Why is "Nazis" regularly trending on Twitter in Belgium?

An analysis showing how Russian official narratives get pushed whenever "Nazis" show up on the platform



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Introduction

Between December 2021 and February 2023, the CrossOver team monitored Twitter Trends for Belgian users. This paper offers an overview of the key findings of Crossover's investigation carried out between March 4th and November 23rd, 2022. It focuses on the use of the term "Nazis" by French-speaking users on Twitter and analyses how it contributed to spreading a pro-Russian vision of the conflict in Ukraine. The paper finally depicts how this theme is associated with other dubious narratives on the platform.

The CrossOver research team focused on the evolution of the trend on Twitter and has collected data both from Twitter's official API and from its user-simulation system. The team also designed a method to spot the first 100 users who interacted with the word "Nazis" the most, analysed how the hashtags were used, and found out who used the word for the major on Twitter.

We led a quantitative analysis of publicly available data, as well as a qualitative analysis of the narratives associated with the use of the word "Nazis" among French-language Twitter users. We could demonstrate that far-right figures are active in disseminating the idea that Ukraine was in the hands of Nazis, therefore relaying Russia's justification to the invasion of Ukraine. An examination of these accounts also enabled us to observe how other far-right ideas can overlap with pro-russian narratives.

Main findings

On May 9th 2022, between 9 and 10 am, CrossOver's monitoring computers detected that the keyword "Nazis" appeared in top trends for Belgian users on Twitter, but this word was not to be found on the trends list retrieved when querying the platform's official API. The tweets contained dubious content and disinformation about Ukraine. The same phenomenon happened on November 22nd and 23rd, 2022, starting at 11 pm, as the word "Nazis" appeared as trending on our monitoring devices, but not on the trends list as returned by the official API. Deeper research revealed that tweets containing the word "Nazis" were thriving on Twitter in Belgium.

Looking back in time, we could establish that the term "Nazis" was trending for Belgian users on 15 different occasions between March and November 2022. When Belgian Twitter users would click on the trend, they would be exposed to very different kinds of content. Sometimes, the word "Nazis" was associated with a commemoration of World War II events (on June 6th for example, remembering the Normandy landings). Alternatively, the word "Nazis" was associated with narratives depicting the Ukrainian government and army as Nazis. As a reminder, Vladimir Putin justified the invasion of Ukraine by the necessity to "denazify" the country. On Twitter, narratives associating Ukraine to Nazis were echoing Russia's discourse and justification of the war.

Our analysis of t<mark>he mo</mark>st active French-speaking authors of tweets using the keyword "Nazis" shows that they mostly share ideas and visions with French far-right politics. By analysing the

narratives associated with the hashtag "Nazis", we noticed an overlap with antivax narratives, conspiracy theories and pro-russian discourse on the platform.

API vs user simulation: same platform, different datasets

CrossOver's <u>dashboard</u> is capturing data from Twitter's official API and from a network of <u>8</u> Raspberry Pis disseminated in Belgium programmed to simulate user behaviour.

User simulation enables us to cross check the data as provided by Twitter with our own observations. In other words, we can compare the list of trending topics in Belgium as given by the official Twitter API with what our simulated users see while browsing the site. This network of computers is spread all across Belgium (see our methodology for more details). Since the beginning of the CrossOver project, we noted that trends retrieved from the API did not always match trends as collected by simulated users.

What is an API?

An API is "a protocol that allows a user to query a resource and retrieve and download data in a machine-readable format.

