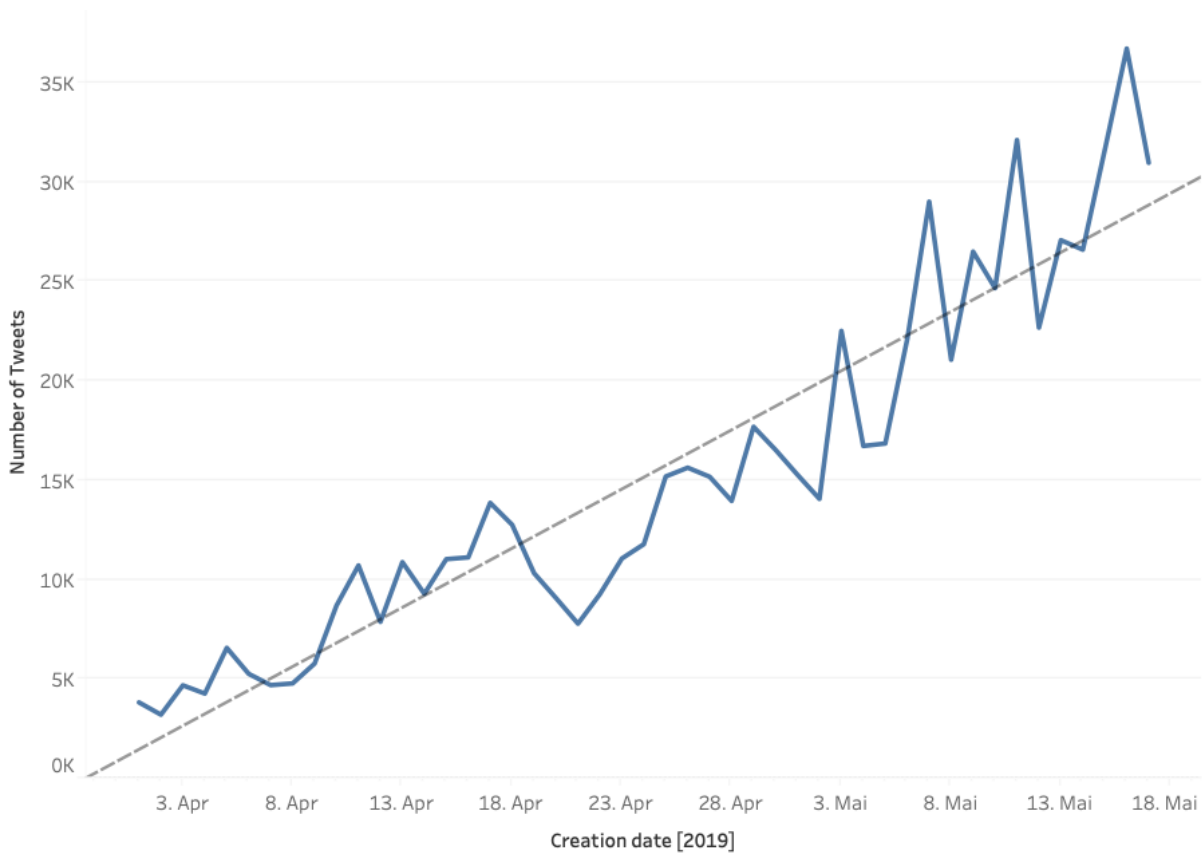
Looking at the daily tweets over time, their number increases as the date of the European election approaches. This can be seen as a clear indicator for an increase in interest in the event, which is mirrored by a heightened level of social media activity. The numbers (several dozens of thousands of tweets per day) further demonstrate the importance of the technology and its potential to serve as a vehicle of public opinion formation and discussions on political topics.

SOCIAL NETWORK ANALYSIS

German-speaking network

This visualisation shows the relationships between the most important accounts that were active in the German Twitter communication about the elections as a network graph. Users are shown as nodes (small circles), and the lines between them represent retweets, which are called edges. When a user retweets another user's tweets, a line is drawn from the retweeting user to the retweeted user. The size of the nodes represent the follower count of the user, i.e. the larger the node, the more followers the user has. The colour of the nodes further indicate how much a user has been retweeted by other users, i.e. the darker the node, the higher the retweet count. The position of the nodes in the network is determined by a physics-based graph layout algorithm in which nodes

repel each other by default but edges attract. This means that when nodes are close to each other in the network visualisation, they are likely to share many connections. Nodes that are only connected over long chains of other nodes tend to be far apart.

