



Hungarian hub
against disinformation
LAKMUSZ-HDMO

PRO-RUSSIAN PROPAGANDA IN THE MAINSTREAM, ANTI- VACCINATION ON THE FRINGES

**THE JANUS-FACE OF THE HUNGARIAN DISINFORMATION
ECOSYSTEM**

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Introduction

The Hungarian information environment – following the term of Sergey Guriyev and Daniel Treisman – can be described as a kind of "information autocracy", in which the government is successfully manipulating the information to keep up and legitimise its political support among the electorate.¹ In this respect, Hungary's role is unique within the European Union, as we can see no other countries where the media system has become centralized to this extent.² The government is obviously using it to spread political misinformation on a massive scale – with a visible impact on public opinion. We could clearly see, for example, before the elections in April 2022, where clear pieces of disinformation – such as the opposition is planning to enable sex-changing surgeries on underaged children in case they are elected – had a huge impact on public opinion³.

This study aims to analyze the spread of two narratives in this special informational environment. In our previous studies, we have dealt in depth with the domestic spread and social embeddedness of both Covid⁴ and war-related disinformation⁵. We have already shown that in the domestic disinformation ecosystem – with its strong governmental presence – the handling of the spread of disinformation about COVID and war were very different. While anti-vaccine messages and disinformation about the coronavirus was mainly spread by fringe players beyond the mainstream,⁶ the pro-Russian media coverage of the war-related disinformation narratives have been and continue to be disseminated prominently by pro-government actors to this day.⁷ This difference was reflected in the polling data as well. The war-related disinformation was much more highly politicized than Covid: while pro-government voters tended to lean towards the six-party coalition voters on conspiracy theories about the coronavirus⁸, on conspiracy theories about the war they were more on the same platform as the voters of Mi Hazánk (Our Homeland) – a radical right-wing party that has been clearly supportive towards Vladimir Putin's invasion of Ukraine.⁹

This analysis presents two of the most recent cases – already fact-checked (and debunked) by our fact-checking partner, Lakmusz – that illustrate this dichotomy, which characterizes the domestic post-truth universe and especially the government-controlled online media ecosystem.

¹ Krekó, P. (2022). The Birth of an Illiberal Informational Autocracy in Europe: A Case Study on Hungary. *The Journal of Illiberalism Studies* Vol. 2 No. 1 (2022): 55-72.

² Polyák, G. (2019). Media in Hungary: Three pillars of an illiberal democracy. *Public service broadcasting and media systems in troubled European democracies*, 279-303.

³ https://www.dimenziomedia.hu/hir/What_has_been_proven_by_the_Hungarian_election_results-144

⁴ Győri, L. and Istrate, D. (2021). COVID-9.11. The transformation and anti-West radicalization of the Hungarian antivax movement. [COVID-9.11 The transformation and anti-West radicalization of the Hungarian antivax movement \(politicalcapital.hu\)](https://politicalcapital.hu/COVID-9.11-The-transformation-and-anti-West-radicalization-of-the-Hungarian-antivax-movement/)

⁵ Propaganda Without Borders: A study of proKremlin propaganda among far-right and radical voices in Hungary, Poland, Romania and Serbia. [Zinc XFR Disinfo Report Final report 221010.pdf \(politicalcapital.hu\)](https://politicalcapital.hu/Zinc-XFR-Disinfo-Report-Final-report-221010.pdf)

⁶ [PC Tanulmány AlszentAntikapitalisták 2022_02.pdf \(politicalcapital.hu\)](https://politicalcapital.hu/PC-Tanulmany-AlszentAntikapitalistak-2022-02.pdf)
[Main narratives about COVID-19 in the V4 countries - Takeaways from the first wave of the pandemic \(politicalcapital.hu\)](https://politicalcapital.hu/Main-narratives-about-COVID-19-in-the-V4-countries-Takeaways-from-the-first-wave-of-the-pandemic/)

⁷ [A dezinformáció csodálatos világa: amerikai biofegyverek, világháború, őrült és bűnöző Zelenszkij, bölcs és aktív Putyin az Origo Rendkívüli Híreiben \(politicalcapital.hu\)](https://politicalcapital.hu/A-dezinformacio-csodálatos-világa-amerikai-biofegyverek-világháború-őrült-és-bűnöző-Zelenszkij-bölcs-és-aktív-Putyin-az-Origo-Rendkívüli-Híreiben/)

[Győzött már a békeharc? - A Kreml-párti háborús narratívák hazai terjedésének heti elemzése \(politicalcapital.hu\)](https://politicalcapital.hu/Győzött-már-a-békeharc?-A-Kreml-párti-háborús-narratívák-hazai-terjedésének-heti-elemzése/)

⁸ For more about the Hungarian elections and parties, see: [Hungarian Election Monitoring - Report \(politicalcapital.hu\)](https://politicalcapital.hu/Hungarian-Election-Monitoring-Report/)

⁹ [Telex: Magyarországon is kéz a kézben jár a Covid-szkepticizmus és az oroszbarátság](https://politicalcapital.hu/Telex-Magyarországon-is-kéz-a-kézben-jár-a-Covid-szkepticizmus-és-az-oroszbarátság/)

Executive summary, conclusions

Our study describes the evolution and spread of two types of disinformation. The first case study is about the war in Ukraine and how US companies bought up a large part of Ukraine's land, practically "colonising the country", and the second is about the Pfizer vaccine being used as a kind of 'human experiment' without any pre-testing.

