

From Infodemic to Information War

A contextualization of current narrative trends and evolutions in Dutch-language disinformation communities

Tom Willaert, Vrije Universiteit Brussel
Maria Giovanna Sessa, EU DisinfoLab

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TABLE OF CONTENTS

Introduction	3
Section 1: Narrative Trends in International Fact-Checks	4
Method	4
Findings	5
Things are escalating	6
Calling out crimes against humanity	6
Reductio ad Hitlerum	6
Conspiracy theories on secret lab activities	8
The era of denialism	9
Emotional stories for likes and clickbaits	10
The negative othering of migrants and refugees	11
Section 2: Narrative evolution in Dutchophone Telegram channels	12
Method	12
Findings	13
Emerging narratives and stable undercurrents	14
Recurring deceptions	15
Salient pivot points in an ongoing process	16
Conclusion	18
Data and ethics statement	18
Acknowledgements	18

Introduction

What makes online disinformation such a formidable threat to democracy is its seemingly inexhaustible capacity to adapt, spread and evolve to match the most polarizing issues. Recent years have taught us just how efficiently misleading stories internalize world-shocking events such as pandemics or wars, twisting facts and re-appropriating evidence in support of malicious agendas. In this process, stories rapidly propagate across national borders, where they are adapted to local contexts with ease. Traces of the same electoral fraud narrative that dominated the 2020 US elections were for instance soon observed in the context of the 2021 [German Federal Election](#).

Yet one of the most striking features of misleading narratives is their tendency to revive old deceptions and conspiracies. False stories about the detrimental side-effects of coronavirus vaccines for instance readily recall earlier stories about a causal link between [vaccines and autism](#) or other disabilities (where none has been found). Likewise, recent pandemic-related hoaxes were already circulating during earlier [disease outbreaks](#), such as ebola, zika or H1N1. In the field of technological innovation, stories antagonizing new wireless technologies such as 5G can be traced back to similar narratives following the introduction of [wifi or microwaves](#).

These examples suggest that the analysis of narratives and their evolution holds the key to understanding and monitoring the disinformation that circulates on social media platforms. Focussing on Dutch-speaking disinformation communities, this report explores this idea, and contextualizes and investigates the relationship between the narratives that frame two actual and impactful events: the ongoing coronavirus pandemic and the recent Russian invasion of Ukraine. Despite the seemingly disparate nature of these events, we expect to find striking similarities and convergences between the narratives surrounding both. On a conceptual level, this is already implied by the mere concept of 'narrative', which, in political science, has broadly been defined as a form of discourse in which humans "construct disparate facts in [their] own worlds and weave them together cognitively in order to make sense of [their] reality" ([Patterson and Monroe, 1998](#)). Furthermore, previous observations indicate that across social media platforms, anti-vax conspiracy groups have embraced pro-Russian narratives surrounding the war. For instance, the unsubstantiated claim that the coronavirus was engineered in laboratories was soon discovered to re-emerge as the narrative that the U.S. had established biolaboratories in Ukraine - an observation that will be corroborated in this report.

In order to do justice to the complex and wide-ranging connections that can thus form between narratives, this investigative report combines two perspectives. For one thing, it offers a broad, comparative analysis of coronavirus and Ukraine-related narrative trends across countries and platforms based on a qualitative analysis of data sourced from the CoronaVirusFacts Alliance and #UkraineFacts databases. This analysis and its resulting typology of narrative trends serves to contextualize a more focused, quantitative analysis of narrative evolution on Telegram – a messaging platform that through its permissive affordances tends to harbor conspiracy theories and other misleading or antagonistic discourse typically not tolerated on media such as Twitter ([Rogers 2020](#), also see [Urman and Katz, 2020](#)). More specifically, our empirical case study zooms in on the dynamics of narrative evolution that mark Dutch-speaking conspiratorial and far-right channels on the platform. In addition to presenting further evidence for the convergence of coronavirus disinformation and pro-Russian propaganda, the report thus aims to make a methodological contribution by implementing an inductive approach to the detection and interpretation of narrative signals from social media data.

Section 1: Narrative Trends in International Fact-Checks

Method

A suitable approach to constructing a typology of narratives is to mine, map and compare narrative signals based on fact-checks: reports that document and debunk disinformation based on expert analysis. Even though assessments of the overall effectiveness of fact-checks in combating disinformation diverge, we argue that they can serve as a satisfactory indicator for the types of narratives that figure in the online misinformation landscape ([Marzi and Sessa, 2022](#)).