The German Twitter communication network consists of 46,184 nodes and 109,341 edges. In the graph, it can be observed that the network contains two main clusters. When looking at the positions of the German political parties in the network, one can see that only the right-wing party "AfD" (Alternative für Deutschland) is located in the top right cluster, while the other parties can be found in the bottom left cluster and are therefore more connected to each other. It can be assumed that the communication of the AfD and their supporters sets itself apart from the rest of the network. Another thing to remark is that parties such as the "FDP" (Freie Demokratische Partei) and the "CDU" (Christlich Demokratische Union Deutschlands), who have similar political opinions are positioned closer together, which means that they share many connections to the same users when it comes to sharing content.

Further, it is also visible that the party "SPD" (Sozialdemokratische Partei Deutschlands) is more likely to have connections to news accounts such as "Spiegel Online", "tagesschau" or "Zeit Online", as they are positioned very closely together.

When analysing the network in more detail, it is also visible that the accounts that were retweeted by the most users are "KeineAFD2017" (an account that vehemently opposes the right-wing AfD) and the official account of AfD themselves, which indicates that the German right-wing party and their content seemed to be very an exceedingly dominant and controversial topic.

English-speaking network

The English-speaking network consists of 116,956 nodes (i.e. users) and 271,617 edges (retweets). The shape of the graph indicates that one main cluster and several smaller sub-communities exist (e.g. in the lower left part).

In contrast to the German-speaking network, the dominant part of the English-speaking network has not been the communication by the political parties, but rather by journalists, official EU accounts and human-rights activists with Human Rights Watch, the EU Commission and Greta Thunberg (climate activist) being among the most retweeted accounts in the network. They are all located in the centre of the network. This cluster spreads to the upper right part, where numerous Greenpeace-related accounts could be identified.
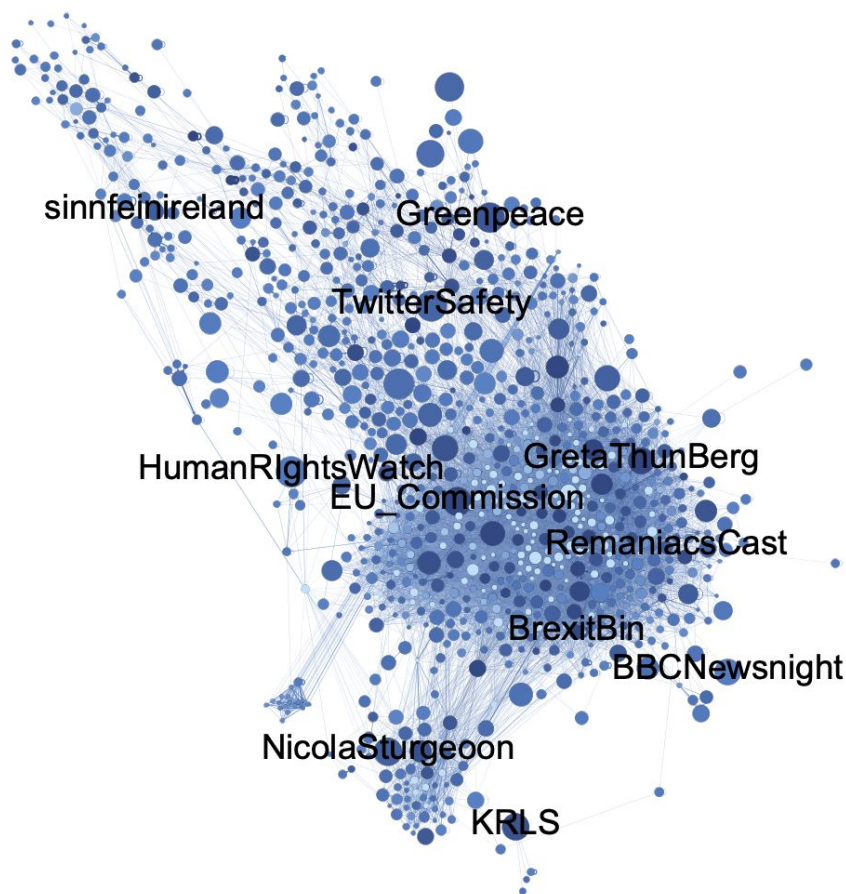
The smaller cluster in the lower left part mainly contains politicians (e.g. Nicola Sturgeon) and supporters of the Scottish Party "SNP" (Scottish National Party), which is a party that supports and campaigns for Scottish independence. Numerous users belonging to the Catalonian political environment, such as Carles Puigdemont advocating Catalan independence can be found there as well.