Our main conclusions are the following:

Green light to conspiracy theories about the war and yellow to the anti-vaccine ones

- After the start of the invasion of Russia against Ukraine in 2022, there was a visible shift in the entire European disinformation ecosystem, as reported by EDMO: sources spreading disinformation about Covid and vaccines later become the primary source of the war-related – mainly Kremlin-oriented – conspiracy theories and disinformation.¹⁰ This phenomenon was clearly visible in the Hungarian COVID-sceptic political subculture as well: sites and politicians who were spreading health-related fake news immediately turned towards war-related disinformation as the war started.¹¹ However, in the government-controlled Hungarian offline and online media environment a different logic prevails: while pro-Russian narratives are given green light, conspiracy theories against covid and vaccines are much less likely to spread, and has been more blocked by the central political will.
- While both the Ukrainian land purchase and the Pfizer vaccine (international) conspiracy theories have appeared on government-controlled platforms, the two cases differed significantly in their coverage. The narrative of the "colonisation" of Ukrainian land by the US entered the Hungarian public at a clearly identifiable point – through the so-called V4NA "news agency". This portal is, in fact, a lookalike press agency, which serves as a governmental mouthpiece aimed at legitimising governmental narratives and stories as a pseudo-international, pseudo-independent source. This story was rapidly, intensively, and concentratedly disseminated by the government-controlled media (however, it was not spread by official governmental politicians). Also, it could penetrate into the tabloid press and even to the agricultural professional press.
- The Pfizer-Small case, on the other hand, permeated through several marginal sources, and was reported in several small waves. The Pfizer conspiracy theory was only leaking into the government publicity, and then quickly disappeared from there.
- This difference was articulated in the reach and engagement figures in the social media space: the articles on US "colonialism" in Ukraine generated three times more interactions than disinformation about Pfizer.

¹⁰ EDMO: How Covid-19 conspiracy theorists pivoted to pro-Russian hoaxes [How Covid-19 conspiracy theorists pivoted to pro-Russian hoaxes – EDMO](#)

¹¹ Falyuna Nóra-Krekó Péter: Dezinformációk, amiknek terjedését nagyvállalatok a tudtuk nélkül finanszírozzák – hogyan? [Dezinformációk, amiknek terjedését nagyvállalatok a tudtuk nélkül finanszírozzák – hogyan? - Forbes.hu](#)

- This dichotomy also points to the fact that in the domestic information autocracy, central control of narratives can have an important impact on their public representation. While the anti-vaccine narratives have been largely banished from the public sphere by the central political will, the "anti-war", "pro-peace" narratives, and the conspiracy theories that grew out of them and which serve Russian interests, have been deliberately introduced into the mainstream publicity (and in some cases of communication).
- This selective approach to different kinds of conspiracy theories might be related to the fact that Viktor Orbán's government (unlike other populist right-wing politicians, such as Donald Trump and Jair Bolsonaro) has restrained from openly promoting COVID-scepticism and vaccine-scepticism for practical and tactical reasons. Similarly to Aleksander Vucic's Serbia, Hungary was among the first countries in Europe that started the vaccine rollout with Russian and Chinese vaccines.

The table below summarizes the differences between the two cases:

	1. case study: Ukrainian land purchase	2. case study: Pfizer vaccine
Entering the domestic media scene	At one, identifiable point (via V4NA „news agency”)	Via several channels/actors, independent from each other
Intensity and temporality of the coverage	Intense and short initial period (1,5 week)	In several waves, low intensity
Characteristics of the coverage	The main spread flow was organized with a few sidestories	Altogether spontaneous, with scarce organized activity
The channels of the coverage	Primarily it spread in the mainstream, government-controlled medium, but it appeared in radical, anti-globalist, conspiracy theorist and tabloid themed groups as well	Primarily it spread in the fringe groups. It appeared in the mainstream as well, but did not manage to spread significantly
Number of articles ¹² spreading disinformation	59	28
Number of shares (of the articles) on Facebook	7,438	177
Total interactions to the shares	36,804	11,824
The average number of followers of the 5 biggest Facebook pages which shared the articles	280,090	78,814

¹² By articles we mean those writings, which appeared on media platforms, blogs and forums.

The (possible) impact of fact-checks/fact-checking

- The results of the two case studies suggest that fact-checking has consequences for some of the media.
- The government-controlled media is largely immune to fact-checking: even after the Lakmusz fact-check was made public, disinformation about the US purchase of land in Ukraine was still being merrily spread online, and shared by several anti-American conspiracy theorists. In the latter medium, as well as in the pro-government public in general, fact-checkers have become a kind of public enemy, a negative point of identification. The ruling party's position in the Hungarian discourse on fact-checking – which is represented through a variety of means and through organisations with open or opaque links to the government – is that there is no such thing as journalistic objectivity or independence.¹³
- **In other segments of the media, however, there is a clear impact of fact-checking. There were two online media sources (a tabloid news site and an agrarian site) which deleted the false statements that they cited from pro-governmental outlets, certainly thanks to the fact-check.** We have also seen that some commentators – using the fact-check – have tried to persuade others about the veracity of the fact-check.
- While the fact-checking article on the war reached many more people (33,500), the one related to vaccines reached fewer (8,800). The increased interest in the first topic is also indicated by the fact that this was the 27th most popular topic among the 350 articles written since the launch of Lakmusz, while the one on Pfizer took only the 173rd place. A similar difference was in the estimated outreach of the original articles containing disinformation, which is based on the publication dynamics.
- Facebook's built-in fact-checking system marked both articles of two widely read outlets (magyarnemzet.hu and pestisracok.hu) as false, citing the AFP fact-check. This restricted access to these articles, as they opened only after the warning, when clicked. However, the dozens of other articles can be accessed via Facebook without any hindrance.