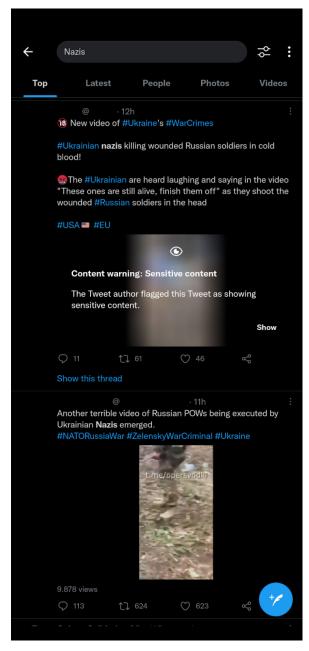
Researchers sometimes use APIs to download collections of texts, such as scholarly journal articles, so they can perform automated text mining on the corpus they've downloaded." Researchers who work on social media can use the platform's API to collect data². Twitter's API, for example, has an "Academic Research" version to "get access to even more data and advanced search endpoints. (Retrieve 10 million Tweets per month, Access to full-archive search and full-archive Tweet counts, Access to advanced search operators) etc." ³

On May 9th, 2022, between 9 and 10 am, Crossover's network of monitoring computers detected that the keyword "Nazis" appeared in the top trends in every monitored Belgian province. However, this trending topic did not show up on the list returned by the Twitter's official API in Belgium at that time. When the word was trending again between 7 pm and 6 am the following day on our monitoring devices, it was also visible on the list given by the official API.

¹ https://guides.temple.edu/APIs

²https://firstdraftnews<mark>.org/a</mark>rticles/how-to-investigate-healt<mark>h-misi</mark>nformation-and-anything-else-using-twitters-ap

³ https://developer.twitter.com/en/docs/twitter-api



Narratives spread by tweets containing the word "Nazis" included anti-Ukrainian disinformation and Pro-russian justifications of the war. Authentic content commemorating the victims of Nazism and the celebration of the victory of allied forces over Nazis on 8 May was also found using the term "Nazis".

In some provinces, at 10 am the keyword was in first or second position in the top trends, as in <u>Brussels, Liège</u> or <u>Hainaut</u>. In Limburg, Antwerp and East Flanders, it appeared in 7th position.

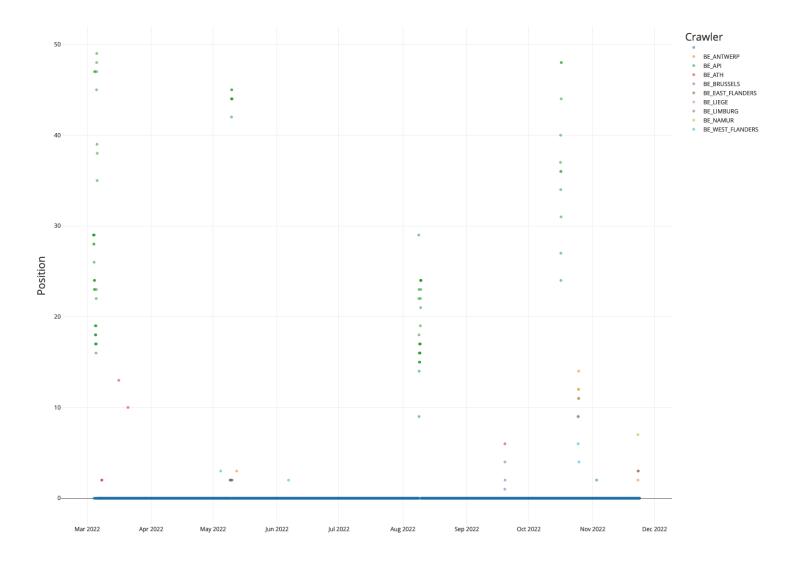
The difference in ranking among these trends suggests that there might be a region-wide geographic customisation of trends on Twitter.

In May 2022, we wrote a thread on Twitter and called out the platform and asked for an explanation about the phenomenon: why does this trend appear for Belgian users and not in the data returned by the API? How is this trend chosen and why is this keyword highlighted? What criteria are used to select content for their "Trending" tab? We didn't get any answer.

Not an isolated case?

On November 22nd and 23rd, 2022, starting at 11 pm, a similar phenomenon happened. At that time, the word "Nazis" was trending for approximately 5 hours in a row, sometimes in 4th or 5th position on the trends list (respectively in Brussels and Liège). As for in May, nothing similar was to be seen on the API. This means that if only the Twitter API is to be trusted, the keyword "Nazis" never appeared in Twitter trends for Belgian users at that period. We have found evidences of the contrary.

