RECO_DAR
RESEARCH PROJECT

Far-Right Hate Speech on TikTok

A New Approach to Exploring Ecosystems

This report was produced as part of the EU-funded RECO_DAR project: Right-wing extremist eco-systems driving hate speech: dissemination and recruitment strategies

The project generates a deeper knowledge and understanding about ecosystem of right-wing actors in German-speaking countries and their use of hate speech online. This should lead to sustainable and more effective prevention programmes in online and offline spaces and improve the protection of minority groups, women, and minors often targeted by hate speech.

More information: www.scenor.at/recodar

Authors Esther Theisen

Ivo Bantel

Erik Hacker

Robert Jung

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Association Register No.: 1495448289

+43 650 3666621

www.scenor.at

Chairman Stefan Meingast, MA

Editors Dr Daniela Pisoiu, Stefan Meingast, MA

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00 ABSTRACT

This RECO-DAR report enhances the understanding of hate speech used by the German-speaking far-right extremist ecosystem on TikTok by proposing a new theoretical and methodological framework for its analysis in the context of the RECO-DAR project.

To accommodate the specific phenomenon and context that the project addresses, the conceptual framework utilises an understanding of far-right extremism as a unique combination of populism and nationalism with radicalism or extremism. While acknowledging that these traits in isolation are not unique to far-right extremism, the report argues that their overlap forms a unique ideology that has shaped key policy areas and sometimes led to political violence. Recent examples of far-right extremist ideology undermining democratic principles further underpin its relevance.

On the basis of this specific understanding of far-right extremism and building on earlier project findings about the definition and indicators of hate speech, the report proposes a focus on so-called seed channels for studying the use and proliferation of hate speech in a specific extremist ecosystem. Leaning on earlier conceptual work by peers, such seed channels are conceptualised as entities embedded in multi-level structures, forming communities, biotopes, and eventually an ecosystem.

In line with these theoretical foundations, RECO-DAR used a user-centric data collection and (pre-) processing methodology. Using a mix of indicators, a snowballing technique, and known extremist players, the researchers simulated real-world user experiences and inductively generated a sample of TikTok users producing (far-right) hate speech content. This iterative, authentic approach resulted in the project identifying 323 relevant user accounts, out of which the researchers, using a comprehensive, metric-driven cross-coding process, identified 34 as seed channels. Recognising the challenges of researching online extremism and TikTok's platform-specific features, over time, the project scraped the content and selected the metadata of each user in the sample using a custom-built Python-based solution to allow further analysis despite users or the platform moderating or removing content.

The project team members then processed and structured the account and video data to facilitate further qualitative analysis. Further steps to (pre-)process and structure data consisted of automatically transcribing posts in German, calculating a multidimensional mathematical representation of in-text semantic meaning, and exploring ecosystem maps and clusters based on semantic similarity and metadata.

RESULTS

Identified

323 relevant user accounts

Of which

34 seed channels

Scraped the content

using a custom-built Python-based solution

The project collected 21.685 videos published between February 2020 and November 2023. The researchers estimated that the majority of users in the sample were German. The researchers found no notable differences between German and Austrian accounts in most metrics: There was equal distribution in the age of the account, number of posts, and bans. The number of views of collected videos ranged between 600 to over 10,000, with an average of fewer than 20 comments.

While this report does not provide a detailed analysis of the ecosystem, it outlines the project staff's first impressions. The distinct use of visual language by younger, presumably Generation Z users stood out, with their prevalent use of flashing video collages accompanied by music often referred to as "fashwave". Other general trends the project identified were the use of humour, memes, and (frequently visual) dog whistles (i.e. insider references) to appear neutral and add a layer of plausible deniability in an attempt to circumvent content moderation. The first screening also found that far-right hate speech on TikTok is predominantly spread implicitly, likely as a conscious strategy to appeal to a wider, unsuspecting audience.

Somewhat surprisingly, while the researchers identified 421 links to other platforms in the sample, only a few of these led to fringe platforms, raising questions about the role of TikTok in recruitment.

RESULTS

collected **21.685** videos

found no notable differences between **German** and **Austrian** accounts

only few of **421** links led to fringe platforms

01 INTRODUCTION

This report is the result of the third work package (WP3) in the RECO-DAR project, which aims to understand the ecosystem of far-right hate speech on TikTok and so-called fringe platforms. WP3 builds on the results of the project's second work package (WP2), in which the researchers developed a comprehensive working definition of hate speech to guide the project's data collection process and subsequent analysis.

WP3 COMPLETED ITS OBJECTIVES

- It manually identified the most relevant far-right TikTok channels in Austria and Germany.
- It identified the "seed channels" producing hate speech and structured and stored the collected data in the project database.
- It advanced the understanding of far-right networks.

This work package aimed to collect relevant data on the spread of hate speech by an ecosystem of German-speaking far-right individuals on TikTok. That data allowed the researchers to analyse the content, networks, and interactions between actors and identify clusters to discover the structures that allow the ecosystem to thrive, providing a basis for devising strategies to counter such hate speech in future work packages and projects.

This report details the achievement of the objectives outlined in the project application. It describes in detail how the project collected data on German-speaking far-right ecosystems spreading hate speech on TikTok, including identifying relevant channels, the data collection process, and the database design. The report also details progress towards the goal to "*map German-speaking right-wing extremist ecosystems spreading hate speech across a web of social media platforms, focusing on platforms more popular with younger audiences (TikTok, Discord, etc.).*"

Furthermore, the report details the *content* of the hate speech involved by examining predominant themes, topics, and content strategies of actors across multiple platforms. However, despite the project's objective to "*map links (interconnections) between platforms and content*", the researchers focused on TikTok due to the inter-platform links being weaker than initially anticipated and TikTok being a highly relevant platform.

The data collected allowed the researchers to analyse the content, networks, and interactions between actors and discover and identify clusters to "*investigate the progression of hate speech on platforms*" and "*generate insights about the proliferation of hate speech that will aid the development of new counter strategies and alternative narratives, specifically on these less-studied platforms.*"

WP3 completed its objectives. That work package accomplished the following: Firstly, it manually identified the most relevant far-right TikTok channels in Austria and Germany and collected the social media content by automatically retrieving data from the accounts. Furthermore, the project identified the "seed channels" producing hate speech and structured and stored the collected data in the project database.

The researchers then preprocessed the data, designed a customised database to store it and created a spatial representation of the German-speaking far-right social media ecosystem by calculating embeddings for transcribed hate speech video texts that transformed semantic meaning into spatial relations. Afterwards, the researchers used the embeddings to group the messages into shared topic clusters, thus creating a map of German-speaking far-right hate speech.

The findings of this work package are crucial for the RECO-DAR project's de-radicalisation efforts. Firstly, the findings provide an empirical basis to answer the project's overarching research questions. Secondly, they provide insights into far-right actors who use and link social media platforms and posts to achieve their goals. In particular, the findings show how subgroups form, and clusters of channels influence the overall ecosystem. That advances the project's goal of understanding the evolution of such communication patterns across platforms and their effects on young people.

Thirdly, the project's findings advance the understanding of far-right networks by providing descriptive evidence of German-speaking far-right hate speech content on social media, accurately assessing its prevalence, and creating a better understanding of circulation dynamics to devise targeted counter strategies.

Readers should note that this work package of the RECO-DAR project does not analyse the collected data. Nevertheless, it provides preliminary insights into hate speech ecosystems by introducing and describing the data, presenting the conceptual background underlying its collection, and describing how researchers collected it. The reports in work package four (Cluster Analysis Report, Content Analysis Report and Linkages Report) present an in-depth analysis of the data and present the results.

The authors compiled the report as follows

Section 2

Introduces and defines the relevant concepts and definitions – Radical and Extreme Right, Eco systems – and details their relevance.

Section 3

Part one outlines the project's methodology in identifying relevant channels and consolidating details about them.

Part two explains the data collection procedure, discusses the steps the project used to preprocess and cluster the data, and describes how the researchers structured the data collected.

Section 4

Describes the data and summarises the statistics of relevant metrics.

Section 5

Provides insights into the procedure the researchers used to identify the ecosystem's components, including the main actors' demographics, strategies and links and presents the results.

02 CONCEPTUAL BACKGROUND

This section provides an overview of the relevant concepts within the report, namely the far-right and populism. After defining the concepts, this section outlines the relevance of the far-right in real-world events and discusses the role of far-right ecosystem components and why they provide a relevant perspective when considering far-right hate speech.

What does the concept of 'far-right' encompass? In short, this project considers far-right actors as those who combine *populism and nationalism with radicalism or extremism.*[1] While these traits in isolation are not unique to the far-right, far-right actors increasingly overlap them, which sets them apart from fascist or far-left actors – the latter not exhibiting nationalist traits.

Populism is an integral component of far-right ideology and consists of three elements.[2] It promotes a Manichaeist understanding of society. In other words, the underlying image of society is that it is divided between homogeneous groups: "the people" and "the elites." As far as the Manichaeist worldview is concerned, these groups have naturally diverging preferences; importantly, populism is *people-centric and anti-elitist*, meaning that it considers society as actually divided between "the pure people" and "the corrupt elites" and advocates for the former to free themselves from the latter's dominance. Finally, populism focuses on the (imagined) "general will" of the "pure people" as the exclusive source of legitimate decision-making rather than being restricted by representative bodies, minority rights, independent courts, or expert involvement.

However, populism is almost always accompanied by a substantive ideology. It does not necessarily have an ideological underpinning. For the data analysis, the most important question is how the far-right defines "the people". Far-right populist actors define "the people" based on ethnicity and culture, thereby connecting populism with nationalism.

The far-right builds on populism as much as it relies on nationalism. At its core, nationalism demands that state and nation be congruent.[3] While subtypes of nationalism differ in how or if one can become a member of the (imagined) nation, they concur that it must be homogenous either with regard to culture and values (civic nationalism) or ethnicity (ethnic nationalism). Importantly, nationalism demands that this national homogeneity is desirable and should be the goal of state action.

Radicalism or extremism completes the conceptual identification of far-right actors.[4] Radicalism refers to an anti-systemic conviction that calls for a fundamental overhaul of the political and economic system, while extremism rejects the political and economic system entirely. As such, the RECO-DAR project identifies far-right radicalism as an opposition to liberal democracy and far-right extremism as a direct opposition to democracy.

1 - Earlier stages of this project planned to focus on the "extreme right", which constitutes a sub-group of the far-right that combines populism, nationalism, and extremism (characterised by a rejection of democracy overall). However, over the course of the project, those who reject liberal democracy emerged as the more reasonable ideological group to focus on; see also Mudde, Cas (2019): The Betrayal of Populism: Why the New Far Right Is the Real Threat to Our Democracy, Promarket, available online from here, last retrieved on 30 November 2023.

2 - See e.g. Mudde, Cas (2004): "The Populist Zeitgeist." Government and Opposition, 39(4), 541-563; Geurkink, Bram, Andrej Zaslove, Roderick Sluiter, and Kristof Jacobs (2020): "Populist Attitudes, Political Trust, and External Political Efficacy: Old Wine in New Bottles?" Political Studies 68(1), 247-267.

3 - Mudde C. 2007. Populist Radical Right Parties in Europe. New York: Cambridge Univ. Press.

4 - Golder, Matt (2016): "Far right parties in Europe." Annual review of political science 19, 477-497; Eatwell Roger (2000): "The rebirth of the 'extreme right' in Western Europe?" Parliamary Affairs 53, 407-425; Mudde Cas (2000): "The Ideology of the Extreme Right." Manchester, UK: Manchester University Press.

Far-right actors combine populism and nationalism with radicalism or extremism. In practice, this manifests in ethnically or culturally defined concepts of "the pure people." Far-right actors suggest this imagined group and its will should be respected and thus present themselves as advocates for this 'desirable' state through a fundamental break with existing power structures and instead "saving democracy" (radicalism) or replacing it with a strong leader (extremism).

This combination of ideological underpinnings and traits is relevant in multiple policy areas. While far-right ideology can impact immigration policy and ultimately lead to political violence against individuals identified as foreign, it also has a more lasting impact on democratic processes. As developments in Hungary or the United States show, far-right actors in power influence policy and impede liberal democratic principles by undermining free and fair elections, attacking the independent judiciary and the rule of law, and/or refusing to transfer power peacefully.

Hate speech in this context is a tool used by far-right actors to marginalise and attack any individual or group that does not conform to their defined in-group, or as previously referred to, "the pure people".[5] They depict those they identify as out-group(s) as threats to their desired social, cultural, and political order.

5 - Haslam, Nick, & Loughnan, Steve. (2014). Dehumanization and infrahumanization. Annual Review of Psychology, 65, 399–423.

Hate Speech

is a form of communication, verbal, written, or visual, that intentionally or unintentionally degrades, discriminates against, devalues, or threatens individuals or groups based on their inherent characteristics such as race, religion, ethnicity, sexual orientation, or any other societal categorisation. Even without explicit derogatory language, hate speech can exclude and impact individuals by constructing the 'alien other'.

Hate Speech Among the Far-Right in Austria and Germany – Definitions, Indicators, Actors, Platforms, and Context Factors (RECO-DAR, 2023)

The atrocities committed during the Holocaust and the awareness that the Civil Rights movement brought to the United States largely shaped the contemporary conceptual understanding of hate speech.[6] However, hate speech recently took centre stage in research due to the proliferating effect of social media platforms that offer far-right actors a new arena and a broader audience.[7] Researchers should approach hate speech as a multifaceted and dynamic phenomenon that is not uniformly understood because it is shaped, among other things, by its sociocultural context and the perspective of the person interpreting it.[8] That approach helps to understand the plethora of definitions of hate speech in academia and the legal profession in various countries. This report builds on a working definition of hate speech as conceptualised in RECO-DAR's second work package (WP2).

Because RECO-DAR focuses on the use and proliferation of hate speech by far-right actors on TikTok, WP2 aimed to establish a working definition of hate speech through a preliminary list of indicators and relevant far-right actors in the context of Germany and Austria.

The project built this definition through an extensive literature review and interviews conducted with 30 hate speech experts, particularly in the context of online hate speech. The resulting definition, as stated in "Hate Speech Among the Far-Right in Austria and Germany – Definitions, Indicators, Actors, Platforms, and Context Factors" is as follows: Hate speech is a form of communication, verbal, written, or visual, that intentionally or unintentionally degrades, discriminates against, devalues, or threatens individuals or groups based on their inherent characteristics such as race, religion, ethnicity, sexual orientation, or any other societal categorisation. Even without explicit derogatory language, hate speech can exclude and impact individuals by constructing the 'alien other'.