¹³ Német Szilvi: "Értelmezni se tudom, mi az a liberális tényellenőr" - Facebook-hírkomentárók a tényellenőrző újságírásról, 2023.01.31. ["Értelmezni se tudom, mi az a liberális tényellenőr" - Facebook-hírkomentárók a tényellenőrző újságírásról - Lakmusz](#)

Methodology

One of the aims of this study is to explore/present two different topics with two very different dynamics of disinformation narratives, which, in our opinion, tells us a lot about the Hungarian disinformation ecosystem and its political environment. Due to the different nature of the two cases, the structure of the two subchapters significantly differs from each other.

The two case studies were selected based on their proven misleading character, so that a respected fact-checking news outlet – in this case Lakmusz – identified them as disinformation. Both cases deal with topics of high interest – not only domestically, but also in the international sphere – but are distinct from each other: while one is related to the war in Ukraine, the other is about the coronavirus and the Pfizer vaccine; one is disinformation about health, and the other is about geopolitics.

The database used for our analysis is based on information gathered from the SentiOne social listening tool (articles, Facebook posts and comments) and Meta's Crowdtangle (Facebook interactions, shares on Facebook pages and public groups). This was complemented by a Google search to ensure the most complete coverage. Results based on the search query¹⁴ were manually cleaned of irrelevant elements.

A potential limitation of the methodology is that databases of SentiOne, CrowdTangle and Google searches do not necessarily cover 100% of the content published on websites and on Facebook. However, this means that typically only low-reach publications are not included in our analysis. Of course, Facebook's non-public groups and posts are not visible to the tools and are therefore not included in this analysis. Numbers related to Facebook-interactions were used primarily to compare the relative level of reach.

¹⁴ For the first case study, the initial query was „17 million hectar”, which was followed by identifying other keywords with snowball search (based on the mutations). The examined period was between 1 June 2022 – 30 September 2022. For the second, the search query was >> Pfizer and (CÖF or Fricz or Roos or „Janine Small”) and NOT (Erasmus or Harari) <<. The period was between 10 October 2022 and 30 April 2023.

1. case study: American land purchase in Ukraine

The storyline

The first case deals with the domestic spread of disinformation, according to which US-based multinational companies have bought 17 million hectares of land in Ukraine, about a third of the country's territory. The narrative was published in several countries and in several languages ([in Italian](#), [in Russian](#), in Danish etc.). In Hungary, adapted to the domestic context, the basic narrative has been expanded to include a more pronounced presentation of the role of George Soros¹⁵ and Volodymyr Zelensky¹⁶, anti-globalisation contexts and the GMO issue.

The disinformation was first published on the Australian National Review website on 27 May 2022. It did not receive major media attention until two months later, when it began to be picked up in other countries. The fact that in the first wave, several pro-Kremlin media outlets almost simultaneously reported this news, as highlighted by a StopFake fact check,¹⁷ indicates coordinated action. Later on, independent research by other fact-checking organisations refuted the rapidly spreading disinformation.

Disinformation and its main mutations

The disinformation was introduced into the Hungarian media space by the V4NA news agency on 30 July 2022. We consider this to be the entry point to the Hungarian (dis)information market.

But what is V4NA? A detailed analysis of the role of the V4NA by Átlátszó (an investigative journalist platform)¹⁸ concludes that the contents of the pseudo-international news agency, which belongs to the Hungarian pro-governmental umbrella media organisation, Central European Press and Media Foundation (KESMA¹⁹), are almost exclusively used by the Hungarian government-friendly media outlets. In this Átlátszó article, Ágnes Urbán, Mérték's director, said that V4NA "has already given the impression that its basic aim might be to make Hungarian propaganda sites quote from a known website". According to her, "the word 'news agency' sounds good", and that "is used to legitimise the news of this whole media or propaganda empire." Also, it is disguised to be a foreign and domestic media source, while its headquarters, in fact, is based in Budapest instead of London, as it is officially claimed²⁰.

Building on the original claim, in the week following the publication, disinformation broke into the government-controlled public sphere, where it spread systematically, including six separate, newly created articles dedicated to the topic, giving voice to some experts from

¹⁵ In Hungary, there has been an extensive scapegoating campaign against George Soros. Geró, M., & Sik, E. (2020). The Moral Panic Button 1: Construction and Consequences. In *Europe and the Refugee Response* (pp. 39-58). Routledge.

¹⁶ See more about the media representation of Zelensky in the government-friendly media outlet (origo): [Disinformation wonderland in the Hungarian government-controlled online media: Origo's articles on Putin and Zelensky \(politicalcapital.hu\)](#)

¹⁷ [Фейк: Зеленский «продал» треть сельхозугодий Украины американским компаниям | StopFake](#)

¹⁸ [London helyett Óbudán írták a Habony-féle „nemzetközi hírügynökség” híreit | atlatszo.hu](#)

¹⁹ <https://europeanjournalists.org/blog/2019/12/03/new-report-hungary-dismantles-media-freedom-and-pluralism/>

²⁰ <https://v4na.com/impressum/>

research institutions, which are openly close to the government. V4NA has published another article, this time about the US Monsanto agro-chemical company, with an anti-war, strong anti-globalization and anti-GMO tone. These articles are considered mutations of the original disinformation.²¹

The articles, published in just over a week, are a textbook example of the kind of coordinated and intensive disinformation campaign in which they built up a seemingly real, easily believable narrative from a mixture of factual and untrue information and then disseminated it widely. The centrally disseminated disinformation narratives are immune to refutation.