Digging a bit further in the data, we realised that "Nazis" was captured as trending 321 times (0.66% of the entire dataset). Each time, exactly the word "Nazis" (plural) is trending. In fact, the trend "Nazis" appeared on Twitter on 15 different occasions over the course of our data collection between December 2021 and December 2022, as shown in the following graph.



note: a point might appear several times for the same day: it means that the keyword "Nazis" was appearing as a trend at different times of the day.

As the graph shows, there are also periods when the trend was appearing on the Raspberry Pis, but not on the API data.

Why this is problematic

The differences between datasets obtained from the API and datasets from our monitoring Raspberry Pis raise the question of the reliability of Twitter official's API. Does the API reflect what users actually see on their screens? Why are trends different between Belgian provinces? For now, what we know about Twitter trends, from the platform itself, is that they are:

- determined by an algorithm (This algorithm identifies topics that are popular now, rather than topics that have been popular for a while or on a daily basis, to help you discover the hottest emerging topics of discussion on Twitter.)
- by default, are tailored for [a user] based on who you follow, your interests, and your location.
- Location Trends identify popular topics among people in a specific geographic location.
- Note: The number of Tweets that are related to the Trends is just one of the factors the algorithm looks at when ranking and determining trends. Algorithmically, Trends and hashtags are grouped together if they are related to the same topic.⁴

Twitter's website also describes the existence of a curation team "responsible for highlighting and contextualising the best events and stories that unfold on Twitter" but it seems to "have been axed" since the recent acquisition of the platform.

We have little knowledge about how the word "Nazis" made it on the trending list, why this keyword is highlighted, or what criteria are used to select content for the "Trending" tab. According to Twitter, trends are also supposed to "promote healthy conversations on Twitter." Yet, we observed that narratives associated with the keyword "Nazis" can sometimes be related to antisemitic or hateful content.

When the term "Nazis" is used on Twitter

At times, the term "Nazis" has popped on Twitter's trending list in relation to historical commemorations, especially during World War II anniversary events. At other times, however, no clear justification could explain why "Nazis" was trending.

Clear reasons why the term would be trending are for example on May 10th 2022, when many tweets referred to the events of May 10th 1933, as the Nazi auto-da-fe took place in Germany. On June 6th 2022, some tweets referred to the US Normandy landings which occurred 78 years prior. On September 19th 2022, when the keyword was also trending on Twitter, a ceremony to pay tribute to the French Jews deported by the Nazis took place.

Another set of reasons explaining why "Nazis" was trending are to be found in vivid discussions held on Twitter: on October 16th 2022, some tweets referred to the decoration of the Klarsfeld couple by Louis Aliot. Louis Aliot, far-right mayor of Perpignan, decorated Serge and Beate

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⁴ https://help.twitter.com/en/using-twitter/twitter-trending-fags

⁵ https://twitter.com/i<mark>/en/cu</mark>ration

⁶ https://twitter.com/Reuters/status/1588548808224305152

⁷ idem

Klarsfeld on Thursday 13th October, on the occasion of the inauguration of a memorial association. The event caused a stir among internet users as some saw a paradox: they pointed out the proximity between Louis Aliot's political party and antisemitic ideas, while Serge Klarsfeld is known for being an "activist and Nazi hunter known for documenting the Holocaust in order to establish the record and to enable the prosecution of war criminals"⁸.

On October 25th, the presence of the keywords as a trend can be associated with the breach of contract between Adidas and Kanye West⁹ whose anti-Semitic discourse had become increasingly regular. Adidas justified their choice by explaining that "Adidas does not tolerate anti-Semitism or any other type of hate speech" The keyword "Nazis" kept on being used by people who reminded that Adidas was founded by a former Nazi 11, and the narrative thrived on Twitter at that time.

Finally, on 2 November, Giorgia Meloni appointed as member of the italian government an MP who had displayed himself with a Nazi armband¹², which, again, was vividly debated on the platform.