In the context of this project, the above working definition of hate speech builds a foundation to identify what the project refers to as 'far-right seed channels' on TikTok: user accounts that produce content that falls under the above outlined definition of hate speech.

6 - Walker, Samuel (1994). Hate Speech: The History of an American Controversy. University of Nebraska Press.
7 - Jaki, Sylvia, & De Smedt, Tom. (2019). Right-wing German hate speech on Twitter: Analysis and automatic detection. arXiv Preprint arXiv:1910.07518.
8 - Sellars, Andrew. (2016). Defining hate speech. Berkman Klein Center Research Publication, 2016–20, 16–48.

The concept of a far-right "ecosystem", as defined by Baele et al.,[9] underpins this project's understanding of far-right online presence and activity. One of the project's key understandings is that the online far-right ecosystem is "vast, heterogenous, and multifaceted" (p. 1619). Therefore, It is necessary to continue research into this ecosystem to build knowledge about its various actors, ideologies, and content strategies.

Baele's concept of hate speech allowed this project's researchers to highlight and engage with various levels of analysis, paying particular attention to the dynamics and interactions of the accounts ('entities'), account clusters ('communities') and the overlapping abstract topic areas of these communities ('biotopes').[10] Analysing far-right actors and content on TikTok and how they connect to other entities and communities within this ecosystem contributes to collectively understanding how the ecosystem works. Thus, this work package aims to provide a better, more detailed empirical understanding of these complex phenomena.

Researchers can develop an overview of the current state and recent developments in the far-right online ecosystem by collecting data on far-right hate speech, which usually combines elements of populism, nationalism, and opposition to liberal democracy. That will allow the researchers to identify dynamics within the ecosystem and devise appropriate intervention strategies.

ONE OF THE PROJECT'S KEY UNDERSTANDINGS IS THAT THE ONLINE FAR-RIGHT ECOSYSTEM IS:

VAST

HETEROGENOUS

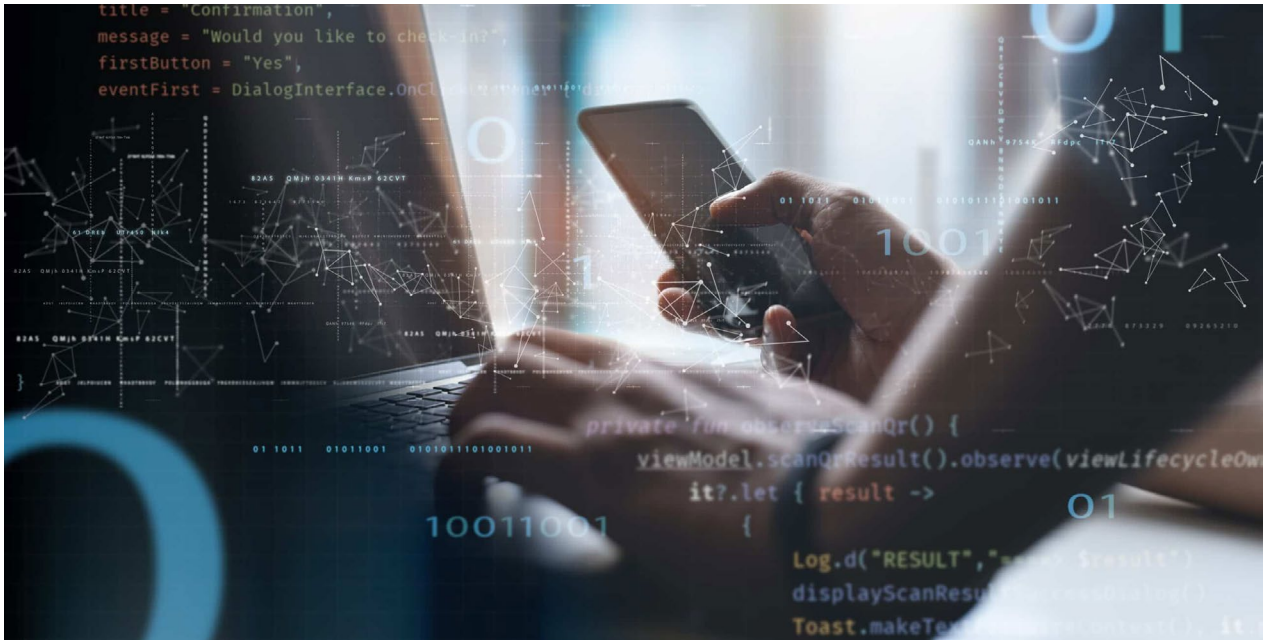
MULTIFACETED

It is necessary to continue research into this ecosystem to build knowledge about its various actors, ideologies, and content strategies.

9 - Stephane J. Baele, Lewys Brace & Travis G. Coan (2023) Uncovering the FarRight Online Ecosystem: An Analytical Framework and Research Agenda, Studies in Conflict & Terrorism, 46(9), 1599-1623.

10 - Cf. Davey et al.'s (2020) claim of six overlapping ideological sub-groups in the far-right internet (white supremacists, ethno-nationalists, militia groups, the "manosphere", anti-Muslims, and the alt-right).
Jacob Davey, Mackenzie Hart and Cecile Guerin (2020): An Online Environmental Scan of Rightwing Extremism in Canada. London: ISD.

03 METHODOLOGY



3.1. Far-Right (Seed) Channels on TikTok

RECO-DAR focuses on far-right hate speech originating on TikTok. The researchers identified TikTok as a popular platform for far-right actors to link to more fringe platforms.[11] However, before delving into how TikTok offers a platform for far-right actors, a short introduction to the platform itself is warrented. Since its launch, TikTok has continuously risen in popularity, especially during the COVID-19 pandemic. The platform had one billion active users per month in 2021.[12] TikTok has emerged as a dynamic space for creating and consuming short-form videos as opposed to image and text-based formats that are prevalent on Instagram, Facebook and Twitter. At its core, TikTok thrives on the synergy of visual, audio, and textual elements that collectively contribute to its distinctive appeal.

The cornerstone of the TikTok user experience is the so-called 'For You' page, where the platform provides users with a highly curated content feed. Most videos on the platform are 15 to 60 seconds long (max. 10 min). The platform offers users an array of visual effects, filters, slideshows, greenscreen effects, and editing tools to create their content and reach a wider audience. The themes and content of videos on the platform differ significantly. Although TikTok is known for dancing posts and trends, one can find a wide variety of content on the platform, including dancing, lip-syncing, book reviews and news stories. In general, users refer to content subgenres as "[...]tok", often in the form of hashtags that connect similar content. For example, creators use the hashtag #booktok to connect to TikTok users interested in books, book reviews, and book-related content.

11 - O'Connor, Ciarán (2021). Hatescape: An In-Depth Analysis of Extremism and Hate Speech on TikTok. Institute of Strategic Dialogue. https://www.isdglobal.org/isd-publications/hatescape-an-in-depth-analysis-of-extremism-and-hate-speech-on-tiktok/

12 - Der Spiegel (2021): TikTok meldet eine Milliarde aktive Nutzer. Der Spiegel, September 2021. https://www.spiegel.de/netzwelt/apps/tiktok-meldet-eine-milliarde-aktive-nutzer-a-6b61b799-5155-4708-acda-1022d73449b3.

One innovative aspect of TikTok is its emphasis on sound. Users can integrate audio clips, songs, and dialogues from the platform's extensive library into their videos. That allows users to be creative with their content. However, more importantly, the sound is key to a video going viral. Furthermore, users can add captions to their videos to provide context and make the video accessible to aurally impaired users or users who do not speak the content language. Users and the platform refer to such content as audio (visual) memes.

Users can use the comment section to discuss the content and interact with content creators and other users. Furthermore, TikTok Live has introduced real-time broadcasting, allowing users to engage with creators. This feature creates and enhances a sense of community within the platform.

TikTok manages its content dissemination through its recommendation algorithm. User engagement and interactions, including likes, shares, saves and comments, which other users follow or interact with; video information, such as whether a creator produced their content on the platform and the information in the hashtags and captions; and device or account settings that indicate location and language preferences, are key elements that determine which content TikTok displays on users' For You pages. The more users engage with content, the higher the chances of TikTok pushing that content to a wider audience. In turn, the content a user is recommended depends on who they follow and interact with. And finally, video information matters, such as whether content was created natively on the platforms, and if information is contained in the caption or the hashtags.[13] The device and account settings matter especially with regards to location and language preference. All these elements lead to highly personalised For You pages. Engaging with content challenges and trends further pushes content to a wider audience.

With the potential for videos to reach millions of users, TikTok community guidelines play a significant role in content moderation. Key components of the platform's guidelines include prioritising safety, authenticity, respect, privacy, and upholding intellectual property rights.[14]

Consequences of violating these guidelines are:

1. Content removal
2. Account suspension
3. Device ban
4. Legal action against the creator

Account suspension can include a temporary ban, a shadowban, or a permanent ban.[15] Temporary bans typically last 24-48 hours, during which the platform restricts a user's posting and commenting activities. A shadowban lasts two weeks, during which the platform silently limits the user's content visibility and does not display it on other users' For You pages. If a user repeats serious TikTok community guidelines violations, the platform removes or suspends their account, and they may not be able to access the platform from their device.

TikTok's audio-visual elements, interactive features, and highly personalised For You pages make the platform incredibly popular. This popularity and opportunity to reach wider audiences helps far-right actors produce and disseminate hate speech. TikTok is especially attractive for the production and dissemination of hate speech, as users can utilise visual elements

13 - Oladipo, Tamilore. (2023). How to Work With the TikTok Algorithm in 2024. Buffer Resources. https://buffer.com/resources/tiktok-algorithm/
14 - Community Guidelines | TikTok. (n.d.). Retrieved 20 November 2023, from https://www.tiktok.com/community-guidelines/en/
15 - Linh, Phuong L. (2023, September 8). TikTok Shadowban Clarified: Determine Causes and Solutions. Mega Digital - Digital Marketing Agency. https://megadigital.ai/en/blog/tiktok-shadowban/

like greenscreens, text, hashtags, and sound. This report's authors hypothesise that the multimodal nature of TikTok content allows far-right actors to create implicit hate speech content or mask certain aspects using sound, 'algospeak'[16], or visual elements that are challenging for the platform to spot when attempting to moderate the content. Other reports have identified that audio-visual content on TikTok helps those who aim to trigger emotions in other users plan their strategies.[17] RECO-DAR will analyse this aspect of hate speech promulgation in work package four (WP4).

The platform's algorithm concerns this project's authors because of its potential to send consumers down a 'rabbit hole' of harmful content.[18] The experimental case study by Little et al. confirms this suspicion by showcasing how engagement with transphobic content on TikTok floods the user's For You page with similar content.[19] TikTok itself has noticed the harmful impact of hate speech on various affected communities. However, as of now, the platform's response has been to limit the reach of such content instead of addressing the algorithmic dissemination of hate speech content.[20] Because of this approach, the platform remains attractive to far-right actors.

Finally, TikTok is a popular platform from which extremist actors tend to link to more fringe platforms.[21] The elements described above make TikTok a relevant and novel platform in the online far-right ecosystem. Building on Baele et al. (2023), this analysis conceptualises the platform as an 'entity ', specifically a web 2.0 entity.[22] Considering that, it is necessary to research how far-right actors use the platform's features to produce and disseminate hate speech and monitor whether they link to other entities within the ecosystem and, if so, to which entities they link. That lays the foundation for this project's research objectives.

3.1.1 Identification & Consolidation

The initial step of the data collection process was identifying (far-right) hate speech content on TikTok. User accounts are central to the data collection process and following analysis. This project refers to these as seed channels, i.e. channels that form the basis for the scraper script. They mark the entry point to identify clusters of relevant far-right users through follower lists and comment sections and an insight into the content strategies they employ. The project's goal during this initial step was to find various clusters of users ('communities') representing various themes, visual aesthetics, and demographics which produce and disseminate hate speech content under the larger umbrella of the far-right.

To perform this task, the researchers identified relevant sources through first-impression screening based on names of known right-wing actors, popular extremist hashtags, and milieu-specific codes based on insights from the expert interviews and literature review in WP2 and published via a report (see Hate Speech Among the Far-Right in Austria and Germany – Definitions, Indicators, Actors, Platforms, and Context Factors). This project developed prominent narratives related to the far-right, which can be understood as

16 - Algospeak is a form of netspeak, and is understood as introducing misspellings, abbreviations, or a completely new work as a placeholder for another word. This is commonly used online to evade content moderation and potential restriction. A prominent example on TikTok is to write "le$bean" for "lesbian", see in Steen, Ella, Yurechko, Kathryn, & Klug, Daniel (2023). You Can (Not) Say What You Want: Using Algospeak to Contest and Evade Algorithmic Content Moderation on TikTok. Social Media + Society, 9(3),https://journals.sagepub.com/doi/10.1177/20563051231194586.

17 - Amadeu Antonio Stiftung. (2023). Katzen, Krieg und Creators. https://www.amadeu-antonio-stiftung.de/publikationen/katzen-krieg-und-creators/

18 - Amadeu Antonio Stiftung. (2023). Katzen, Krieg und Creators. https://www.amadeu-antonio-stiftung.de/publikationen/katzen-krieg-und-creators/ ; Weimann, G., & Natalie. (2022). New Antisemitism on TikTok. In Antisemitism on Social Media. Routledge.

19 - Little, Olivia, Richards, & Abie (2021). TikTok's algorithm leads users from transphobic videos to far-right rabbit holes. Media Matters for America. https://www.mediamatters.org/tiktok/tiktoks-algorithm-leads-users-transphobic-videos-far-right-rabbit-holes

20 - Strick, Jasna, & Wizorek, Anna (2021). Intersektionale Machtverhältnisse im Internet. In Geschlechtsspezifische Gewalt in Zeiten der Digitalisierung: Formen und Interventionsstrategien (pp. 117–129). Transcript.

21 - O'Connor, Ciarán (2021). Hatescape: An In-Depth Analysis of Extremism and Hate Speech on TikTok. Institute of Strategic Dialogue. https://www.isdglobal.org/isd-publications/hatescape-an-in-depth-analysis-of-extremism-and-hate-speech-on-tiktok/

22 - Baele, Stephane J., Brace, Lewys, & Coan, Travis G. (2023). Uncovering the Far-Right Online Ecosystem: An Analytical Framework and Research Agenda. Studies in Conflict & Terrorism, 46(9), 1599–1623.

