COUNTRY-LEVEL REPORT ON DRIVERS OF SELF-RADICALISATION AND DIGITAL SOCIABILITY

Germany

DARE
Dialogue About
Radicalisation & Equality

MARK DECHESNE,
ANNE BIRGITTA NILSEN
AND
NATHALIE PATON

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Country-level report on drivers of self-radicalisation and digital sociability

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Mark Dechesne, Leiden University

Anne Birgitta Nilsen, Oslo Metropolitan University

Nathalie Paton, EHESS

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Executive Summary

In this report, we present an empirical study from Twitter on how Islamist extremists and right wing extremists are active on Twitter. Our study was based on ethnographic, automatic text and network analyses of data from German female and male Twitter accounts.

General findings from our study on Twitter in Germany:

- Extremist views are expressed in texts, symbols, posters and images on some of the online profiles.

Findings from the analyses of the radical right on Twitter in Germany:

- Twitter plays a role in the lives of right-wing extremists, and the German data sample can be considered a digital milieu.
- The following themes generate engagement amongst the radical right: Islam, media and news incidents and white pride narratives.
- Signs of extremist positions are visible.
- The most influential Twitter user is the American president, Donald Trump.

Findings from the analyses of radical Islam on Twitter in Germany:

- Twitter plays a role in the lives of Islamist extremists but the German data sample cannot be considered a coherent digital milieu.
- The following themes generate engagement among Islamist extremists: hijab, Islamic concepts, God, Muslim prisoners and the Palestinian cause.
- Signs of extremist positions are visible amongst the women but less visible amongst the men.
- The most influential Twitter user is Mohamed Salah, a football player playing for Liverpool FC.

For both strands of radicalisation under consideration, the study did not provide us with any specific knowledge about drivers of self-radicalisation. We do not, for example, know for certain whether themes that create engagement, videos and texts shared on Twitter, serve as drivers of self-radicalisation. The study has, however, produced some indications that could be further researched through qualitative analyses to allow us to draw firmer conclusions

Possible drivers of self-radicalisation amongst the radical right on Twitter in Germany

- A collected digital milieu.
- Influencers, videos, images and texts promoting Alternative for Germany.
- Online conversations about Muslims.

Possible drivers of self-radicalisation amongst Islamist extremists on Twitter in Germany

- Influencers, videos, images and texts promoting jihadi-Salafism
- The staging and framing of radical online identities.
- Online conversations about the Palestinian cause.

1. Introduction

In this report, we present a study of digital sociability amongst supporters of radical Islam and the radical right as well as drivers of self-radicalisation on Twitter. The study is part of a larger study of media-assisted self-radicalisation, under the umbrella of the EU-financed project, Dialogue About Radicalisation and Equality (DARE).[1] The DARE project team has carried out the same type of study of digital sociability in the Netherlands, Belgium, France, Greece, Norway and Great Britain.

In this report, radicalism refers to the active support for fundamental – system-changing – political change (Schmid, 2013)[2]. Radicalism can relate to beliefs/attitudes or actions/behaviour and radicals are not necessarily violent. They might share characteristics with (violent) extremists (e.g. alienation from the state, anger over foreign policy, sense of discrimination) but there are also important differences (e.g. willingness to engage in critical thinking). Holding radical beliefs/attitudes means advocating sweeping political or religious change, based on a conviction that the status quo is unacceptable and a fundamentally different alternative is available.

Analyses conducted in this report followed a mixed-method approach. We present the findings from the initial ethnographic phase of the study as well as the results generated from quantitative and qualitative approaches that exploited the considerable amount of data retrievable via the big data approach pursued during the second phase of the investigation. The methodology used in this report is also used in other country level reports. This methodology is outlined the general introduction to this series of country reports.

The role of the Internet and social media in violent extremism has been a burning issue since Al-Qaeda first started actively employing the Internet (Thomas, 2003; Rogan, 2006), but especially after the rise and expansion of the so-called Islamic State (von Behr et al., 2013; Conway, 2012; Pearson, 2015; Klausen, 2015; Alava, Frau-Meigs and Hassan, 2017; Conway, 2017; Al-Rawi, 2017; Awan, 2017; Meleagrou-Hitchens and Kaderbhai, 2017). Recently, the rise of the extreme right has also attracted much attention with regard to Internet usage and social media in particular (Neudert, Kollanyi and Howard, 2017; Medina-Serrano et al., 2018) as well as their role in the self-radicalisation process (Koehler, 2014).

1.1 A note on concepts

In this report, in line with the DARE project as a whole, 'self-radicalisation' is defined as a process through which individuals become the instigators of their own radicalisation, eventually embracing attitudes – or engaging in actions – that support violence in the pursuit of extremist causes[3]. 'Drivers' of self-radicalisation include various online interactions that may contribute to the radicalisation process. In this study, the staging and framing of online identities, online conversation themes, events, influencers and networks are illustrative of such online interactions.

In studying online radicalisation, we encountered the challenge of finding appropriate labels for the samples under investigation. We selected the samples on the basis of specifics characteristics that are outlined in the general introduction to this series of country reports. However, we encountered difficulties finding suitable cases. This may in part be due to the measures that have been taken to reduce hostile language on Twitter. It may also be due to the absence of real extremist debate on Twitter. As a result, we experienced difficulty in providing adequate labels to describe the sample. On the one hand, the assumption has been that we are analysing extremist messages. On the other hand, the actual practice sometimes suggested that the expressions do not necessarily, uniformly reflect extremist or radical content. In this report, for the sake of consistency across the DARE project,

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[1] http://www.dare-h2020.org/

[2] http://www.dare-h2020.org/concepts.html

[3] http://www.dare-h2020.org/concepts.html

therefore our samples are referred to as 'Right-wing Extremist' (RW) and 'Islamist Extremist' (IS) respectively. However, throughout the report, we also critically reflect on the appropriateness of these labels.

1.2 Online radicalisation and extremism in Germany

In the summer of 2019, the Consumer News and Business Channel (CNBC) placed a news item on its website telling the story of American Twitter users who set their location to Germany (Feiner, 2019). The reason for this location change concerned German laws that prevent the online spread of hate speech, in particular speech pertaining to Nazism. It is believed that because of these laws, Germany provides an online environment that is relatively free of hatred and extremism. More generally, Twitter (more so than other social media outlets) is underused in Germany relative to countries such as the UK, the US and the Netherlands. But this does not mean that extremist expressions on social media do not exist in Germany. According to the official German Youth Care (*Jugendschutz*), the extreme right has an active presence on social media. Twitter is considered a 'beloved platform of online activity' (jugendschutz.net, 2018: 9). Twitter provides the extreme right the opportunity to share memes and images typical for the extreme (or alt-) right milieu. *Jugendschutz* specifically mentions the defamation of mainstream politicians as a key characteristic of the online extreme right in Germany. References are also made to a number of enemies and threats, foremost of which are immigration and 'Islamisation'. Anti-Semitic and anti-homosexual attitudes are also prevalent on such extremist platforms.

In 2019, the same *Jugendschutz* published a report on the presence of online Islamist propaganda (Jugendschutz.net, 2019). Politically active Islam – Islamism - was reported to have impacted Muslim youth in Germany by making connections between Islam and popular youth culture (in particular, mixed martial arts) as well as between Islam and youth concerns related to identity, belonging, recognition and discrimination against Muslims. The report also mentions various ways in which social media help spur Islamist interest. Such media are claimed to help activate 'a Muslim voice' against the prohibition of headscarves, spread a conspiracy theory regarding the origins and causes of terrorist attacks, and report on the Jihadi lifestyle.

According to a study by Reinemann et al. (2019), approximately 40% of youth between 14 and 19 years old encounter extreme-right content, and about one-third of these young people encounter extremist religious content. Moreover, 13% indicated that they encounter extremist online content on a frequent basis, and 5% indicated that they encounter extremist online content on a very frequent basis. A study by Koehler (2014) of former right-wing extremists underscores the central role the Internet has played in increasing commitment by some to extremist causes.

In Germany, substantial attention has been paid to redirecting online extremist messaging. Various academic centres and NGOs offer ideas and programmes intended to promote critical thinking skills and build resilience against conspiratorial and defamatory online content (Jugendschutz.net, 2018, 2019). In Germany, the presentation and the use of extremist signs and symbols has been made a punishable offence. The Federal Office for the Protection of the Constitution (Bundesamt für Verfassungsschutz, 2018) states that to counter right-wing extremism effectively the people's attention and commitment is required and has therefore published a report on symbols, signs and organisations related to right-wing extremism (Bundesamt für Verfassungsschutz, 2018).

This report describes the debates and actors involved in online radical Islam and radical right discourses on Twitter in Germany. The first section reports the key characteristics of the sample, the quality of the sample, and the levels and modalities of engagement in digital extremism for users in the sample. The next section describes the dynamics of the discussions that occur on Twitter by identifying narrative themes, the events that influence the narratives, influencers and sources of information. Then, network analyses are used to describe the relationships between actors in the debate. The last

section concludes by summarising the results and suggesting the implications of the research findings for the wider academic field to which they are directed.

2. Sample characteristics

This section describes the data sample used to investigate digital sociability and self-radicalisation in Germany. We detail the characteristics of the sample: the distribution, time periods of participation, volume of activity and modalities of participation.

2.1. Distribution and representativeness of samples

The analyses outlined in this report were based on 63 accounts (from 38 right-wing extremists and 25 Islamist extremists), as shown in Table 1 below, which specifies the exact number of men and women, as well as a category for those whose gender is unknown.

TWITTER ACCOUNTS IN THE STUDY FROM GERMANY		
38 RIGHT-WING ACCOUNTS	Men	23
	Women	12
	Unknown	3
25 ISLAMIST EXTREMIST ACCOUNTS	Men	9
	Women	15
	Unknown	1
TOTAL number of accounts		**63**

Table 1: Overview of sample

Relevant Twitter pages were scanned as far back as possible, with posts collected from 2010/02/18 to 2019/02/14. Figure 1 (below) provides an indication of the distribution of tweets across this timeline.
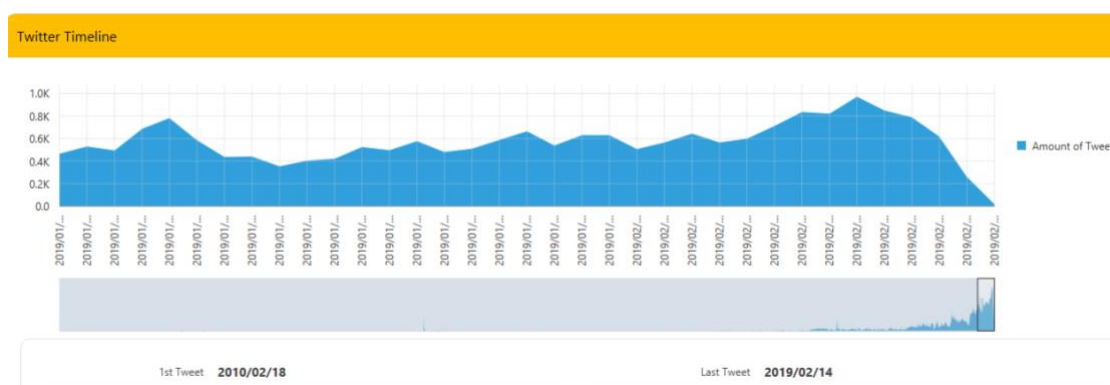
Figure 1: Distribution of tweets across timeline from 2010/02/18 to 2019/02/14

2.1.1 Representativeness of gender

The overall distribution was gender-balanced: 43% of the overall sample was female, 51% were male, and 4% were unspecified[4]. That said, the gender balance for each form of radicalisation was slightly skewed. The right-wing extremists (RW) included 12 women and 23 men, with the gender of an additional 3 accounts being undetermined. The Islamist extremist (IS) side included 15 women and 9 men, with the gender of 1 account being undetermined. Figure 2 below shows the details of the distribution.
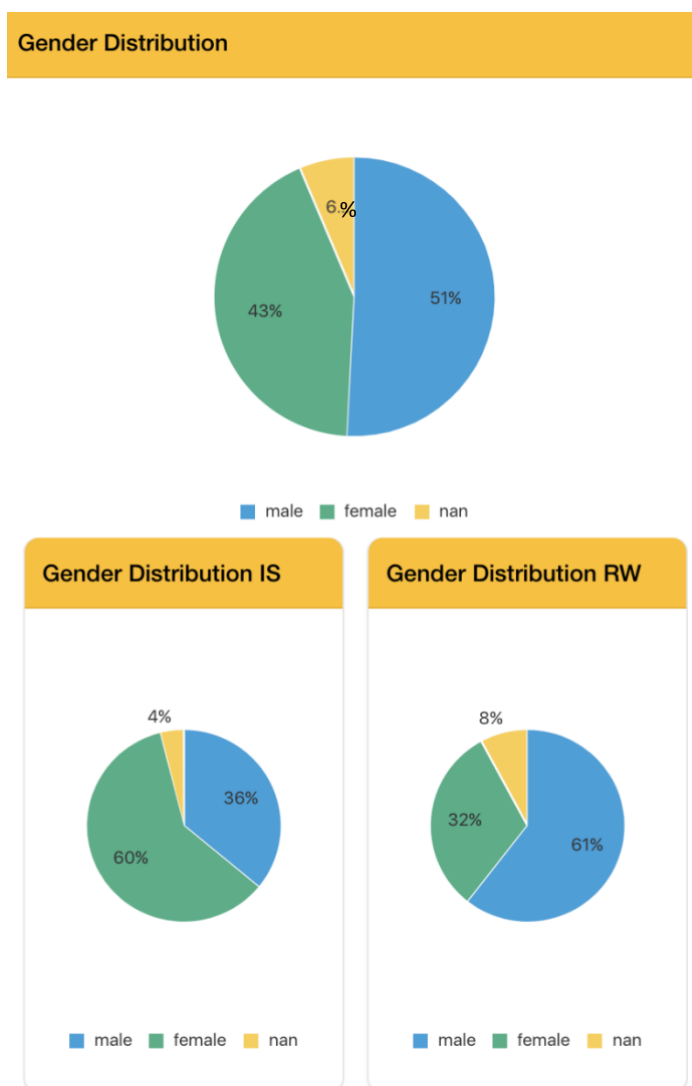
Figure 2: Gender distribution for both samples

2.1.2 Representativeness of radical ideologies

The German sample contained more right-wing extremist than Islamist extremist Twitter users: 60% of the sample were right-wing extremists (i.e. 38 accounts), while 40% were Islamist extremists (i.e. 25 accounts). In searching for Islamist extremists on Twitter, we faced difficulties identifying cases that

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[4] The label 'nan' in Figure 2 indicates that no gender was specified

fitted the criteria. As discussed later in the report, this may at least in part be explained by efforts to crack down on hostile and extremist content on Twitter.

2.1.3 Language distribution

The vast majority of individuals in the sample chose the German language as the default language of their account.

Within the German sample, 10% chose English as their primary language, while the vast majority of users (89%) chose the German language. A single user indicated Dutch as his/her primary language. Non-German speakers are about the same percentage for the Islamist extremist (IS) as the right-wing extremist (RW) sample. Non-German speakers accounted for 12% of the IS and 8% of the RW samples (see Figure 3)

Language Distribution

10% 2%

89%

■ nl ■ de ■ en

Language distribution IS

12%

88%

■ de ■ en

Language distribution RW

8% 3%

89%

■ nl ■ de ■ en
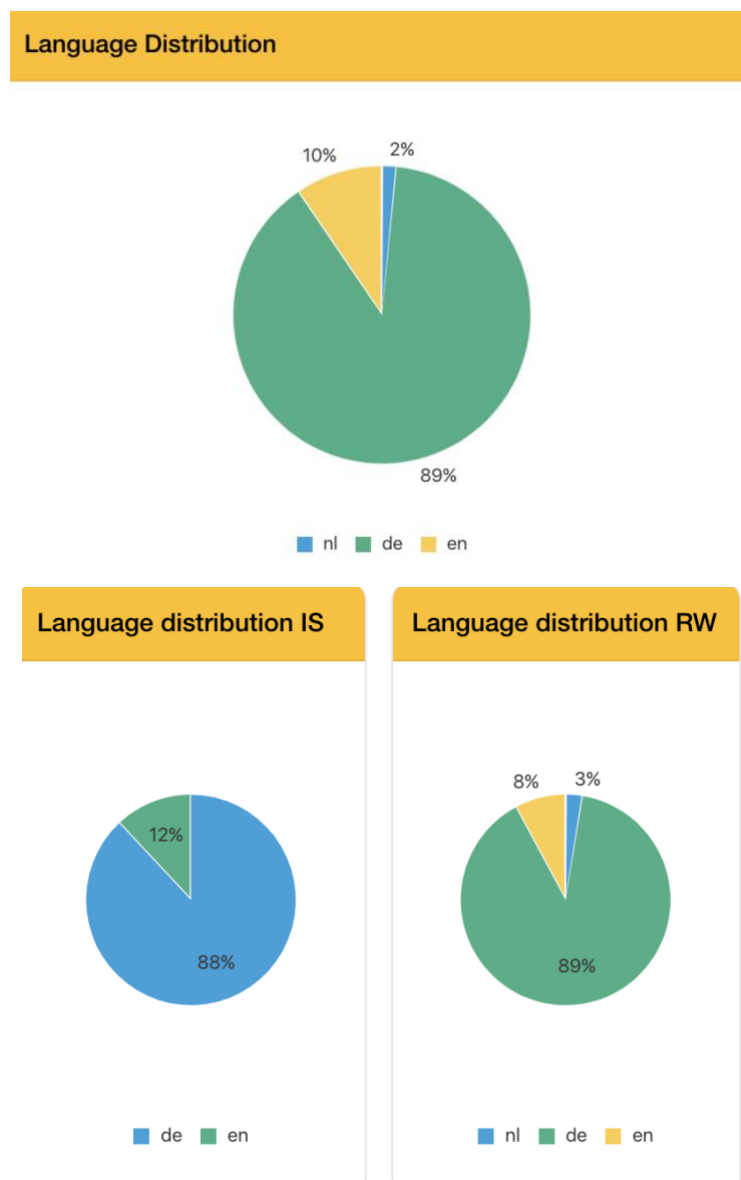
Figure 3: Language distribution of the samples

2.2 Time periods of participation

The data collection campaign on Twitter was intended to retrieve data from the beginning of any given account until the end of the data collection campaign (23 February 2019). Given that Twitter was launched in 2006, it is notable that the first tweets captured in this study were sent in 2010 (18 February, 2010). It should also be noted that the dates on which the accounts were created, or how recently they had been active, were not used as a selection criterion for the German case.

