Novel technologies and Geopolitical Strategies: Disinformation Narratives in the Countries of the Visegrád Group

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Abstract: *In the current media environment of growing information disorder and social media platforms emerging as primary news sources, the creation and spread of disinformation is becoming increasingly easy and cost-effective. The projection of strategic narratives through disinformation campaigns is an important geopolitical tool in the global competition for power and status. We have analysed close to 1,000 individual news pieces from more than 60 different online sources containing disinformation, which originally appeared in one of the V4 languages, using a natural language processing algorithm. We have assessed the frequency of recurring themes within the articles and their relationship structure, to see whether consistent disinformation narratives were to be found among them. Through frequency analysis and relationship charting, we have been able to uncover individual storylines connected to more than ten overarching disinformation narratives. We have also exposed five key meta-narratives present in all Visegrád Countries, which fed into a coherent system of beliefs, such as the envisioned collapse of the European Union or the establishment of a system of Neo-Atlantism, which would permanently divide the continent.*

Key words: *novel technologies, geopolitics, disinformation, strategic narratives, Visegrád Group*

Introduction

Political polarisation, opinion echo chambers and filter bubbles seem to have become the buzzwords of the past years, not only in the political conversation

but also within the popular discourse. The widespread interest in documentaries such as 'The Social Dilemma' (Orlowski 2020), a movie premiered in 2020 that takes a critical look at technology platforms influencing human behaviour, showcases the simultaneous fascination and concern over political and social trends enhanced by digital technologies increasingly shaping our realities. The Oxford English Dictionary chose the word *post-truth* as the word of the year in 2016 (OUP 2016). The selection seeks to represent the 'ethos, mood, or preoccupations of a particular year' that has 'lasting potential as a word of cultural significance' (OUP 2020). The term post-truth has gone from being a peripheral term to a widely recognised notion in headlines, publications and the cultural mainstream within the course of a year, largely in relation to the Brexit referendum in the United Kingdom and the 2016 United States presidential elections, with the most important association of the term being *post-truth politics*. The 'post' prefix in the expression 'post-truth' articulates the meaning of truth as a concept becoming unimportant, dated or irrelevant in the contemporary political context (ibid.).

Critics of data-centric technologies claimed more than a decade ago that *ideological silos* (Sunstein 2007) could be created through growing personalisation powered by digital technologies. The increasing authority of the consumer to filter what kind of information they encounter on a daily basis has the potential to skew people's perceptions regarding tendencies in news and public affairs. Simple search engine results can vary by personal and regional (location-bound) characteristics, while social media platforms such as Facebook, Twitter or Reddit operate custom newsfeeds to enhance user experience. Internet users – through algorithmic decision-making and as a result of personal network connections – increasingly only encounter information that does not challenge their original beliefs but typically reinforces their pre-existing convictions (EPRS 2019a). Such digitally enabled distortion of shared realities can result in voices gradually becoming more radical.

This leads us to the so-called (social media) *echo chamber* phenomenon or the emergence of homophilic clusters of individuals who reinforce and amplify each other's opinions, creating a bubble where no opinion challenge can occur (Garret 2009). Echo chambers can come to life thanks to the human tendency to seek information adhering to pre-existing opinions and values, generally referred to as an unconscious exercise of *confirmation bias*. Confirmation bias is the human tendency to seek information that one considers supportive of their favoured hypotheses or existing beliefs, and to simultaneously interpret information in ways that are partial to those (Nickerson 1998). Such selective exposure to opinions and the (self-)isolation from a diverse range of arguments naturally pushes people toward more extreme attitudes (Sunstein 2007). Polarisation of views may account for growing partisan divides among political affiliations and ever greater ideological gaps being created within society (ibid.). Social media network

dynamics therefore play a crucial role in influencing political processes as social platforms have become the agorae of not only political campaigning but also of sharing information (EPRS 2019a). According to Sunstein (2007: 8–9), the growing power of consumers to filter what they see and hear decreases the probability of unplanned, unanticipated encounters that constitute shared experiences in an otherwise heterogenous society. If such tendencies exceed a certain threshold, they could inhibit the creation of a general consensus on core questions that are central to addressing social problems and the functioning of democracy itself (ibid.).