Thus the story, like the folk tale, continued to spread, adding new elements. On 11 August "The stakes of the war, whether Ukraine will be a Russian land or an American colony" was published in a press release on V4NA. This further reinforced the narrative that has been present ever since, that there is a war between Russia and the United States in Ukraine ("proxy war" narrative).

We now explore the spread of the original article and the six mutations.

The spread of the narrative

On the websites

The initial article was picked up almost immediately by most government-controlled media. Many county newspapers had the same publication time to the minute, which indicates/points to centrally coordinated editorial behaviour. This phenomenon observed in county newspapers under KESMA is not unique: the topic examined in January by Mérték Media Monitor²² "appeared in the same way in the word's literal sense. All nineteen county news portals published the article without an author in the public column". (...) The text "both formally and content-wise, even the illustration used was identical to the one used in the 'public life' news section." A total of 27 websites have posted articles from or directly on the V4NA announcement or by referring to a major government-controlled, republishing media outlet.

Disinformation did not spread only in the bubble of tightly controlled government media. It also spread elsewhere, among the radical and extreme right readers, the politically biased and deceptive websites²³, and the tabloid readers, while also reaching the agrarian experts.

Of all the mutations, the Magyar Nemzet (one of the most-read government-controlled newspapers) article was the most widely circulated: 20 other websites republished it.

The intensity of the first days faded relatively quickly. Lakmusz's fact-check might have a role in this: their fact-check was published in Hungary as early as 4 August.²⁴

²¹ The validity of the newer factual claims in these articles is not examined in our research. However, it is common in them that they all refer back to the original, factually refuted disinformation.

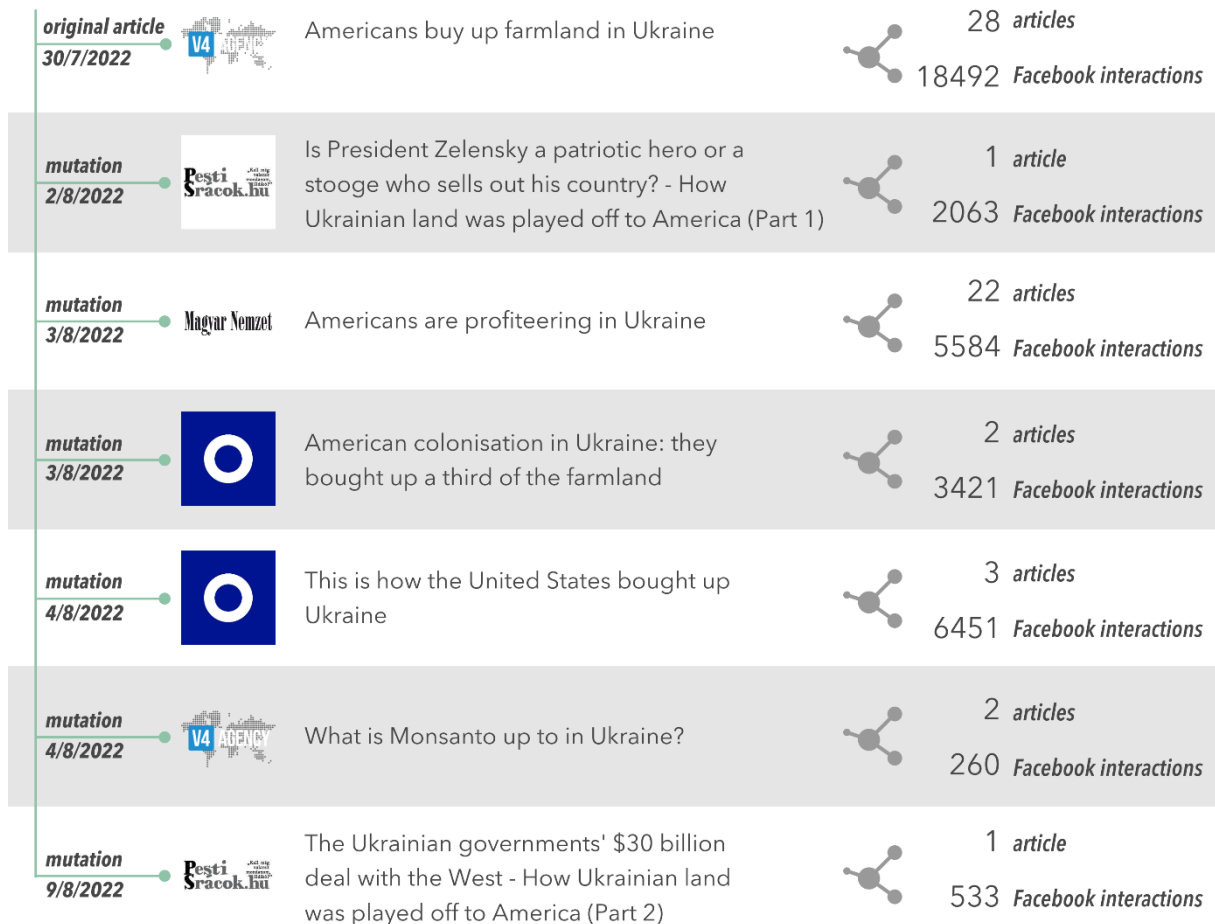
²² [Mindent vagy \(szinte\) semmit – Egységes propagandahírek vagy azok hiánya a megyei lapokban - Mérték \(atlatszo.hu\)](#)