2.2.1 Longevity of participation

To obtain a better understanding of the time period of the general sample, we illustrate two timelines below, one above the other (Figure 4a and Figure 4b). Activity in this context refers to tweets and retweets. The first timeline covers a shorter period of time, ranging from August 2017 to February 2019, than the second timeline, which considers the entire range of tweets and retweets, going all the way back to 2012. Within the first timeline, we can see that activity is flat over several years, prior to 2017.
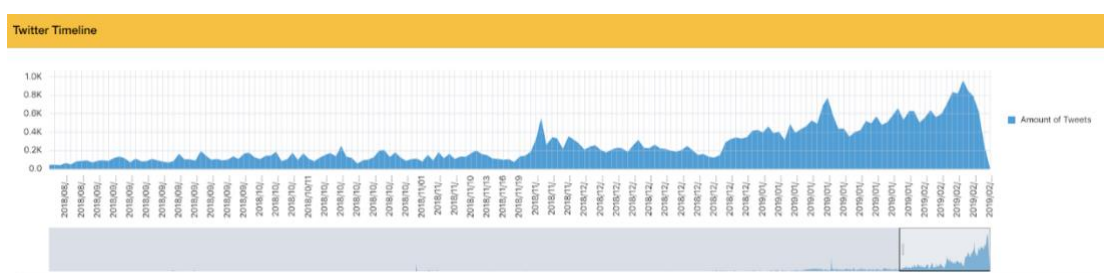
Figure 4a: Twitter timeline of activity for the whole sample with a focus on the most recent years
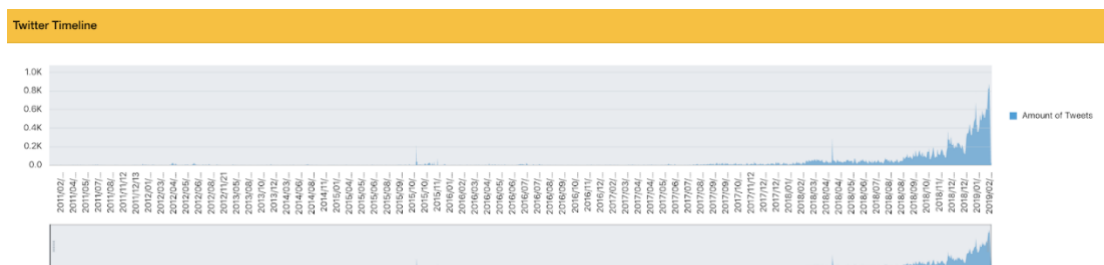
Figure 4b: The same Twitter timeline of activity for the whole sample zoomed out to present a better picture of the full period of time covered by the sample

We considered this timeline of activity separately for the Islamist extremist sample and the right-wing sample. In Figure 5, we observe, for the Islamist sample, scattered activity with a peak in April 2018. In Figure 6, we observe, for the right-wing extremist sample, a growing level of activity as we are closer to the present.
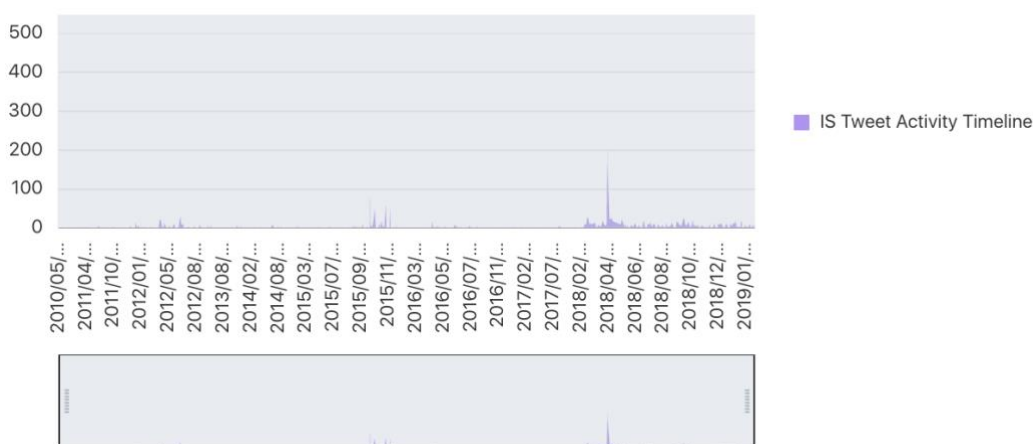
Figure 5: Timeline of Islamist extremist Twitter activity from 2010 to 2019

Figure 6: Timeline of right-wing extremist Twitter activity from 2014 to 2019

2.2.2 Differential focus on present-day phenomena

The Islamist extremist accounts tend to be older than their right-wing counterparts. For both types of radicalisation, the first tweets under study were published in 2010. The broad view of the activity timelines shown above illustrates the fact that the Islamist extremist content we discuss in this report covers publications ranging from 2010 to 2019, and additionally demonstrates irregular activity with a peak in April 2018 (especially on 15 April). In the right-wing case in the timeline above, activity is virtually non-existent until 2018, meaning that one or two accounts in our sample yielded this broad view of activity from 2014 to 2018, but that the vast majority of accounts only began posting content as of 2018.

2.3 Volume of activity and patterns of participation

To better understand the accounts selected, we considered the volume of activity of each sample and highlighted the levels of engagement as well as the homogeneity of behaviours.

2.3.1 Volume of tweets/retweets and levels of engagement

The 63 Twitter accounts examined in this report consists of a total of 23,016 tweets and 44,031 retweets. Tweets can be understood as original messages originating from a user, while retweets are those created by one user and shared by another. Our database consisted of 8,139 tweets and 3,130

retweets made by the Islamist extremist sample and 14,877 tweets and 40,901 retweets sent by the right-wing extremist sample.

Within the IS sample, users tend to tweet rather than retweet; the total number of tweets is significantly higher than the number of retweets. This could suggest that they use Twitter to put information out rather than connect with each other. However, even when correcting for the smaller sample size, the IS sample still tweet less often than the RW sample. This suggests that their preference for tweeting over retweeting does not indicate a higher level of engagement.

2.3.2 Homogeneous vs. scattered patterns of behaviour

The right-wing sample was composed of users who tended to be active online or, at the very least, to actively produce a large volume of tweets, accounting for 50% of the total number of tweets in the sample - between 342 and 2,329 tweets. The same cannot be said of the Islamist extremist sample, which, on average, participated less frequently, with 50% of the total number of tweets - between 54 and 317 tweets.

More importantly, the right-wing sample comprised users who exhibited homogeneous behaviours, especially in comparison with the Islamist extremist sample. This trend becomes even clearer when one examines Figure 7 below. Figure 7 depicts a box-and-whisker boxplot,[5] representing the distribution and dispersion of the full dataset.
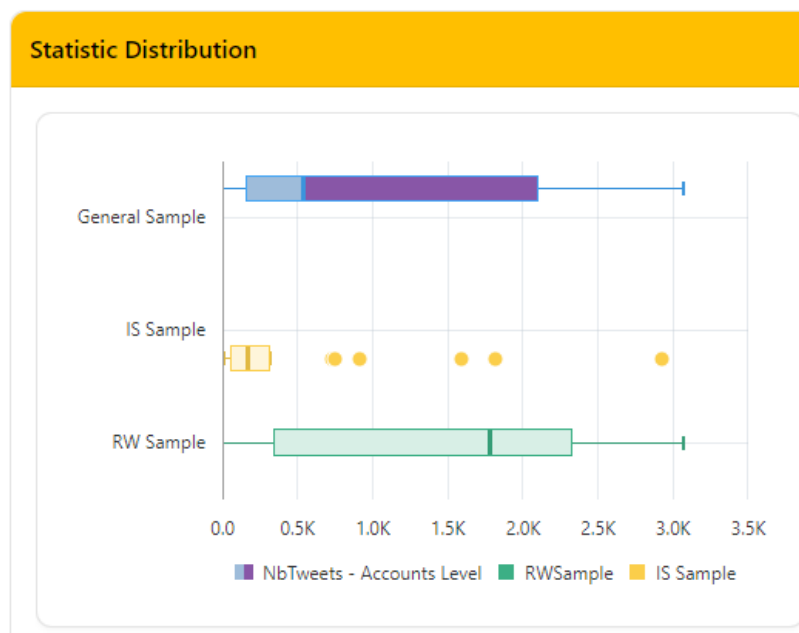
Figure 7: box-and-whisker boxplot representing distribution and dispersion

When examining the Islamist extremist boxplot side-by-side with the right-wing boxplot, the right-wing sample is compressed while the Islamist extremist sample is spread out. It should be noted that the more the surface of the rectangle is spread out, the more the dispersion of values becomes important. In the case of Islamist extremist accounts, it appears that a few accounts posted prolifically (indicated by the yellow dots in Figure 7), whereas a substantial part of the account showed infrequent activity.

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[5] This box-and-whisker boxplot provided information on how the overall sample was composed with regard to the lowest and highest number of posts for a single account within the whole sample, as well as the median level of posts, how dispersed or homogeneous the material was, and whether or not the accounts corresponded to a similar pattern.

Also, the more the rectangle is left-skewed, the less activity occurs, and vice versa. In the case at hand, the Islamist extremist boxplot is clearly left-skewed, while the right-wing boxplot is right-skewed.

In short, the analysis conducted via the boxplot shows that, on the one hand, with the right-wing sample, the dataset contains similar types of accounts, i.e. the sample is rather homogeneous; on the other hand, the Islamist extremist accounts are more diverse, heterogeneous and possibly poorly related to one another. Based on these findings, and the analysis above, it appears that the Islamist extremist sample cannot be understood as a single pattern of behaviour but instead comprises a wide range of individual practices and digital activities. Contributors within the Islamist extremist sample do not use Twitter in a similar manner.

Considering that the study was carried out after extensive banning campaigns took place on major websites, the absence of a clear-cut Islamist extremist phenomenon is unsurprising. However, this suggests that we are studying a sample that does not represent an actual phenomenon in itself but rather brings together a wide range of activities and possibly different formats of participation. The implications of this for how we research Islamist radicalisation online are discussed in Section 6 of this report.

2.4 Modalities of participation and levels of integration

Based on what we have just established regarding patterns of behaviour, we now turn to the exploration of modalities of participation to determine how people are participating in online environments. To do so, we examine in more detail *how* people are using Twitter. Are they posting original content (a tweet), sharing an idea (retweet), publicly approving of someone else's contribution (like) or spreading content (share)? Understanding how users contribute helps us to understand the levels of engagement for each form of radicalism and to determine whether we are dealing with online milieus or individual patterns of behaviour.

2.4.1 Statistical distribution of tweets and retweets and levels of integration

The boxplots depicted in Figure 8 show the statistical distribution of tweets and retweets for each sample: on the left-hand side, tweet activity is illustrated; on the right-hand side, a snapshot of retweet activity is depicted.
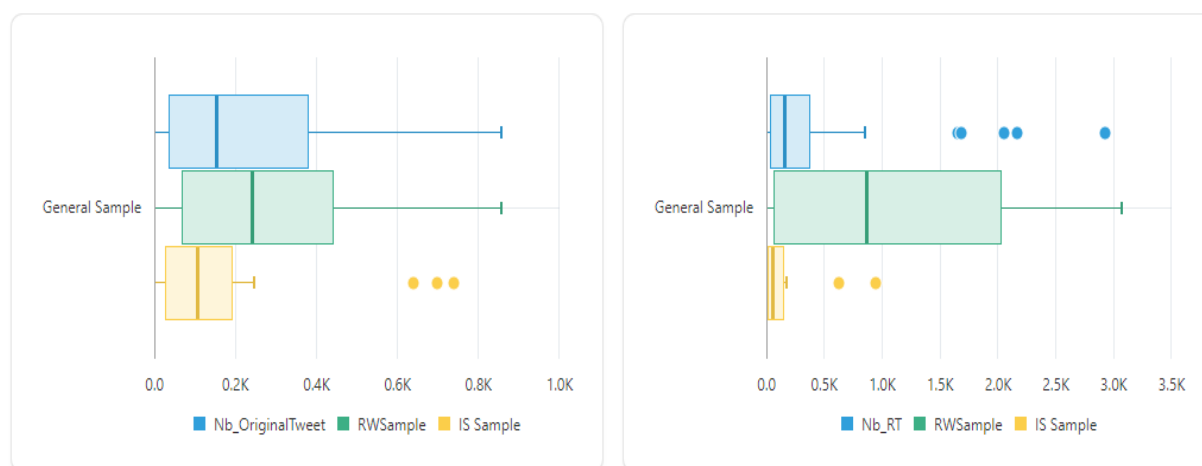
Figure 8: Boxplots of the distribution of tweets and retweets for both samples (top), the right-wing sample (middle) and the Islamist extremist sample (bottom)

As noted above, modalities of participation, in terms of tweeting or retweeting, is one way to categorise levels of engagement. By retweeting rather than tweeting, people are less visible or identifiable and thereby more disengaged (Cha et al., 2010). However, if we contextualise these results

within typical Twitter use patterns, then re-publishing content rather than generating original content represents a normal pattern of behaviour for users on this platform. The fact that right-wingers retweeted more than they tweeted does not tell us much about levels of engagement. Given that retweeting is a typical behaviour, it is more relevant to question the low number of retweets from Islamist extremists. We suggest that this trend may be related to a low level of integration with the digital milieu. Indeed, spreading other contributors' content would demonstrate an inflow just as much as it would an outflow of information, illustrating the manner of connection to others online and the relative degree of attention given to events occurring within their networks. Instead, it would seem that Islamist extremist Twitter users are not particularly receptive to their digital environment, nor are they strongly impacted by what others are expressing. While this suggestion needs further substantiation, this finding appears to demonstrate the low level of integration of members of the Islamist extremist sample.

2.4.2 Followers/followings and levels of integration

The final series of indicators we will examine to highlight modalities of participation and to evaluate online engagement are the number of followers and followings for each sample. Figure 9 shows the relevant boxplots related to *followers* while Figure 10 shows the relevant boxplots related to *followings*.
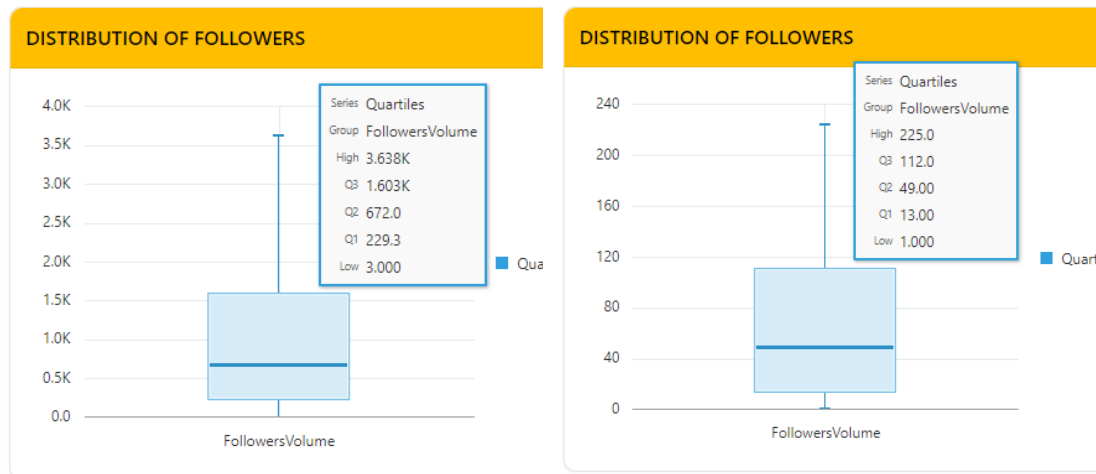
Figure 9: Boxplots of the distribution of followers for both samples: right-wing extremist (left side) and Islamist extremist (right side)
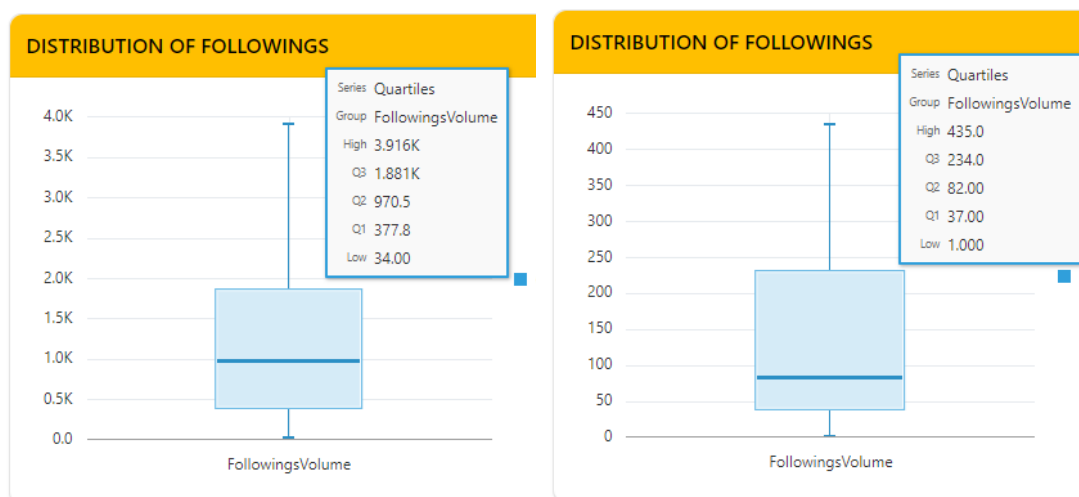
Figure 10: Boxplots of the distribution of followings for both samples: right-wing extremist (left side) and Islamist extremist (right side)

For the right-wing extremists, the median level is around 672 followers and 971 followings. For the Islamist extremists, the median values are dramatically lower, with 49 followers and 82 followings. Followers and followings are good indicators to know if people have any echo when they post as well as how well-connected they are.