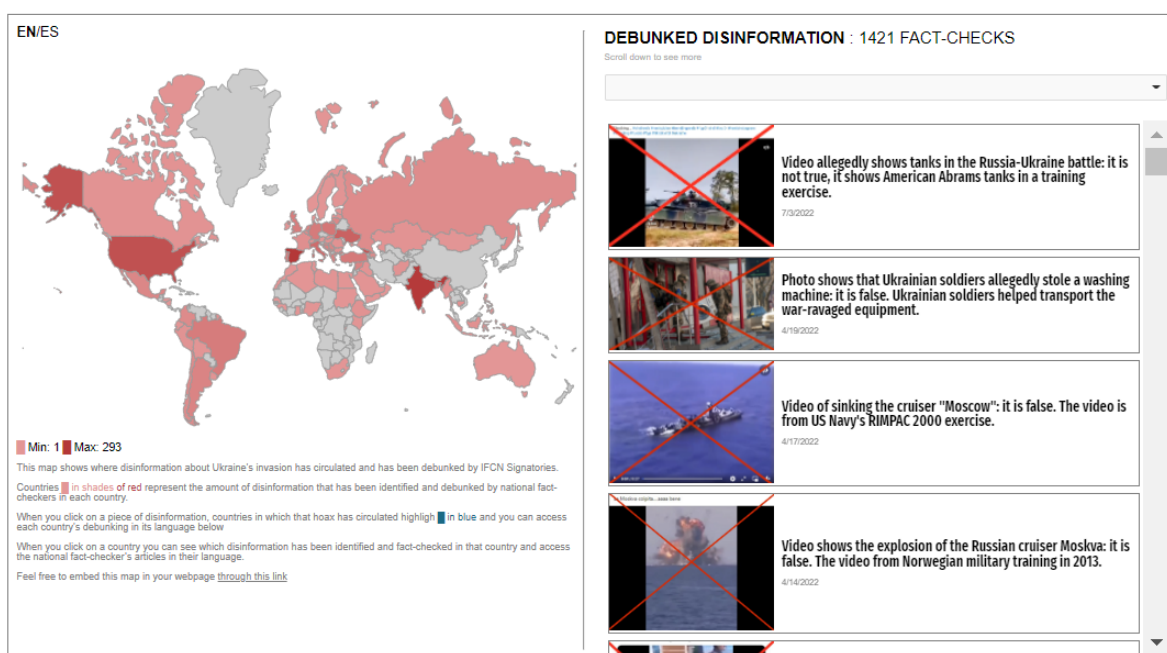
Regarding the war in Ukraine, we thus extracted narratives from debunks by signatories of the International Fact-checking Network (IFCN), collected in the [#UkraineFacts](#) database. This repository categorizes debunked disinformation by narrative, offering IFCN signatories' in-depth analyses for each of these. This immediately conveys a sense of the wide-ranging, transversal diffusion of disinformation surrounding the war in Ukraine, with some [hoaxes](#) appearing in up to 34 countries worldwide. The emerging, war-related narratives that were thus collected were then discursively compared to similar ones centering around the coronavirus pandemic, pooled from the [IFCN CoronaVirusFacts Alliance Database](#).

This database allows users to retrieve fact-checks by country, organization, falsehood-rating, or through a keyword search. At the time of our writing (April 26), it has 1,118 pages (each page contains 15 debunks) of fact-checks since January 2020. Currently, #UkraineFacts contains circa 240 claims that together amount to 1,421 fact-checking articles starting from the last week of February when the invasion began.

#UkraineFacts

By the International Fact-checking Network
Signatories

Developed by Maldita.es



The CoronaVirusFacts/DatosCoronaVirus Alliance Database

Here is the database that gathers all of the falsehoods that have been detected by the [CoronaVirusFacts/DatosCoronaVirus alliance](#). This database unites fact-checkers in more than 70 countries and includes articles published in at least 40 languages. Para búsquedas en **español**, haz clic [aquí](#). Faça buscas em **português** [aqui](#).

The screenshot shows the search interface of the CoronaVirusFacts/DatosCoronaVirus Alliance Database. At the top, there is a search bar with a 'SEARCH' button. Below this, there are three dropdown menus: 'Select a country', 'Select a rating', and 'Select an organization'. To the right of these menus is a 'VIEW' button and a close button (X). Below the filters, there is a 'SORT BY: Oldest' dropdown menu. The main content area displays three fact-check entries. Each entry includes the fact-checker's name, the date, the country, the rating, and a brief description of the falsehood. Each entry also has a 'READ MORE' button.

Fact-Checked by	Date	Country	Rating	Description
Estadão Verifica	2022/02/23	Brazil	FALSE	The Sinovac vaccine caused the death of a 10-year-old boy.
Estadão Verifica	2022/02/22	Brazil, United Kingdom	MISLEADING	Queen Elizabeth II is taking ivermectin against the COVID-19.
Chequeado	2022/02/20	Argentina	FALSE	Ultraviolet light predicts the result of coronavirus antigen tests.

Findings

Our comparative, cross-country analysis of fact-checks allows us to identify seven narrative trends that cross-cut stories about the war in Ukraine and the pandemic, both in terms of actual contents as well as the timing of their propagation.

Things are escalating

Mis- and disinformation are often a drawback of any [collective sense-making process](#) people engage in when confronted with unknown situations, and it thus tends to intensify in times of crises. In the early stages of both the Russian invasion of Ukraine and the pandemic, at a time when people were less acquainted with the geography of a new conflict and the diffusion of a new virus, the 'escalation' narrative was the first to emerge. The goal is definitely to cause alarm and confusion, to trigger panic over the feeling of a threat advancing until there is no way out and either the virus or the war will eventually get to us.

Since the end of February, social media has been filled with false and inaccurate news on the military escalation of the conflict. In this regard, old images from elsewhere were recycled: videos of explosions [in Lebanon in 2020](#) and [in China in 2015](#), or videos of airstrikes [in Gaza in 2021](#) and [in Turkey in 2016](#) were used to depict Russian aggressions on Ukrainian cities and civilians. As TikTok misinformation researcher [Abbie Richards](#) pointed out, techniques also included adding scary sounds to the content or shaking the camera to convince viewers that the footage had been filmed during ongoing combat.

During the initial outbreak of Covid-19 in 2020, similar disinformative instances warned that the new SARS-CoV-2 emerged all over the place, usually containing references to specific city in the country: e.g. Mandaluyong City in the [Philippines](#), El Callao in [Venezuela](#), or Almaty in [Kazakhstan](#). The hoaxes were often framed as insider information – in writing or in the form of audio messages – by healthcare professionals.