²³ [Megtévesztő magyar híroldalak listája 2020 | Urban Legends](#)

²⁴ [Nem vásároltak amerikai multik akkora földet Ukrajnában, mint Olaszország teljes termőterülete - Lakmusz](#)

1. case study: American land purchase in Ukraine

Nevertheless, the original disinformation, its mutations, and replications appeared in 59 articles on 40 websites. Among these are sites with high outreach, such as Origo.hu, Blikk.hu, Mandiner.hu and Hirado.hu. According to SimilarWeb data, they rank among Hungarian news and media websites the 2nd, 3rd, 13th and 21st place, respectively.



1. Figure The spread of the initial disinformation and its mutations (available online [here](#))

On Facebook

Facebook is currently, by far, the most dominant social media site in Hungary. It has more than seven million users²⁵ and over four million people use it daily²⁶. Between February and April 2023, which was a relatively quiet period politically, the advertisements in social, political or election-related issues reached as much as 292 million HUF (€780,000) spent on this site alone²⁷.

As shown above, the narrative examined in our case study has also reached quite a large number of people directly through the articles published on news sites and other websites. The number of reaches can be significantly increased further when the article is

²⁵ [Hungary: number of Facebook users 2023 | Statista](#)

²⁶ [Így internetezünk mi – online tartalomfogyasztási szokásaink • Nemzeti Média- és Hírközlési Hatóság \(nmhh.hu\)](#)

²⁷ <https://www.facebook.com/ads/library/report/>

shared on Facebook. There is no precise data on this, but Crowdtangle (CT) gives us the opportunity to get a better insight into the process. CT's search tool gives information on how many people have shared (publicly or privately) the URL links of the original articles, how many comments, and reactions they received, and also on which public pages and in which public groups they have been shared.

Overall, the 59 articles in our study were shared 7438 times on Facebook, the posts received 9098 comments and 20268 reactions (likes and others). The total number of interactions was 36804.

The aggregated data on interactions do not show who commented on, shared, or liked them. To get a more nuanced picture of this, we examined which Facebook pages specifically shared the links and which public groups they were posted in. This information can be extracted via CrowdTangle.

Of the 7438 shares, 76 appeared on public Facebook pages. Although this number may seem like a small number, there are several of them with more than 100,000 followers. Thus the potential organic reach of the articles could be significant. Not only the Facebook pages of the big mediums shared it, but it appeared also on seemingly unrelated sites. Even though the narrative was essentially echoed in the government-controlled media, some of the news outlets also reached the bubbles of the tabloids and the grey zone. Therefore, it appeared for those readers as well, who were less open to war-related news.

While sharing on Facebook pages requires activity from administrators and thus conscious decision, in public groups mainly members post, the administrators can at most moderate them. Thus, a specific post is mainly the result of the opinion of the user sharing it, not necessarily the group as a whole. This is an opportunity to reach readers who may have different views on a particular issue.

The articles in the narrative were shared in 51 different public Facebook groups 104 times. Of these, 25 have more than 10,000 members. The main organizing principle of most of the groups is sympathy with the government.

As with Facebook pages, public groups are also marked by other topics. These include

- groups sympathizing with Russia,
- conspiracy theory groups,
- radical nationalist groups,
- groups of Hungarian communities in Transylvania and
- anti-globalization groups.

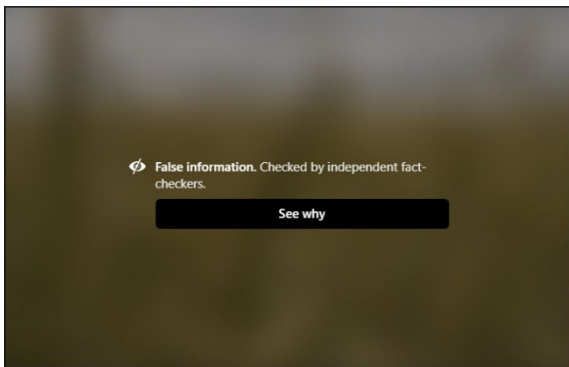
The impact of fact-checking

V4NA's initial news story published on 30 June was fact-checked by Lakmusz five days later and refuted its claim that three giant US companies had bought 17 million hectares of land in Ukraine. Since the disinformation was published in several countries, it has been refuted by international fact-checking organisations such as the Ukrainian [StopFake](#), the Italian [Facta](#), the Danish [Tjekdet](#), the Australian [AAP](#), and the English [Fullfact](#).