'biotopes' by using insights from the experts interviewed.[23]

Subsequently, the researchers used snowball sampling[24] aimed at resembling real-life user behaviour to identify further channels and content through previously unknown hashtags, sounds, and social ties (i.e., content-related or proximity-based social relations).

As described previously, biotopes categorise communities into a limited number of groups defined by a shared ideology or themes under the umbrella of the far-right ecosystem. One example taken from WP2 is the theme of Anti-LGBTQIA+, which includes the following indicators:

Hashtags: #genderwahn (engl.: gender mania) or #gendergaga

Emojis and symbols

Discursive elements: framing identities as a mental illness, reducing people to their sexual attributes, branding people as sexual predators, and framing them as spreaders of diseases like HIV

Keywords: homo-lobby, transgender agenda, "unmenschlich" (inhuman), "unnatürlich" (unnatural), "Memme" (sissy), "Kampflesben" (engl.: dyke), "pervertierte Menschen" (engl.: perverted humans)

The various far-right actors identified in WP2 can be categorised under five umbrella terms:

1. Influential figures
2. Political parties
3. Movements
4. Media outlets/entities
5. Telegram channels

This project differentiated between German and Austrian actors for the first three. For example, Nicolei Lehrling (aka 'Der Volkslehrer ') is an influential figure in Germany, and Martin Rutter is influential in Austria.

Using the method described above and the previous report's insights, the researchers established access to a plethora of relevant actors and content. However, only a handful of influential figures were present on TikTok, and it became clear that the platform had already banned many prominent actors and any content mentioning their names. That differs in the case of political parties and connected figures because they had already established their presence on the platform. The researchers found that the indicator list produced mixed results because the platform had already banned certain terms and hashtags. Methodologically, the snowball method was best suited for investigating the platform and how users interact with content posted on it. The researchers' clicking on sounds and hashtags used by far-right actors, their follower lists, and those who commented on their posts

23 - Baele, Stephane J., Brace, Lewys, & Coan, Travis G. (2023). Uncovering the Far-Right Online Ecosystem: An Analytical Framework and Research Agenda. Studies in Conflict & Terrorism, 46(9), 1599–1623. https://doi.org/10.1080/1057610X.2020.1862895

24 - In the context of this report we use the term "wider channels" to snowball out of aka use to find further far-right users. Here, seed channels, however, need to be understood as central actors, so-called influencers within their respective clusters of users.

yielded the most success. Due to TikTok's content moderation, users use algospeak, emojis, and very specific hashtags to avoid being shadowbanned or banned. However, even the indicators inductively collected throughout the research process became redundant due to the speed of content evolution on the platform.

The authors created a guiding document for all project researchers to make the identification process described above actionable and consistent. The authors of this report constructed that document (see annex) based on OSINT practices outlined by researchers who had already investigated TikTok[25]. The authors of this report adopted these best practices and documented the workflow to avoid becoming confused by the enormous amount of far-right content. The authors defined three primary steps for this project's objectives.

Firstly, in order to find relevant users and content, the authors, building on their knowledge from WP2, searched for an entry point using keywords, hashtags, actors, tagged locations, and search terms. Once the researchers found an entry point, they could enter specific communities and learn the specific keywords, hashtags, and sounds those communities used (and continue to use) to build a feedback loop and so identify seed channels.

The second step was to archive the information. That was particularly important because researchers used mobile devices to search the platform as if they were users but stored the information on a shared spreadsheet. The urgency to archive relevant accounts was twofold: Firstly, the lifetime of accounts varies because TikTok often bans them quickly, and secondly, the researchers had to document the avenues through which they had identified the seed channels to ensure the consistency of the snowballing approach (e.g., through other users or sounds used).

THE ARCHIVING PROCESS WAS AS FOLLOWS:

1. An initial search on the TikTok mobile app.
2. After identifying an account, copy the account link into a shared spreadsheet.
3. Note the avenue through which the researcher found the seed channel.
4. Document relevant information related to the seed channel on the desktop computer.
5. Use a browser extension to capture a screenshot of the seed channel in case TikTok banned it. The screenshots can be seen as proxies of the account in case it gets banned.

The researchers documented any indicators they found during the identification process in a shared spreadsheet. Content on TikTok tends to have a short lifespan, so the researchers had to check regularly and assess if TikTok had banned hashtags, sounds, or other elements. Nonetheless, noting new indicators allowed the researchers to increase their understanding of the language and

25 - Mossou, Annique (2020). Investigate TikTok Like A Pro! Bellingcat. https://www.bellingcat.com/resources/2020/05/25/investigate-tik-tok-like-a-pro/ ; O'Connor, Ciarán (2022). How to Investigate TikTok Like a Pro - Part II: Using TikTok for Ukraine Research. Bellingcat. https://www.bellingcat.com/resources/how-tos/2022/11/02/how-to-investigate-tiktok-using-tiktok-ukraine-research/

audio-visual language used in each community and use more specific and niche keywords to find entry points. This process was cyclical and provided space for feedback at each stage. The authors found this flexible and inductive approach the most suitable for working with the platform's affordances and limitations.

RECO-DAR classifies user accounts as seed channels based on the definition of hate speech and the indicator list resulting from WP2. Using the snowballing method, the authors identified 323 accounts (48 Austrian users, 275 German users, and two unclear yet German-speaking users) that produced far-right hate speech according to this report's conceptual framework. The authors used a variety of indicators to identify users as German or Austrian. Some users mentioned their country in their bio through text or flag emojis, whereas others produced country-specific content. Many users repeatedly reaffirmed their national pride in their videos or comment sections. The researcher's identification process had a solid foundation but was unable to eliminate all blind spots. After identifying the nationality of hate-speech users, the researchers, using an internal coding process, identified 17 Austrian and 17 German seed channels representing various communities and thematic biotopes. The remaining accounts represented the wider far-right ecosystem (see Figure 3.1). The authors refer to those channels not identified as seed channels as *wider* channels. These *wider* channels are relevant to understanding broader communities, biotopes, and the broader far-right online ecosystem. However, the authors did not analyse these wider channels to the same degree as the seed channels.

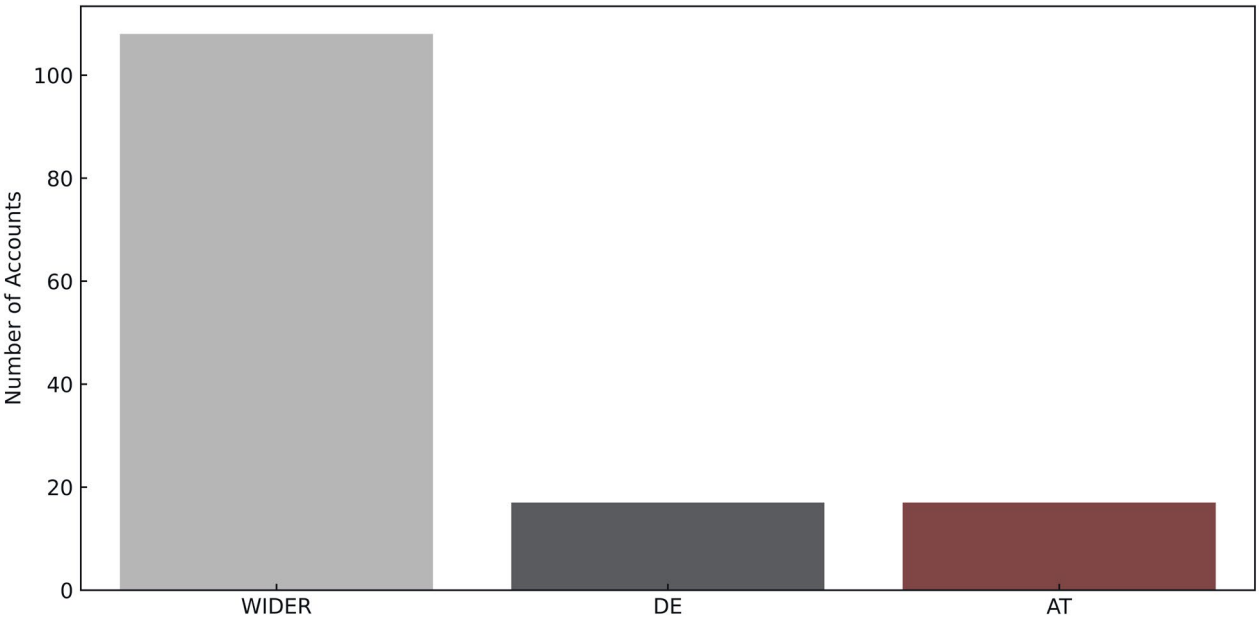


Figure 3.1: Number of Accounts per Channel Type

The authors based their final decision to identify a channel as a seed channel on a combination of the following factors (the higher the overall score, the higher the relevance):

1. Number of followers
2. Number of likes
3. Presence, intensity and explicitness of hate speech
4. Right-wing extremist ideology (presence, explicitness in posts, caption, username, bio)
5. Number of posts
6. Frequency of activity
7. Recruitment efforts and links to other platforms

Please find the full coding guide in the annex of this report. The authors created the criteria based on the project's objectives, weighted them equally, and used a scale of 1-4. The channels were coded by two researchers, one from each country and discarded when there was a disagreement to ensure consistency. Furthermore, the researchers added an exclusion mechanism: they did not consider an account as a seed channel if it scored one on three or more criteria.

In WP3 and the analysis in WP4, this project considers all accounts not defined as seed channels as *wider channels* (Baele et al. refer to them as *entities*[26]). The wider channels served as backup channels in case the seed channels were deleted.

Users can connect to and build communities through social ties based on follower lists and frequent commenters. These communities have different biotopes but are "defined by a shared ideological, thematic, or cultural sub-identity under the umbrella of the far-right ecosystem writ large." (p. 1602).[27] The users and content identified by this project only represent a faction of active far-right users on TikTok. Nonetheless, they offer an insight into the behaviour of users and their content strategies on the platform.

The methodology used for data collection was apt, considering TikTok's affordances and limitations. WP2's definition of hate speech is a robust foundation when considering whether TikTok posts are hate speech or not. However, the indicators from the expert interviews were not always useful when identifying far-right users because TikTok communities rapidly adopt specific language or 'algospeak' to avoid content moderators and adapt their content to emerging trends. This can swiftly render previously identified indicators redundant. Most experts interviewed also struggled to provide concrete indicators and keywords and highlighted the challenges of identifying hate speech on social media due to its fluid and coded nature (see WP2 report: *Hate Speech Among the Far-Right in Austria and Germany – Definitions, Indicators, Actors, Platforms, and Context Factors*).

The TikTok research process needs to be flexible and iterative. Existing knowledge can help enter the platform, but it is important to learn

26 - Baele, Stephane J., Brace, Lewys, & Coan, Travis G. (2023). Uncovering the Far-Right Online Ecosystem: An Analytical Framework and Research Agenda. Studies in Conflict & Terrorism, 46(9), 1599–1623. https://doi.org/10.1080/1057610X.2020.1862895
27 - Ibid.

and adapt quickly to go deeper and find new hashtags or use sounds to find other relevant users or content. Because TikTok content uses visual language specific to particular communities and short-lived trends, the authors found it necessary to engage with it similarly to consumers to get '*authentic*' access to data.

3.1.2 Details

This subsection gives a brief overview of the report data's key metrics when considering TikTok accounts. First, account age (see Figure 3.2): the data contains accounts between six months and 3.5 years old, with the various groups (German, Austrian, and ecosystem) equally distributed.

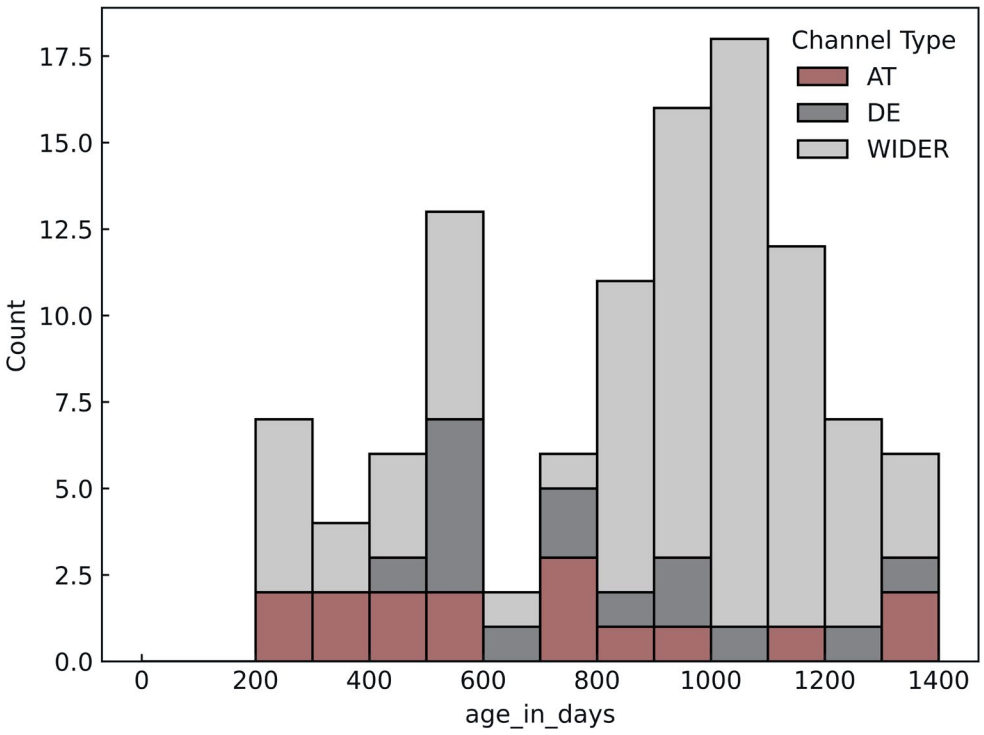


Figure 3.2: Account Age in Days by Channel Type

Regarding the accounts' content and reach, those in the data set used for the analysis had between one and over 1,000 *individual* videos (see Figure 3.3 – note the logarithmic scale). Again, these were equally distributed between German, Austrian and ecosystem accounts. The accounts had between less than ten to 100,000 *followers* (see Figure 3.4 and note the logarithmic scale). The number of followers was lower for the wider ecosystem accounts than the (German or Austrian) seed accounts.