Calling out crimes against humanity

Disinformation has played a crucial role in justifying the Russian invasion of Ukraine, one that is corroborated by an instrumental use of language. While still accessible, Russian-state media in the West have referred to the military aggression with vague and loose terms like 'operation' and 'situation', while systematically avoiding wording such as 'war' or 'conflict'. As referred by [EU DisinfoLab](#), Putin's address on February 21 – fact-checked by [The Washington Post](#), the [BBC](#), and [VoxUkraine](#) – further highlights the importance of terminology in framing the war. The Russian propaganda machine has been pushing the narrative of [denazification and liberation](#) of Ukraine for years, which the Russian President reiterated in his speech together with fabricated allegations of a Ukrainian [genocide](#) against ethnic Russians in Donbas.

COVID-19 conspiracy theorists have often equated the pandemic to a [plot for global depopulation](#), a [planned genocide](#) that also involves [containment measures](#). In this regard, fabricated rumors maintained that unpopular personalities in the eyes of conspiracy believers (i.e. [Anthony Fauci](#), [Bill and Melinda Gates](#)) and entities (i.e. the [WHO](#), the [Davos group](#), or pharmaceutical company [Pfizer](#)) were to be tried for war crimes due to their alleged involvement in said mass genocide. Moreover, various debunks maintained that [mandatory masks](#) and the imposition of [vaccines](#) notwithstanding the will of the patient were a war crime according to the Nuremberg code, for which [health workers personnel](#) would be tried. These accusations mistake the prohibition to perform human experimentation with the possibility to apply public health measures.

Reductio ad Hitlerum

The "[reductio ad Hitlerum](#)" is a rhetorical strategy that engages in ad hominem attacks aimed at disqualifying the opponent through guilt by association. The argument – whether right or wrong – is detailed and a substantive debate is thus avoided through a fallacy of irrelevance that distracts and angers the audience by comparing the opponent to the most feared criminals of Europe's history. The association serves the double purpose of delegitimising the opponent and justifying one's actions.

The use of the 'Nazi card' has been outstandingly skewed toward anti-Ukraine stances, with the exception of the doctored image of a [Time](#) magazine circulated online, superimposing Hitler's moustache to Putin's face. Otherwise, hoaxes have repeatedly pushed the narrative that Ukraine is filled with Nazi infiltrations, for example through a manipulated photo of President Zelensky holding a [football jersey with a swastika](#), or an actual photo of him wearing a T-shirt in which the logo of Ukraine's armed forces was mistaken for the [Nazi iron cross](#). In addition, a TikTok video showing [Third Reich flags](#) in Ukrainian streets was really taken during a neo-Nazi reunion in Bulgaria, while a 2014 photograph of the Azov Battalion wielding [Nazi symbols](#) or the projection of a svastika on the stairs of a shopping mall in Kiev during a [hacker attack](#) in 2019 were revived as current.

Comparisons with the Nazi regime have been used and abused by pandemic-related disinformation too. Anti-vaxxers have compared the vaccination campaign to a [Nazi policy](#) aimed at [harming the community](#) and the Covid-19 health pass to the [Nazi-era passes](#), maintaining that imposing limitations on the unvaccinated population equated to the discriminations experiences by the [Jews in Nazi Germany](#). In Poland, a deeply troubling symbolic action saw protesters dressed in [striped uniforms](#) that emulated the attire of prisoners in Nazi concentration camps.

Fun stuff in Ukraine
[See original](#) · [Rate this translation](#)



 Yestarday driving by Lviv, UA

Yesterday Poles protested neoliberal fascism in this form.

As Thierry Bode would say:
"People who are not Xsinized are the New Jews"

[Hide Translation](#) · [Rate this translation](#)



[Above: [Photo](#) of a film set in 2013 in Bulgaria passed as Ukraine nowadays; Below: [Photos](#) of a 2010 anti-Nazi performance in Poland shared online as a 2021 Covid-19 anti-vax protest]

Conspiracy theories on secret lab activities

The very piece of disinformation that draws a continuum between coronavirus-related and pro-Russian positions is definitely the false conviction that Ukraine is currently hosting over a dozen [biological weapon labs](#) paid for by the US Defence Department. A [2018 Coda Story article](#) attributed this hoax, which was applied at the time to alleged labs in Georgia, to “Russia’s information war with the West”, as the Eastern power has indeed officially [endorsed](#) the fabricated story of US-funded secret biolabs to justify the invasion of Ukraine. Nonetheless, Russia has been deliberately pushing disinformation about the United States and biological weapons since the Cold War, accusing the superpower of [manufacturing the HIV virus](#).

Ça va sans dire, the conspiracy – also promoted by [Russian and Chinese](#) media – blinks an eye to QAnon believers, as it feeds on the delusion that Putin is fighting to stop the evil scheming of the deep state. This is extremely similar to the belief that Covid-19 is an artificial virus manufactured in a Chinese [biosecurity lab](#) to be a [bioweapon](#), which was released either [intentionally](#) or [accidentally](#).

Putin Orders Military to Destroy Bio-Labs in Ukraine as US Scrubs Evidence of Their Existence

Not checked

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China built a lab to study SARS and Ebola in Wuhan - and US biosafety experts warned in 2017 that a virus could 'escape' the facility that's become key in fighting the outbreak

[Left: [Unproven claim](#) of U.S.-funded biolabs in Ukraine; Right: [Misleading claim](#) that Covid-19 escaped a Wuhan lab]

The era of denialism

Another close similarity between the ongoing conflict and the pandemic is the large amount of denialist disinformation that exists. On the one hand, the denial of reality is even more surprising in an era where information is continuously and immediately accessible. On the other hand, this tendency probably resonates with the overwhelming amount of authentic and deceiving information dubbed as the infodemic.