Although the extent to which consumer selection and algorithmic decision--making respectively contribute to the creation of social media echo chambers and filter bubbles is still debated in the literature, we find ourselves in a chicken--and-egg situation where regardless of the exact structure of causalities, the human-machine interaction seems to create a mutually reinforcing dynamic. Zimmer and others (2019) make a point about human accountability when they argue that algorithms and their mechanisms to form filter bubbles, do not create online communities on their own, but rather amplify users' existing behaviours. They reflect on cognitive patterns, such as non-argumentative or off-topic behaviour, denial, moral outrage, meta-comments, insults, satire and creation of a new rumour that could all contribute to the emergence of echo chambers. John and Dvir-Gvirsam (2015) also point to the human factor, when presenting empirical evidence that politically motivated unfriending on Facebook became a common practice in the Israel-Gaza conflict of 2014. Such ideologically-based unfriending affected weak ties in the network, which are precisely those connections that would with a higher probability expose users to a diverse range of opinions. On the other hand, Cinelli et. al. (2021), by analysing the interactions of more than one million active users on Facebook, Twitter, Reddit and Gab, have concluded that while the former two platforms presented clear-cut echo chambers, the latter two did not, suggesting that different platforms offer different interaction paradigms to users, triggering different social dynamics. Particularly, platforms organised around social networks and news feed algorithms, seem to favour the emergence of echo chambers (ibid.). Cohen (2018) makes a similar observation, stating that algorithm-based personalised feeds create an immersive media environment that permits users to consume unique media feeds that may affect civic actions and democracy by tailoring cultural artefacts to the individual user. Irrespective of the exact share of human and machine bias in the equation, as automation and algorithms become more embedded in civic life, we have to assess the role of technology in deepening social divides and how we might be able to counter undesirable tendencies (EPRS 2019a). Responding to the effects of social media enabled polarisation could entail a top-down approach of interrogating digital media structures, platform capitalism, algorithm design and methods of data collection, as well as a bottom-up move from the consumers' perspective, to transition beyond

traditional media literacy, understanding the multiple ways user actions are converted into algorithmic decision-making (Cohen 2018).

Computational propaganda and disinformation campaigns

Not long ago, most academic research and public attention on cyber power focused on the possibilities of affecting the physical world via digital threats, such as cybercrime, data theft or damage to critical infrastructure. Today computational propaganda is gradually taking centre stage (Bradshaw – Howard 2018). Computational propaganda as defined by Howard and Woolley (2016:4886) is 'the assemblage of social media platforms, autonomous agents, and big data tasked with the manipulation of public opinion'. The blueprint of computational propaganda entails autonomous agents acting based on big data collected on people's behaviour in order to advance certain ideological projects. Computational propaganda, therefore, can be regarded as a technical strategy to use information technology for social control (ibid.). Cases such as the Cambridge Analytica scandal have shown the vulnerabilities of social platforms and how their business model could be exploited in order to manipulate citizens (EPRS 2019a). Computational propaganda, as known from everyday life, includes the spread of disinformation, automated amplification with bots and fake accounts, the suppression of opposition with hate speech and trolling and the infiltration of political groups and events (ibid.). Social media manipulation is already available to a large proportion of internet users at relatively low costs; however, as innovations in artificial intelligence, machine learning and big data analytics advance, weapons of computational propaganda will become even more effective and sophisticated (Bradshaw – Howard 2018).

Current levels of online mis- and disinformation, commonly described as 'fake news', already pose serious threats to the workings of democracy by casting a shadow of doubt on democratic election outcomes. With that said we have to point out that we still lack a thorough understanding on how much impact computational propaganda has on actual voter behaviour. Recent examples of disinformation campaigns undermining public trust and impeding the formation of a general consensus on election outcomes include the UK Brexit referendum and the 2016 United States presidential elections (EPRS 2019b), which shows that the actual or perceived effects of computational propaganda are already manifesting themselves in real life outcomes.