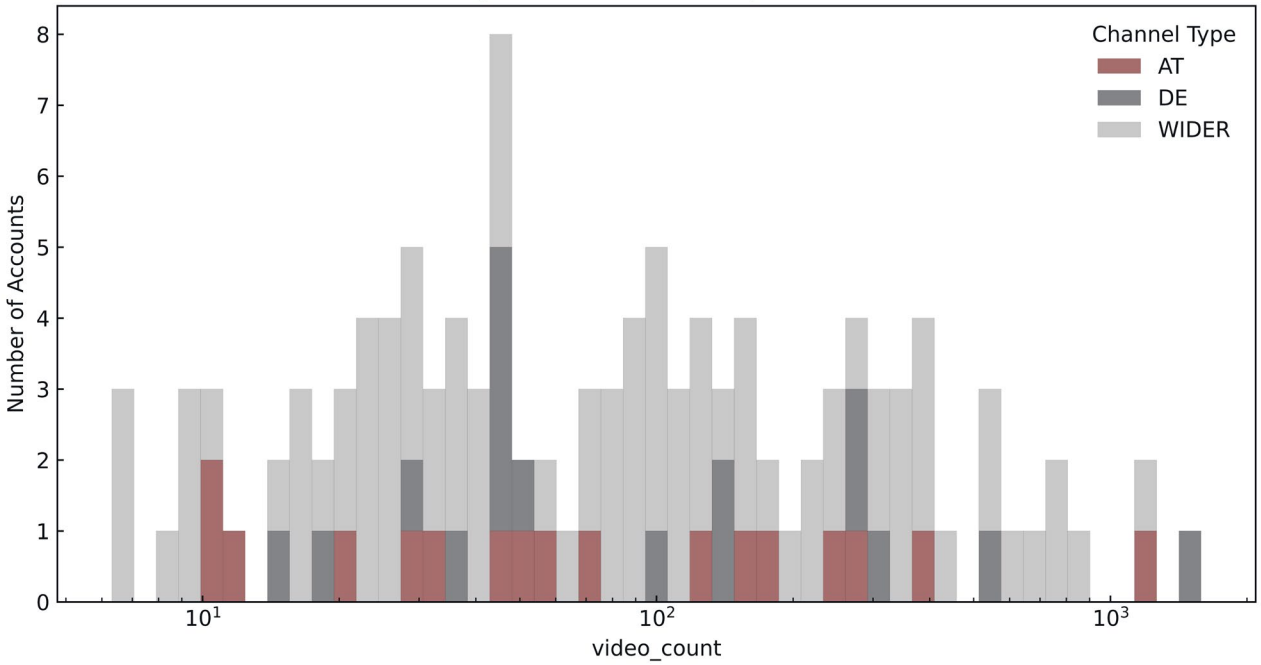


Figure 3.3: Histogram of Video Count per Account

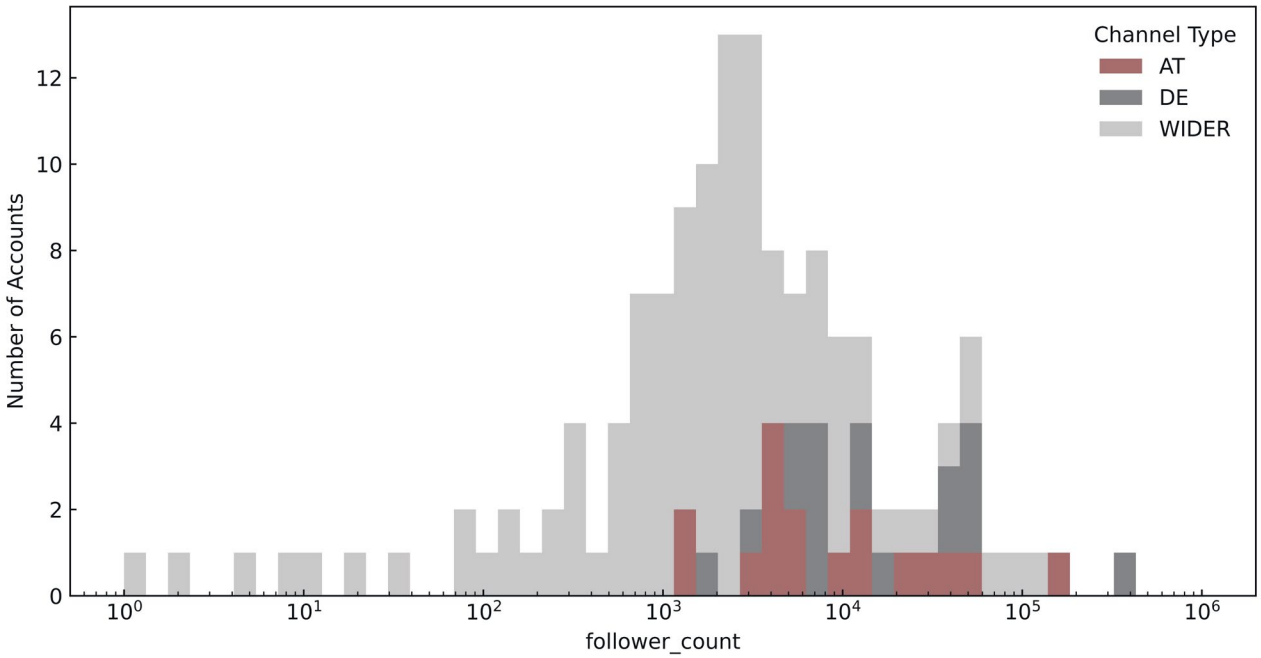


Figure 3.4: Histogram of Follower Count per Account

The collected data also tracked whether TikTok had banned the accounts. Overall, the platform banned a few of the accounts this project identified as relevant (24 out of 323) and only did so after a relatively long period (up to 3 years: see Figure 3.5).

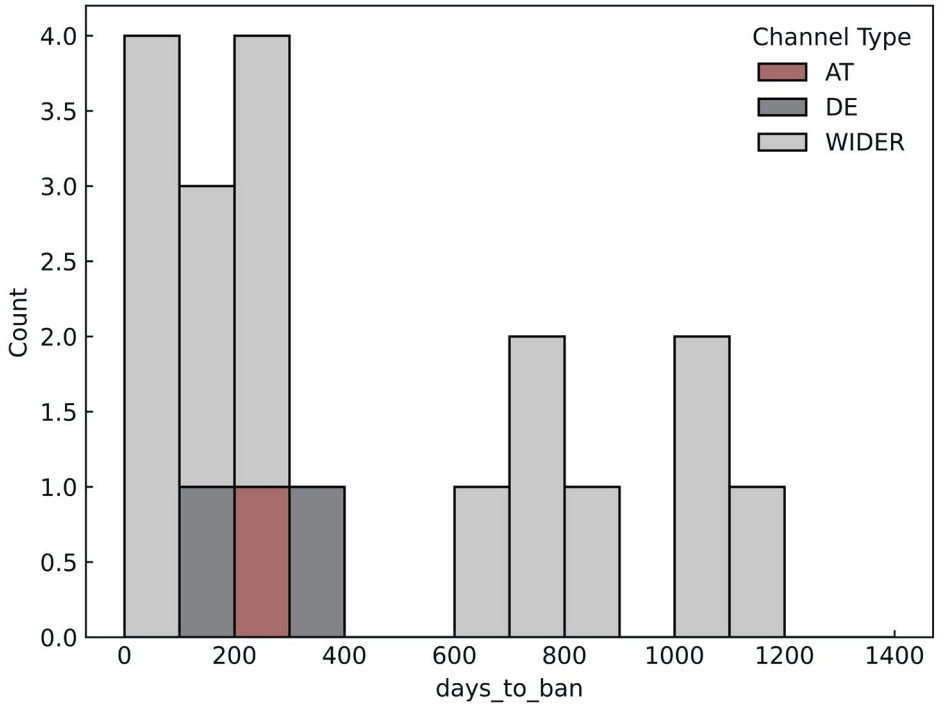


Figure 3.5: Days to Account Ban by Channel Type

3.2. Data Collection

This section describes how the researchers collected the data based on the seed channels and how the data structure looked.

3.2.1 Data Collection Procedure

The researchers collected data three times per week. They retrieved the account metadata, video metadata, comment content and metadata, and error messages (see Figure 4.1). The researchers used Docker containers in Python to scrape (collect data) from TikTok content and build background knowledge about the seed channels. Both the meta data (such as date, views etc.) as well as videos – both the video files and the comment contents – were retrieved.

The results[28] are time-structured data on the accounts, their posted videos, and comments. The researchers only downloaded the video files when they first detected them as plain files. Video transcripts were rarely generated (see details in Section 4.2 below). The researchers stored them in a simple JSONL file that they could easily parse to avoid duplicate work. The files were organised by day and could be efficiently compressed, archived and accessed individually or in custom subsets.

All scraping records were labelled according to type (e.g. account or video) to compose a perspective of each account, video or comment for analysis and reporting. The researchers assembled these composed data perspectives as Python Pandas DataFrames, which can be exported in various formats, including Excel or for further computational analysis using software such as JSON, CSV or SQL.

This process yields temporally fine-grained data on video content and metadata that can be analysed by account, video or post.

3.2.2. Preprocessing and Clustering

The data collected consisted of unstructured video data, which the researchers preprocessed for analysis (see Figure 4.1-4.2). The speech in the collected videos was automatically transcribed, resulting in unstructured text data. 20% (Austria), 45% (Germany) and 55% (wider ecosystem) of the video content transcribed contained language identified as German (see Figure 4.3). Readers should note that those transcriptions could still contain language misclassified as German because of background music in German. Nevertheless, the data provides an important and insightful approximation of the videos' spoken content. The researchers then aggregated the data appropriately for various analyses, exports, or visualisations (see Figure 4.2).

28 - These data are stored in a fixed line-based format, encoded in JSON in a plain .jsonl file. Each entry is enriched with additional metadata from the scraping software (custom modus|zad development), that adds project and item annotation, timestamps and other information in the same record.

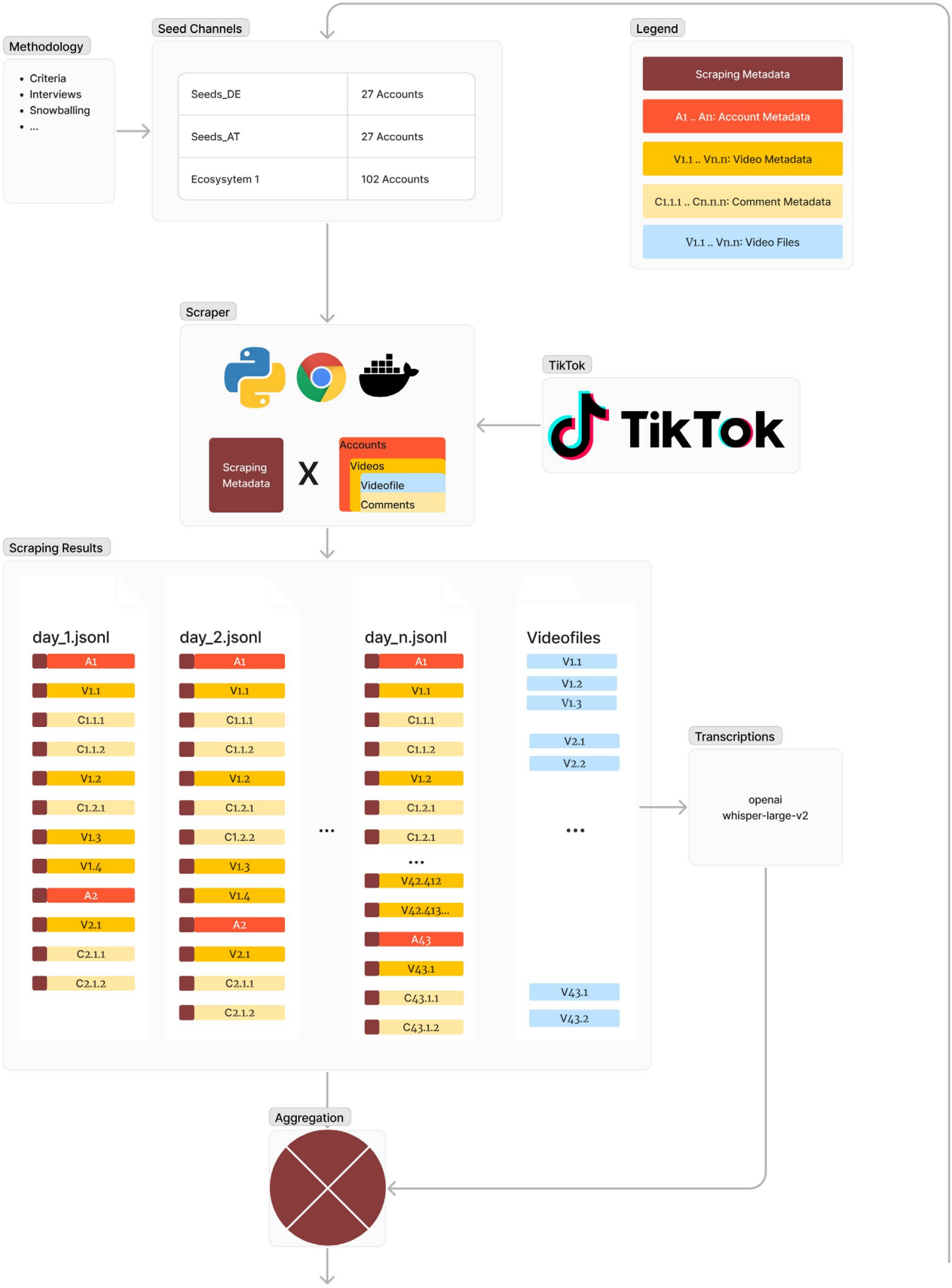


Figure 4.1: Data Collection Workflow (1)