Followers and followings can also help pinpoint communication strategies. For example, are users trying to get their message out there, or are they simply using Twitter to monitor domains of interest without a commensurate level of interest in the connectivity potential of the platform? Without going into great detail about who people are following, we observe a similar pattern to that described above. Users in the Islamist extremist sample demonstrate online engagement by publishing original content rather than by participating in an online milieu. They may express themselves publicly, but for the most part they lack any actual visibility and accordingly have a low number of followers. As Boyd (2010) pointed out, publicity is not visibility; publishing online does not mean that anyone (or everyone) is reading or seeing the material a user is sharing. The number of followings and followers for the Islamist extremists seems to reveal a sample of active contributors who nonetheless do not leave a lasting online impression. In comparison, the right-wing extremist sample presents a connected group of individuals with a strong level of participation.

2.4.3 Integrated vs. disconnected contributors

Based on the various findings discussed above, we can describe the Islamist extremist sample as one in which users are disengaged from the larger online community, tending, rather, to be more individualistic in their participation activities. This finding allows us to argue that Islamist extremist contributors do not support or engage in the active development of radicalisation, at least not in a collective manner. These conclusions regarding the Islamist extremist sample cannot be extended to the right-wing milieu. In this latter case, we can indeed confirm the existence of an online milieu; intense activity corresponding to liking other people's tweets, following one another and spreading likeminded content are all elements that highlight the degree to which right-wing Twitter users are engaged in sharing flows of information and reacting to online content both sent and received.

2.4.4 'Likes' and levels of integration

The overall volume of likes for the samples illustrates another form of media participation. Liking content is even less engaging than retweeting but nonetheless reveals the manner in which

participants actively contribute to the existence of digital milieus. Figure 11 shows the distribution of user likes.
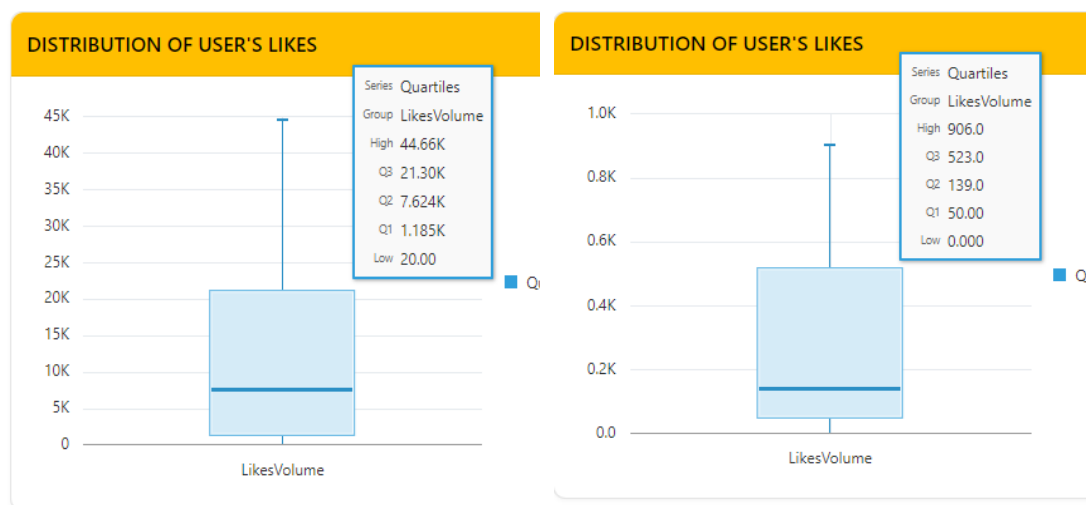
Figure 11: distribution of user likes

As Figure 11 allows us to observe, likes are strongly disproportionate between the Islamist extremist and right-wing extremist samples. On the left, the right-wing sample shows that 50% of users liked between 1,185 and 21,300 tweets, with a median value of 7,624 tweets liked. On the right side, the range of likes of the Islamist extremist sample between the upper case of the first quartile of contributors and the upper case of the third quartile of contributors is between 50 and 523 tweets liked, with a median value 139 tweets liked. These figures again suggest that Islamist extremist activity is mainly output (that is directed at a general audience) rather than interactive (intended for exchange or construction of reciprocal relationships with others). Overall, the response to the inflow of information is decidedly low – even on its own, without any comparison to the right-wing milieu – to the extent that responses to inflow of information appears to be non-existent for a number of accounts in the Islamist extremist sample. With a median value of 139 tweets liked, Islamist extremist users did not tend to like content published by other users.

3. Staging and framing identities

Human communication, offline as well as online, is about exchanging information, getting things done, expressing feelings and emotions, and conveying what kind of people we are, where our loyalties lie, for example in religious and political terms, and what social communities we belong to (de Fina, 2006: 263). We may distinguish between individual and collective identities. The Twitter profiles we study here mainly express collective identities conveying loyalties in religious and political terms. We may therefore assume that these accounts are set up and mainly used for participation in particular communities.

In this third section, we first present analyses of what Twitter users in the data sample communicate through their online identities and self-presentations, as well as how they stage their identities to present themselves for an audience (Goffman, 1965). We explore how Islamist extremist and right-wing extremist identities are formed and what these self-presentations communicate.

The profiles are not analysed exclusively as images or texts. Instead, they are examined as user-generated, multimodal utterances, paying attention to how profile pictures, texts, names and handles

appear as a combination of semiotic resources, such as images and written language. The qualitative methodology employed here is multimodal textual analysis (Kress, 2010; Kress and Van Leeuwen, 2006; Van Leeuwen, 2005), through which we can demonstrate how certain patterns of semiotic representations in Twitter users' profiles convey ideological meanings (Veum and Undrum, 2018; Machin, 2016).

In the analyses, all personally identifiable information was removed. The examples we used were translated from German and rewritten in such a way that the Twitter users in our sample could not be identified. The images we present were not taken from the actual Twitter accounts of those in our sample but instead are representative of the same genre and symbolic content as that expressed in their Twitter accounts.[6]

This section will provide answers to the following questions:

- What political and religious opinions do Twitter users express on their profiles, and how do they express these opinions? (Section 3.1)
- How do Twitter users stage and frame their identities? What kind of semiotic resources and discourses are they drawn to? (Section 3.2)
- What differences exist between male and female Twitter users? (Section 3.2.1, 3.2.2 and 3.3.2)
- To what extent do Twitter users label themselves as radicals? (Section 3.3)

3.1 Expressing political and religious opinions

To generate the sample, Twitter accounts that contributed to the construction of profiles supporting Islamism and Salafism[7] on the one hand and far-right ideologies on the other were collected. The online identities of the Twitter users in the sample are thus more ideological than individual.

In this section, we present forms of participation, the way that Twitter is used in our data sample, based on the ethnographic phase of the study and thus explain the reasons for selecting both samples. What political and religious opinions do Twitter users express on their profiles, and how do they express these opinions? The data used in our ethnographic analyses include information found on the Twitter accounts in our data samples.

3.1.1 Right-wing extremist sample

The online accounts from the radical right, in the German dataset, were selected primarily on the basis of their explicitly negative stance towards Islam, including the belief that Islam constitutes a clear and present threat to Europe. Aside from this criterion, which stems from the core aim of the DARE project, we considered other characteristics, including anti-immigration views. We also considered expressions of anti-democratic attitudes and ultra-nationalism. Accounts were also selected on the basis of their tone, for example those expressing overt hostility.

In the selected accounts, we observed people discussing their opposition to Islam, their love of Germany – but not of the EU – and call for resistance. One profile picture referred to Nazism, while another referenced the Stop Islamisation of Germany movement. In the 'about' section of one of the Twitter users, we find an expression of support for white heterosexuals. In another, we find support

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[6] The personally identifiable information is more strictly removed in this report from Germany, as well as in the report from Norway. The reason is that one of the authors of this report follows ethical guidelines from Norway, and these are stricter than in the other countries.

[7] 'Salafism is a branch of Sunni Islam whose modern-day adherents claim to emulate "the pious predecessors" (*al-salaf al-ṣāliḥ*; often equated with the first three generations of Muslims) as closely and in as many spheres of life as possible.' https://oxfordre.com/religion/view/10.1093/acrefore/9780199340378.001.0001/acrefore-9780199340378-e-255

for criticism of Islam and freedom of speech. In the postings, we find the use of the terms Islamisation and treason (*Landesverrat*) relating to the discourse of German immigration and refugee policies.

We also find texts and images referring to the discourse of immigration and European suicide. The so-called European suicide is described in the book 'The Strange Death of Europe: Immigration, Identity, Islam' written by Douglas Murray (2017). The book has been translated into German and in German it carries the title '*Der Selbstmord Europas (The European suicide)'* (Murray, 2018)*.* The book describes how Europe is committing suicide through its immigration and refugee policies.

Many tweets were written about a gang rape in Freiburg in October 2018, for example one Twitter user asked rhetorically what more must happen before the refugee policies are changed, thus indicating that stricter refugee policies may prevent rape. In another retweet, we read that the right to asylum was intended for the politically persecuted and not for the strongest or for criminals who can overrun Europeans by the thousands: 'Europe must defend itself'

We observe that several Twitter users in our sample retweet leaders of the Alternative for Germany (AfD) right-wing/far right-wing political party. Plate 1 shows a profile picture from one of the Twitter accounts. This image, which was taken from a sticker, expresses support for AfD and calls for a stop to the 'migration pact'. In yellow, we read 'All of Germany protests'.

Plate 1: Sticker from Alternative for Germany (AfD)

The 38 accounts, with the exception of two, appear to be anonymous. They do not include the names of the account owners, and they do not feature photos of people. Instead, logos from AfD and other right-wing symbols are common, as are photos or pictures that do not seem to refer to an ideology, for example a pet dog or a favourite aspect of nature. We also noticed that only a few of the Twitter users registered their country and city, for example, in Germany, Düsseldorf, Hamburg, Berlin and Dresden. Because the accounts are mostly anonymous, they may be used to hide their owners' social networking activities.

The selected profiles communicate radical and extremist ideas, as demonstrated in sections 3.2 and 3.3, and may attract the attention of others and even serve as inspiration for friends, acquaintances, and random onlookers on Twitter. These radical and extremist ideas are easily recognisable by others and may also serve the function of gaining like-minded friends and acquaintances.

3.1.2 Islamist extremist sample

When generating the Islamist extremist sample, we searched for indications of religious fundamentalism, support for ISIS, Al-Qaeda or other extreme Islamist organisations, Salafism, or for violence and hostility against the West. Salafists may be divided into three major factions: the purists, the politicos and the jihadis (Wiktorowicz, 2006). The purists focus on nonviolent methods of

propagation, purification and education, and as such they view politics as a diversion that encourages deviancy. In contrast, politicos emphasise the application of the Salafi creed to the political arena. Jihadis argue that the current geopolitical context calls for violence and revolution.

Amongst Islamist extremists on Twitter, we found radical views or opinions and support for jihadist-Salafism, but most of the accounts seemed to belong to supporters of Salafi purists and politicos. This is likely to be because those expressing extremist Islamist ideologies have been driven off Twitter (Conway et al., 2019) and may thus be expressing their opinions elsewhere, in more private and protected settings, such as Telegram (Parekh et al., 2018; Bloom, Tiflati and Horgan, 2019).

Examples of videos shared by the users include one showing French police assaulting a Muslim woman wearing the hijab. In the text above this video, there is a sarcastic comment in Arabic: 'This is France – a country that cares for women's rights'[8]. Another video shows Sheikh Mohamad al-Habadan, after 16 months in prison, hugging his very young sick daughter. Others comprise religious lessons in video format from Darul Ilm (Institute of Islamic Knowledge). Darul Ilm's 'vision [is] to provide the Muslim community [with] a strong foundation through developing both Islamic knowledge and lifelong skills. Through this strategy, Darul Ilm Birmingham aims to produce the next generation of scholars and imams in the West.'[9]

Support for the Islamic concept of *mahram* is also found on the profiles. A mahram is a family member who may serve as an escort for a woman. We also find warnings of *fitna* (Arabic for temptation), followed by advice for women to cover up their bodies.

In our data sample, we also find Islamist extremists quoting politicians from AfD, for example this alleged statement by Marcel Grauf: 'After all, we now have so many foreigners in the country that a Holocaust would be worthwhile again.'[10] Another alleged quote is from the AfD politician Björn Höcke: 'The problem is that Hitler is portrayed as absolutely evil' (Höcke #Hanau).[11] We also find retweets of moral issues, for example 'Everyone should be quick to listen, slow to speak and slow to become angry' and 'Alcohol is the mother of all evil'. In another tweet, there is a poster of a black background with white text stating, 'We often forget the angel sitting on our shoulder who writes down everything. Think about what you do and say'. Twitter users also share posters encouraging others to support people in Syria, as in Plate 2 below, for example.

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8 Translated from Arabic by Anne Birgitta Nilsen.

9 https://darul-ilm.co.uk/

10 Translated from German by Anne Birgitta Nilsen.

11 Translated from German by Anne Birgitta Nilsen. Source text: *Das Problem ist, dass man Hitler als das absolut böse darstellt.*

Plate 2: Support for Syria

In the tweets, we also find references to double standards, for example in a retweet from *Generation Islam*[12]: 'You can insult anything in Germany. Muslims, Jews, non-whites, Asians. But not an old white billionaire.'[13]

In 2018, the Irish Imam Shaykh Dr Umar al-Qadri posted a video of the Irish singer Sinéad O'Connor reciting the Islamic declaration of faith; this video was also shared on our data sample. In addition, we found visual activism against Nazism as expressed in the poster below (see Plate 3) where the swastika figures in a prohibition sign. The swastika became a Nazi symbol in the 1930s, an emblem of the Aryan race. Prohibition signs are typically used to draw attention to actions that are not authorised because they do not conform to regulations or to actions that could be a risk to people's health or safety. The sign may be interpreted as a prohibition of Nazism.

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[12] https://www.ufuq.de/generation-islam-und-online-islamismus-interview-mit-pierre-asisi/
13 Translated from German by Anne Birgitta Nilsen. Source text: *Du darfst in Deutschland alles beleidigen. Muslime, Juden, Nicht-Weiße, Asiaten. Aber keinen alten weißen Milliardär.*

Plate 3: Anti-Nazism poster

The most notable feature of the accounts was that, similar to right-wing accounts, they were virtually anonymous and so could also be used to hide their owners' social networking activities. Also like the right-wing extremist accounts, few of the Islamist extremist accounts registered their country and city. Those that did were in large German cities, including Bonn, Hamburg, Berlin and Frankfurt. These Twitter users also appeared to be interested in connections outside of Germany, since those who registered Germany on their profile mostly did so in French (*Allemagne*) or English – few were registered with the native term for Germany, *Deutschland*.

Some of these profiles communicate radical and extremist ideas, as demonstrated in sections 3.2 and 3.3, and, as the right-wing extremist profiles, may attract the attention of others and even serve as inspiration for friends, acquaintances and random onlookers on Twitter. The radical and extremist ideas are quite easily recognisable by others and may also serve the function of gaining like-minded friends and acquaintances.

3.2 Staging identities

Social media is an arena in which people can experiment with extreme and radical identities and through these establish and maintain contact with milieus or individuals holding similar views. The continuous repetition and reference to specific symbols and discourses connoting extreme and radical ideologies may reinforce and normalise these ideologies and, in this manner, contribute to the process of radicalisation.

On Twitter, identities are expressed through names and handles, profile pictures, banners and texts. These elements of Twitter profiles are mostly constructed using symbols, photos, posters and texts. In the following, we present analyses of how Twitter users stage and frame their identities. What kind of semiotic resources and discourses are they drawn to? We will also point to some differences between male and female Twitter users in our data sample.

3.2.1 Right-wing extremist self-presentations

The right-wing profiles in our data sample refer to discourses of political opposition (*der Einspruch*), patriotism and nationalism but also to Pegida and AfD, as well as the Identitarian Movement, through either the movement's lambda symbol, Pepe the Frog memes (see plate 4) or references to the movement in the 'about' section on their profiles.

Plate 4: Pepe the Frog

These far-right symbols are spread online. As noted by Cynthia Miller-Idris:

> Online communities contribute to the rapid and global spread of far-right symbols, enabling icons and symbols from nationalist resistance movements from one particular geography to be claimed and appropriated by social and political movements in different locations. (Miller-Idriss, 2018: 131)

Other symbols found on the profiles include the Russian Orthodox cross (see plate 5).

Plate 5: The Russian Orthodox cross

We find positive terms referring to Germany, such as home (*heimat*), fatherland (*vaterland*) and 'good old Germany', as well as negative terms, such as 'Germanistan', the 'caliphate of Germany.' Often these terms co-occur with the terms 'de-Islamisation' and 'Islamisation', which are also found in the 'about' sections of the profiles. In a study portraying the emergence and development of Pegida and similar groups in the German city of Dresden, Virchow (2016) claims that the particular use of the term 'Islamisation' by Pegida is much broader than just putting Islam in opposition to Christianity. It is used as a term claiming that Islam is infiltrating and destroying Western societies (Virchow, 2016: 549). The hashtags #defendeurope and #reconquista are also found in the 'about' section – hashtags that connote the term 'Islamisation'. For example, one Twitter user writes in his 'about' section that he misses his homeland and that Islam does not belong in Germany.

One Twitter user has an image of Donald Trump's silhouette as a profile picture (see Plate 6) and expresses support for him in the 'about' section.

Plate 6: Silhouette of Donald Trump

3.2.2 Islamist extremist self-presentations

Although the sample of Islamist extremist Twitter accounts from Germany was very small, it produced some interesting findings. Very few users were identifiable due to a lack of profile pictures of the owners and names and to the extensive use of 'kunyas'. A kunya is an Arabic teknonym consisting of the word *umm* or *abu* (Arabic for mother and father, respectively) followed by the name of offspring or an identity marker. We also found kunyas based on *bint* and *ibn* (Arabic for daughter and son, respectively). By extension, kunya may also have hypothetical or metaphorical allusions to, for example, Abu Sayfullah (father of Allah's sword). In the kunyas, we also found references to the user's gender, as in mother or father, daughter or son.

Only two Twitter users included profile pictures from which they could be identified. We also noted that men and women in our sample used different types of profile pictures. Of the 14 female accounts, 10 had profile pictures of unidentifiable women in a *niqab* (a piece of clothing worn by some Muslim women to cover their whole face, except for their eyes), which depicts modesty and the segregation of men and women. As noted by Pearson (2018), such a design is suitable for highlighting both gender and politico-religious ideology. Photos or drawings of the women were taken either from behind or from the side, as illustrated in Plate 7. We may conclude from these observations that the *niqab* represents an important characteristic of the women's identity. Amongst the men, the most popular profile picture was a poster featuring religious quotes.