As the events we have just listed can explain in part why the term "Nazis" was trending on Twitter, **the word was also used to other ends**. Narratives spreading the idea that Ukraine is led by nazis kept on circulating on Twitter. Even if there is an ongoing usage of the word "Nazis" on Twitter, such narratives have managed to piggyback the above described events, using them as an echo chamber and in some cases being pushed louder than the events themselves.

⁸ https://en.wikipedia.org/wiki/Serge_Klarsfeld

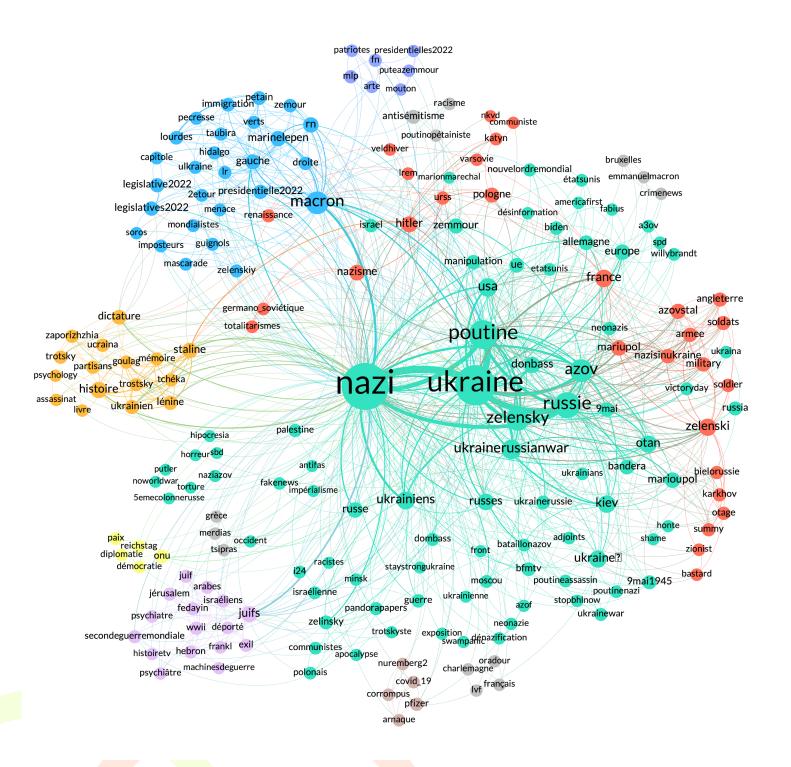
^{*}https://www.politico.eu/article/german-sportswear-giant-adidas-ends-cooperation-with-kanye-west-after-rapper s-antisemitic-remarks/

¹⁰https://www.adida<mark>s-grou</mark>p.com/de/medien/newsarchiv/pr<mark>essem</mark>itteilungen/2022/adidas-beendet-die-partnersch aft-mit-ye-mit-sofortiger-wirkung/

¹¹ https://www.snopes.com/fact-check/adidas-founded-former-nazi/

¹²https://www.theguardian.com/world/2022/nov/01/giorgia-meloni-galeazzo-bignami-nazi-swastika-armband

What do people tweet about when they use the term "Nazis"? An analysis of narratives



This data visualisation focuses on hashtags derived from tweets that include the hashtag "Nazis". It is based on the <u>Louvain community detection system</u>¹³ used by Gephi. It shows that the hashtags "Nazis", associated with Ukraine, represents an important part of the analysed content, meaning that they are often used together on Twitter.

Looking at the green community, the hashtags that have the most connections to each other are, in order of importance, *ukraine*, *nazi*, *poutine*, *Russie* and *azov*.

In this myriad of hashtags, the topics associated with sometimes very distant communities can overlap: although the graph focuses on the hashtag nazi, some communities emerge at the margin. This is the case, for example, of the hashtags "LREM¹⁴ - veldhiver¹⁵ - renaissance¹⁶ - france - macron - ukraine - nazis" or "Puteazemmour¹⁷ - FN - mouton¹⁸ - presidentielles2022¹⁹ - nazis".