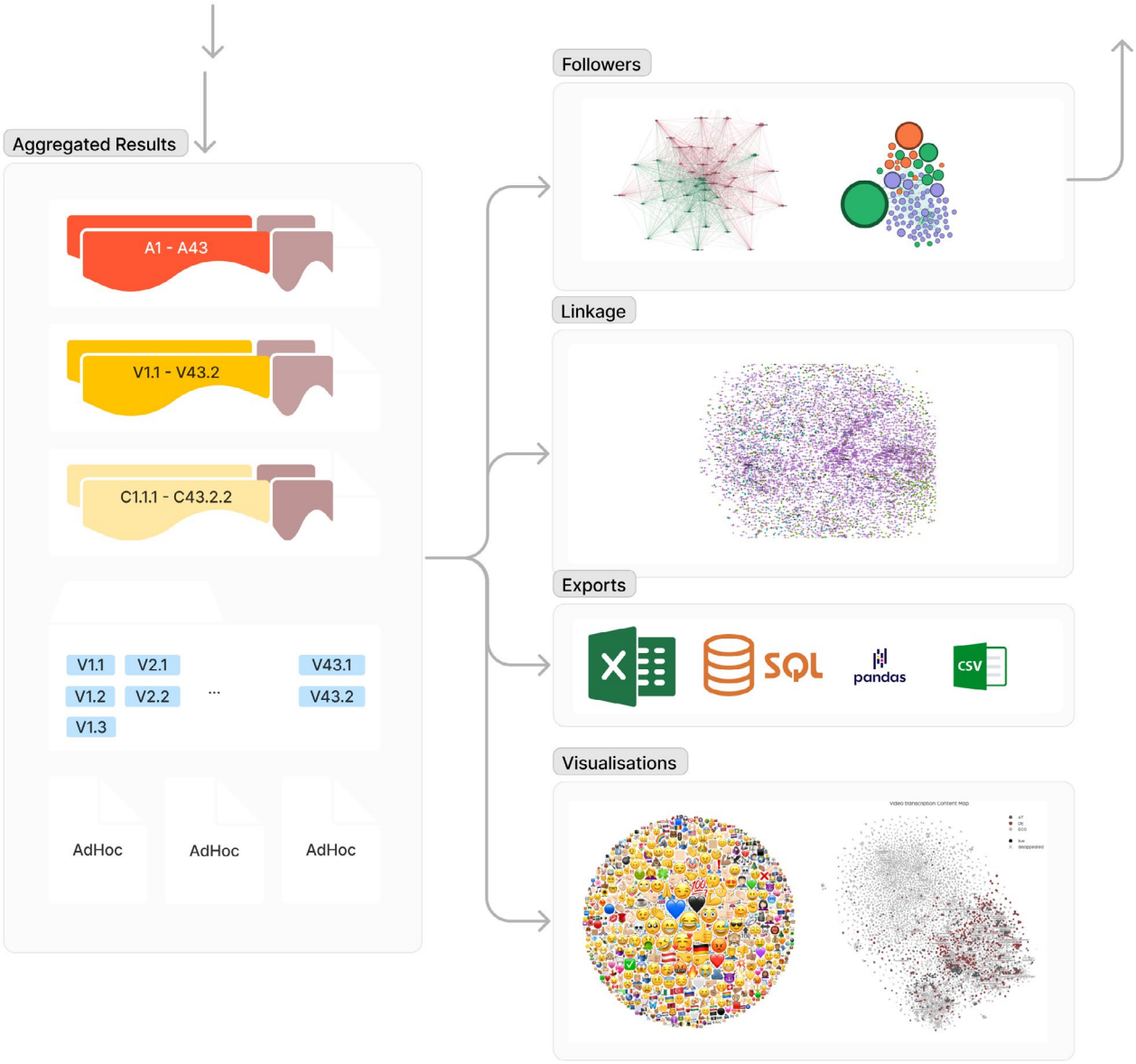


Figure 4.2: Data Collection Workflow (2)

Afterwards, the researchers used the state-of-the-art model text-embedding-ada-002 to calculate the embeddings for each video transcript. These embeddings are a multidimensional mathematical representation of in-text semantic meanings. Technically speaking, each video transcript is assigned a position in a high-dimensional space (1,536 dimensions) based on semantic meaning. As a result, video transcripts with similar meanings are positioned close to each other.

Subsequently, the researchers simplified the structured yet complicated data of the high-dimensional representation of video transcripts. Using T-SNE dimensionality reduction, the researchers projected the high-dimensional position of each video transcript into two dimensions while maintaining the relationship of spatial proximity encoding the semantic meaning. The result is a two-dimensional representation of video transcripts where similar videos are close together and which is, thus, intuitively intelligible.

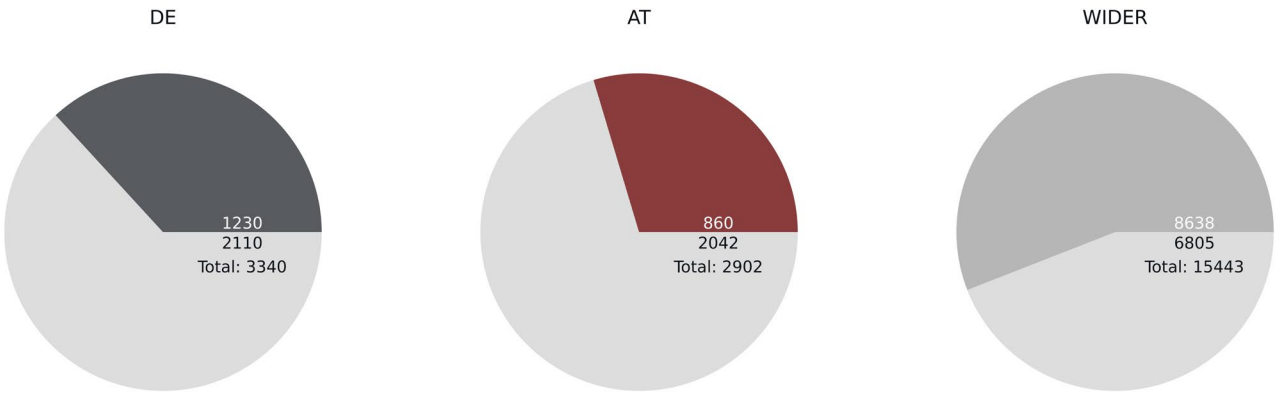


Figure 4.3: Videos With Detected German Spoken Language Used for Embedding

This procedure yielded a numeric representation of videos in two dimensions. However, its performance decreased with less frequent terms, niche terms, or terms that TikTok users used in an uncommon manner. However, as the manual inspection revealed, the overall performance was excellent. Based on the embedding positions, the following work package (WP4) will identify clusters of similar videos based on spatial proximity and manually identify the semantic meaning underlying that positioning. That forms the basis for analysing the far-right ecosystem on TikTok, as detailed below.

3.2.3. Database Design

The database design closely follows the data structure and available fields as visible in the original TikTok data (see Figure 4.4).

Four data fields identify a TikTok account: ID (a number uniquely identifying the account, likely unchangeable), SecUID (a cryptographic hash uniquely identifying the account, likely unchangeable), UniqueID (a short string that identifies an account, e.g. in the URL, change seems possible but is rare),[29] and nickname (the visible screenname, easily changeable). Furthermore, the researchers collected the account language and region, the bio, privacy settings information, reach metrics, and statistics on created content.

Videos link to accounts through the AuthorRef, which corresponds to the UniqueID and is uniquely identified through the ID (VideoID).[30] The researchers also collected the description, metadata, hashtags, statistics, and transcribed text from each video.

29 - E.g. https://tiktok.com/@uniqueid.

30 - The VideoID is consistent with the URL scheme. Consider the following example of a video URL: https://tiktok.com/@unique_id/video/1234567890, where 1234567890 is the numerical video id and @unique_id is the unique account ID outlined above.

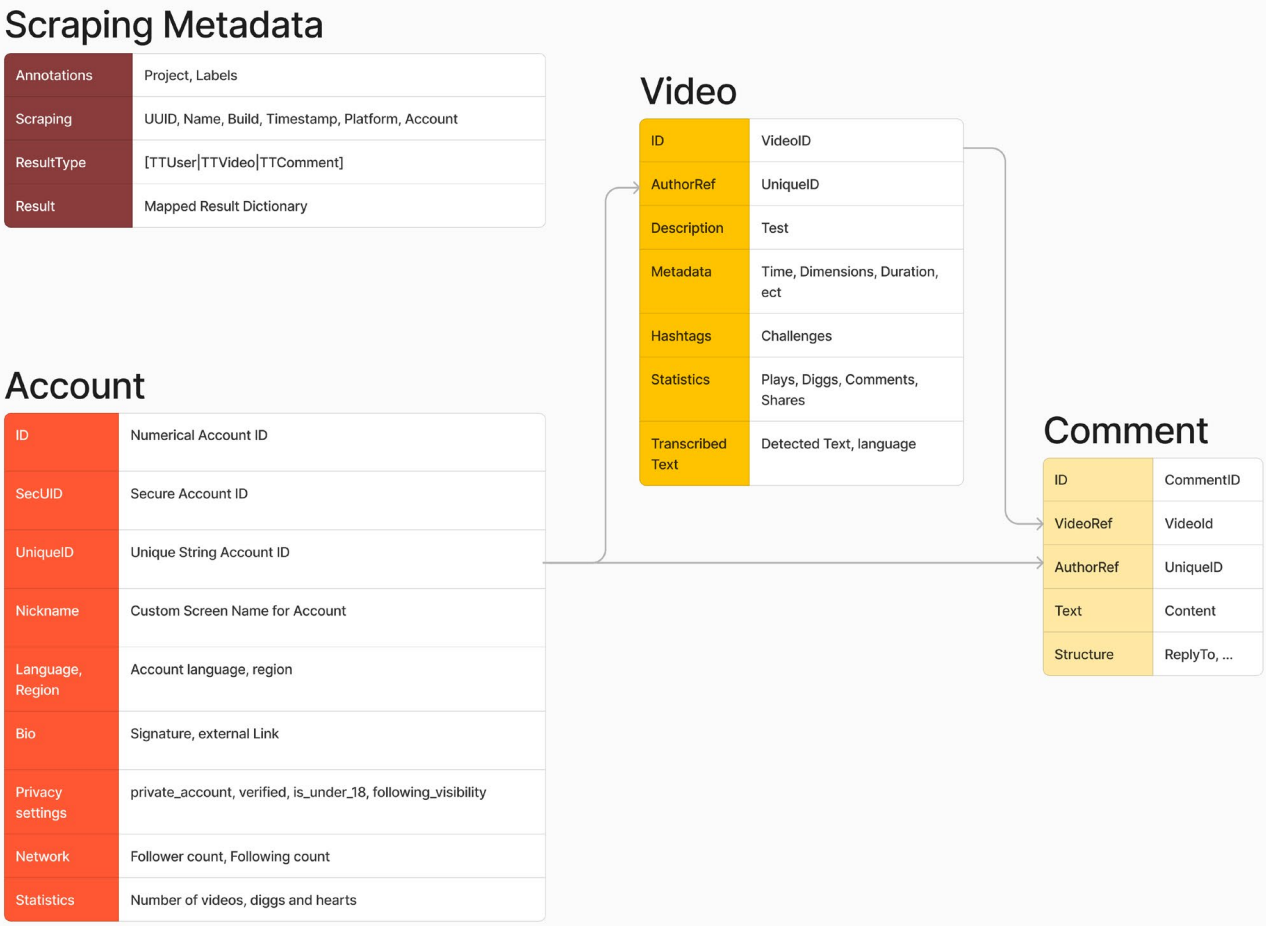


Figure 4.4: Database Structure

Next, the authors linked the comments (uniquely identified through the CommentID) to the videos through the VideoRef, which maps to the videos' VideoID and to accounts through the AuthorRef, which maps to the accounts' UniqueID. In addition, the researchers collected the comment text and its structure (whether it was a reply or a comment).

The researchers considered flexibility and privacy when devising methods for data storage. Currently, the researchers store the data in flexible file formats and use in-memory databases and solutions like Pandas DataFrames and FAISS vector databases for specific analytical tasks. The data fits a relational database design well and could be easily transformed into a fitting schema and imported into any SQL or NoSQL database if required.

The authors chose a flexible data structure due to the unknown structure, amount of data and the dynamic nature of analysis requirements. Therefore, the authors' current solutions work with Linux and Python tools because they work at any scale, from tens to billions of records.

The project's various phases also have different requirements. During the *exploration* phase, quick iterations and quick feedback were key to understanding the data structure and working with external dependencies. During the data collection phase, consistency in data gathering methods and up-to-date and easy monitoring of the data status were of the utmost importance. Furthermore, the data collection tool must be agnostic of any downstream handling of data. During the analysis phase, the key is to transform the collected data into various aggregation levels and slices to allow specific analyses. The current setup allows for this priority. Finally, in the *archival* phase, it is crucial to opt for multi-purpose format(s) to use the data.

Finally, to address privacy and data safety concerns, the researchers stored the database on an encrypted hard disk in file format and stored a backup on an external, encrypted SSD disk. A pseudonymisation of the data was given to the data analyst team on an encrypted USB disk.

Data protection is a primary concern of this project. The researchers made every effort to ensure that all data collection and the database comply with the General Data Protection Regulation (EU) 2016/679 (GDPR) and German and Austrian data protection laws while simultaneously guaranteeing access for all project partners. Central to this effort is a data protection document summarising all the relevant regulations and the data management plan (DMP).

The central objective of the data protection document is to collect, summarise, and communicate the relevant data protection regulations to the project team. All regulations apply to the collection, storage, and processing of the desired data. The researchers conceived the data handling method underlying this work package to comply with EU regulations and German and Austrian national regulations. Because GDPR is an EU regulation, not a directive, it is binding on and applicable to all member states. Therefore, our data management is sufficiently robust to adhere to GDPR principles. However, member states are allowed some flexibility, which needs to be taken into account in the context of the project, especially regarding collecting visual and audio data or collecting data from assumed minors.

Data protection regulations in Germany prohibit collecting personal data without consent. However, in specific cases, researchers are granted exceptions ("Erlaubnistatbestände," e.g., *§ 24 HLDIG, BlnDSG § 17; § 33 HDSG*). Therefore, collecting personal data without consent is possible. There are still limitations and conditions, such as those in § 33 HDSG, which outline that no consent is necessary when the needs of individuals are not ignored or when the public interest the research addresses outweighs the needs and protections of individuals.

THE RESEARCHERS

Considered **flexibility and privacy** when devising methods for data storage

Chose a **flexible** data structure due to the unknown structure, amount of data and the dynamic nature of analysis requirements

Stored the database on an **encrypted** hard disk in file format and stored a backup on an external, encrypted SSD disk

In Austria, specific data protection and data processing provisions have been established, primarily in the "*Forschungsorganisationsgesetz*" (FOG). The provisions aim to create practical regulations for archives, scientific or historical research, statistics, pseudonymised data, and register-based research. The *Forschungsorganisationsgesetz* (specifically, section 2f, paragraph 5 of the FOG) explicitly permits collecting and processing personal data for research. However, researchers must take extra care to ensure that data is only processed in accordance with legal requirements and is not transferred to third parties (aside from situations allowed by GDPR article 89, paragraph 1).