The bottom right corner mainly consists of British News Accounts (e.g. BBCNewsNight) and users that support stopping Brexit (e.g. RemaniacsCast or BrexitBin). This indicates that in this part of the network, the fate of the United Kingdom has been the main focus.

The upper left parts of the network are mainly dominated by Irish political parties and their supporters, such as the left-wing republican party Sinn Féin (sinnfeinireland).

In summary, it can be seen that the network structure is mostly shaped by differences in political views as well as countries, while the central parts of the network contains general discussions by journalists and human rights activists.

TOP ACCOUNTS

Most visible accounts

Top users by number of retweets received

#	Screen Name	Description	Times retweeted
1.	@guyverhofstadt	Head of the ALDE group in the European Parliament	17,638
2.	@BrexitBin	British expat, pro-Remain	12,652
3.	@GretaThunberg	Swedish climate activist	11,810
4.	@KeineAFD2017	German Account opposed to the right-wing party AfD	10,140
5.	@AfD	Official account of German right-wing party "Alternative für Deutschland"	9,875

An indicator of the reach of an account's messages is the number of retweets that the messages receive. These metrics can be seen as an approximation of the volume of an account's voice. The most retweeted account belongs to politician Guy Verhofstadt, a Member of the European Parliament for Belgium who heads the liberal ALDE group and is the European Parliament's representative on Brexit. The messages by the accounts on ranks 2–4 are equally of a liberal and democratic nature in support of a united Europe. The account with the second-most retweets explicitly opposes Brexit, while the third most retweeted account belongs to Greta Thunberg, a 16-years-old Swedish activist fighting climate change who garnered much attention from the media for initiating the Fridays for Future protests in Europe where school children took to the streets to voice their dissatisfaction with current climate policy. Notably, the last two accounts are directly connected, with the purpose of the account in position 4 (@KeineAFD2017) being to oppose the German right-wing to far-right party *Alternative für Deutschland* ("Alternative for Germany"), whose own account, in turn, is in the fifth position in this ranking.

Most active accounts

Top users by number of original tweets

#	Screen Name	Description	Original Tweets in dataset
1.	@KeineAFD2017	German account opposed to the right-wing party AfD	1,634
2.	@SUnterhaltung	Account "for a free internet", supports the German Pirate Party	726
3.	@cmwheatley56	British pro-EU supporter of the Liberal Democrats	571
4.	@chris_pyak	Candidate in the EP election of a minor socially liberal German party (NL)	539
5.	@MME7	German supporter of a minor ecologist party (ÖDP)	487

When looking at the most active user accounts, it should be kept in mind that accounts that rank highly in this list are not necessarily those which get the most attention, let alone are the most heard voices. The accounts rather posted the most original tweets within the tracking period indicating a high activity and possibly a high interest in the examined topic. The most active account in the dataset belongs to @KeineAFD2017, an account dedicated to opposing the German right-wing party *Alternative für Deutschland* ("Alternative for Germany"). The absence of right-wing or far-right accounts in the list of the most active accounts is notable. The accounts in the following four positions have different focuses such as a free and unrestricted internet (@SUnterhaltung), opposing Brexit (@cmwheatley56), supporting a socially liberal minor party (@chris_pyak) or an ecologist minor party (@MME7). Especially the two latter accounts which support niche parties can be seen as an indicator for a more active usage of social media channels by supporters and candidates of smaller parties. Whereas larger, more established parties may rely to a greater extent on traditional marketing, for the smaller parties social media are a cheaper and more convenient way to promote their interests.

Top users by number of retweets made

#	Screen Name	Description	Retweets made by account
1.	@SUnterhaltung	Account "for a free internet", supports the German Pirate Party	711
2.	@cmwheatley56	British pro-EU supporter of the Liberal Democrats	550
3.	@FBPETrundlelin	British expat, opposed to Brexit	459
4.	@MME7	German supporter of a minor ecologist party (ÖDP)	420
5.	@S4XON14	German opponent of right-wing and far-right activities	383

Three of the most active accounts by number of tweets in the dataset (@Sunterhaltung, @cmwheatley56 and @MME7) were also among the top five accounts that retweeted others' messages, again indicating a high activity for the tracked topic. Again, there were not far-right accounts among those that retweeted the most tweets. Their goals include a free internet (@SUnterhaltung), opposing Brexit (@cmwheatley56 and @FBPETrundlelin), supporting a minor ecologist party (@MME7) and opposing right-wing activities in the German federal state of Saxony (@S4XON14).