In order to maintain clarity of terminology, it is important to distinguish between distinct categories of information disorder used in computational propaganda, and define mis-, dis- and malinformation, instead of vaguely referring to them collectively as 'fake news'. According to the classification used by Wardle and Derakhshan (2017: 5), differences among the three categories are to be found along the dimensions of *intention to cause harm* and *falseness of*

information. As stated by their definition, *misinformation* refers to false information being shared, where no harm was meant, while *disinformation* refers to false information being shared knowingly, with the precise intention to cause harm. Conversely, *malinformation* refers to genuine information being shared to intentionally cause harm, by spreading private information in the public space. The European Parliamentary Research Service (EPRS 2019b: 1) has identified five key drivers behind the rapid and pervasive spread of online mis- and disinformation campaigns in recent years:

- *Online propaganda and for-profit websites* that specifically spread disinformation with the goal of deepening societal divides and influencing political outcomes based on a particular ideological stance.
- *Post-truth politics*, whereby politicians and political parties propagate misleading claims to frame key public issues in a way that is beneficial politically, ignoring factual evidence.
- *Partisan media and poor-quality journalism,* which is aimed at feeding echo chambers, by using highly divisive language and partisan reporting, often overlooking factual inaccuracies.
- *Polarised crowds* created through personal selection of content and extrapolated by algorithmic decision-making, which are characterised by biased content sharing and the creation of hyper-partisan groups.
- *Technological particularities* of advertising algorithms and the business model of social platforms, which can contribute to the promotion of online misinformation through search engine optimisation, personalised social feeds and the monetisation of micro-targeted advertising.

Online misinformation and disinformation are not limited to Facebook and Twitter, but affect all social media platforms and even mobile applications, with the most prominent ones being YouTube, Reddit, 4Chan, 8Chan, WhatsApp, Discord and Telegram (EPRS 2019b). The logic of the disinformation lifecycle is built around a self-reinforcing dynamic, whereby the creation and propagation of disinformation is supported through intentional amplification strategies. Successful disinformation campaigns tend to build on the emotive power of stories and images that have the capacity to invoke an emotional response in readers and boost online engagement. Disinformation campaigns often aim to harness the power of a network of websites that post similar distortive content to reinforce each other and enhance credibility. The impact of disinformation is ensured by its 'shareability factor' on social media, meaning that the content by itself has the ability to become trending due to its sensationalist or emotionally charged nature. Such targeted disinformation news pieces typically play on social divisions, such as political or religious beliefs and include digital elements that increase visibility and engagement through the use of memes, false images, false footage and misleading content (ibid.).

Along with genuine propagation, artificial amplification and spread of disinformation through fake profiles and groups also play a crucial role in heightening perceived importance. Artificial propagation of content can include the use of bots, trolls, sockpuppets or even simple targeted advertisements (Bastos – Mercea 2018). *Bots* are automatic posting protocols that scrape data from internet sources and post them via social media platforms to artificially inflate the popularity of certain content. *Trolls* are (semi-automated) supervised accounts, commonly understood as hostile, malign actors on social media, who promote extremist opinions, disseminate fake news or distort conversations. *Sockpuppets* are fictitious online identities used to manipulate public opinion through deception (ibid.). The wide spectrum of coordinated inauthentic behaviour on social platforms serves the purpose of steering and shaping public conversation in a desired way. *Astroturfing*, in particular, is a technique to mimic grass-roots initiatives in online communities to create the appearance of a genuine group of people who provide credibility to a certain cause. Such fake groups are used to lure unsuspecting users, who will be presented information that purposefully distort facts to fit specific narratives, display a biased view of events or even express a specific call to action (Kovic et al. 2018).

Disinformation and strategic narratives in the V4 region

Successful disinformation campaigns are often targeted at existing societal grievances and fissures to create discord among the members of a group or society (Jankowicz 2020). Storytelling, based on narratives coloured by emotions, has great potential to incite certain group behaviour, create new social identities and drive polarisation (Rosůlek 2018). Miskimmon et. al. (2013) argue that the study of strategic narratives is necessary in the novel media environment to understand complexities of international politics. Discursive framing of local, regional and global occurrences can determine who gets to construct the *experience of international events* (ibid:103). Livingston et al. (2018) also argue that a strategic narratives framework is key to capturing the complexities and purposes of transnational struggles over meaning. The study of strategic narratives has been applied to wide-reaching topics from analysing public support for the deployment of military troops by national governments (Ringsmose – Børgesen 2011; Dimitriu – de Graaf 2016; Coticchia – De Simone 2016), mitigating the effects of climate change (Bushell et al. 2017; Bevan et al. 2020), construing the international system from emerging countries' perspective (van Noort 2017) and even in the realm of business, regarding how managers can construct future--oriented narratives for companies (Kaplan – Orlikowski 2014; Bonchek 2016).