In both Germany and Austria, researchers must consider copyright laws and regulations when researching audio-visual content on TikTok. Lastly, in the context of national regulations, there are a few common measures and conditions that researchers and other interested parties must consider:

- The need to separate technological and organisational measures to adhere to data protection principles
- Anonymising personal data as soon as the research process permits
- The importance of processing personal data in a manner that is appropriate, necessary, and proportionate to the research goals
- Establishing internal regulations to control data access, ensuring compliance with data protection requirements

As for EU regulations, the GDPR recognises the importance of processing personal data for scientific research and includes provisions (such as Article 89) to address societal expectations regarding knowledge advancement. The project's data management plan (DMP is central to the project, considers GDPR and is guided by DMP templates provided by the EU Commission.

The project's DMP outlines how the researchers collect, process and generate data and metadata for the RECO-DAR project. It also details provisions to ensure data integrity, security, privacy, and preservation, and the preliminary measures and directions to ensure that RECO-DAR data complies with the core principles of FAIR (Findable, Accessible, Interoperable and Reusable).

As such, the project's DMP is critical for ensuring that all information collected is handled ethically and in accordance with relevant regulations. Furthermore, the DMP lays out how to facilitate meaningful impact of the project's data outputs.

As the project progresses and evolves, the aspects affecting data management will naturally cement as the researchers will gain clarity on what they need for data collection, storage, and analysis. Consequently, the DMP will be updated to reflect the advancements in understanding the nature and complexity of data assets and processes. Thus, the DMP is a living document, regularly updated throughout the project.

04 OVERVIEW OF COLLECTED DATA

This section provides an overview of the post-level (video-level) data that the researchers collected. The authors collected 21,685 videos published between February 2020 and November 2023 (see Figure 5.1), with the highest number published in early 2021.

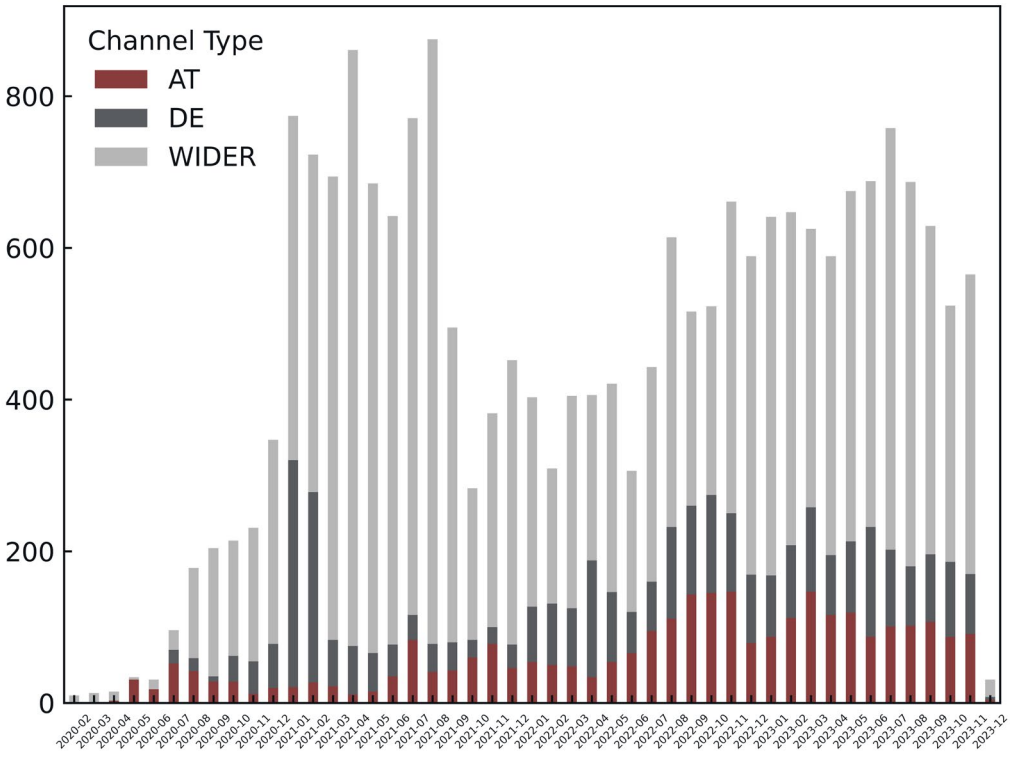


Figure 5.1: Number of Videos Created per Month by Channel Type

Consequently, the RECO-DAR dataset contains videos that are between 1 day and over 3.5 years old at the time of writing this report (November 2023) (see Figure 5.2).

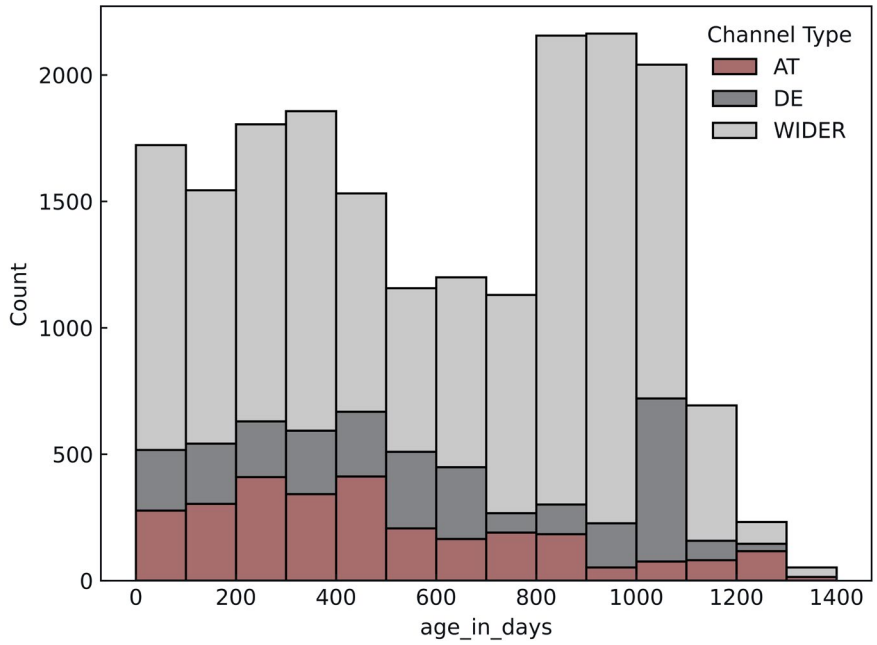


Figure 5.2: Video Age in Days by Channel Type

Most of the videos are short (less than 100 seconds; see Figure 5.3). Regarding their reach, the majority were played between 600 and over 10,000 times (see Figure 5.4) and received fewer than 20 comments (see Figure 5.5).

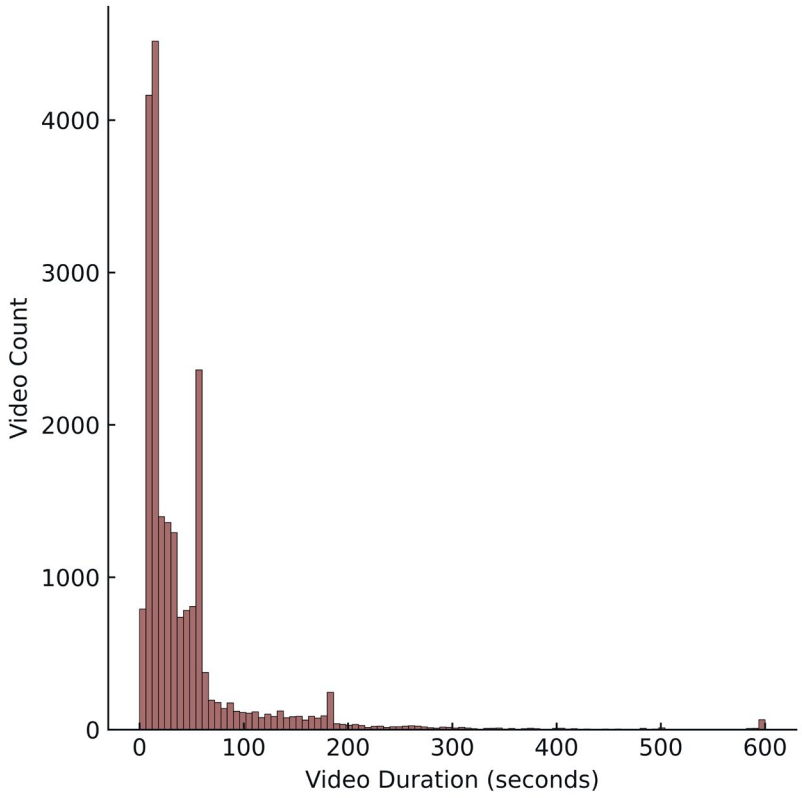


Figure 5.3: Histogram of Video Duration

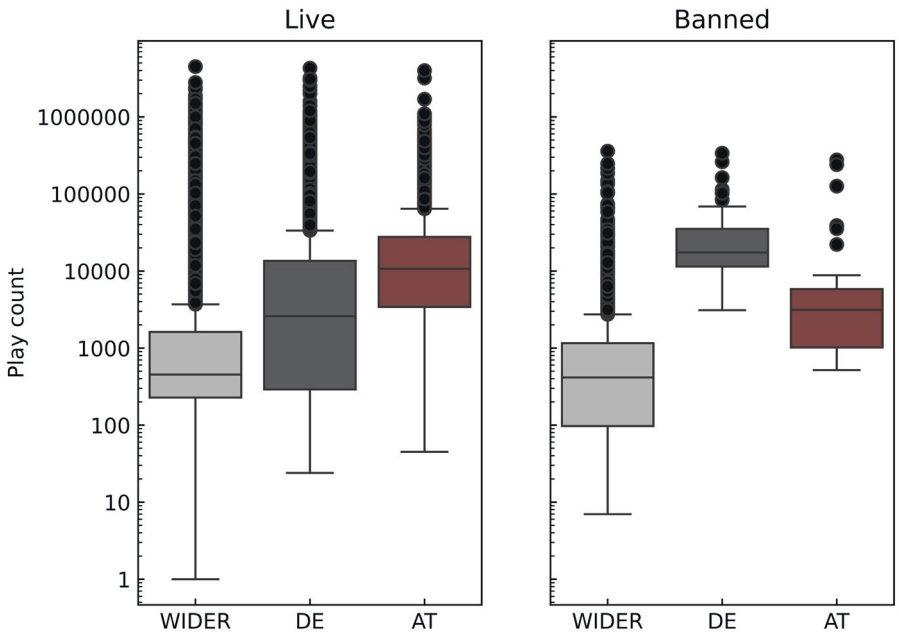


Figure 5.4: Box Plots of Video Play Count by Channel Type

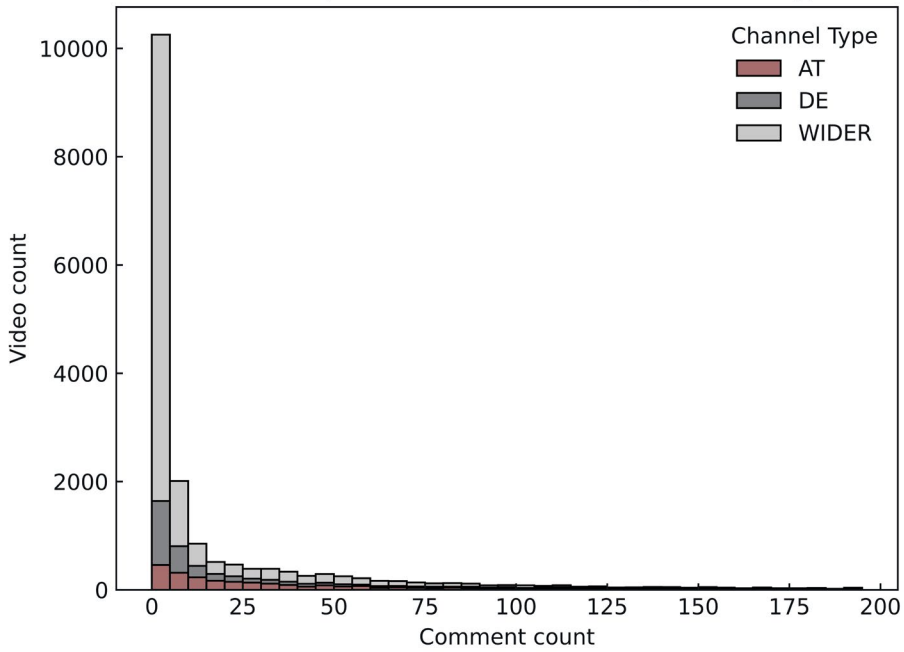


Figure 5.5: Comments per Video Distribution by Channel Type

The data is rich and granular. Furthermore, the links between accounts, videos, and comments allowed the researchers to conduct detailed analyses on various levels. The following section presents preliminary insights about the far-right ecosystem on TikTok.

05 ECOSYSTEM

Based on the conceptual background introduced above and the data collected, the authors can provide preliminary insights into the far-right ecosystem on TikTok. The presentation comprises the entirety of the collected data across all accounts, including seed channels. The semantic similarity of video content based on the embeddings described above, and meaningfully projected in two dimensions, gives a first impression of the ecosystem's (topical) clusters (see Figure 6.1).

Furthermore, Figure 6.1 displays manually labelled topics for distinct locations based on the video texts that come from these locations. It highlights that no fully separated clusters emerged. However, there is a substantive overlap between many closely related yet denser clusters, such as the Covid-cluster (e.g. "Impfpflicht" and "Ungeimpfte"), and a political parties cluster (e.g. "AfD wählen" and "Grüne Ost"). Readers should note that this is only a preliminary analysis that showcases the possible downstream analyses based on collected data.