The AFP fact-checking team in Germany investigated the claims appearing in the narratives in detail in the autumn of 2022, during which they interviewed the three companies involved and the Ukrainian Agricultural Union. The fact-checking article was also published on AFP's fact-checking page in Hungarian.²⁸

Only a few news sites reported in separate articles about the refutation of this disinformation. The original article, the mutations, and their replicates were made unavailable only by three sites. The former two are certainly the result of fact-checking: one confirmed this when we asked them, and another wrote a separate article on the fact-checking. All other reports, including those published in government-controlled media, are still available.²⁹

In fact, Origo, as a “fact-check of fact-checking”, published an article on 6 August titled “Soros' blog tried to excuse the Americans who bought up Ukraine – including Soros”, in which the fact-checked claim was ignored, and focused only on the role of US companies and Ukrainian oligarchs. The article, which appeared also on Origo's Facebook page, was further distributed by Mediaworks in a paid advertisement³⁰, with the message “The 444's litmus paper³¹ is good for many things, but mostly for obfuscating the truth”.



Facebook's built-in fact-checking system flags only two articles as fake (as shown in the picture), referring to the AFP fact-check. These articles are thus more difficult to be accessed by the reader because they are only available after the warning, clicking on the link. However, all the other articles shared on Facebook can be accessed without any hindrance. In other words, the filter is already working, but it is far from thorough.

²⁸ [Nem vásároltak fel 17 millió hektárnyi ukrán termőföldet külföldi vállalatok | Ténykérdés \(afp.com\)](#)

²⁹ On 12 May 2023.

³⁰ <https://www.facebook.com/ads/library/?id=1001144720567692>

³¹ Lakmusz – the fact-checking organization – and 444.hu both belong to Magyar Jeti, one of the independent news outlets.

2. case study: Pfizer at a trial

Our second case study deals with (one of) the disinformation about the Pfizer vaccine: the starting point is that even if you get a Pfizer vaccine, you can still spread the virus. The narrative is that it is completely unnecessary to vaccinate ourselves and goes as far as claiming that the coronavirus vaccine is an "experimental military biological weapon" designed for genocide.

From Janine Small's hearing to genocide: the story and its timeline

The story detailed below has been widely spread internationally, and several fact-checking organizations immediately wrote about the incident, thus correcting the disinformation. To name a few, the French [afp](#), the American [factcheck](#), the German [correctiv](#), the English [fullfact](#), and the Croatian [factograf](#) also wrote about this issue.

The disinformation narrative under study had several episodes: each was based on the same video. These episodes are detailed below:

The starting point (the first episode) of the disinformation was the dialogue that took place on 10 October 2022 in the European Parliament between Janine Small, Pfizer's President of International Developed Markets and Robert Roos, Dutch MEP, who is a member of the Covid-sceptic JA21 party –, which separated from the right-wing Forum for Democracy. The hearing was prompted by the notorious scandal that Ursula von der Leyen, the president of the European Commission, allegedly used SMS text messages to arrange the purchase of the Pfizer vaccine.³² The hearing was convened by the European Parliament's Covid committee "to clarify its position on the EU's vaccine contracts with Pfizer".

The original dialogue went as follows:

Robert Roos: „Was the COVID-vaccine tested on stopping the transmission of the virus before it entered the market? If not, say it clearly. If yes, are you willing to share this data with this committee?“

Janine Small: „Regarding the question, no. You know, we really had to move with the speed of science to really understand what is taking place in the market. From that point of view, we had to do everything at risk.“

As you can see from the timeline below, the first episode was the only one that remained active almost the whole time, meaning that it was occasionally shared (even after some time has passed). The basis for the disinformation, as highlighted by the fact-checking, was not fake news because the dialogue actually took place between the two parties. **The disinformation was created by distorting the meaning and significance of what the director said (namely that the vaccine was not tested for preventing the virus' transmission) in such a way that it fit into their anti-vaccine or vaccine-sceptic narratives.**

³² [EU's von der Leyen can't find texts with Pfizer chief on vaccine deal -letter | Reuters](#)

The first episode was published in several places (mainly on fringe sites, such as substack blogs).

In the second episode, the same content was expanded: Robert Roos, Dutch MEP, was interviewed by Tucker Carlson, then Fox News anchor, who regularly spread the word about anti-Covid and anti-vaccine conspiracy theories.³³ The Hungarian translation was published on 2 November, and the original programme was broadcasted on 12 October. This episode had not reached even the fringe media.

The third episode was published on 2 November, when Mi Hazánk (Our Homeland) held a press conference to present its proposed parliamentary resolution to compensate those who were dismissed from their jobs because they were refusing to be vaccinated. The proposal was handed in on 6 November and they subsequently started collecting signatures. They did mention both, directly and indirectly, Janine Small's statement. They wrote that "the justification of the government's threats about dismissing the unvaccinated is based on non-existent scientific facts"³⁴. The initiative has received only moderate media attention.

The fourth episode featured a speech by MEP Christine Anderson on the Small-case, with a Hungarian translation. In this video, the message was similar to Roos' with no new content, but it still received quite a lot of shares. One explanation for this is that this video was also shared by György Gődény (a prominent anti-vaccine and anti-COVID personality) on his Facebook page Doctor Gődény, which has a huge number of followers (over 200,000).

With **the fifth episode**, the disinformation has entered the government-controlled public sphere: on 3 December 2022, Tamás Fricz (the spokesperson for the government-organized NGO CÖF³⁵) wrote an opinion piece for Magyar Nemzet Online, in which he brought up the Small-case in connection with another story. The article, titled "Ursula van der Leyen's Suspicious Affairs", seeks to discredit the President of the European Commission and also looks at what happened in the case of the hearing on 10 October.

The sixth episode was also written by Tamás Fricz: a month later, he wrote a blog post again for the Magyar Nemzet online platform, this time dedicating the entire text to the Small-case. These two episodes produced a similar number of shares. Here the government-controlled media was involved in spreading disinformation, but it did not go well. The obvious reason for this is that interest in Covid has now dwindled to a minimum.