Concretely, false news maintained that crisis actors were hired to appear as war victims or Covid-19 patients. For instance, a [TV series actor](#) made up to look injured and bleeding was passed off as a Ukrainian survivor, while actors who were filming a [training video for doctors](#) were said to be faking being sick with Covid-19 for TV. The footage of Austrian [climate activists](#) in dead body bags has been misleadingly reshared in the context of the conflict, just like the image of an [actor smoking a cigarette](#) on set while in a body bag was used as evidence that Covid-19 deaths were fake.



[Left: A decontextualized video of climate activists used to deny the Ukraine war; Right: A decontextualized video of actors on set used to deny the pandemic]

Besides decontextualized visuals, pro-Russian disinformation around the conflict also tried to undermine victims' credibility: the photo of an [injured Ukrainian woman](#) due to the attacks was shared online with the false accusation that it was a decontextualised image from a 2018 gas explosion, challenging the work of fact-checkers. The Russian embassy in the UK also fostered the conspiracy that a beauty influencer played the role of a [pregnant woman](#) escaping the bombed Mariupol hospital.

Emotional stories for likes and clickbaits

A disinformative genre that is particularly successful in times of crisis focuses on heart-breaking and heart-warming stories that might provoke an emotional response in the audience, and thus collect clicks and likes. These accounts portray vulnerable categories such as children, women, and the elderly in a stereotypical way. Decontextualisation is key to reaching the goal: the 2018 photo of a wounded [Syrian child](#) passed for a Ukrainian toddler, for instance, or the authentic photo of a [crying Ukrainian boy](#) who was falsely said to be crossing the border with Poland alone, while he was with his family. As the pandemic unfolded, the internet was overcrowded with false stories about desperate [fathers](#) and [mothers](#) whose children had allegedly died following the Covid-19 vaccine.

Płaczący chłopiec w Medyce. Ten widok rozkrusza serce na miliony kawałeczków



[Above: A decontextualized video used to promote a clickbait story on the Ukraine war; Below: A decontextualized [video](#) used to promote a clickbait story on the pandemic]

The negative othering of migrants and refugees

Unexpectedly, Ukraine-related disinformation has still not delved into the topic of migration and refugees. So far, relevant debunks suggested that crossing the [Ukrainian-Polish border](#) was forbidden to non-white people or that Slovakia was probably tipped off on the imminent Russian invasion and thus had changed its rules for the [entry of refugees](#) ahead. Polish fact-checker [Demagog](#) debunked claims that refugees are mostly African and Middle-Eastern males – rather than Ukrainian families – and that these asylum-seekers are violent criminals, thieves, and rapists.

Prior to the war, a [DGAP report](#) warned that Russia might instrumentalise migration by spreading “disinformation about the character of the people fleeing into the EU”. The assumption fits indeed with the false news that [Ukrainian refugees](#) had beaten to death a Russian-speaking teenager in Germany. Moreover, the [2018 video](#) of an attempted robbery committed by two Ukrainian citizens against an Indian man on a train in Italy was revived as current to blame Ukrainian refugees.

As soon as Covid-19 emerged, there was an attempt to link the pandemic to migration, which is a salient and audience-dividing issue for many countries. As the novel coronavirus was dubbed the ‘[Chinese virus](#)’, [hate crimes against Chinese communities](#) were reported worldwide. Finally, another fear of vaccine skeptics was that [migrants](#) would be forced to get vaccinated against Covid-19, a rumour that is now being extended to include [Ukrainian refugees](#). Another viral false claim maintained that the WHO would be taking advantage of the conflict to impose [mandatory Covid-19 vaccines](#).

Section 2: Narrative evolution in Dutchophone Telegram channels

Having mapped some general parallels between narratives surrounding the coronavirus pandemic and the war in Ukraine, we can wonder how these trends are reflected on a more localized level. Indeed, how exactly might communities that embraced coronavirus conspiracies suddenly pivot to push false narratives surrounding the war in Ukraine? This section seeks to answer this question by investigating narrative evolutions on Dutch-speaking far-right and conspiratorial Telegram communities around the time of the Russian invasion. By operationalizing inductive methods from corpus-based discourse analysis, this data-driven case study thereby aims to further our understanding of the dynamics that govern disinformation in one of the main linguistic communities studied in the EDMO BELUX project.

Method

Narratives on Telegram are shaped and propagated through messages in channels or in groups, which can be public or private, and messages can contain texts as well as other media such as images or videos. In this in-depth analysis, we focus on narrative evolution in message texts and images on public Telegram channels pertaining to Dutch-speaking far-right and conspiratorial communities. Identifying these Telegram channels is a non-trivial matter, as they can be difficult to identify based on their channel name. Therefore, relevant channels were identified through the ‘snowballing’ method for Telegram research described in [Peeters and Willaert \(2022\)](#). This method repurposes Telegram’s affordance of message-forwarding between channels, and assumes that if one channel forwards a message from another channel, a meaningful relation exists between both. Starting from a seed list of known far-right and conspiratorial channels, is it thus possible to retrace these connections between channels, bringing into view a network of related channels in a bottom-up way. For the purposes of this case study, a tailor-made scraper was used to automate and scale-up this process.