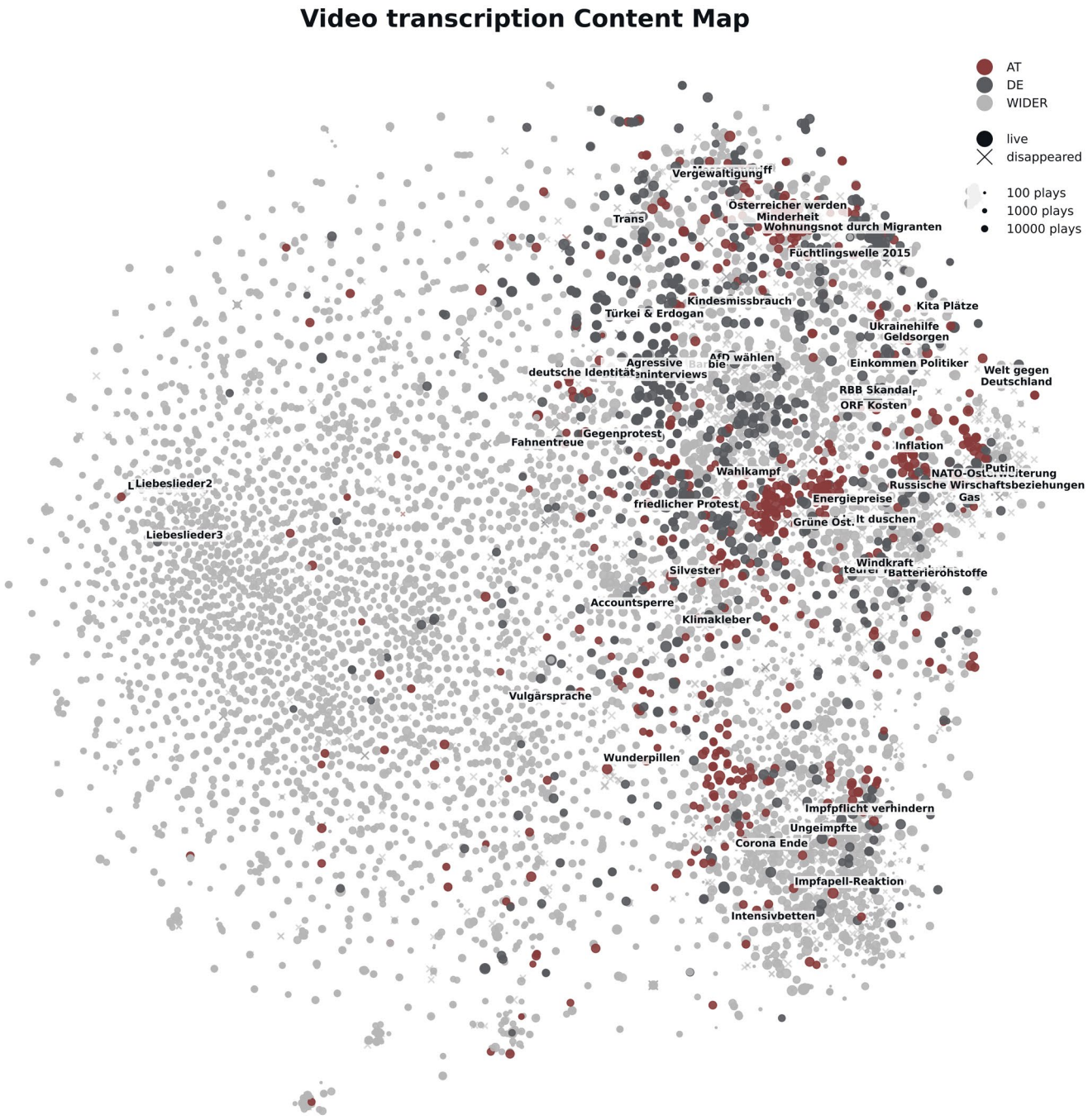


Figure 6.1: The Far-Right Ecosystem on TikTok, Based on Semantic Similarity of Content

A second way to visualise the far-right ecosystem is using follower networks. Figure 6.2 shows a first impression of this approach with channels displayed as nodes (points), the size corresponding to the number of followers, and the connections between channels and their proximity, identifying their connectedness through shared followers. That paints a slightly different picture, showing a more closely-knit network of Austrian seed channels.

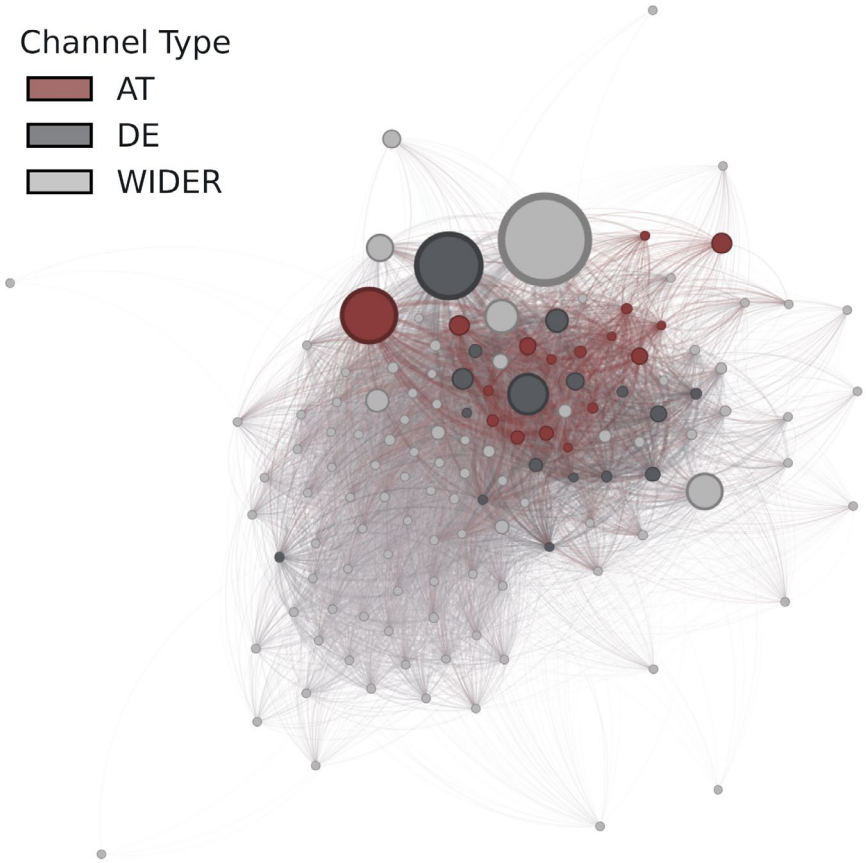


Figure 6.2: The Far-Right Ecosystem on TikTok, Based on Followers

5.1 User Demographics of Main Actors

WP3 of the RECO-DAR project does not aim to provide an in-depth analysis of the collected data because that is the central objective of WP4. However, this section and the following one on monitored users' content strategies offer initial insights into the data that stem from the manual and automated data collection process. As with the first impressions above, readers should consider that these are initial insights only, and assessments may change as the analysis progresses.

Several users identified as potential seed channels are assumed to be young, regardless of their (presumed) country. These users' content differs significantly from that of older demographics in its visual language and themes. Visually, the difference is obvious. The authors of this report believe that these users, as part of Generation Z and so-called 'digital natives', are more familiar with the platform, its trends, and how to create content in accordance with both. TikTok content is focused on short-form content yet offers a plethora of visual effects, opportunities for interaction, and content formats. This user demographic seems more aware of how to use these features for their content.

VISUAL LANGUAGE

A prevalent theme in the RECO-DAR sample is flashing video collages of nature, quaint German or Austrian towns, nuclear families, and Greek statues accompanied by short quotes or texts, music and 'mashups'. Some also remix speeches from Nazi Germany with pop or techno music. In many instances, the edits resemble nostalgic, arcade-style games from the 1980s, with this specific aesthetic combined with far-right content best described as "fashwave". These features make it challenging to detect their content as problematic automatically. Only by examining the content manually does the underlying ideology become apparent.

These users also work with memes that often make fun of 'woke leftists' and 'environmentalists'. They use memes that imitate a conversation between themselves and 'the other' with the goal of ridiculing the other and underlining the superiority of their perceived in-group. Part of this visual strategy is the conscious selection of visual content about 'the 'others' that is unfavourable or manipulated to seem bizarre. Using humour, memes, and (frequently visual) dog whistles (i.e. insider references) adds a layer of plausible deniability regarding hate speech and extremism. Furthermore, when the platform moderates such content, this specific user strategy allows far-right actors to strengthen their narrative of being oppressed and 'silenced by the system' for joking.[31]

Finally, it is important to mention that these users attempt to appear 'neutral', but their comment sections show otherwise. There is a clear ideology present in these circles, including the wish to return to what the actors refer to as a "traditional way of life". It becomes clear that what they show in their videos is not just nostalgic but conveys their hopes and dreams for a possible future: the ideal life for which they must 'fight'. While users attempt to convey this narrative subtly, the visual strategy of comparing the imagined "ideal scenario" with dystopian images taken out of context (e.g. violent demonstrations, crimes, and ethnically diverse societies) implies their perceived need for militancy and violence and signals the perceived urgency to take action.

THEMES

Dominant themes in this demographic include white supremacy, patriotism, nationalism, religion, anti-feminism, revisionism, misogyny, and anti-LGBTQI*. These themes are frequently embedded into 'neutral' topics, portraying their posts as informative, historical content, outdoor content, or simply supporting their country's military and

31 - McSwiney, Jordan, & Sengul, Kurt (2023). Humor, Ridicule, and the Far Right: Mainstreaming Exclusion Through Online Animation. Television & New Media, 15274764231213816. https://doi.org/10.1177/15274764231213816

police actions. Many of these mirror the narratives identified in WP2 through interviewing experts.

The previously mentioned 'need to fight' often appears in the form of glorifying the crusades. For many of these younger users, religion, especially Christianity, plays a central role. They share historical paintings of crusaders and use biblical quotes to justify violence against their perceived enemies. While the messages are barely coded, they attempt to justify the legitimacy of these posts by referring to them as historical content.

It is clear from the data that the user demographic producing right-wing content is younger than the broader population of internet users. They know how to use the platform and what content increases the potential of going viral or generating views. While the researchers could find no technical solution for verifying the users' age, contextual clues helped them estimate the approximate age of each user. Such clues include references to 'returning to school' and school topics in general. In some cases, the details hint at the users' age, including visibly underage friends appearing in posts about nature (e.g. while hiking) or tagging such friends and their profiles. The researchers considered the videos and comment sections while attempting to determine the user's age. Nonetheless, the high number of assessed underage users in this demographic is a concerning trend that should be taken seriously.

In line with existing research findings, the distribution of genders among relevant users also appears to be shifting. While the German-speaking far-right scene on TikTok still seems dominated by males, the relevance of female influencers is clearly increasing. These accounts use specific aesthetics, often referred to as the "cottagecore" and "tradwife" (traditional wife) bubble. While neither of these scenes are inherently extremist or exclusive to the far-right, far-right female influencers have recently co-opted both concepts. These accounts subtly promote a lifestyle resembling the early-to-mid-1900s, with far-right undertones such as ethnically homogenous societies. As mentioned above, the consideration behind this is to appear neutral while still spreading ultra-conservative and far-right notions.

5.2 Main Actors' Content Strategies

Most of the content identified as hate speech by project staff was implicit. Users seem familiar with what they can post on TikTok and what will potentially get them banned. Should a ban be enforced, users tend to return with aliases similar to their initial username, which is frequently already listed in their bios before the ban (so-called alternative usernames) to ensure continuity. Other users develop strategies, such as deleting videos after 24 hours to avoid being banned or using deceiving hashtags and captions (e.g., #nohate and #history).

Right-wing actors' content tends to mix conspiracy theories, narratives and disinformation. Themes such as xenophobia, misogyny, anti-feminism, and anti-LGBTQI* (especially transphobia) are widespread among various types of users and content. As described above, users rarely spread such notions explicitly. Instead, the seed channels resort to implicit messaging, for example, by using simple comparisons between their ideal utopian scenario and distorted dystopian scenarios, where they portray the utopian world as superior to the other via uplifting music, emojis, and brighter colours. That becomes apparent in their use of prominently featured emojis (see Figure 6.3). A similar strategy forgoes the comparison and only posts negative, dystopian content on specific topics without further commentary.

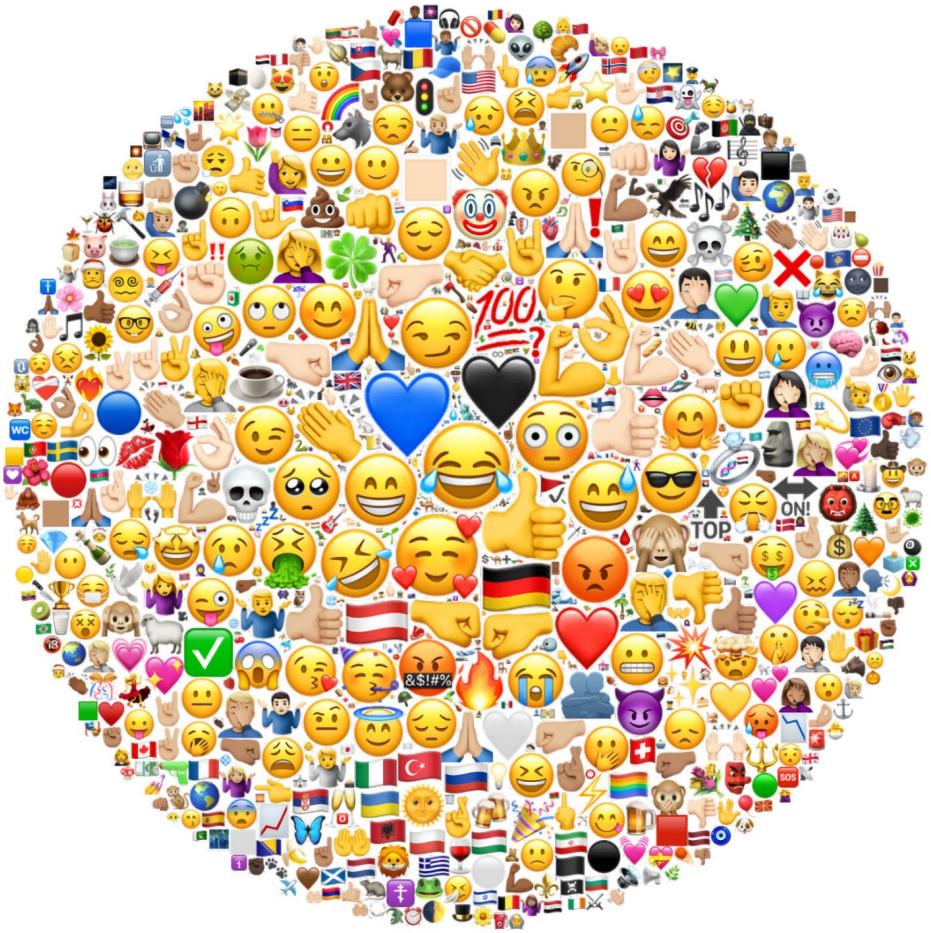


Figure 6.3: Visualisation of Emojis

Prevalent examples of this include posts about headlines on criminal activity by perceived out-groups (e.g. refugees, migrants, non-EU citizens, PoC). Once again, the idea behind this is strategic ambiguity: claiming that the content is simply informative ("stating facts") while spreading specific hate speech notions (e.g. certain out-groups are highly prone to crime and violence). In some bubbles, the opposite dominates: not addressing any out-groups but making a case for the in-group's superiority. That appears to be the case with nature-related and military-related posts that highlight the perceived dominance and higher status of the in-group without explicit comparisons.