The seventh episode is again a side story: the author of an irredentist blog³⁶ wrote a letter on 12 January to the National Institute of Pharmacy and Food Safety (OGYÉI), referring to the Small-case. In the letter, the blogger asked the Institute – which "advertises the Pfizer injection Comirnaty as preventing the disease COVID-19" – to "explain how, in the light of the above, it is believed that Comirnaty would prevent the disease COVID-19 and why the

³³ His reference to Hungary is that he admires the Hungarian government. [Tucker Carlson, a magyar kormány csodálója, aki főműsoridőben terjesztett összeesküvés-elméleteket - Lakmusz](#)

³⁴ [Országgyűlési határozati javaslattal követeli az oltatlan dolgozók kártalanítását a Mi Hazánk - Magyar Jelen](#)

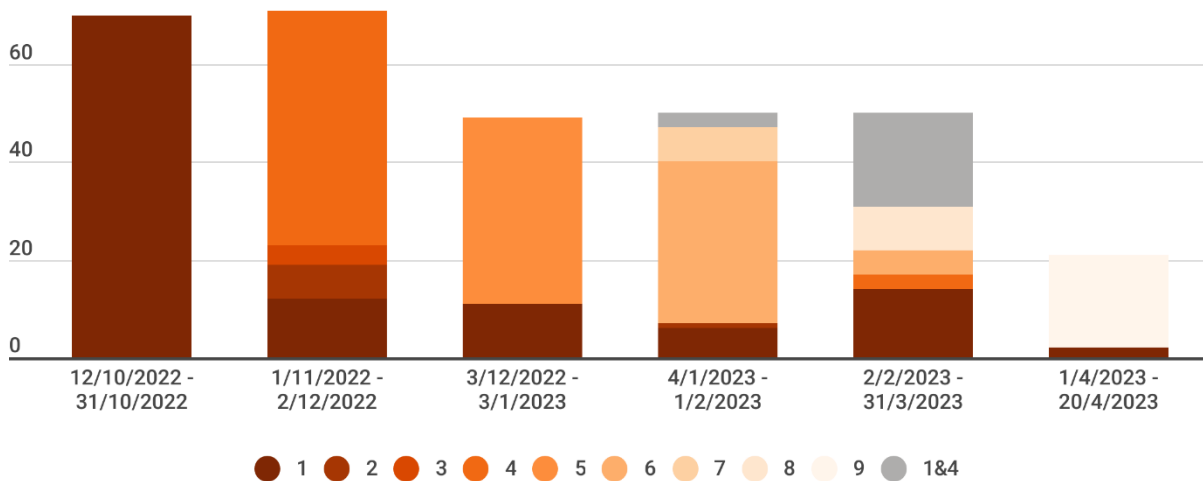
³⁵ <https://civilosszefogas.hu/en/>

³⁶ Ruthenian Carpathians (originally ruszinkarpatalja.blogspot)

Institute continues to recommend the product for the prevention of COVID-19". A negative reply was received on 29 January, drawing the attention of the author, inter alia, to the possibility of disinformation.

The eighth episode is the Lakmusz fact-check, which was based on Fricz's writing, and was published on 2 February 2023. This article did not blow up the internet either, as the anti-Covid disinformation has fewer supporters by now.

The last (ninth) mini episode was a denunciation by a Hungarian vaccinee who complained to the police about his doctor, also referring to the Small-case for not informing him about the risks of the vaccination. As far as we are aware, this news was reported exclusively by the same blog author, but it was shared in various Facebook groups. The complaint has been rejected by the competent authorities.

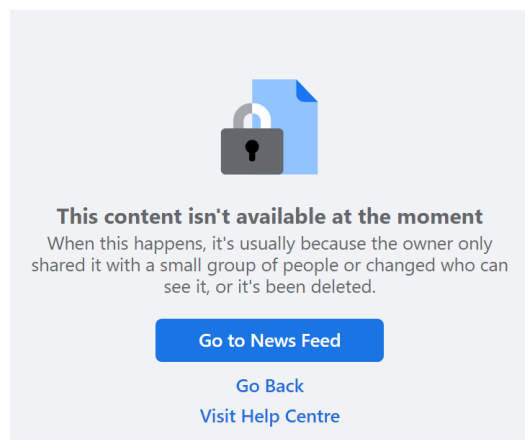


2. Figure Timeline of the episodes' appearances (available online [here](#))

The timeline clearly shows that most of the episodes are published only immediately after their release. This suggests that this disinformation was not an organised, centrally controlled campaign, but was picked up here and there, and was then used for various purposes.

The impact of fact-checking is mixed: after the publication of the fact-check there were still 54 comments, but there were also several hits that were no longer available – presumably taken down as a result of the fact-checking (see screenshot to the right).

Furthermore, Fricz mentions "fact-checkers" in his article in an attempt to discredit them: "... This is Pfizer's own internal report. It is not a report of independent doctors, but which would be classified as >>misinformation<< by >>fact-checkers<<". This also shows that fact-checking is definitely disturbing/concerning to those sharing disinformation, and an image of hostility is associated with them.



One commenter tried to convince readers that it was fake news, but it had no impact:

"feel free to write more exclamation marks, it doesn't make the lie the truth. SubStack is one of the most reliable sources of fake news propaganda. Not a word is true of what is written there."