Plate 7: The niqab

3.3 Content and framing

Labelling is a two-step process (Becker, 1963). First, to form part of a group or category of people, the individual must acknowledge the label for themselves and by themselves. Second, bystanders must label the person in a similar manner. In other words, being considered a radical is the result of a dual process: an endogenous one consisting of self-labelling and an exogenous one consisting of labelling

by others. This approach to radicalisation reminds us that radical ideologies do not comprise a set of characteristics but rather a series of interactions between hegemonic and counter-hegemonic movements, which are strongly dependent on the context and the situation of the symbolic productions.

In this section, we will present analyses of self-labelling accomplished by written and visual means on Twitter profiles. To what extent do Twitter users label themselves as radicals? More specifically, we present the semiotic resources and discourses the Twitter users were drawn to, as well as how they exploited these aspects on their profiles in a manner consistent with their right-wing extremist or Islamist extremist views. The findings showed that both right-wing extremists and Islamist extremists used their Twitter accounts as a means to label themselves not only as radicals in possession of radical ideologies through self-labelling but also as extremists through self-labelling by reference to extremism, such as Salafi Jihadism and Nazism.

3.3.1 Right-wing extremist self-labelling

We found that supporters of the Identitarian Movement engaged in self-labelling via several profile pictures of frogs (most notably Pepe the Frog – see Plate 4) or the movement's logo (plate 8) and an expression of support for white heterosexuals. The expression of support for white heterosexuals may be interpreted as a sign of homophobia.

We also find the hashtag #identitär (German for identitarian) in the German Twitter sample, which may also serve as self-labelling. In 2019, the Identitarian Movement was classified by the German Federal Office for the Protection of the Constitution as a right-wing extremist organisation.[14] The self-labelling with references to the Identitarian Movement may be interpreted as self-labelling as an extremist.

Plate 8: The Identitarian Movement's lambda symbol

In the 'about' sections, we also find the Celtic cross (see plate 9).

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[14] https://www.dw.com/de/identitäre-bewegung-als-rechtsextrem-eingestuft/a-49551518

Plate 9: The Celtic cross

The Celtic cross is used by the global white power/pro-Aryan movement (Miller-Idriss, 2017: 145), and using this symbol in the 'about' section of their accounts is a way of expressing support for the Aryan movement. Also worth noting is the fact that the Celtic cross is a central element in the logo of Stormfront, as demonstrated in Plate 10. Stormfront is an online community of white nationalists serving as a home to four divisions of the movement: the Ku Klux Klan, Christian Identity, neo-Nazis and racist skinheads (Simi and Futrell, 2015: 6). Because it is international in scope, Stormfront attracts discussants who have hate speech laws in their own countries that prohibit them from engaging in racist rhetoric (Dentice, 2019: 134).

Plate 10: Logo of Stormfront

A common self-labelling practice among radicals combines visual and written means. In one example, the profile picture is a postcard depicting a boy wearing typical Nazi youth clothing and a profile name referring to the Germanic race (see Plate 11).

Plate 11: Postcard depicting a boy with typical Nazi youth clothing

This account has since been suspended. In another example, we found a profile picture of a logo belonging to AfD accompanied by an image of the Norse god Odin, as well as depictions of wars and battles in Nordic mythology. When the image and name are examined in combination, the account may be interpreted as being owned by a supporter of AfD who supports not only democratic means for achieving political goals but also violent means, thus referring to extremism. A third example is an 'about' section that declares a love for Germany, which may be interpreted as an expression of nationalism, but this is followed by the Celtic cross and may thus be interpreted as support and/or the promoting of the pro-Aryan movement. In addition, the account name includes the Celtic cross, which may be interpreted as a very explicit way of self-labelling as a right-wing extremist.

There appeared to be few differences in self-presentations between women and men, and as such it is difficult to determine which profiles represent men and which represent women. Many accounts were registered as belonging to women yet featured names and profile pictures suggesting that the account owners were actually men, and vice versa.

3.3.2 Islamist extremist self-labelling

Among both male and female Islamist extremists in our sample, we also observed self-labelling that may be interpreted as extremism, not merely radicalism.

In one of the photos, which was taken from behind, a woman wearing a *niqab* is being embraced by a male, who is holding his arm around her. The man is dressed in a military field uniform similar to those worn by ISIS soldiers in Syria and Iraq. Accordingly, the uniform evokes associations with jihad and the Islamic State. We also found other symbols and concepts evoking associations with Salafi jihadism, such as the concept of *hijra* (Arabic for migration), which was used in a profile name. *Hijra* refers specifically to the migration of the Prophet Muhammad from Mecca to Medina, which marks the beginning of the Islamic calendar, in 622 CE. The active participle of *hijra* is *muhajir*, meaning migrant, with its feminine form being *muhajira*. Peresin and Cervone (2015: 495) note that 'Western women who have joined ISIS have extensively used the term *muhajirah* (Arabic for the female migrant) to identify themselves on social media. In this way they indicate a discontent with their previous living environment (the West), an impellent drive to move to a place of ideal perfection (the caliphate) and the religious motivation for seeking the change.' Saltman and Smith (2015) claim that *hijra* and the notions of belonging and sisterhood are key factors in women's radicalisation.

In a study of the visual culture in jihadi organisations (Ostovar, 2017: 93), the *mujahid*, the *martyr* and *paradise* are identified as central building blocks of jihadi identity. Another study at the organisational level (Wignell, Tan and O'Halloran, 2017: 10–11) highlights the following fundamental ISIS values: *tawhid* (the indivisible oneness of God), *manhaj* (following pious predecessors' ways in belief, worship and interactions with others), *hijrah, jama'ah* (the Muslim community) and *jihad*. In our sample from Germany, we also found references to *tawhid* and *manhaj* in profile pictures and names.

An explicit example of support for jihadist-Salafism is illustrated in Plate 12 - the posting of an image of soldiers on horseback carrying the *shahada* flag – the black-and-white flag (*al-raya*) often associated with ISIS, the creed of which is written in white on the black flag. It is one of the most prominent symbols of jihadi identification (Holtmann, 2013: 43). The soldiers on horseback, as opposed to soldiers in modern vehicles, also connote combats of the first generations of Muslims (*al-Salaf as-salih*, the pious predecessors) and may therefore be interpreted as a reference to jihadist-Salafism. A report from the Combating Terrorism Center (2006: 36) states that the combination of a horse, rider and battle flag is very common in jihadi visual propaganda and that the three together 'serve to amplify the jihadi element of this image, making it more aggressive and proactive than any image that contains only one of the three component motifs.'

Plate 12: The shahada flag

We find links to a blog where the blogger praises Osama bin Laden and states that if Islam allowed it, they would have declared September 11th a holiday, with gifts and cakes. In the same blog, there is also advice on different ways to support violent jihad. We also found users who shared links to jihadi *anasheed* on YouTube. Anasheed (*nasheed* in the singular) are Islamic songs of praise or lament that are either sung as cappella or accompanied by percussion instruments. The jihadi anasheed praise violent jihad. Most often, they are sung in Arabic, with subtitles in the videos shared on YouTube, in this case in German.

An example of a profile picture from a male Twitter user is a photo of a lion (see Plate 13). The lion is a common visual semiotic resource used by Islamist extremists due to its connotations of power, strength and bravery (Ostovar, 2017: 98–99; Combating Terrorism Center, 2006: 29–32).

Plate 13: Photo illustrating the use of a lion as a profile picture

In the Western-facing English-language IS propaganda magazine *Rumiyah 2*, the ISIS soldiers are portrayed as lions:

> Let them follow the example of the lions who have preceded them by striking the Crusader citizens and interests wherever they are found in the West – as was ordered by Shaykh Abu Muhammad al-'Adnani ﷺ in several official addresses – especially as the Crusaders continue to wage war against Islam and the Muslims, never hesitating to commit more atrocities against the men, women, and children of the Khilafah (Al Hayat Media Center, 1438: 3).

Moreover, *osama,* as in Osama bin Laden, the former leader of al-Qaida, means lion; thus, through him, the lion also connotes al-Qaida, from which ISIS and other Islamist terrorist organisations evolved.

In the profiles, we also find references to *ghurba*, an Arabic Islamic concept referring to feelings of not belonging and estrangement. This concept has also been found in a study of Facebook profiles of

women who support ISIS (Nilsen, 2020 forthcoming) where the author argues that the use of the concept of ghurba and the experience of ghurba may influence the process of radicalisation because the online ISIS communities may provide comfort and counteract feelings of estrangement by offering a space where the women can experience a sense of belonging. Concurrently, Nilsen argues that the discursive use of the concept of ghurba and the continuous repetition and citation of specific semiotic resources related to this concept may reinforce and normalise their emotional state of estrangement and position as outsiders and thus contribute to radicalisation. The use of the derogatory singular term *kafir* (Arabic for infidel) and its plural *kuffar* is also found in postings on the Twitter accounts. This term is frequently used in ISIS propaganda in depictions of the West (Baele et al., 2019).

4. Key themes and influencing factors

In this fourth section, key themes and other influencing factors that may support claims that the Internet can trigger self-radicalisation are presented. Three forms of stimuli were considered: (1) content; (2) events; and (3) influencers. The findings demonstrate themes of Twitter conversations and gender differences as well as how these themes are influenced by national or international developments and incidents.

Our analyses in this section will provide answers to the following questions:

- What do the Twitter users in our sample talk about?
- Do particular events offline create engagement online?
- Are women more interested in certain themes than men and vice versa?
- Who are the influencers in the networks?

4.1 Content

In this section, the main themes in the conversations among female and male Twitter users in the German corpora, as well as the relationship between these themes, are presented. The themes and their relationships were determined using two types of statistical text analysis based on the Reinert method (Reinert, 1983, 1990), implemented via the free IRaMuTeQ software (Ratinaud, 2014; Ratinaud and Marchand, 2012). To determine the themes in the corpora, we conducted a Descending Hierarchical Analysis (DHA) (Camargo and Justo, 2015). In this analysis, the vocabularies in the corpora were clustered according to their lexical co-occurrences. That is, those words that frequently occurred close together in the corpora were grouped together. These clusters yielded an overview of word associations and – by interpreting the clusters of words based on an investigation of the concordance of the most common nouns in each cluster – clarified the themes in the corpora.

To determine the relationship between the themes, we used similarity analysis (Camargo and Justo, 2015), which is based on graph theory. Similarity analysis identifies co-occurrences of words, thereby providing information on their level of connectivity. In this manner, we identified the structure of the corpora's content. Both analyses were based on nouns and adjectives in the corpora. Gender specifications were identified via a chi-squared analysis.

For the Islamist sample, our analyses are based on the 1,829 German-language tweets and the 757 English-language tweets. For the right-wing sample, the vast majority of right-wing tweets were composed in German. We therefore based our analyses of the right-wing sample on only the German tweets.

4.1.1 Right-wing extremist themes

For the German right-wing corpus, we identified a classification of nine word clusters. The cluster analysis is displayed in Figure 12. In turn, these clusters were categorised into two main thematic

categories and one standalone cluster. The first of the two main categories (from left to right) comprised Cluster 6, Cluster 9, Cluster 4, Cluster 3 and Cluster 2. We label this category 'The online and offline German political landscape concerning Islam'. The second main category comprised Cluster 7, Cluster 8 and Cluster 5, which we label 'media and incidents in the news'. Cluster 1 served as a standalone thematic category that we labelled 'patriotism, white pride and anti-political correctness'. By examining the words associated with each of the clusters, we obtained an indication of the thematic content of online debates of the German radical right.
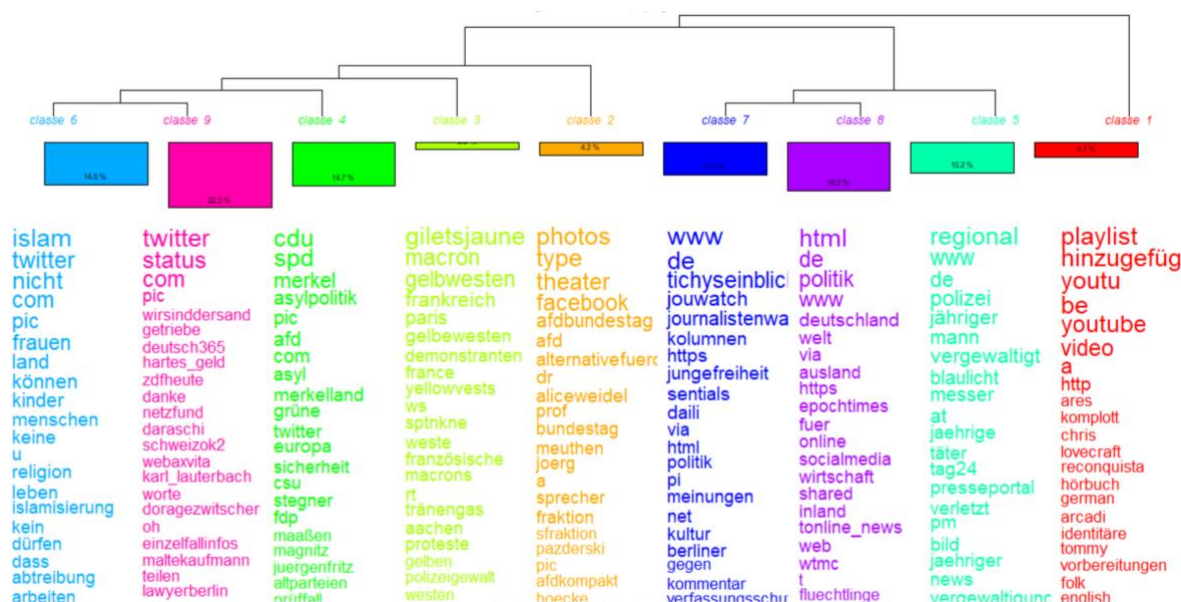
Figure 12: Outcome of cluster analysis performed on the right-wing extremist corpus

Thematic Category 1: The Online and offline German political landscape concerning Islam

For the cluster analysis presented above, the size of the boxes directly below the cluster labels provide an indication of the relative dominance of the cluster within the general debate. We can see that Cluster 9 (in pink) is particularly strongly present in this thematic category, although it primarily involves names and social media labels. Cluster 4 incorporates many of the actors (parties and politicians) involved in mainstream German politics. Cluster 4 can be contrasted to the much smaller Cluster 2, which contains many references to the AFD. Speculatively, Category 1 identifies a debate between the 'mainstream politics' represented by Angela Merkel and the CDU and SPD and, on the other hand, the AFD with regard to Islam and immigration (represented in Cluster 6). In light of this storyline, it is noteworthy that the final cluster in this category, Cluster 3, seems to pertain to the yellow-vest protest movement in France.

Thematic Category 2: Media and incidents in the news

The second category combines Cluster 7, Cluster 8 and Cluster 5. Cluster 7 contains many references to news shows, publicists and news outlets. Cluster 8 contains words that reflect topics of general political discussions. For instance, 'inland' (interior), 'ausland' (foreign country), 'wirtschaft' (economy) and 'migranten' (migrants) – and also, although not visible in the representation above, 'Euro'. Unlike Cluster 7 and Cluster 8, Cluster 5 contains many specific references, in particular crimes such as 'vergewalltigung' (rape), 'attacke' (attack) and 'mord' (murder). When looking at a set of words associated with this cluster that is larger than the set presented above, there are clear indications that these words are associated with asylum seekers ('asylbewerber') and Syrians ('syrer').

The combined categories that were just described give way to a general narrative that has been discussed throughout this report; German politics is divided between the traditional parties in the centre (CDU, CSU, SPD) and the political newcomer, AFD (Alternative für Deutschland). Many of the tweeters in the sample side with the AFD and protest against specific policies implemented by the Merkel administration that are supported by the traditional parties in the centre. The two specific issues of contention are Merkel's 'Wir schaffen das' pro-immigration policies and the associated costs, and the growing influence of Islam in Germany. Both are considered unwanted and against the will of the people of Germany. Cases of violence and rape by asylum seekers fuel the outrage against the German government's pro-immigration policies.

The special case of Cluster 1: patriotism, white pride and anti-political correctness
Next to words such as 'playlist', 'youtube' and 'video', Cluster 1 contains words typically associated with white pride narratives, including the words 'reconquista' and 'reconquistagermanica', as well as 'befreiungskrieg' (liberation war). An earlier version of the analysed corpus contained English words and also identified expressions such as 'it is ok to be white' and 'white lives matter' within this cluster. Political correctness is treated negatively within this cluster, with words such as 'schuldkult' (cult of guilt) and 'selbstgeisselung' (self-hostage taking). The cluster further contains references to 'Identitäre', i.e. the Identitarian Movement. The cluster contains very few references to mainstream political debate, but it does contain references to more ideological movements, including to Marxism and Islamism. Other words of interest which suggest that we are potentially dealing with extreme content refer to 'Kulturkampf' (cultural battle) and 'widerstand' (resistance).

4.1.2 Lexical proximity and relationship between themes
The analysis presented in this section maps the dendrograms depicted in the section above and can be considered as a similarity analysis or an analysis of networks of co-occurring words. This is not a word cloud, but rather a graphic representation of lexical clusters. By this we mean that words are not selected by the analyst according to what they mean, nor are they selected at random; instead, they are bound by their co-occurrence and their position with regard to one another. The size of the font is proportional to the importance of the words in the corpus. The colours represent communities identified automatically. This graph is made from the lexical clusters that formed each of the categories presented in the dendrograms above, thereby providing another reading of the data; one more focused on lexical proximity and relationships between topics.

Figure 13 (below) was generated by selecting the 700 words that appeared the most in the corpus. The spatialisation layout that was used is called the Fruchterman-Reingold algorithm; this algorithm helps emphasise clusters of discussions. The coloured areas of the graph were generated by means of the Louvain method, i.e. an algorithm specifically designed to detect interpretative communities and extract them from large networks.