A large community is also forming around the hashtags *Ukraine*, Azov, A3ov, spd²⁰, Willy Brandt and allemagne. The graph shows some hashtags associated with conspiracy material (nouvelordremondial²¹ or soros for example).

Who is spreading these narratives

We have condensed the top 100 most active users on Twitter, in French, on this topic. Among the

top 100 users that use the word "Nazis" the most, 12 of them have used it at least 10 times during the study period. Among them, 8 of them are unfolding the narrative associating Nazis to the Ukrainian government and soldiers. One account is particularly active with 43 tweets using "Nazis" found during the study period. Looking at it, the user supports the official Russian narrative. On other topics, this user also relays antivax claims and climate denial content.

There is an overlap in narratives and communities, a phenomenon which already happened about other topics. Paying particular attention to the top 10 accounts, some of them have been suspended. A visit to their dedicated archive allows us to read some openly racist tweets. These accounts also spread narratives such as antivax discourse, new world order ideas and conspiracy theories. These ideas are spread alongside narratives associating Ukraine with Nazis.



Il y a même l'allée des anges, tous les enfants tués par Kiev et ses nazis #Donness #Donnetsk



¹³ https://arxiv.org/abs/0803.0476

¹⁴ La République En Marche, former name of Emmanuel Macron's political party

¹⁵ Reference to the Vel' d'Hiv Roundup, an WW2 event when a mass arrest of foreign Jewish families by French police and gendarmes occured at the behest of the German authorities, that took place in Paris on 16 and 17 July 1942

¹⁶ Current name of Emmanuel Macron's political party

¹⁷ slang expression referring to deferring people to the far-right politician Éric Zemmour

¹⁸ litteraly "sheep", slang Franch word referring to people following blindly a leader or authority

¹⁹ reference to the Fre<mark>nch p</mark>residential election which occurre<mark>d in th</mark>e spring of 2022

²⁰ reference to the Soci<mark>al De</mark>mocratic Party of Germany

²¹ French for "New World Order", referring to conspiracy theories

What is their impact

We also analysed the accounts with the most impact on these topics, using a performance score of our own design 22 . For each user a score has been attributed based on its interactions associated with tweets mentioning the word "Nazis" (see methodology below).

The top score is associated with the account of Florian Philippot. His impact score is six times higher than the following account listed, and he counts more than 300,000 followers. The account keeps on spreading narratives associating the Ukrainian government and army to Nazis, and justifying the attack by Russia. Among the 14 other people who have a score over 1000, 12 use the same narrative. They are mostly French people, close to far-right and sovereignist ideas.



²² See methodology

Conclusion

On May 9, the Crossover team spotted that there was a discrepancy between data collected by our user-simulation system and data retrieved through Twitter's official API. Our observations showed that the keyword "Nazis" had been trending for at least 1 hour in every Belgian province, at the top of the list for Brussels, Liège and Limburg. However, this phenomenon was not to be found on data provided by Twitter's official API. Furthermore, between March and November 2022, French-speaking Belgian users on Twitter would see the word "Nazis" appear at 15 different occasions in the Twitter trends, sometimes for several hours.

The keyword Nazi has been thriving on the platform, sometimes at moments associated with World War II commemorations, as tweets celebrating, for example, the memory of Jews deported to concentration camps or the Allied landings in Normandy in June 1944. However, the word 'nazis' was mostly associated with Vladimir Putin's narrative, justifying the invasion of Ukraine by a desire to "denazify" the country. In every observed period, tweets associating the word "Nazis" with the Ukrainian government or army were present. Although the keyword is sometimes used to refer to history, or in the context of political debates, the official Russian narrative associating the Ukrainian state with a nazi state is widely spread by pro-Russian accounts on the platform. A substantial part of the authors of such messages also show affinities with far-right ideas. Finally, among all the observed discourse, conspiracy theories, antivax and pro-russian discourses have a tendency to overlap on the platform.