The network of channels under investigation was first mapped in the summer of 2021. At that time, these channels were mainly preoccupied with the coronavirus pandemic and its associated narratives, making this a suitable sample for exploring further narrative evolutions. In order to include any possible narratives on the invasion of Ukraine (which started on February 24, 2022), the contents of these previously identified channels were subsequently scrapped in March 2022. This resulted in a dataset containing both message texts and images of 225 public Telegram channels spanning the period March 2017-March 2022. To facilitate further analysis of both messages and images, any text contained in the images was extracted using optical character recognition (OCR) methods, and both image and message texts were automatically classified by language (with Dutch and English being the most prominent languages in the dataset).

Our analysis of international narrative trends on the pandemic and invasion of Ukraine already illustrated how narrative evolutions online can be highly idiosyncratic. This highlights the need for machine-guided methods for ‘mining’ narratives from Telegram data that can detect emerging narrative signals in an inductive way. Addressing this need, we performed a ‘keyness’ analysis of the retrieved Telegram data. This method from the field of corpus linguistics is aimed at identifying ‘key’ items (e.g. words) in a target corpus in relation to a reference corpus based on the frequencies of items in both corpora. As outlined in

[Gabrielatos \(2018\)](#), a keyness analysis can support an exploratory approach to texts that gives an indication of a text's 'aboutness'.

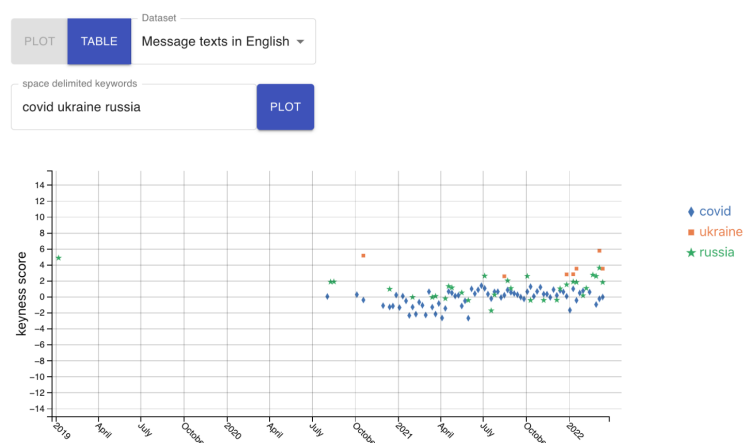
Arguably, this makes the method well suited for our purposes of identifying narrative signals in texts. More specifically, we want to consider both items with a high keyness score (indicating emerging narratives between corpora), as well as items with a low keyness score (pointing towards narratives that might remain more entrenched between corpora). To achieve this, we group our texts per weekly timestamp, and then calculate the keyness scores for words present in each week in relation to all other weeks in the dataset, using the Log Ratio as a keyness statistic ([Hardie, 2014](#)). As we are mainly interested in capturing core narrative signals (events, actions, concepts), we filter our dataset for nouns and verbs. On a conceptual level, this approach returns keyness scores for items in relation to the timestamps that precede and follow it – offering a retrospective view of narrative innovations as well as narratives that might remain rather constant. The keyness scores for the final timestamp have a special status in this regard, as they reveal key items in relation to all of the preceding data, illustrating what is key at the last moment of observation.

The results of our keyness analysis are presented in an exploration tool that offers two perspectives on the data. In the 'chart' view, users can search for words and plot their keyness scores. In the 'table' view, users can browse the top 20 words with the highest and lowest keyness scores at each timestamp. The tool is available [online](#).

Telegram narrative evolution observatory

This demonstrator offers a tool for exploring narrative signals on Telegram. It allows users to examine keyness scores (Log Ratio) for words extracted from messages and images in a dataset of 225 Dutch-speaking far-right and conspiracist Telegram channels spanning the period March 2017-March 2022. Data were grouped by weekly timestamps, and keyness scores for nouns and verbs for each week's worth of data (target corpus) were calculated in relation to the combined data in all other weeks (reference corpus). Users can use the 'chart' view to create scatterplots of weekly keyness scores for selected search terms. The 'table' view presents an overview of the n words with the highest and lowest keyness scores for a given time period.

This demonstrator is part of the [EDMO BELUX](#) Belgium-Luxembourg Digital Media and Disinformation Observatory. This project has received funding from the European Union under Grant Agreement number INEA/CEF/ICT/A2020/2394296.



[Screenshot of the EDMO BELUX Telegram narrative evolution observatory. The chart shows weekly keyness scores for terms referring to the coronavirus pandemic and invasion of Ukraine for English message texts shared in the retrieved Dutch-speaking Telegram channels]

Findings

In light of recent crises, the study of narrative evolution on Telegram has developed into an active area of research. Previous work has for instance demonstrated that words related to Ukraine have become increasingly frequent in German-language Telegram channels pertaining to Covid-19 skeptics and far-right extremist movements ([ISD, 2022](#)). Our bottom-up analysis adds to this observation by inductively revealing a range of emerging and evolving narratives related to the Ukrainian conflict.