Figure 13: Graphical depiction of themes in right-wing extremist Twitter debate

Figure 13 illustrates the central theme of oppositional politics in Germany. We can see that the AFD is the central concept of the first of the two main clusters, in the green cloud at the top of the graph. The concept of AFD has linkages to a number of words. These words do not necessarily form semantic links by themselves, but they are clustered together by virtue of their shared connection to the AFD. As a political party, the AFD relates to many different topics and public figures. One finds among these words 'Merkel', 'Die Gruenen', 'Österreich' and 'Asyl', but also 'Europa' and 'altparteien' (old parties); in short, many words are associated with the AFD for reasons specific to particular political events and dynamics in Germany. The second of the two main clusters, the blue/turquoise cluster to the left of the graph, has 'Nicht' as the central concept, which translates as 'not' in English. One could interpret this to suggest that in this cluster, one finds words that play a role in debates regarding the undesired aspects of German society. The overlapping purple and red clusters organise words around 'html' and 'http'. Most likely, we can find a strong linkage between these concepts and content-related words because html and http facilitate the online spreading of particular news footage. In these clouds, especially the red cloud, we find words with political content, 'Merkel', 'Deutschland', 'Macro', 'Brexit',

'politik', 'junge freiheit', 'Afghanistan', although at this stage it is difficult to provide an explanation for the exact meaning of the red cloud.

4.1.3 Right-wing discussions according to gender

To understand the structure of debates within a group, another interesting variable to consider is gender. Figure 14 shows which lexical clusters are more discussed by either men (green bars) or women (red bars). Links are estimated through a chi-square reflecting the trend to find, in a given cluster, a statistical overrepresentation (a higher proportion) or a statistical underrepresentation (a lower proportion) of tweets produced on each date. The bars going upwards signal an overrepresentation of tweets from one gender over another in the cluster: the bars going downwards underline an underrepresentation.
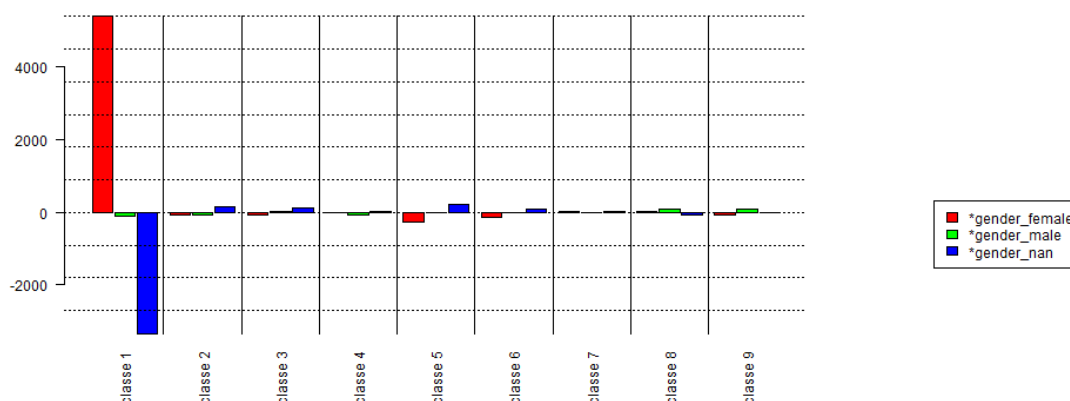

Figure 14: Gender differences in involvement in cluster specific discussions

Figure 14 shows that the words in each of the clusters are equally discussed by males and females, with the noticeable exception of Cluster 1. Here we see that females are far more involved than males. This is a remarkable finding. We identified Cluster 1 as a collection of many words related to 'white pride', 'identitarian resistance' and 'anti-political correctness'. In other parts of DARE research, these themes have consistently been found to be more appealing among males relative to females. This may suggest that this specific finding is the result of a gender miscoding by one or more of the representatives within our Twitter sample.

4.1.4 Islamist extremist themes in German

For the German radical Islam corpus, we identified a classification of eight word clusters based on nouns and adjectives to generate the dendrogram. This is depicted in Figure 15 where we can see that these eight clusters can be divided into two groups. One group consists of a single cluster with Arabic words, Islamic concepts, written with Latin letters, in pink to the right (Cluster 8). The other group consists of all the other clusters, which mainly contain German words. In the pink group, we find words relating to Islam, like *ilm, baqara* and *kuh*. *Ilm* is Arabic for knowledge, and in this context the term probably refers to Islamic knowledge. *Baqara* means cow in Arabic, and *kuh* is cow in German, and both probably refer to the Sura of the cow in the Quran, a very central passage in the Quran containing the especially revered Throne Verse. *Tassawuf* is an Islamic concept referring to the ethical and the spiritual.

In the other clusters mainly consisting of German words, we find four main themes. These themes are *hijab* (*kopftuch* in Clusters 4 and 5) and God (Allah in Cluster 2). Cluster 1 is about *aseer*, which is Arabic for prisoners and probably refers to Muslims who have been imprisoned for their support of alleged terrorist organisations as defined by European authorities. Cluster 3 is difficult to interpret in the absence of semantic relationship between the words in this cluster; however, we did find references

to *niqab* (the piece of clothing worn by some Muslim women which covers the whole face except for the eyes) and to *hijra* (migration in Arabic). *Hijra* is a significant Islamic concept (see Section 3.3.2 for discussion), which, in the context of extreme Islamists, often refers to migration to the Islamic State. Cluster 6 is about local and international news, where we can find references to Gaza and Israel. Cluster 7 is about what Twitter users share from YouTube, and in this cluster we find a reference to Pierre Vogel, also known as Abu Hamza, who is a well-known German Salafi preacher (e.g. Käsehage 2019).
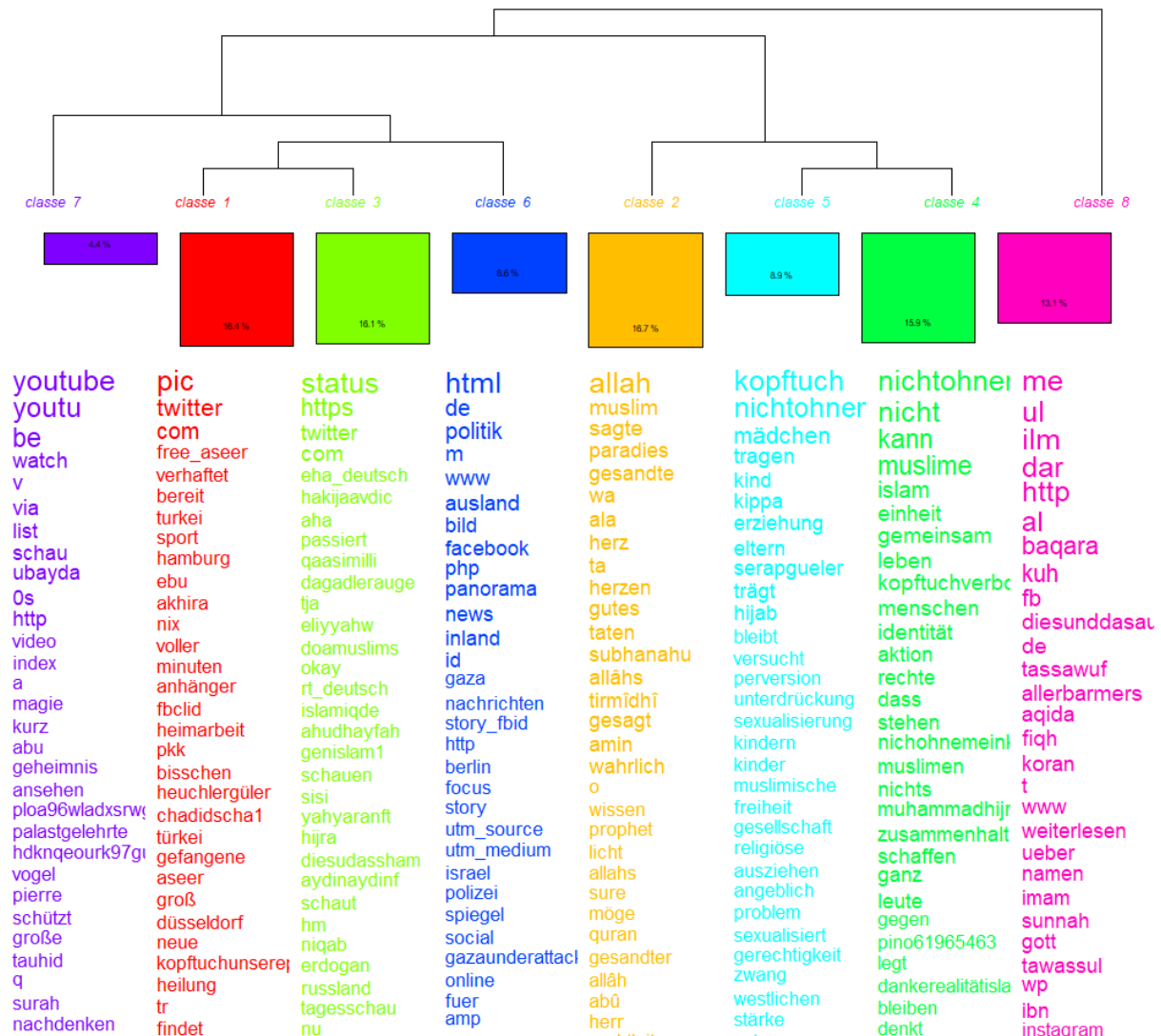

Figure 15: Dendrogram depicting main themes in the Islamist extremist sample

4.1.5 Lexical proximity in Islamist extremist themes in German

The analysis presented in this section maps the dendrograms described in the section above and can be considered as a similarity analysis or an analysis of networks of co-occurring words in the same manner as was done for the right-wing themes in section 4.1.2. Figure 16 extends the dendrogram for the Islamist extremist themes in section 4.1.4. It was generated by selecting the 150 words that appeared the most in the corpus.

Figure 16 shows that there is very little connection between the interpretative communities and the importance of the discussions of forbidding the Islamic head scarf 'nichtohnemeinkopftuch' (not without my headscarf), which has linkages to words like identity (identität), girl (mädchen), women (frau), children (kinder) and Ramadan. These words are not necessarily semantically related, but they

are clustered together by virtue of their shared connection to the discussions about forbidding the Islamic head scarf.
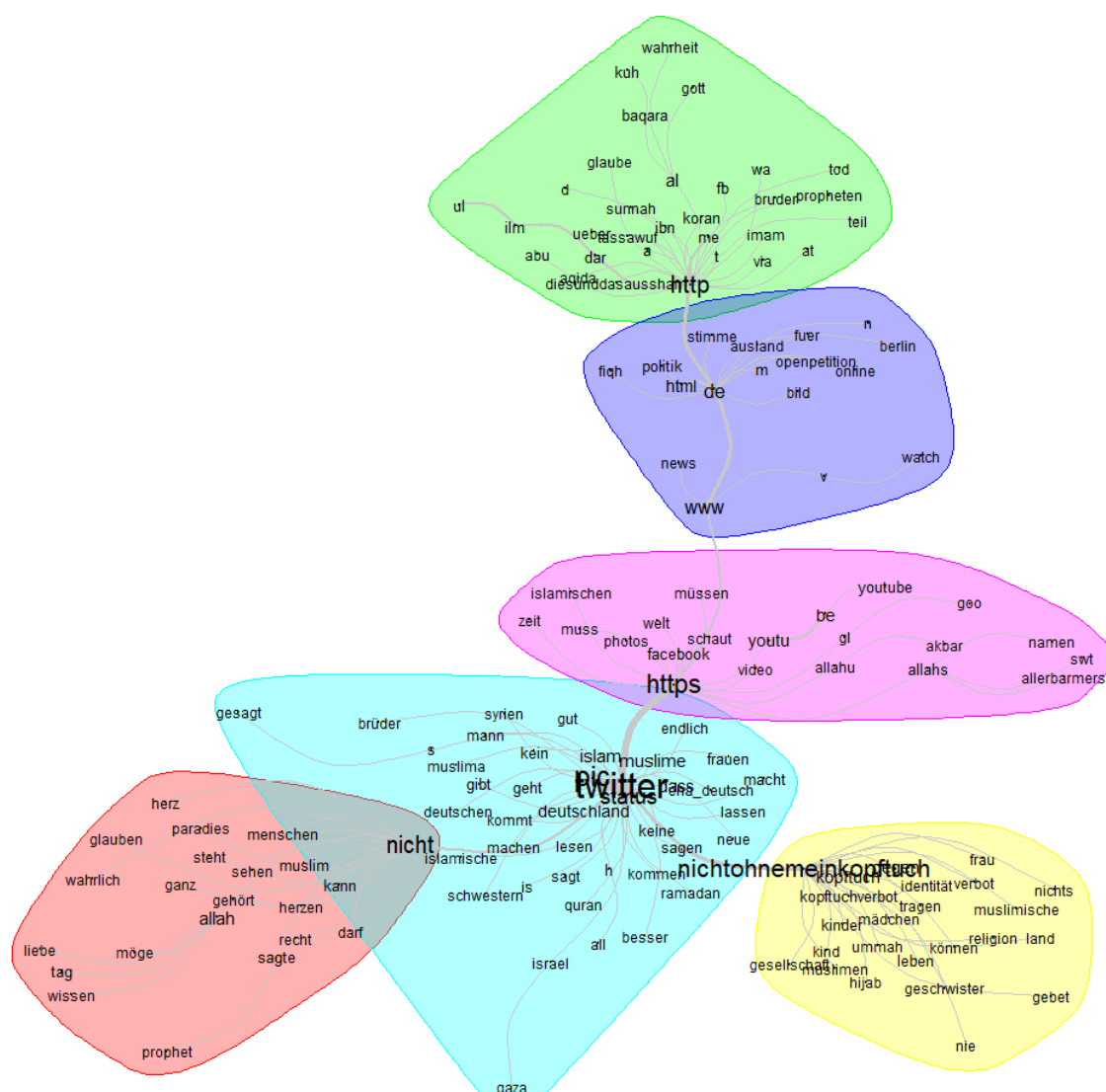

Figure 16: Similarity analysis of the German radical Islamist structure of debates in German

4.1.6 Islamist extremist themes in English

The results from the analysis of the themes that are discussed among Islamist extremists in English are presented in a dendrogram in Figure 17. For the German Islamist extremist corpus in English, we selected a classification of eight word clusters based on nouns and adjectives to generate the dendrogram.

In this dendrogram, we can see that these eight clusters can be divided into two groups. One group only consists of one cluster – namely Cluster 1, which concerns the Palestinian cause. The other group consists of all the other clusters. Clusters 4, 5 and 6 all pertain to God, Allah and the Prophet Muhammad. In Cluster 5, we find references to Abudullah Azzam, Osama bin Laden's mentor and one of the cofounders of Al-Qaeda (Schnelle, 2012 discusses Azzam's ideological stance). When we traced back the word *abu* in the tweets, which we also found in Cluster 5, we discovered references to Abu Musab al-Suri and Abu Qatada. Abu Musab al-Suri is one of the most important jihadist ideologues (Lia, 2007), while Abu Qatada is among the most influential ideologues of the Salafi-jihadi movement

(Nesser, 2013). There are also references to Umar ibn al-Khattab, the second caliph (634–644 CE) and one of the most influential Muslim caliphs in history.

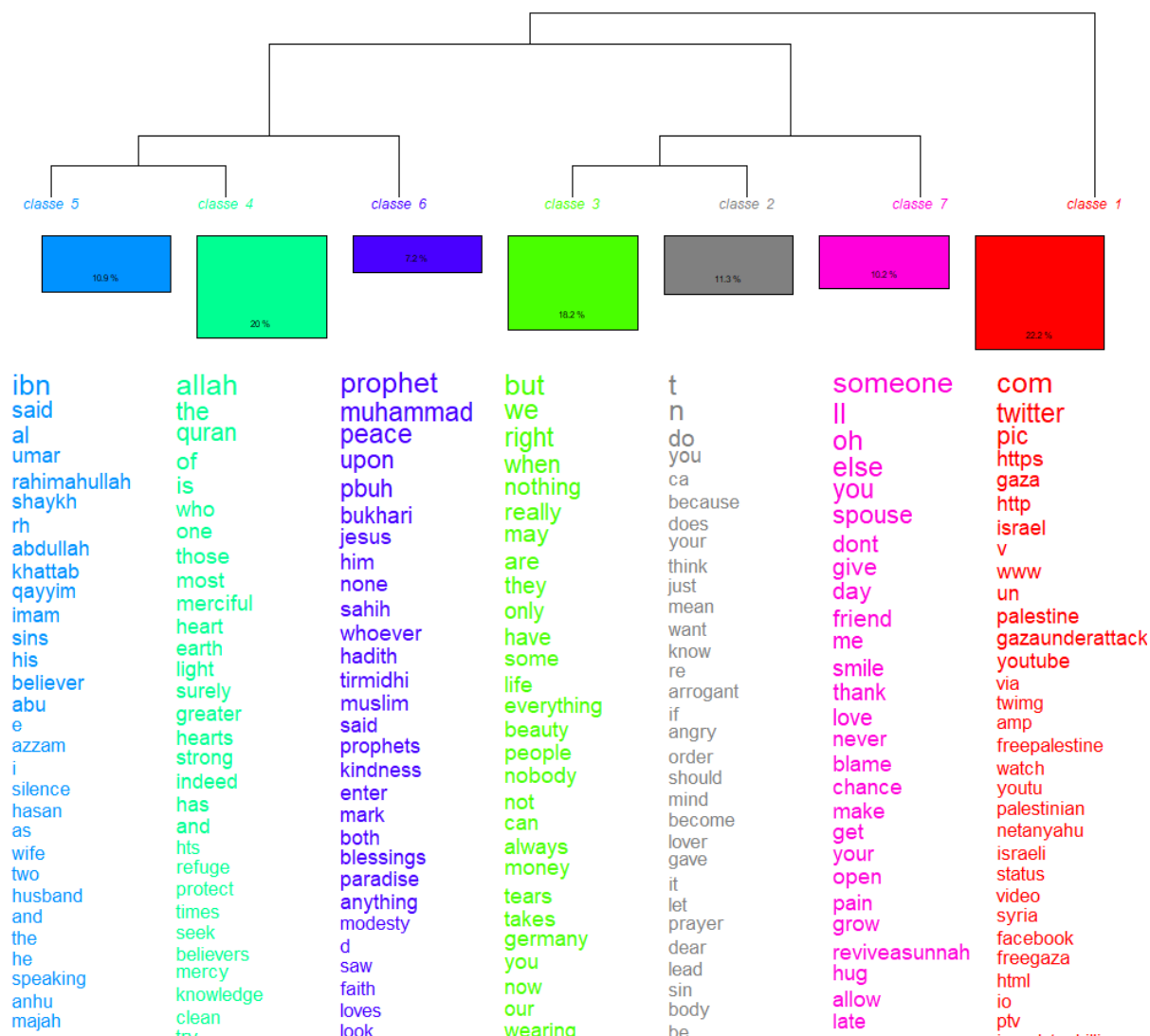Clusters 2, 3 and 7 seem to be about life and feelings.