TOP TWEETS

Most favourited tweets

1. **@GretaThunberg**

   Favs in Dataset: 49,517

   "The top 5 most important issues for the #EUelections2019 :   1. Climate and ecological breakdown   2. Climate and ecological breakdown   3. Climate and ecological breakdown   4. Climate and ecological breakdown   5. Climate and ecological breakdown 6. Climate and ecological breakdown"

2. **@guyverhofstadt**

   Favs in Dataset: 8,980

   "Salvini's pro-Russian, far-right coalition is a threat to the prosperity of all European people. They betray our European values and we must unite to reject their hatred. #EP2019 #EUelections2019"

3. **@BirdLifeEurope**

   Favs in Dataset: 8,133

   "#IPBES7: What will the world look like in 2050? IT'S 👏 OUR 👏 CHOICE 👏. #EUelections2019 will have a direct impact on biodiversity. #IvoteNature #GlobalAssessment @IPBES https://t.co/yjT8IVo0h7"

Two of the creators of the most liked tweets are also in the ranking of the most visible accounts: @GretaThunberg is ranked second in the top 5 most visible accounts and @guyverhofstadt is the most visible one (in terms of retweets). However, none of the three accounts of the most liked tweets, including @BirdLifeEurope, are part of the top 5 most active accounts. Greta Thunberg is fighting for a change in climate policy and she initiated the Fridays for Future protests. Her post is by far the most liked tweet concerning the European election, comparing 49,517 "favs" to 8,890 and 8,133. @guyvershofstadt, who posted the second most frequently liked tweet, is a European politician who supports a united Europe. Curiously, the third most liked tweet is by @BirdLifeEurope. This account is neither extremely active nor visible. It aims to create awareness to protect the nature and especially focuses on the protection of birds.

Most retweeted tweets

1. **@GretaThunberg**

    Retweets in Dataset: 11,810

    "RT @GretaThunberg: The top 5 most important issues for the #EUelections2019 : 1. Climate and ecological breakdown 2. Climate and ecological breakdown 3. Climate and ecological breakdown 4. Climate and ecological breakdown 5. Climate and ecological breakdown 6. Climate and ecological breakdown"

2. **@PartisanDE**

    Retweets in Dataset: 3,612

    "RT @PartisanDE: More evidence how inhuman #Macron's #France is in 2019

    A disabled protester was humiliated by #regime forces, her walker was knocked out of hand. She fell down

    No comment of these violations of humanity from any #EU country

    #GiletsJaunes #EUElections2019"

3. **@FollowPolitics_**

    Retweets in Dataset: 2,425

    "RT @FollowPolitics_: POLL | Who are you planning on voting for at the European Elections if they go ahead in the UK?

    #Ridge #Marr #EUElections2019"

Similar to the most retweeted accounts, this list of the most retweeted tweets indicates which messages received the most attention and thus also which accounts – if only for this one tweet. The, by far, most retweeted tweet is the same as the most favorited tweet, indicating broad agreement with its message among Twitter users. 16-year-old climate activist Greta Thunberg demands a greater emphasis on climate protection and sees it as the most important topic in the EU election. It received more than double the number of retweets than the tweet in second place. The latter attacks French security forces for taking away a disabled protester's crutch, as could be seen in a video attached to the tweet. The choice of words indicates criticism of President Macron. It also complains about a lack of comments on the case by the governments of other European countries. The third most retweeted tweet revolves around Brexit, with the author posting a Twitter poll and asking which party the citizens would vote for in the case of European Elections in the UK. The top two tweets have in common that they contain emotional topics, be it climate change or injustice towards a disabled person.

METHODS

All data was collected using Twitter's Application Programming Interface (API). This analysis considers tweets in German or in English that contain at least one election-related hashtag and were published between 1 April 2019 and 17 May 2019. The following hashtags were included in the analysis: #EUElections2019, #EP2019, #Europawahl2019, #EUElections, #EUElection, #Europawahl, #EUWahl, #EUW19, #EP2019, #EE2019. The use of the first three hashtags is especially encouraged by Twitter. When one of them is used, a custom emoji also knows a "hashflag" is displayed next to the hashtag (). The other hashtags are also commonly used by Twitter users when discussing the European elections.