Emerging narratives and stable undercurrents

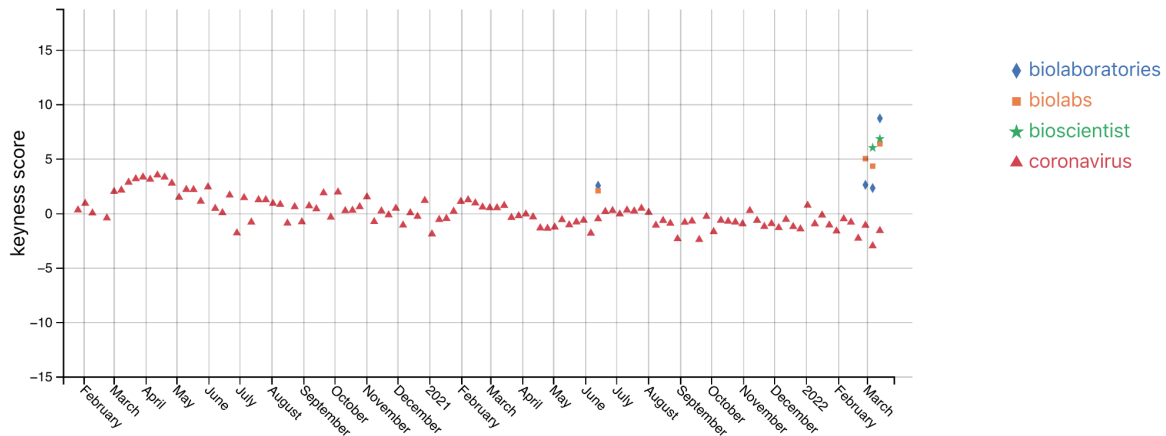
The image above shows a 'layered' representation of the key items retrieved for each week in the English message texts retrieved in the dataset. On the top row, we display the 20 words with the highest keyness scores, on the bottom row we display the top 20 words with the lowest keyness scores. From this overview, it follows that discourse in the shared imagery for the latter weeks of the dataset distinguishes itself from previous weeks through references to the war in Ukraine. Possible first traces are already observed in the week of February 20 in the form of a reference to 'mobilisation'. Further, more explicit references can be found in ensuing weeks, which feature high-keyness words such as 'demilitarize' and 'bombards' (week of 27/02/2022), 'defections' (week of 06/03/2022), and 'vladimir', 'corridors' (week of 13/03/2022). Clearly marking an increased attention for the ongoing war, it should be pointed out that these emerging narrative signals are contrasted with a stable undercurrent of anti-coronavirus and anti-authority narratives. Examples include 'lockdown' (20/02/2022), 'injection' (20/02/2022) or 'injected' (27/03/2022), 'coronavirus' (6/03/2022), 'mask' and 'pass' (13/03/2022). It should be noted here that using the tool, similar trends can be noticed for Dutch-language subsets of the data.

2022-02-20	2022-02-27	2022-03-06	2022-03-13
pooling: 9.56	demilitarize: 9.26	actuaries: 8.37	biolaboratories: 8.74
admires: 8.75	sotu: 8.52	rearranging: 8.37	cleanups: 7.87
cma: 8.34	bombards: 8.35	underestimating: 8.37	consciences: 7.87
interferon: 8.34	denazify: 8.16	modernize: 8.05	gf: 7.87
methylation: 8.34	aggravate: 7.93	defections: 7.64	hyperloops: 7.87
symptomstake: 8.34	contaminations: 7.35	dispelling: 7.64	liquidation: 7.87
inside: 8.34	extrapolated: 7.35	gloat: 7.64	optic: 7.87
canberra: 7.75	geïnfilteerd: 7.35	plucked: 7.64	shekels: 7.87
christened: 7.75	gibberish: 7.35	thalidomide: 7.64	wheather: 7.87
cores: 7.75	holdthelove: 7.35	archeology: 7.05	releqsed: 7.61
disheartened: 7.75	junta: 7.35	boodschappen: 7.05	corridors: 7.29
dubai: 7.75	locators: 7.35	centralbanks: 7.05	hotlines: 7.29
hersen: 7.75	occupies: 7.35	conjecture: 7.05	vladimir: 7.29
implanteren: 7.75	ores: 7.35	cyberaanvallen: 7.05	airfields: 6.87
lrads: 7.75	peacefull: 7.35	debtsystem: 7.05	asholes: 6.87
mobilisation: 7.75	perfected: 7.35	depts: 7.05	batting: 6.87
multistakeholder: 7.75	pounding: 7.35	desiring: 7.05	bioscientist: 6.87
reagents: 7.75	regio: 7.35	devoured: 7.05	boostered: 6.87
specimens: 7.75	remember: 7.35	digitisation: 7.05	buttercups: 6.87
spliced: 7.75	slut: 7.35	doodeng: 7.05	carefulled: 6.87
anders: -6.70	meer: -5.31	meer: -6.61	nieuws: -5.60
hoor: -5.88	hoor: -5.28	niet: -5.56	niet: -4.74
meer: -4.32	nieuws: -5.12	lid: -4.70	arrested: -3.96
nieuws: -4.13	anders: -4.78	thanks: -4.21	cases: -3.93
lid: -4.00	dan: -4.55	hospital: -4.13	mask: -3.74
lockdown: -3.63	niet: -4.26	vote: -4.10	campaign: -3.59
niet: -3.53	migrants: -3.47	workers: -4.08	workers: -3.26
become: -3.15	record: -3.32	dan: -3.63	kids: -3.23
website: -3.13	staff: -3.23	receiving: -3.62	ad: -3.20
parents: -3.07	ballots: -3.15	hearing: -3.45	letter: -3.07
migrants: -3.07	violence: -3.13	reference: -3.42	sign: -2.98
votes: -2.96	care: -3.12	audit: -3.41	parents: -2.96
rate: -2.94	judge: -3.07	signature: -3.24	leader: -2.91
dan: -2.92	percent: -3.06	impact: -3.12	mandate: -2.88
document: -2.92	required: -3.02	dies: -3.10	pass: -2.86
record: -2.91	girl: -2.95	receive: -3.03	streets: -2.85
race: -2.91	signature: -2.94	protests: -3.02	votes: -2.85
update: -2.91	father: -2.93	reactions: -2.97	election: -2.83
term: -2.82	injected: -2.92	coronavirus: -2.96	police: -2.82
injection: -2.76	faith: -2.80	m: -2.93	speak: -2.80