Figure 17: Thematic discussions among Islamist extremists in English

4.1.7 Lexical proximity and relationship between Islamist extremist themes in English

The analysis presented in this section maps the dendrograms outlined in the section above and can be considered as a similarity analysis or an analysis of networks of co-occurring words in the same manner as was performed for the right-wing themes in section 4.1.1 and for the German Islamist extremist discussions in 4.1.4. Figure 18 extends the dendrogram for the Islamist extremist themes in section 4.1.2. It was generated by selecting the 150 words that appeared the most in the corpus, keeping only nouns and adjectives.

At the centre of these conversations is God, or Allah, which has links to words like faith, hears, messenger, worship, mercy and what the Prophet said in the pink interpretive community to the right. These words are not necessarily semantically related to each other, but they are clustered together by virtue of their shared connection to discussions of Allah. Compared to the discussions among Islamist extremists in German, these English discussions are more connected.
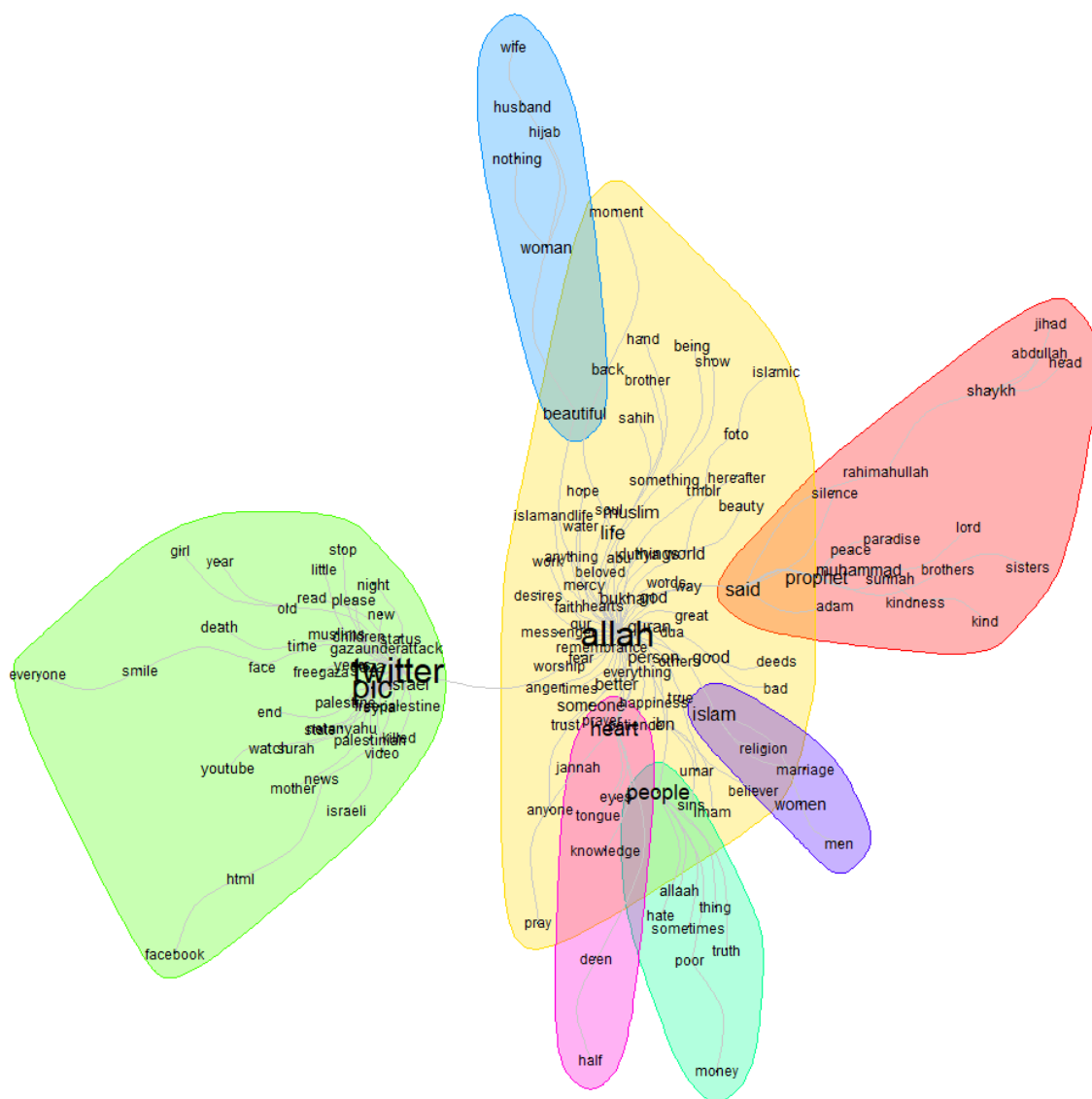
Figure 18: Similarity analysis of the German Islamist extremists structure of debates in English

4.2 Events

Offline incidents, such as a terrorist attack, an election or a social movement, can be perceived as events that provoke a response from bystanders, trigger media participation or fuel radicalisation. Here we employ a visualisation technique to determine, alongside time period, which particular cluster of words was particularly used in debates in our sample.

In this section, we will identify influencers and determine whether they reinforce radicalisation or are in fact irrelevant to the process of radicalisation.

4.2.1 Publications triggered by events for the German right-wing extremists

In the lexical analysis part of this report, we detailed the content of the nine clusters that emerged from the lexical analysis. The heat map below is a chronological representation of these categories. Heat maps in general provide information on the overrepresentation of a cluster for a given variable. In the case at hand, the selected variable is the month and the year. This allows us to visualise what

topics were the most discussed within the timeframe of the study. The cluster numbers are listed in the column on the left. The months and the year are indicated on the bottom line, under each column. Figure 19 particularly focuses on the year 2018 and the first months of 2019.
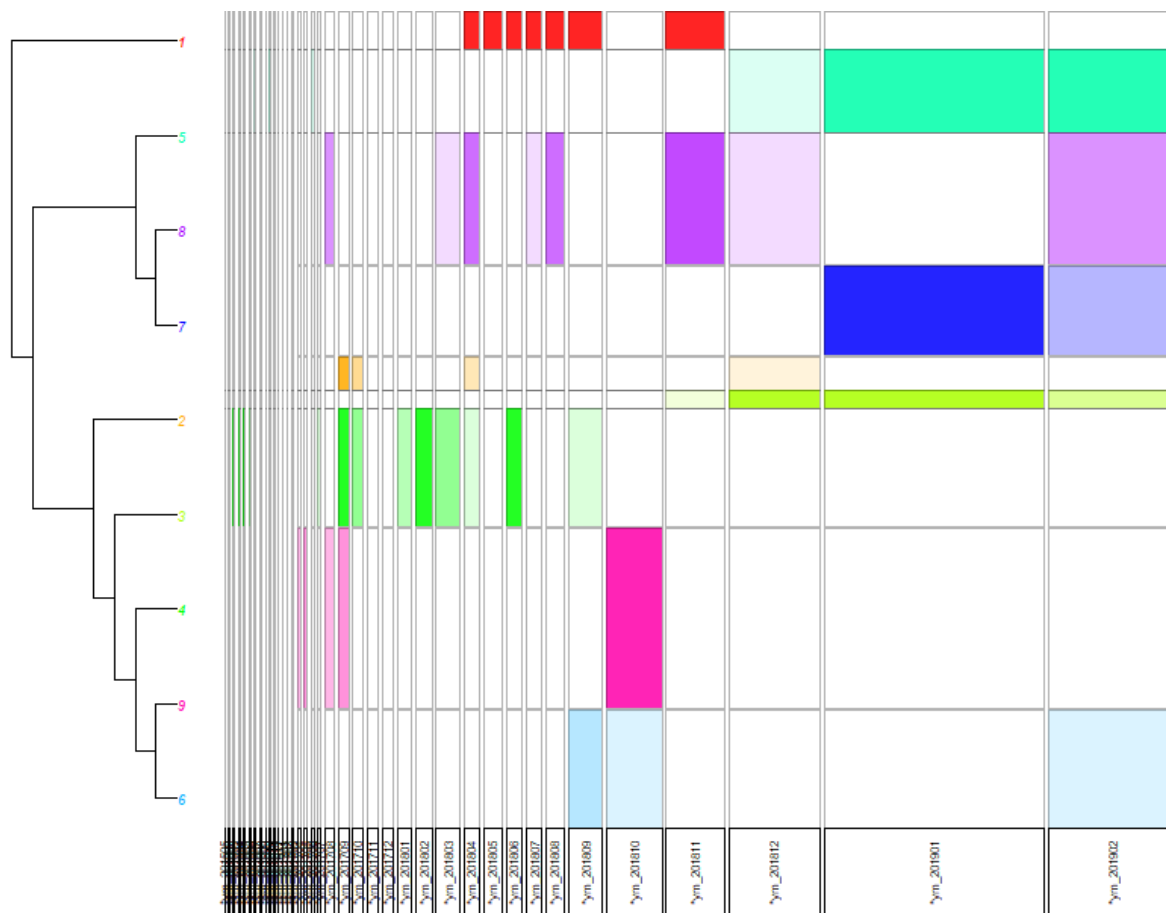
Figure 19: Evolution of categories over time as per over-representativeness of clusters by month

Figure 19 shows that the topic of Islam is discussed particularly in September and October 2019, and in the latest month of the study, February 2019. The cluster analysis revealed a number of substantively fewer interesting clusters for which variation over time was difficult to interpret. For instance, Cluster 8 contains general political words, and it is thus not surprising that the graph shows this cluster to be fairly evenly present over the time period under investigation. Of interest, Cluster 3 appears to become more frequently discussed as we approach the present. Cluster 3 involves the 'yellow-vest' movement in France. It may be of interest to see how the yellow-vest movement is making inroads in the German political sphere. Moreover, we also see an increase in words related to Cluster 5, which involves terms related to serious crimes (including rape and murder) allegedly committed by immigrants. Cluster 4, which contains many references to German mainstream political parties, is regularly discussed in the first half of the time period under investigation – but after the summer of 2018, the same cluster is much less actively discussed.

Overall, it is difficult to identify specific events that may trigger particular types of discussions. In the summer months of 2018, significant events happened, most notably in Chemnitz, where right-wing protesters gathered and overtly made Nazi salutes and intimidated foreigners after two immigrants from the Middle East were arrested in relation to the stabbing of a German citizen. This is a significant event in the context of this study. However, on the basis of our specific methodology, we found little indication that this particular event fundamentally altered the nature of the right-wing extremist discussion on Twitter.

4.2.2 Publications triggered by events for the German Islamist extremists

Figure 20 below shows the conversations in German among the German Islamist extremist sample. Clusters 4 and 5 are about *hijab*, which was a central topic in 2018 and is probably related to the discussion of legislation to ban girls from wearing headscarves in school. The theme of 'prisoners' in Cluster 1 was a central topic in 2018, as was Cluster 3, which was difficult to interpret in section 4.1.4. Cluster 6 concerned local and international news, in which we found references to Gaza and Israel as central in 2016. Cluster 7 pertained to what Twitter users shared from YouTube, and it represented an important conversation in 2015 and 2016. In Cluster 8, we found words relating to Islam, and these conversations were central in 2014–2016. Cluster 2 about God dominated discussions in 2015.

Except for the conversations about *hijab*, we did not find any offline events that may have triggered the engagement in particular themes among the Islamist extremists in our sample from Twitter.
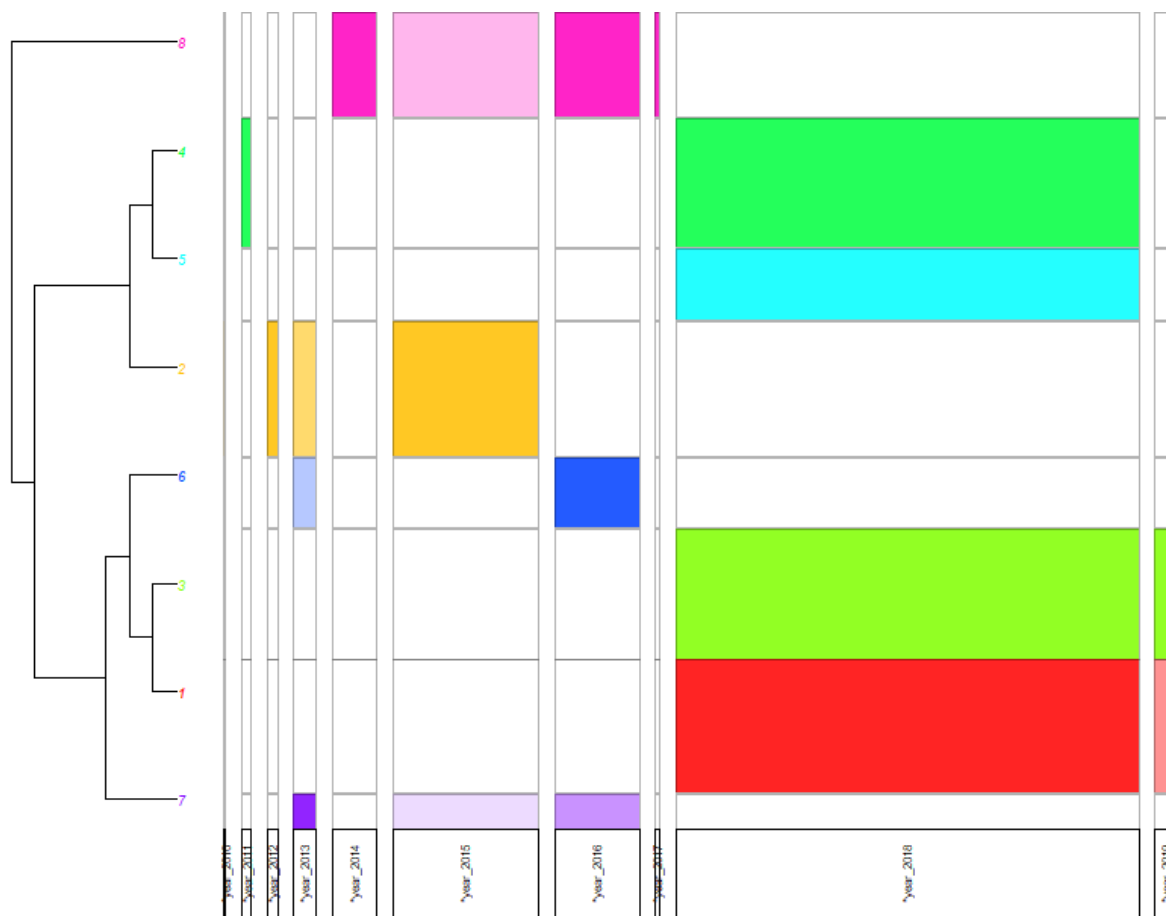

Figure 20: The conversations in German among the German Islamist extremists by year

4.3 Influencers

Some Twitter users, like celebrities or famous politicians, have very large audiences of followers with whom they share no personal ties. If their relationships are primarily unidirectional and outbound, then their messages can take centre stage and shape public debates. Others, with little to no platform prior to the web, can nonetheless develop strong ties with likeminded people around the same centres of interest and gain notoriety online – to the point of becoming digital influencers with the capacity to give high visibility to a series of topics. However, most Twitter activity consists of people interacting within small circles, enjoying the social networking site to microblog and talk about their daily activities and seek or share information and, most importantly, associating at a community level with users who share similar opinions. In this section, we discuss influencers. Influentiality was measured by

pinpointing those users who are the most retweeted and who have received the largest number of replies at the level of the Twitter platform as a whole. In this way, we identified users who can be perceived as influencers on a global scale. Worth noting, however, is that influence is not only driven by 'influentials', but also by a critical mass of easily influenced individuals. Watts and Dodds (2007: 442) claim that in 'the models that we have studied, in fact, It is generally the case that most social change is driven not by influentials but by easily influenced individuals influencing other easily influenced individuals'.

We examined users whose content spreads the most and reaches the highest scores in terms of retweets to better understand the role of influencers at the level of Twitter – not at the level of the German sample due to its size, which is very small. Instead, the main focus was on those users who were retweeted by the sample and who were the most shared at the level of the Twitter platform as a whole. This approach of influentiality reveals the directions in which information flows and spreads, thereby allowing researchers to pinpoint those who have received the most exposure in relationship to the most replies to their tweets. By defining influencers in this manner, those who have the largest platforms and the highest levels of visibility are considered.