The spreading dynamics and statistics

The 307 hits we found on this disinformation in the domestic public domain are distributed as follows:

	Facebook	Forum	Website	Blog	Total
Comment	67	5	3	1	76
Article			24	5	29
Post	196				196
Video	2			4	6
	265	5	27	10	307

This clearly shows that the story was mainly told in the form of posts and comments, and relatively few articles were written about it. As for the posts, most of them appeared in public Facebook groups (even in the same group more than once), and only a minority of them were on Facebook pages. (See more below.)

In the comments, we also looked at the context in which the particular comment appeared. These were categorised in three ways:

- when the content was disinformation;
- when it was something pertinent but not entirely about the disinformation (for example, news and statistics related to the coronavirus);
- when the subject was completely different (foreign affairs news, someone's death unrelated to virus, etc.).

We argue that this narrative had a marginal nature based on the following facts: only 2 out of 76 comments were dominated by disinformation, in 54 cases, the topic was something similar but not closely related, and 20 comments were irrelevant to the original article. Therefore, we conclude that this disinformation had only a supportive role to justify other claims.

The articles were published on a wide variety of platforms: both the explicitly anti-vaccine media and extremist sites were represented. Only a few mainstream platforms published the news.³⁷

As Facebook posts account for the majority of the results (196 out of 307), it is worth looking at on which pages and groups the different news items were spread. The most shared was the original video (82), followed by the video with Christine Anderson (47) and Fricz's opinion piece on Ursula von der Leyen (32).

The variety of groups and pages we found shows how the spread of the narrative was fragmented

- virus-denying, conspiracy theory-sharing and other extremist content;
- sites promoting a fundamentally green, environmentally friendly lifestyle;³⁸
- groups of Hungarians living beyond the border;
- mainstream political pages (e.g., a page/group of fans of a politician);
- and several that are completely out of the ordinary, e.g., the official business site of His Highness Sheikh Mohammed bin Rashid Al Maktoum (a politician in the United Arab Emirates, the member of the royal family and ruler of Dubai), where the video of Christine Anderson was shared with Hungarian subtitle. (Other Hungarian content was also found on his page in isolated instances.)

In several cases, one person shared the same post in several groups. This suggests some organisation, but far from the usual proportion.

Using CrowdTangle, we also looked at how many shares the articles we studied received. Of the 29 articles, a total of 7 had a significant amount of reach (at least 50 shares and 100 total interactions), two of which – not surprisingly – were linked to the mainstream pro-governmental outlet Magyar Nemzet.

Article	Number of reactions	Comments	Shares	Total interactions
Szőke Mária Magdolna Substack oldala: It can no longer be denied: a Pfizer executive admitted in a public hearing that millions of people were injected not with a vaccine, but with a dubious and uncontrolled biological	2174	740	2471	5385

³⁷ Apart from these, there were a few posts and videos.

³⁸ There is some overlap between environmentalism and anti-vaxxers. Schonfeld, J., Qian, E., Sinn, J. et al. Debates about vaccines and climate change on social media networks: a study in contrasts. *Humanit Soc Sci Commun* 8, 322 (2021). <https://doi.org/10.1057/s41599-021-00977-6>

Article	Number of reactions	Comments	Shares	Total interactions
weapon called COVID19 vaccine				
Magyar Nemzet: Ursula von der Leyen's suspicious affairs	2208	572	380	3160
Magyar Nemzet: An inconsequential sentence from a Pfizer executive	1582	365	458	1582
Ruthenian Carpathians blog: A Hungarian vaccinee has denounced her vaccinator	296	59	145	500
Vadhajtások: Ursula von der Leyen's suspicious affairs	211	47	110	368
Climenews: An ugly lie has just been revealed	140	24	73	237
Bitcoin bázis: Pfizer chief at EU meeting: we never tested COVID vaccine for virus transmission	94	36	67	197

Narrative analysis

The story's leitmotif was given by Janine Small's speech at the European Parliament hearing, saying that the Pfizer vaccine has not been tested to see if vaccinated people pass on the virus or not. As the anti-vaccine campaigners claim, since the coronavirus vaccine was built on the premise that people who do not get vaccinated are antisocial because it protects not only oneself but also others, this 'admission' invalidates the whole train of thought (because it is pointless to vaccinate oneself if one can transmit the virus anyway).

Comparing the content of comments and articles, we found very similar results: the most frequently occurring 50-50 words are almost the same in both databases. This clearly shows that 1) the comments often summarised the point of the articles, and 2) the articles are so varied that the most common words in the articles are not just copied and pasted.

In this case study – unlike the previous one –, the various news portals have not adopted the original article because it did not even have a definable starting point. However, the central story was copied, and the rest of the text was completely different. It is not a case for the coordinated spread of disinformation.

The creation of disinformation is usually characterised by twisting the original content, even by extracting a sentence or by distorting it. It was no different in this case. This is how the disseminators of disinformation came to the following conclusions:

- "The drug that was administered as a vaccine, forced on millions of people, is not one of the vaccines developed for a supposed epidemic, but for a genocide, it is an experimental military biological weapon designed to reduce the population" (Source: szmm.substack)
- "If you don't vaccinate yourself, you are against society", said our PM. Well, millions have been vaccinated under the myth that "you do it for others". It is now clear that this was just a cheap lie." (Source: ruszinkarpatalja.blogspot.)

The initial story was shaped in order to fit into existing conspiracy theories and disinformation narratives.