[Overview of top 20 items (nouns and verbs) by highest and lowest keyness scores in English message texts shared in the retrieved Dutch-speaking Telegram channels around the time of the Russian invasion of Ukraine (week of 20/02/2022 to week of 13/03/2022)].

Recurring deceptions

Among the high-keyness terms that are detected in the latter weeks of the dataset, some words clearly recall the narrative trends mapped in our typology. Terms legitimizing the war such as ‘demilitarize’ and ‘denazify’ (27/02/2022) evoke both escalation narratives as well as the aforementioned ‘reductio ad Hitlerum’. Some of the terms retrieved are reminiscent of conspiratorial language in general, especially references to scientific phenomena and processes (e.g. ‘methylation’ (20/02/2022) and ‘thalidomide’ (6/03/2022)). Strikingly, we also see clear references to the biolaboratories conspiracy identified earlier (e.g. ‘biolaboratories’, ‘bioscientist’ (13/03/2022)). A wider search for the terms referring to biolabs in the image below reveals that an earlier segment of the data where this term had a higher score was during the coronavirus pandemic, before the Ukraine war.



[Weekly keyness scores of terms referring to ‘biolaboratories’ in English message texts shared in the retrieved Dutch-speaking Telegram channels]

Salient pivot points in an ongoing process

The repeated occurrence of ‘biolaboratories’ as a high-keyness item suggests that within the Dutch-speaking disinformation communities under investigation, narratives contextualizing the war in Ukraine are but a salient pivot point in an ongoing process of narrative evolution. Indeed, a closer inspection of key items predating the Russian invasion of Ukraine hint at a range of other events that have been appropriated to match the then-predominant agenda of the communities. As follows from the table below, we can also detect traces of references to the freedom convoys in Canada (e.g. ‘Winnipeg’, ‘blockading’ (06/02/022)), which demonstrates how Telegram channels continuously adapt narratives to match ongoing events.