4.3.1 Key Influencers on Twitter

Figure 21 provides an overview of key right-wing influencers. By far the most visible influencer among the radical right is the American president, Donald Trump (including the official White House account). For the other influencers, we found a mix of German politicians and accounts associated with the AFD (Beatrix van Storch, Alice Weidel, Malte Kaufmann, AfD, Joerg Meuthen Erika Steinbach, Georg Pazderski, AfDimBundestag), German political commentators or social media persona (Steinhoefel, Hartes Geld), American political figures or commentators (FLOTUS i.e. Melania Trump, the Real James Woods, RealCandaceO – with the latter two commenting on the political correctness of the Democrats and affiliates), and European commentators and news agencies (KTHopkins, the Voice of Europe). Matteo Salvini is the only European politician who ranked among the top 20 influencers.
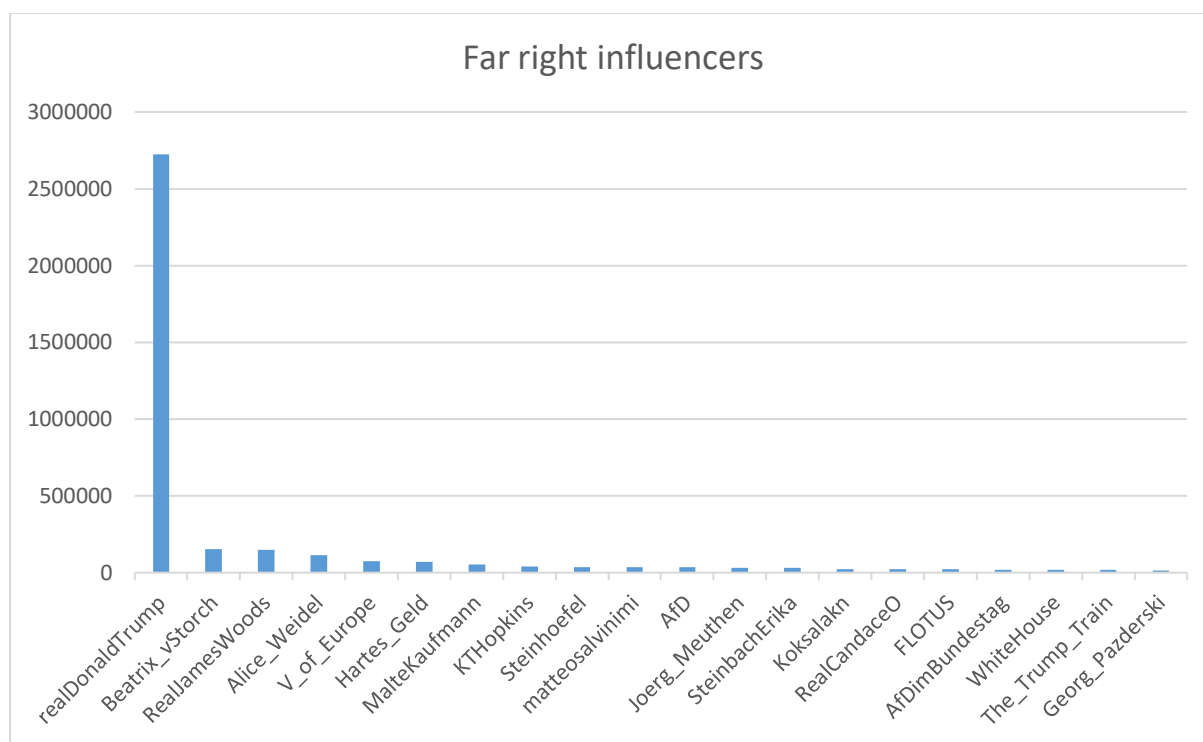

Figure 21: Overview of key right-wing influencers

It is important to note that the attention received by individual tweets can just as easily constitute criticism as it can praise. Influencers are not ranked according to their level of approval, but are instead considered on the basis of how visible they are. Donald Trump's tweets, as noted above, have reached a level of visibility that significantly surpasses the others.

When looking at the Islamist extremist data sample, the results are very different, as shown in Figure 22. The foremost influencers in this sample cannot be perceived as holding a particular, common worldview.
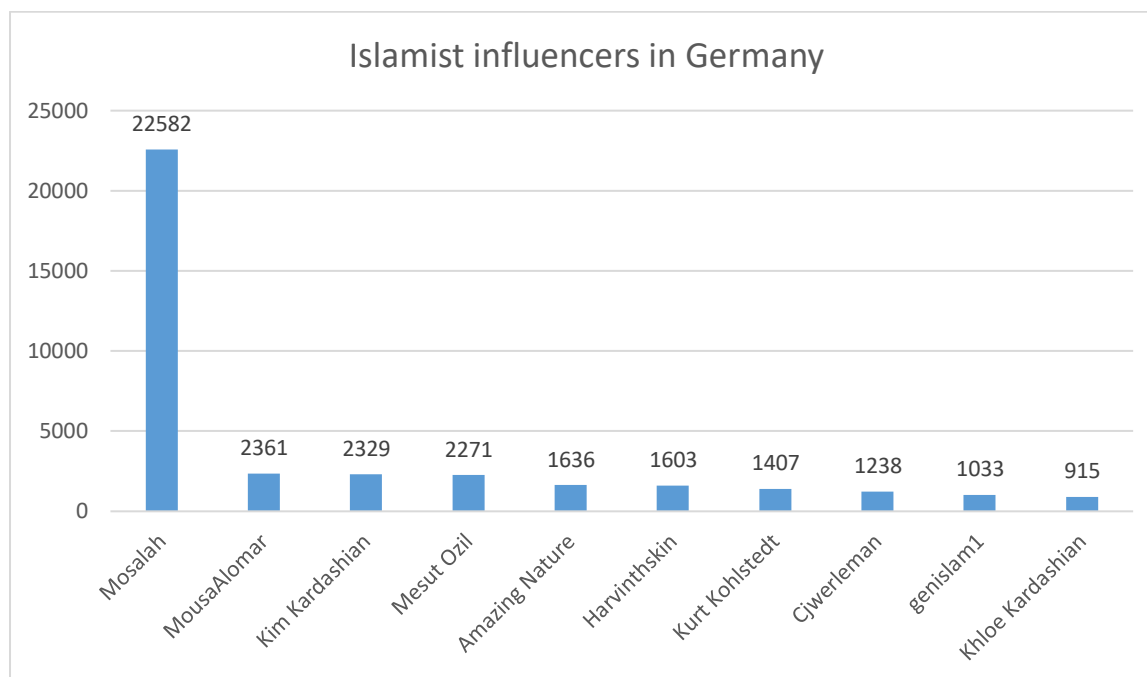

Figure 22: key influencers in the Islamist extremists sample

There is no distinct pattern or perceptible characteristic that links these accounts. The very top influencer within the German Islamist extremist data sample is Mosalah, Mohamed Salah, a football player at the English Premier League Club Liverpool. Salah is followed by Moussa al-Omar, a Syrian journalist and TV presenter residing in London. He was a supporter of the Syrian uprising and covers many issues related to the uprising. Kim Kardashian is an American media personality, businesswoman, socialite, model and actress. Mesut Özil is a German professional footballer who plays for the English Premier League Club Arsenal. 'Amazing nature' posts photos of nature's beauty. Harvinth Skin is a Malaysian YouTube influencer. Kurt Kohlstedt is the founder of @WebUrbanist and tweets about design. C. J. Werleman is a columnist for Middle East Eye and Byline Times and an activist against Islamophobia. Genislam1 refers to Generation Islam, an organisation that, according to Zeitonline, organised a campaign against the prohibition of the hijab.[15] Khloe Kardashian is the sister of Kim Kardashian and also an American media personality, businesswoman, socialite, model and actress.

4.3.2 Influencers as a means for participation

The politics of Donald Trump and the ideology of the Alternative for Germany and the Italian Lega Nord may influence German right-wing extremist Twitter users. The only influencer among the top 10 influencers in the data sample from Islamist extremists in Germany who may hold and spread radical views is Generation Islam. Yet, although the American president, Donald Trump, a politician from the Alternative for Germany, the Italian politician Matteo Salvini and Generation Islam seem influential,

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[15] https://www.zeit.de/2018/49/islamismus-jugendliche-hamburg-wilhelmsburg-beeinflussung-widerstand/seite-4

we cannot determine whether these Twitter users serve as drivers of self-radicalisation. We do not know what they tweet about, and we do not know how people respond to what they tweet. We may therefore consider these findings as indications of possible drivers of self-radicalisation.

5. Networks: analysing how people engage

Relationships and group belonging may fuel processes of self-radicalisation (Vergani, 2018). In this section, network analyses are presented to further understand the role of digital sociabilities and self-radicalisation online in our data sample.

These analyses will provide answers to the following questions:

- How connected to one another are Twitter users in the data sample?
- To whom are the Twitter users in the data sample connected?
- Are there groups that may be described as milieus or looser networks?
- What are the institutions and/or who are the leaders taking centre stage in the networks?
- Are there online milieus of radicalisation on Twitter?

In this report, milieu refers to:

> the people, the physical and social conditions, the significant events and networks of communications in which someone acts or lives and which shape that person's subjectivity (identity), choices and trajectory through life. (DARE Project definition[16]).

The network analyses were conducted on three levels to examine digital ties in the German data sample: (i) on a sample level; (ii) on a retweet level; and (iii) on a 'mention' level. Analyses from these three levels are complementary, as explained in the presentations of each of these individual levels. For privacy reasons, the names associated with the accounts do not appear on the graphs presented below.

Throughout the presentation of the analysis, a distinction was made between 'our samples' and the 'full scale of the sample'. 'Our samples' refer to the users who were hand-picked to compose the German sample (38 right-wing extremist accounts and 25 Islamist extremist accounts). 'Full scale of the sample' refers to the followers and followings of the country-level sample, as well as to the samples of the other seven countries within the DARE study (Greece, the Netherlands, Great Britain, Germany, France and Belgium). Thus, we are not only extending the focus beyond the accounts represented by the German Islamist extremist and right-wing samples, but we are also considering the networks of all of the seven country samples, with their respective followers and followings.

5.1 On the sample level

The network analyses at the sample level provide insight into connectivity: how Twitter users in the data sample are connected with one another, their level of online visibility, who is following whom and whom is being followed. In addition, this approach provides information as to whether people constitute points of passage or hubs of some sort.

In the analysis of connectivity, we considered the followers and followings of the country-level sample as well as the samples of the other countries within this study. The analyses are presented in two graphs: one for the Islamist extremists; and one for the radical right. In these two graphs, the size of each node is representative of in-degree relationships - the bigger the node, the more that account is

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[16] www.dare-h2020.org/concepts.html

followed. Large nodes imply a person who has a strong reputation and has other people's attention. In the analyses, the colours represent different countries.

The spatialisation layout is a force-directed algorithm (Force Atlas 2) which helps visualise the level of connectivity of the sample and the people who are central to the network. This algorithm heightens interrelationships and therefore helped us to better determine whether the Twitter users in the data sample possessed close bonds or not.

For the analysis of the network, we made a comparison between the networks we observed for the German samples and the networks that were observed for other countries, including the French, Dutch, and Norwegian samples. We found considerable similarities between the samples. In describing the characteristics of the networks, it was practical to use similar, if not the same, language to describe the networks, of course to the extent that the same characteristic applies to the network under consideration.

5.1.1 The network of the right-wing extremist sample
Figure 23 (below) is produced on the basis of a network analysis of the right-wing German sample, allowing us to visualise the sample's structure at the level of the study's full scale of the sample.

DEU		(65.96%)
NLD		(19.15%)
GBR		(8.51%)
FRA		(4.26%)
BEL		(2.13%)
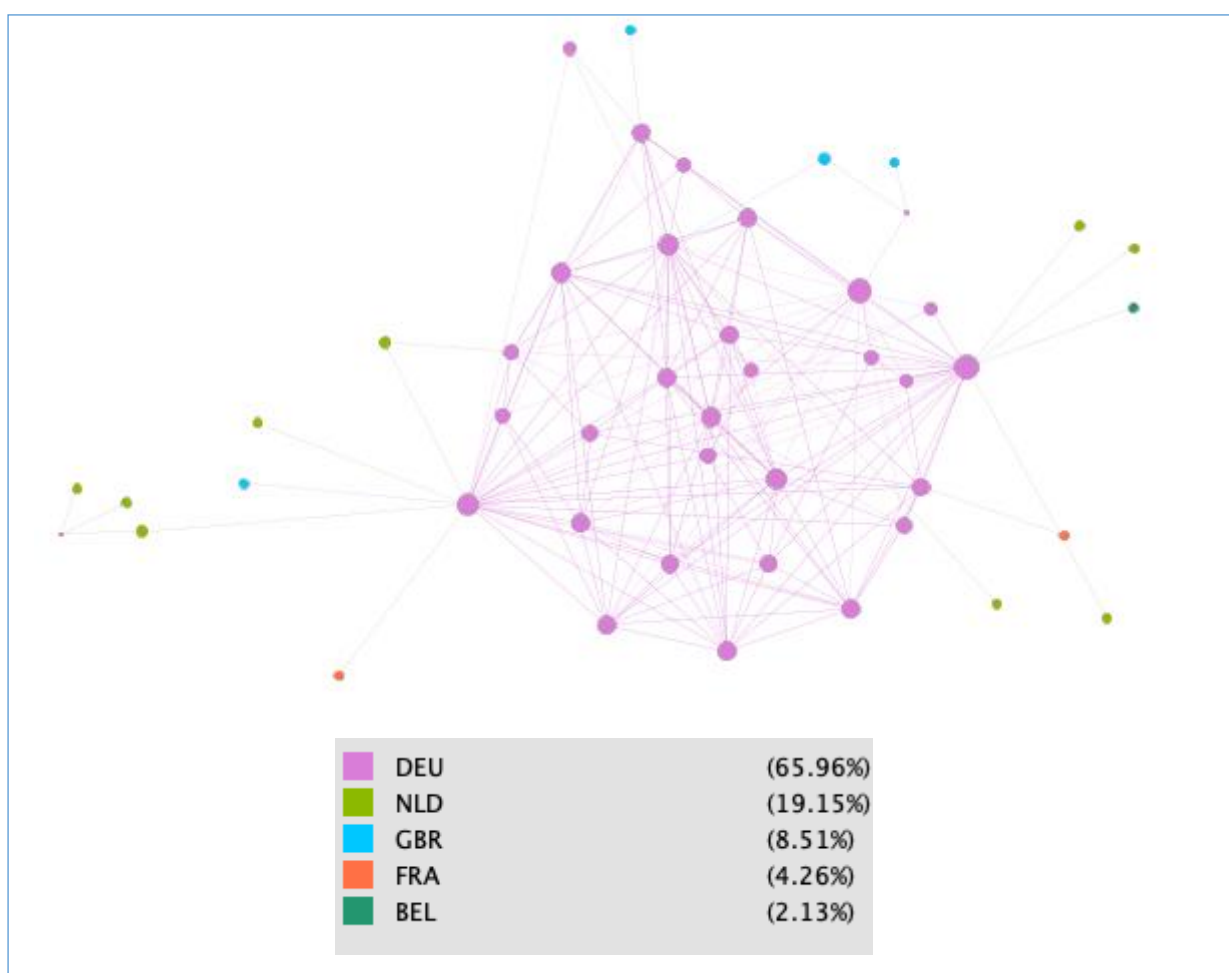
Figure 23: Social network of the right-wing extremist sample

Several characteristics of this network might be noted:

1. 'Small world' network phenomenon

This graph shows a 'small world' network (Watts and Strogatz, 1998). A small world network as indicated by small distances between pairs of nodes and ensembles of networks that appear closely related, so that a node in one cluster can easily connect to a node in another cluster via a small number of intermediaries.

2. Demonstration of an online milieu

We can note that the German sample offers a glimpse into a community of online actors who interact on a regular basis – and, at the heart of these interactions, are the most connected users around whom the clusters are formed. The high level of interactivity and connectivity among users demonstrates, from a different perspective, that we can consider the German sample to be part of a larger right-wing extremist digital milieu.

3. Clustering emphasises the centrality of a handful of users

A few Twitter users are central to the network and play the role of leaders of opinions given that they benefit from a high level of in-degree connections. These people potentially have more influence than their peers as they are more connected and central to the overall digital RW German milieu.

4. Prominent circulation of content

The tweeters are sufficiently interconnected and integrated to have easy access to what the others know and share and thus the social network of right-wing extremists is both dense and strong.

5. Transnationality

Although the network is predominantly German, as indicated by the dominance of purple nodes, one can also see influences from and to other countries. In terms of percentages, there are fairly substantial linkages to the Netherlands, Great Britain, Belgium and France. However, all non-purple nodes (indicating foreign influence) have a marginal place in the network. It appears that the debate in Germany is inspired by, and influences, debates elsewhere but, overall, it is a largely German national debate. This finding concurs with the findings of another study of the German far right on Twitter (Froio and Ganesh, 2018) which concludes that the Internet may provide the German far right with better opportunities for exchanges, but German far-right transnationalism on Twitter is moderate and that far-right Twitter activity remains mostly intranational.

5.1.2 The network of the Islamist extremist sample

Figure 24 (below) is produced from the network analysis of the Islamist extremist German data sample. Several points of interest arise from this illustration of the network.

1. Weak network

The Twitter users in our sample do not appear to be closely related to one another. The level of interactivity and connectivity is low. Not many of the tweeters communicate or retweet among each other, as indicated by the density and uncollected nature of the graph. Looking at the size of the nodes, we can see that there only seems to be one influential Twitter user in the German data sample. As already mentioned, the larger the node, the more that account is followed.

2. Low circulation of content

The graph shows low level of following/followers from which we can conclude that individuals are not privy to information circulated by others in the sample.

3. Transnationality

Although the network is predominantly German, as indicated by the dominance of light blue nodes, one can also see influences from and to other countries, like the Netherlands (11.11%) and

Great Britain (7.41%). The British and Dutch nodes do, however, have a marginal place in the network. This does not mean that these Twitter users only engage in national debates. They probably have networks elsewhere, too. This is because, as we have already noted in section 4.1, among the tweets in the German data sample, there are 1,087 tweets in 31 languages other than German. Among these languages are Bahasa (a language spoken in Indonesia), Somali, Italian and the South African language, Afrikaans.
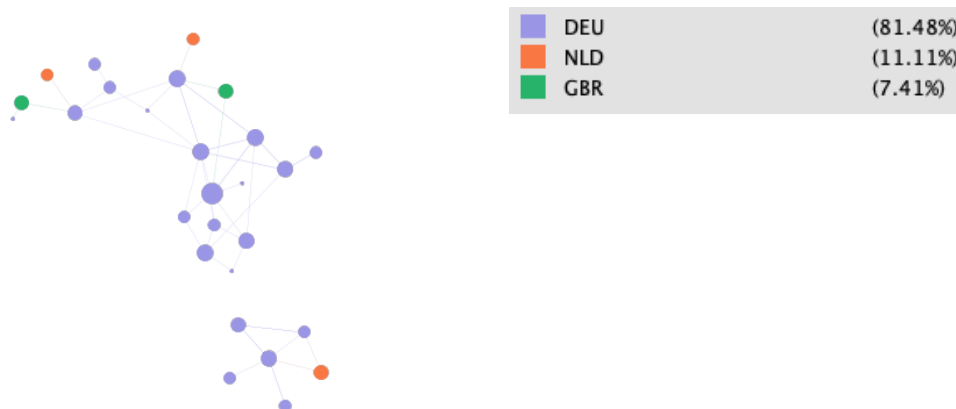

■ DEU	(81.48%)
■ NLD	(11.11%)
■ GBR	(7.41%)

Figure 24: Graphical depiction of the Islamist extremist network

5.2 On the retweet level

In this subsection, we present analyses of who retweets whom within the German sample to map interactions and understand conversation patterns. For users to be considered in the analysis of this subsection, two conditions were required: the person who is retweeting must be part of the country-level sample; and the person who is retweeted must be part of the full study sample (i.e. of any of the seven countries).