This implicit hate speech content on TikTok highlights the danger of unclear intentions presented to content consumers. The bubble around certain journalists and their news platforms is representative of this tendency. The users portray their accounts as neutral and politically unbiased yet use right-wing narratives and buzzwords, making their posts digestible for a wider audience. That corresponds with the findings in WP2 and this project's definition of hate speech.

5.3. Links

The researchers gathered all the links in user bios, captions, images, and comment sections to gauge the size and strength of the larger German-speaking far-right online ecosystem. Collecting links helps to address one of the project's core research questions: How do far-right actors use platforms and link between various platforms to recruit, agitate, and network? Such links connect various entities to various communities and provide insights into the larger ecosystem. Links to fringe platforms are especially necessary to complete RECO-DAR's objectives.

The researchers scraped the links automatically. However, they could not scrape the links within the videos or the captions automatically. Therefore, they collected such links manually in order to scrape them later. Through the automatised process, the researchers collected 421 outgoing links and sorted them into five categories:

1. News outlets
2. Open petitions
3. Mainstream social media platforms
4. Fringe platforms
5. Websites

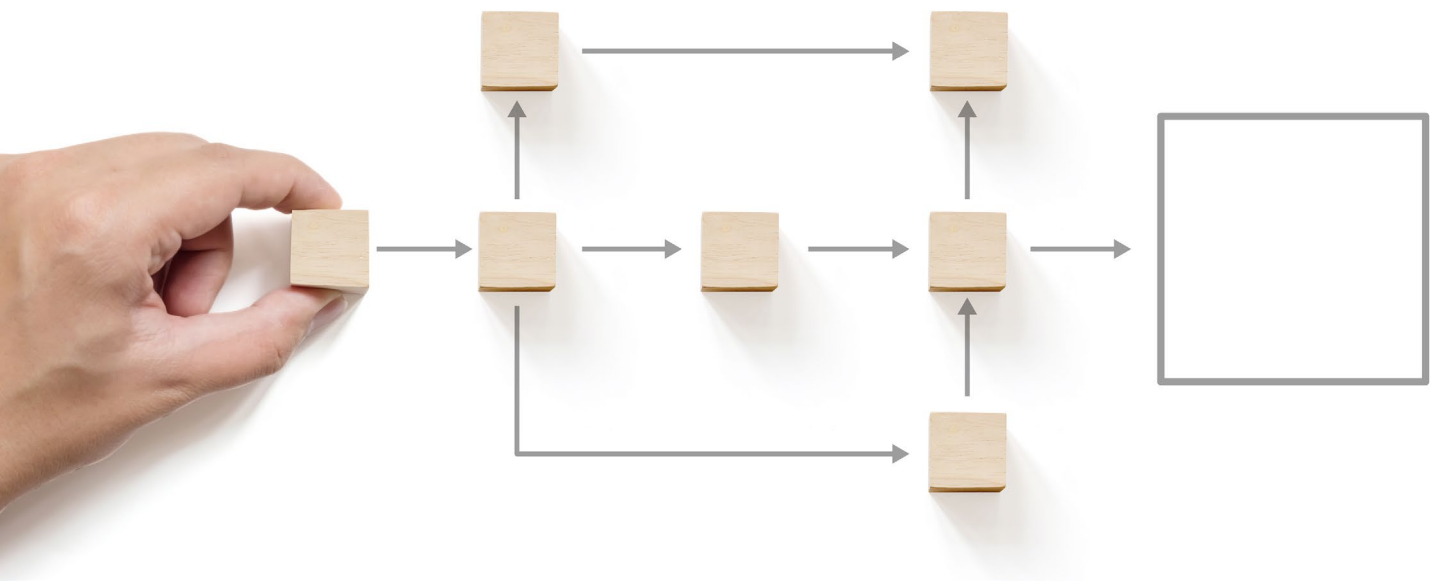
The following table summarises the number of links in each category, providing an overview of where users direct their content consumers.

As the table shows, there are few links to fringe platforms. A further limitation of links to platforms like Discord and Telegram is that creators can use settings so that those links expire quickly. Frequently, they only last 24-48 hours, making it difficult for the researchers to access them on time. It also seems that users do not share links openly due to their concerns about shadowbanning and banning. In these cases, they urge their followers to comment if interested in 'joining' them so they can send links via direct messaging. However, it remains unclear whether sharing links to other platforms may lead to faster bans or TikTok deleting their accounts. Another plausible explanation for the lower number of links to fringe platforms than expected is that the right-wing extremist scene on TikTok is distinct from other right-wing extremist milieus that utilise platforms such as Telegram. That might also have to do with the above-described characteristic of some milieus being younger and preferring social media platforms aligned with their generation's general preferences rather than those of their older counterparts.

The objective of this work package was to collect the links and archive them for future analysis. Nonetheless, certain trends are already observable, as well as potential limitations of the platform regarding links. There seems to be a concerted effort to link to alternative news sources, petitions for support, and petitions for users to become members of political parties. The researchers will conduct a more in-depth analysis of the links between platforms and the strategies behind them in WP4.

CATEGORY	NEWS OUTLETS	OPEN PETITION	SOCIAL MEDIA	FRINGE PLATFORMS	WEBSITES
N of Links	60	67	128	12	154
			421		

06 CONCLUSION



The diverse manifestation of right-wing extremist hate speech necessitates a broad conceptualisation of the far-right and its online ecosystem. The RECO-DAR project defines far-right actors according to the overlapping presence of four ideological traits in their activities to capture this spectrum best on TikTok: The combination of populism and nationalism with radicalism or extremism. Although each of these components is not unique to the far-right, their combination is increasingly characteristic of far-right actors and distinguishes them from other forms of radical actors.

The following are the report's key findings:

1 Far-right actors' online presence forms a complex ecosystem of entities, communities and biotopes

The online activities of the German-speaking far-right can best be understood as a heterogenous ecosystem consisting of accounts (entities), clusters (communities) and overlapping topic areas (biotopes). The diverse entities' social ties allow them to belong to multiple communities simultaneously, which this project has, in turn, further categorised into a limited number of biotopes on the basis of their shared ideology, culture, or topic (e.g. anti-LGBTQIA+).

2 A flexible, iterative approach is currently best suited to analyse hate speech by far-right users on TikTok systematically

TikTok's inherently dynamic nature and rapidly changing trends necessitate an approach that uses existing knowledge to mimic authentic user behaviour. A user-centric snowball method focusing on the hashtags, sounds and followers of so-called seed channels helps to capture the platform's fragmented and highly individualised German-speaking far-right ecosystem.

3 German-speaking far-right TikTok users appear to be young, with a high percentage of females

While this project cannot determine the age of many users with certainty due to the platform's anonymity features, the researchers assessed that a significant share of the users analysed belong to Generation Z, with a notable percentage of young female "influencers". The distinct visual language used by Gen Z, primarily characterised by their prevalent use of flashing collages accompanied by "fashwave" music, sets them apart from older users who are less familiar with the platform's trends and content creation techniques.

4 Far-right users developed novel audio-visual content strategies specifically tailored to TikTok's features and limitations

Far-right hate speech on TikTok is predominantly spread implicitly via audio-visual techniques, such as memes, suggestive comparisons, and dog whistles (insider references). That suggests a conscious use of strategic ambiguity, i.e. attempting to appear neutral in order to appeal to a broader, unsuspecting audience while evading moderation by the platform. Meanwhile, sharing links to fringe platforms to lure users to far-right-dominated spaces appears to be less prevalent than expected, with only 12 out of 421 links (2,8%) leading to niche social media sites.

These findings make it clear that the German-speaking far-right extremist online ecosystem is vast, complex, and diverse. That makes exploring it systematically challenging but all the more important when considering the platform-specific strategies that users employ to attract and cater to unsuspecting audiences. The RECO-DAR project will use these insights in its next phase to develop a deeper understanding of this ecosystem's efforts to spread hate speech and recruit members on TikTok and other platforms. By doing so, the project aims to contribute to ongoing and future efforts in preventing and countering far-right hate speech and recruitment online.

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08 ANNEX

8.1. Internal Coding Guide for Seed Channels (3 August 2023)

The researchers will base their final decision on which channels are seed channels (15GER/15AUT) on a combination of the factors below (the higher the overall score, the higher the relevance). Although some criteria are subjective (relevance/intensity/explicitness of hate speech), all criteria are weighted equally, and they were created based on the project's objectives. The numbers may be adapted for users in Germany to scale better in light of the larger size of the country and its right-wing hate speech scene. A channel cannot become a seed channel if it scores one on three or more criteria. Where multiple channels have the same score, the number of seed channels may be raised within reasonable boundaries to account for expected account bans.

1 Follower count

1: few followers (1-200)

2: moderate followers (2-800)

3: significant user (800-5,000 followers)

4: 'influencer' status (5,000+ followers)

2 Like count

1: below 1,000

2: between 1,000-7,500

3: between 7,500-15,000

4: above 15,000

3 Presence, intensity and explicitness of hate speech

1: barely any noticeable hate speech, mostly ideological content (e.g. supremacy of own group)

2: subtle, implicit hate speech (e.g. comparison of white and PoC individuals, heterosexuality with LGBTQ, suggesting the supremacy or "abnormality" of one group, framing migrants as violent by collages of media reports about incidents involving migrants)

3: A few posts with explicit hate speech

4: frequent explicit hate speech, possibly glorifying violence

4 Right-wing extremist ideology (presence, explicitness in posts, caption, username, bio)

1: some hints at ideology (e.g. followers/following, comments)

2: subtle implicit far-right undertones and ideological positions (e.g. comparison of white and PoC individuals, heterosexuality with LGBTQ, code in username and bio)

3: occasional explicit use of far-right buzzwords (see indicator list)

4: frequent and explicit use of far-right narratives and buzzwords

5 Activity: number of posts

1: less than three posts

2: less than ten posts

3: more than ten posts

4: more than 20 posts

6 Activity: temporal

1: inactive for over 12 months

2: inactive for over six months

3: active in the past six months

4: active in the past two months

7 Recruitment efforts and links to other platforms

1: no recruitment efforts and/or links to other platforms

2: recruitment efforts OR links to other platforms without explanation

3: rare/subtle recruitment effort and one/few links to other platforms

4: frequent, clear invitations to join a group/movement AND multiple links to other platforms

8.2. Guideline for Seed Channel Collection

The following two articles offer insights into how OSINT practices can be applied to most TikTok research. Keep in mind that not all of it is relevant to RECO-DAR.

- Part 1: https://www.bellingcat.com/resources/2020/05/25/investigate-tiktok-like-a-pro/
- Part2: https://www.bellingcat.com/resources/how-tos/2022/11/02/how-to-investigate-tiktok-using-tiktok-ukraine-research/

The first article outlines the various ways of finding TikTok content via different search engines, how to download profile images and videos and how to archive the material. The second article builds on the first but highlights various security and privacy concerns for researchers and how researchers can address and mitigate them. It further stresses the importance of identifying ecosystems to find related content and users. The most important takeaways for the RECO-DAR process:

- **Go local:** search using the local language first
- **Think like a local:** the more niche the keywords, the better they work
- **Be specific:** use specific search terms and keywords, especially locations and place names, in combination with the date fields on TikTok video search to get the most up-to-date results.
- **Mind the ecosystems**

- **Other platforms:** search for usernames the project is interested in on other relevant platforms

- **How did the researcher find what they were seeking:** it is important to document the workflow because researchers can easily get lost in the endless content.

- **Archive, archive, archive:** Remember that researchers are dealing with content that might be taken down quickly.

- **Make life easier:** use browser extensions to simplify the researchers' workflow.

1 Find an Entry Point

Before RECO-DAR can find an ecosystem or relevant content for the project, it needs to find an entry point. That entry point could be many things, including the following:

- **Keywords/search terms:** these must be as specific as possible. Current social and political events or debates can be useful if the researcher knows what and how the target community is speaking about (e.g., pride month).

- **Hashtags:** for these to work, the researchers must understand their target and the hashtags they use that are trending. TikTok users often employ several hashtags for the same content. If researchers use one hashtag without the others in the post for context, the search returns a broad spectrum of videos. Hashtags mentioning specific events or ideas are helpful for researchers (e.g. justicefortilllindemann, stolzmonat, whiteboysummer, aryanclassic).

- **Influential actors and accounts:** if the researchers know of any prominent figures or accounts like right-wing news outlets, they should search for them and go through the videos and comments on their accounts. Researchers can identify users through the comment section, accounts linked in the captions, or via a list of people they follow. Here are some current observations:

  - The list of people the user is following may not be accessible if the user blocks access to it.

  - Influential accounts have a significantly higher number of followers than the number of accounts they follow.

- **Locations:** some users use TikTok's location tagging option to link to locations with right-wing ideological connotations, such as Hyperborea.

Sounds are helpful when seeking users with a similar ideology or similar posts. However, that often only works once the researcher has identified a specific sound users use to spread hate speech or hateful content.

Important: The easiest way to find further seed channels is through an ecosystem of users. Once researchers have found one, it will also give them an idea of the keywords, hashtags, and sounds that the community uses and will build an excellent feedback loop for future research.

2 Archive the Information

Once a researcher identifies relevant seed channels, they need to save the information as soon as possible because the relevant users could be banned quickly. The researchers should scrape the videos automatically, but they should collect the account's initial information manually using the following steps.

RECO-DAR recommends that researchers use a phone AND a computer because TikTok's app offers a better user experience and options. Keep a Google or Excel spreadsheet open on both devices to ease the workflow. However, it is always possible to research social media using only a computer. The following are the steps RECO-DAR recommends:

1. Conduct the initial search on the TikTok mobile app.

2. Once the researchers have identified an account of interest, they should copy the account link into the Google or Excel spreadsheet.

3. Note how the researcher found the user *immediately*.

4. The researcher should record all the relevant information about the seed channel on their computer.

Google/Excel Spreadsheet: <title>

Archiving: Download the archive.ph Chrome extension to capture a screenshot of the account (https://chrome.google.com/webstore/detail/archive-page/gcaimhkfmliahedmeklebabdgagipbia). Once the researchers have created the screenshot and link, they should copy and paste the short link into their spreadsheet.

3 List of Indicators

Through the research process, researchers will notice other indicators that will help them to identify other accounts and relevant content. Use the spreadsheet to take note of them.

Far-Right Hate Speech on TikTok

A New Approach to Exploring Ecosystems

Funded by the
European Union