2022-01-09	2022-01-16	2022-01-23	2022-01-30	2022-02-06	2022-02-13	2022-02-20
frmr: 8.07	payola: 8.83	acknowledgment: 9.12	plexiglass: 9.15	gargle: 9.79	inclusions: 9.17	pooling: 9.48
stewards: 7.88	dation: 8.41	abundantly: 8.38	pais: 8.42	bbq: 9.21	gcs: 8.85	admires: 8.67
unblinded: 7.88	mnie: 8.41	waxxed: 8.38	alsjebliet: 7.83	gargling: 9.21	erkent: 8.43	interferon: 8.26
joes: 7.66	nicholls: 8.41	annoying: 7.80	auis: 7.83	winnipeg: 9.21	schrap: 8.43	methylation: 8.26
toke: 7.66	quasispecies: 8.41	austria: 7.80	cabinets: 7.83	embalmers: 8.21	unknown: 8.07	plumbers: 8.26
virusfeiten: 7.66	deeming: 7.83	bandstand: 7.80	cama: 7.83	irrationality: 8.21	cardiologists: 7.85	symptomstake: 8.26
knighthood: 7.39	electromagnetic: 7.83	boone: 7.80	cohoots: 7.83	weathers: 8.21	cooperations: 7.85	inside: 8.26
advents: 7.07	flashed: 7.83	geimmuniseerd: 7.80	elmo: 7.83	articulates: 7.62	debuted: 7.85	canberra: 7.67
advertentie: 7.07	interim: 7.83	nfl: 7.80	flyby: 7.83	artis: 7.62	dragons: 7.85	chid: 7.67
anoint: 7.07	lief: 7.83	quadruplexes: 7.80	hoofdstad: 7.83	blockading: 7.62	epoch: 7.85	christened: 7.67
backchannel: 7.07	mimicked: 7.83	superieur: 7.80	jede: 7.83	caverns: 7.62	firewood: 7.85	disheartened: 7.67
blackmailers: 7.07	oversterfte: 7.83	vatbaar: 7.80	landverraad: 7.83	changers: 7.62	fling: 7.85	dubai: 7.67
bodem: 7.07	propensity: 7.83	nem: 7.38	lrem: 7.83	deletetheelite: 7.62	fran: 7.85	forcitizens: 7.67
chalet: 7.07	sweatshirt: 7.83	truthrevealedpartners: 7.21	maladministration: 7.83	destabilizes: 7.62	gloss: 7.85	hersenens: 7.67
closeout: 7.07	terhes: 7.83	chemist: 7.16	malformations: 7.83	disseminators: 7.62	housekeeper: 7.85	imbecile: 7.67
commandant: 7.07	typewriter: 7.83	january: 7.09	massed: 7.83	endosomes: 7.62	imprints: 7.85	implanteren: 7.67
corm: 7.07	wating: 7.83	aap: 6.80	müssen: 7.83	enor: 7.62	inductor: 7.85	intation: 7.67
crawls: 7.07	enh: 7.41	accelerator: 6.80	obsessing: 7.83	gekker: 7.62	inscriptions: 7.85	lrads: 7.67
dele: 7.07	noe: 7.41	betreft: 6.80	obwohl: 7.83	irate: 7.62	lastnight: 7.85	mobilisation: 7.67
displeasure: 7.07	sidestep: 7.41	beveelt: 6.80	orking: 7.83	kellie: 7.62	levee: 7.85	multistakeholder: 7.67
anders: -7.38	anders: -6.62	nieuws: -4.67	election: -4.04	hoor: -6.01	hoor: -5.79	anders: -6.78
meer: -5.59	dan: -5.66	dan: -4.10	hoor: -3.80	niet: -4.99	anders: -5.60	hoor: -5.96
dan: -5.42	nieuws: -5.64	meer: -3.87	anders: -3.62	nieuws: -4.84	meer: -4.23	nieuws: -4.21
niet: -4.95	meer: -4.84	niet: -3.81	dan: -3.33	meer: -4.04	nieuws: -4.03	lid: -4.09
migrants: -3.82	niet: -4.78	effects: -3.50	updated: -3.26	safety: -3.22	niet: -3.76	niet: -3.61
ballots: -3.75	content: -4.22	fall: -3.14	meer: -3.25	ballots: -3.20	dan: -3.64	patients: -3.53
reference: -3.47	fraud: -3.80	record: -2.99	hundreds: -3.23	travel: -3.16	bill: -3.22	parents: -3.35
students: -3.46	ad: -3.51	elections: -2.77	niet: -3.19	brain: -3.13	migrants: -3.05	become: -3.30
contact: -3.45	drug: -3.01	ones: -2.74	votes: -3.16	audit: -3.03	drug: -2.99	update: -3.30
content: -3.40	process: -2.98	front: -2.74	lid: -2.93	minister: -3.02	hearing: -2.77	migrants: -3.22
u: -3.04	rise: -2.94	charged: -2.73	school: -2.85	party: -3.02	voting: -2.76	race: -3.18
violated: -3.02	lid: -2.93	producing: -2.70	climate: -2.77	reference: -2.91	cancer: -2.73	term: -3.15
parties: -2.98	violence: -2.86	remain: -2.67	ban: -2.71	propaganda: -2.86	reference: -2.69	violence: -3.01
displayed: -2.95	school: -2.86	father: -2.61	reference: -2.70	content: -2.84	sharing: -2.69	dan: -3.00
incident: -2.90	ban: -2.72	knowledge: -2.61	charged: -2.69	earth: -2.81	lockdown: -2.64	injection: -2.98
army: -2.88	knows: -2.69	lockdowns: -2.56	percent: -2.69	economy: -2.80	killing: -2.63	consent: -2.91
platforms: -2.83	gave: -2.66	businesses: -2.54	users: -2.64	residents: -2.76	tax: -2.59	removed: -2.90
organisation: -2.79	propaganda: -2.66	wait: -2.53	nieuws: -2.63	signature: -2.72	won: -2.56	elections: -2.90
values: -2.74	girl: -2.60	thanks: -2.53	idea: -2.63	drives: -2.70	weapons: -2.55	content: -2.79
opened: -2.73	fear: -2.58	discuss: -2.51	wins: -2.59	b: -2.68	fired: -2.54	wins: -2.75

[Overview of top 20 items (nouns and verbs) by highest and lowest keyness scores in English message and image texts shared in the retrieved Dutch-speaking Telegram channels (week of 9/01/2022 to week of 20/02/2022)].

Conclusion

This report set out to contextualize and investigate the narratives in Dutch-speaking disinformation communities surrounding two ongoing events: the coronavirus pandemic and the invasion of Ukraine. In the first section, we conducted a comparative analysis of fact-checked disinformation about the ongoing conflict across different countries, languages, and platforms. From conspiracy claims to clickbait, similarities emerge with narratives pushed with regards to the pandemic and Russian invasion of Ukraine. A first shared narrative gives expression to a sentiment that things (whether the war or the virus) are escalating out of control. Fabricated claims of a genocide conducted by Ukrainians recall crimes against humanity accusation for allegedly plotting the pandemic and performing COVID-19 vaccines. The memory of the Nazi regime has led many to misuse the term with a derogatory purpose: from labelling the invasion as a 'denazification' mission to equating the treatment of the unvaccinated to persecuted Jews. Conspiracy theories abound these days, resonating with specific communities, who are likely to be convinced that there are biolabs funded by the U.S. in Ukraine as well as that Covid-19 was artificially made in a Wuhan lab. The same mentality leads to the denial of facts, and the trivialization of war victims or virus casualties.

The second part of the report presented an inductive analysis of narrative signals in 225 Dutch-speaking Telegram channels pertaining to far-right and conspiracist communities. Reflecting broader international trends, this analysis revealed emerging narratives surrounding the war in Ukraine, but also the continuation of entrenched discourse on the coronavirus pandemic. The presence of conspiracist narratives such as claims that the United States had established biolaboratories in Ukraine point towards a recurrence of previously successful narratives. This suggests that shifts from embracing coronavirus conspiracies to pushing war propaganda is but a salient pivot point in a much longer process of narrative evolution on social media. As such, a key outcome of this study is that in order to persist and propagate, disinformation on the one hand needs to contain predictable, recurring elements. On the other hand, twists and innovations need to be introduced in order to keep up with rapidly changing external events.

Data availability statement

The keyness scores for words in the retrieved Telegram dataset can be queried through the [online demonstrator](#) accompanying this report.

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