Methodology

Data acquisition

Publicly available information was gathered via a specific data-acquisition system. Such a system has been crafted with the specific purpose of replicating the user behaviour, consequentially the content was extracted from the Web user interface.

The query used by the researchers in order to compose the dataset is:

1. "Nazis" lang:fr

In the following table, the type of the information gathered is reported:

Attribute	Description
Username	Handle of the account who tweeted
Timestamp	Datetime which the tweet was sent
Likes	Number of favourites received
Retweets	Number of retweets received
Replies	Number of replies received
Quotes	Number of quotes received
Text	Body text of the tweet

The anonymised dataset used in this research is made available at the following GitHub repository: https://github.com/CheckFirstHQ/twitter-antisemitic-content-analyse.

Network graph

The network graph visualisation software of our choice is Gephi (https://gephi.org). The main advantages of this software are:

- being open source
- reliable for large networks
- provides means to manipulate network via dynamic filterings

The acquired information was analysed and only relationships between hashtags were considered. Specifically, in the network graphs we produced each hashtag is represented as a node and an edge represents a tweet containing both the hashtags in the body text. Once the extracted information was imported in Gephi, we used ForceAtlas2²³ as layout algorithm in order to highlight connections between nodes.

Next step was to filter-in only the information related to our target hashtags, "Ukraine" and "Nazis", at the first degree. In order to achieve this we used the Ego Network filter with a depth equal to one, and this assured us a network composed by:

- the target node
- nodes connected directly to the target node
- one step away neighbour nodes

Whereby, nodes which are not connected to our target nodes in any way, or too many steps away, are excluded from the network graph.

Finally, we identified communities within our dataset. To achieve this we calculated the Modularity Class statistic²⁴ for community detection; in simple words: hashtags that are paired together the most are part of the same community.

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²³ https://doi.org/10.13<mark>71/jo</mark>urnal.pone.0098679

²⁴ https://arxiv.org/abs/0803.0476

Interaction score

Our tentative way to weight the influence of each user is accomplished via what we define as the "interaction score".

This score is calculated using different weights in order to make the different interaction means as comparable as possible. The weights are:

- 1 per each favourite received
- 2 for each retweet received
- 3 for each quote received
- 4 for each reply received
- 5 for each tweet sent

For example, if a user sent one tweet and received one interaction per each type, the score equals to: 15.

Time periods when "Nazis" was trending

The following table represents moments when the keyword "Nazis" was trending for French-speaking Belgian users on Twitter.

Since	Until	Tweets
2022-03-04T00:00:00.000Z	2022-03-05T20:00:00.000Z	4137
2022-03-08T00:00:00.000Z	2022-03-08T02:00:00.000Z	48
2022-03-16T06:00:00.000Z	2022-03-16T07:00:00.000Z	38
2022-03-20T17:00:00.000Z	2022-03-20T18:00:00.000Z	133
2022-05-04T15:00:00.000Z	2022-05-04T16:00:00.000Z	84
2022-05-09T07:00:00.000Z	2022-05-10T05:00:00.000Z	2123
2022-05-12T09:00:00.000Z	2022-05-12T10:00:00.000Z	59
2022-06-06T13:00:00.000Z	2022-06-06T14:00:00.000Z	67
2022-08-08T15:00:00.000Z	2022-08-09T19:00:00.000Z	934
2022-09-19T09:00:00.000Z	2022-09-19T12:00:00.000Z	142
2022-10-16T09:00:00.000Z	2022-10-16T19:00:00.000Z	874
2022-10-24T21:00:00.000Z	2022-10-24T22:00:00.000Z	57
2022-10-25T00:00:00.000Z	2022-10-25T07:00:00.000Z	165
2022-11-02T20:00:00.000Z	2022-11-02T22:00:00.000Z	103
2022-11-22T21:00:00.000Z	2022-11-23T02:00:00.000Z	156



We observe and analyse the algorithms of social networks against disinformation









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