The size of the nodes represents the in-degree of the node; i.e., the more the account is retweeted, the bigger the node is. Colours represent countries and therefore highlight which countries are the most central to the conversation.

As noted above, the spatialisation layout is a force-directed algorithm (Force Atlas 2) which helps to visualise the level of connectivity of the sample and the people who constitute points of passage – possibly leading to the observed online milieu or connecting people outside the milieu.

It is important to keep in mind that high levels of retweets – and this is the same as for 'mentions'– of a given account do not automatically signal popularity of a message. It likewise does not imply the popularity of a user's or influencer's account, in the case of mentions. Sharing a message can very well represent a strategy for shedding light on a conflictual topic. It may therefore be used to engage in controversy.

In this subsection, we present how conversations are articulated to one another and discuss their overall structure to highlight how communication is conducted. It is important to keep in mind that high levels of retweets – and this is the same for mentions – of a given account do not automatically equal the popularity of a message. Sharing a message can very well be a strategy enacted to shed light on a conflictual topic and can therefore be used to trigger disruptions and create controversy. As stated above, examining retweets represents a means by which to map interactions and understand conversation patterns.
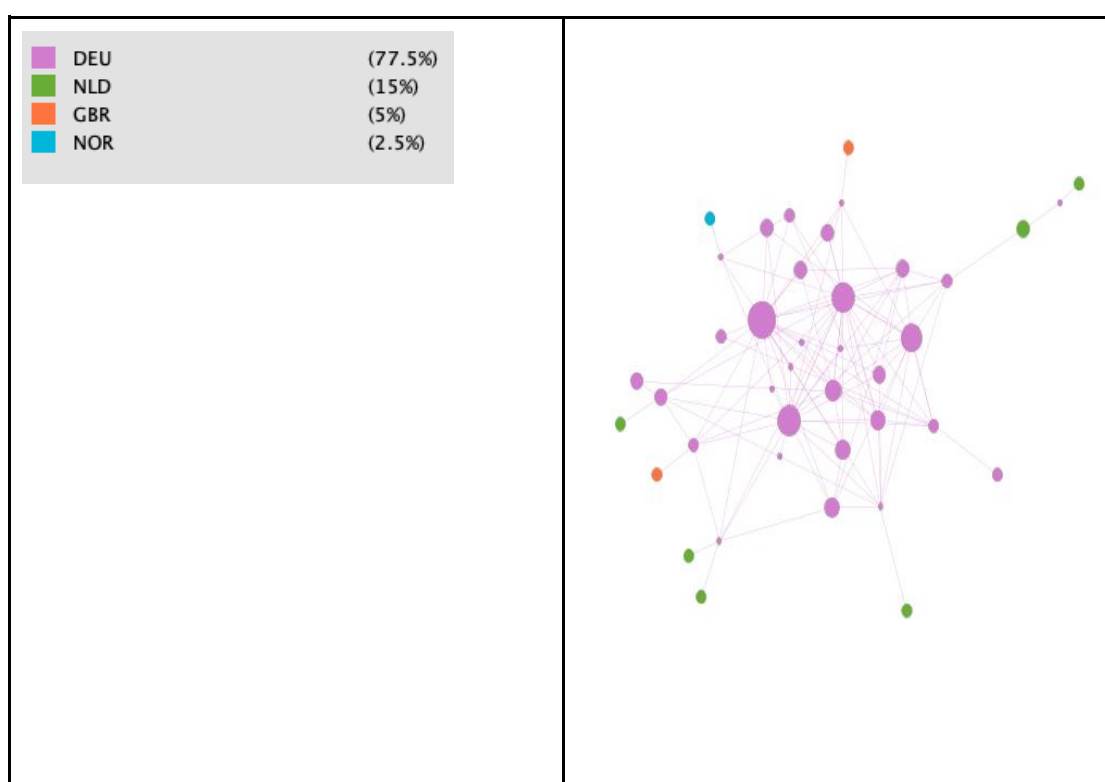
5.2.1 Right-wing extremist retweet network

The two graphs below show us who retweets whom within the German right-wing extremist sample. That said, for users to be considered in the analysis of this subsection, two conditions are required: the person who is retweeting must be part of the country-level sample; and the person who is retweeted must be part of the full study sample (any of the seven countries).

The size of the nodes represents the in-degree of the node, i.e. the more the account is retweeted, the bigger the node is. Colours represent countries and therefore highlight which countries are most central to the conversation.

The spatialisation layout is a force-directed algorithm (Force Atlas 2) which helps visualise the level of connectivity of our sample and the people who constitute points of passage, possibly leading to the observed online milieu or to connecting people outside the milieu.

In Figure 25 (below), we can observe the retweet network of the German right-wing extremist sample.

Figure 25: right-wing extremist retweet network

Figure 25 depicts a high level of interactivity, one which demonstrates the existence of an online German right-wing milieu. Conversations are mainly held among German citizens, and topics are shared with fellow Twitter contributors in relation to German interpretative communities.

Likewise, even though foreign countries play a role in the German right-wing extremist scene, the structure of the conservations shows that the core of communications revolves around German users. This translates into a graph in which we can mainly see German users. The core of the network is dense and close-knit, and it is especially and exclusively composed of German nationals, with the exception of a few foreign accounts, which appear on the periphery of the graph.

Extending the analysis, it is evident that the network is composed of a high number of larger nodes, meaning there are not just a few people spreading content on the web, but in fact a large number of

people using retweeting to communicate, with a larger audience, information that they find relevant to share. This implies a high level of interactivity and strong interconnectivity.

When specifically considering the German retweets, as well as the overall structure of communications, the earlier suggestion that the German sample demonstrates a well-integrated right-wing extremist milieu appears to be confirmed.

5.2.2 Islamist extremist retweet network

Figure 26 shows the Islamist extremist network. We first notice that the retweet network is not connected to any of the other country samples in the study, except for the one connection to Great Britain. Furthermore, one can see that the network is much smaller in comparison to that of the right-wing extremists. We also notice that there is little to no interaction between users, with very few connections in the retweet network of the German Islamist extremist sample. This finding supports the previous findings from the network analysis at the sample level – these patterns of interaction cannot be described as a milieu.

We cannot, however, conclude that Twitter users from the German Islamist extremist sample use Twitter less often to converse and exchange ideas or information than they do to publicise content. They probably have retweet networks elsewhere, too, outside of our data sample. We already mentioned in section 5.1.2 that in the German Islamist extremist data, there are tweets in languages other than German and English, which indicates connections in countries where these languages are spoken, such as Indonesia, Somalia and Italy.
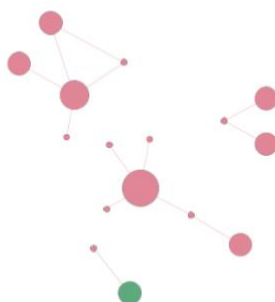
Figure 26: Islamist extremist sample retweet network

5.3 On the mention level

To pursue our understanding of processes of radicalisation on Twitter, we will now examine the level of interconnectivity as well as the centrality and the reputation of accounts that are interlinked through mentions.

5.3.1 The right-wing extremist mention network

Figure 27 allows us to observe the mention network of the German right-wing extremist sample.

Figure 27: Right-wing mention network

In correspondence with the graphical depiction of words used in the right-wing Twitter debates, the graphical depiction of the mention networks reveals two densely knit networks of nodes. Within each of these networks, there are multiple nodes mentioning each other, suggesting the existence of an interaction within the German right-wing extremist sample and between the German right-wing extremists and mainstream German politics. The actors shown in the graph are, with very few exceptions, German contributors.
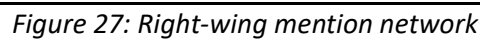
Table 2 below summarises the most frequently mentioned accounts by the German right-wing sample:

| User Mentioned	NbMention
YouTube	1583
jouwatch	806
AfD	648
AfDimBundestag	509
DrDavidBerger	442
welt	438
China_Welt_News	391
AfD_Thueringen	338
OnlineMagazin	234
tonline_news	191
CDU	143
Die_Gruenen	138
googlenews	138
Alice_Weidel	137
focusonline	136
BILD	126
SPIEGELONLINE	119
AN_Offiziell	112
Joerg_Meuthen	112
Beatrix_vStorch	110
Junge_Freiheit	109
webaxvita	104
ZDF	99
politikstube	98
tagesschau	94

Table 2: Most frequently mentioned accounts by the German right-wing sample

We can infer from the table that YouTube and the associated YouWatch are the most frequently mentioned sites in our sample. The AFD also has a significant influence, as indicated by a high number of mentions. There is also mention of other political parties, including CDU and Die Gruenen. National newspapers such as 'Welt', 'BILD' and 'Spiegel' are also referenced, in addition to German public television (ZDF) and the national news (tageschau). Most individuals who are mentioned are related to the AFD, including David Berger and Alice Weidel, Joerg Meuthen and Beatrice von Storch. The essence of the mention network is its reflection of a polarised political debate that, on the one hand, concerns traditional mainstream political parties and, on the other, concerns the Alternative für Deutschland and other influences that are critical of the current parliamentary practices of the German political system.

5.3.2 Islamist extremist mention network

There is no Islamist extremist mention network in our data sample. Only two mentions in the Islamist extremist mention network of the German sample are made, two accounts mentioning each other.

However, as we did with the radical right, we identified the most popular accounts to complement the network analysis in the graph presentation. Figure 28 summarises the number of times an account is mentioned at the level of the full scale of the sample, based on the German Islamist extremist sample. By moving away from the structure of the conversation generated by mentioning people, and examining the number of mentions, we can see that the top mention is YouTube. We do not, however, know what people refer to on YouTube, and it would therefore be interesting to research that question through qualitative analyses of our data.

TOP MUSLIM MENTIONS
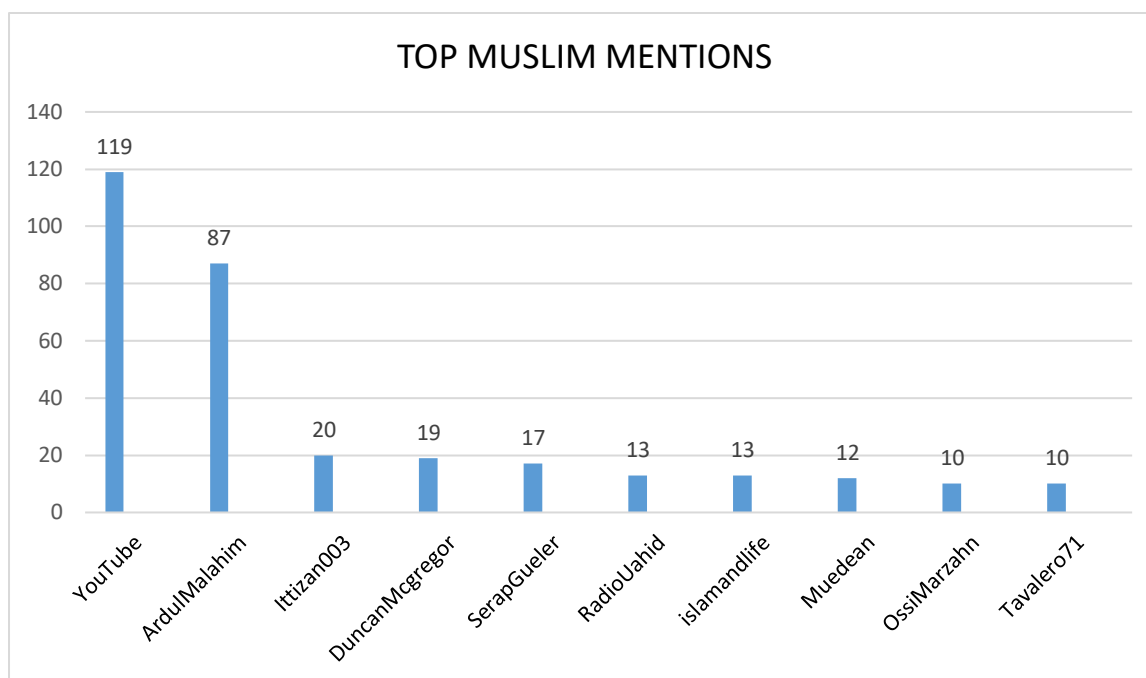
Figure 28: Key influencers in the Islamist extremist sample

As already mentioned in Section 3.2, Twitter suspends accounts that break their rules and the second (ArdulMalahim) and third (Ittizan003) most frequently mentioned accounts (see Figure 28) are both accounts that have been suspended since we performed our data collection. DuncanMcgregor is also no longer found on Twitter, and it is possible that he deleted his account. Serap Gueler is a member of the CDU federal executive and vice-chair of the CDU Cologne.

We may interpret the fact that some of the influencers among the Islamist extremists in Germany are no longer on Twitter as evidence that radical Islam is seen to be disappearing on Twitter.

6. Conclusion

In this study, we investigated radical Islam and right-wing extremism in Twitter conversations. We investigated 38 right-wing extremist and 25 Islamist extremist accounts. We initially envisaged investigating a larger sample, but partially because of the suspension of some accounts and partially due to the absence of other accounts that fit the criteria needed to determine extremism, the analysed set was reduced to the current number.

The time period under investigation was from 2010 until the end of February 2019. For the Islamist extremist sample, the level of activity was more scattered over this time period than for the right-wing extremists. The activity of the right-wing extremists primarily occurred during the past two years. Regarding individual tweeting behaviour, we found greater similarity in the number of tweets sent for the right-wing extremists relative to the Islamist extremists. For this latter subsample, we found that some were very active, while others only sent a few tweets.

We also observed a substantially lower number of retweets relative to tweets for the Islamist extremists relative to the retweet/tweet ratio of the radical right. In combination with a significantly lower level of followers and followings, this suggests that we cannot speak of an Islamist extremist online milieu that consists of a significant number of contributors who regularly comment on one another and follow each other's messages. For the radical right, we found indications of regular

retweeting and following within the sample, providing the existence of an online milieu. Again, this was much less the case for the Islamist extremists.

For the radical right, the debate centres on the tension between mainstream political parties, such as the CDU, CSU and SPD, versus new political movements, particularly embodied in the successful political party, Alternative für Deutschland (AFD). The AFD has a clear endorsement from the right-wing extremist sample under investigation. Immigration and terrorism are core topics used to describe the divide between the two competing views. Specific cases of violent crime, such as rape by immigrants and Jihadist terrorism, are taken as evidence that the political mainstream has failed to address the true threat of Islam. A question that can be asked is whether the position of the radical right under investigation is particularly extreme. We failed to find any widespread indication of violent intent or overt hostility towards immigrants or Muslims. One consistent pattern was that the radical right points to brutal crimes committed by Muslims and then argues that the current government has responded to the threat inadequately. On the basis of this, one might argue that extremism in this case consists of an excessive focus on brutality committed by Muslims, which thereby legitimises hostility towards Muslims. This report's findings on the radical right are in line with some of the findings regarding alt-right Twitter content in a VoxPol report from 2018,[17] which found Pro-Trump content, white nationalist content, general far-right content and anti-immigrant and anti-Muslim content.

Another finding of the present study is that the word 'nicht' (not) had a very central place in the debates within our sample. The 'nicht'-saying tendencies of the sample can be found in the debates regarding a large variety of topics, not only when Islam is discussed. In this respect, one may wonder whether anti-Islamism is driven by negative attitudes that specifically concern Islam or whether generic negativity in the political domain also implicates Islam as a topic.

The Islamist extremists in the data sample cannot be described as a milieu but rather as a much looser network sharing an interest in the same themes, key figures and events. We found Salafism to be a central feature in these data; this is also not surprising, since the accounts were selected using Salafism as one of the criteria. We have also seen that Twitter does not seem to play an important role among Islamist extremists in Germany, although we found traces of extremism in the self-presentations, in the tweets and among the foremost influencers in the networks. Although the sample of Islamist extremist Twitter accounts from Germany was very small, it produced some interesting findings about how these Twitter users stage and frame their online identity and in particular how they label themselves as radical or extremist. Macdonald and Lorenzo-Dus (2019) note that there is a need for more studies on jihadi self-identity construction and this study helps fill this gap in knowledge. Amongst the Islamist extremists in our sample, we observed self-labelling that may be interpreted as extremism, not merely radicalism, among both male and female members of the sample. We found symbols and concepts evoking associations with Salafi jihadism. We concluded from these observations that the *niqab* represents an important characteristic of women's identity. Amongst the men, the most popular profile picture was posters featuring religious quotes.

For the Islamist sample, our content analyses are based on the 1,829 German-language tweets and the 757 English-language tweets. The results of the analysis of themes discussed amongst Islamist extremists in German show that people engage in conversations about Islamic knowledge, the hijab, God, news about Israel and Gaza and prisoners. Prisoners are probably Muslims who have been imprisoned for their support of alleged terrorist organisations as defined by European authorities. The results from the analysis of the themes that are discussed among Islamist extremists in English are the Palestinian cause, God and the Prophet Muhammad and life and feelings. Here we also find references to Abudullah Azzam, Osama bin Laden's mentor and one of the cofounders of Al-Qaeda.

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[17] https://www.voxpol.eu/download/vox-pol_publication/AltRightTwitterCensus.pdf

In the introduction to this report, we referenced a CNBC online article on the alleged civility of German online discourse (Feiner, 2019). However, that should not be taken to imply that there is no concern about extremist discourse on social media platforms such as Twitter. Although this study has not been able to generate definitive knowledge about the drivers of self-radicalisation, the data gathered documents:

- The staging and framing of radical online identities on anonymous accounts where extremist views are expressed in texts, symbols, posters and images on some of the online profiles.
- Influencers, videos, images and texts promoting Alternative for Germany, a right-wing to popular radical right political party in Germany.
- Influencers, videos, images and texts promoting jihadi-Salafism.
- The creation of negative images of Muslims and immigrants in conversations.
- Statements showing alignment with racist, Nazi and Salafist ideologies.
- A digital right-wing extremist milieu.

These factors suggest there remains cause for concern about how social media platforms can be employed in the formation and communication of extremist attitudes.

7. References

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