Purposeful deception and disinformation campaigns in the international media space can be effective through the use of narratives, because engaged audiences become willing but unaware collaborators who help achieve fraudulent

campaigners' goals (Bastos – Mercea 2018). When analysing disinformation campaigns in the V4 region, we have decided to focus on recurring narratives and meta-narratives potentially emerging from individual disinformation news pieces in order to distil information that could be considered supportive of a coherent system of beliefs or a certain world view. We know that the Visegrád Group has managed to profile itself internationally as a significant collective actor, both through its individual member states being NATO and EU members and the group itself, as a region that holds increased geopolitical importance from a perspective of security, primarily in the energy sector and recently also in cyber security (Cabada – Waisová 2018). This gives reason to believe that the Visegrád Group and its member states could be worthy targets of disinformation campaigns aimed at manipulating public opinion. When seeking out inherent strategic narratives in disinformation news pieces targeted at the region, we relied on Miskimmon and others' (2013) definition on identifying constructed identity claims and articulated positions on specific issues that seek to shape perceptions and actions of domestic and international audiences.

Recent studies conducted on disinformation campaigns in the countries of the V4 region and beyond have used a similar framework when assessing the role of narratives communicated. Deverell et al. (2020) have conducted a comparative narrative analysis on how the news platform Sputnik narrated Denmark, Finland, Norway and Sweden between 2014 and 2019, and have found that Sputnik News utilised a mix of standard strategies and tailor-made narratives to destruct Nordic countries. They have been able to identify differences among how Sputnik narrated the countries of the region, with Sweden and Denmark being portrayed more negatively than Norway and Finland. They have concluded that the identified narratives served the purpose of dividing and weakening the Nordics and the EU, as well as undermining the international reputation of the countries involved. A Izak (2019) has focused on the presentation of the European Union in Slovak pro-Kremlin media, with the main objective of identifying basic narratives via qualitative discourse analysis, and has concluded that media manipulation regarding the image of the EU could be considered a tool in a broader scheme of hybrid warfare. Wenerski (2017) examined disinformation campaigns as a method of creating geopolitical influence by distorting public perception of people, events and even entire institutions such as the EU or the NATO. Wenerski argues that an alternative version of events at the Euromaidan, the war in Donbas and Syria has been created by disinformation sources that seek to destabilise the local political situation by supporting one political side and simultaneously discrediting the other. Kuczyńska-Zonik and Tatarenko (2019) have studied the problem of information security and propaganda in Central and Eastern European countries since 2000, and have concluded that information war in the CEE region is not directed toward the countries of the region but rather aims to weaken the West, especially the European Union.

Hinck et al. (2018) examined strategic narratives embedded in Russian broadcast and news media, by analysing 1016 broadcast and online news segments from 17 different sources representing governmental and official news sites, oppositional sites and independent news sources. They have found that narratives help construct Russian identity in building domestic cohesion while fending off criticisms by Western nations. Khaldarova (2016) has concluded that Russia employed strategic narratives to construct activities, themes and messages in a compelling story line during its conflict with Ukraine. She also identified differences in narratives on Russian television when broadcasted to domestic and foreign audiences.

Hypotheses

Based on the examined literature – especially Deverell et al. (2020), Hinck et al. (2018) and Khaldarova (2016) – our first hypothesis for the analysis was that among disinformation news pieces targeted at the Visegrád countries, we would be able to identify recurring topics, and that based on these key topics it would be possible to establish prevailing narratives and meta-narratives of disinformation campaigns targeted at the V4 region. A topic would be considered *recurring* based on its relative frequency of mentions and its overarching presence in various or all four datasets. Our second hypothesis was that if so – similarly to Izak (2019), Kuczyńska-Zonik and Tatarenko (2019) and Wenerski (2017) – we would be able to structure those narratives and meta-narratives into a coherent system that portrays an underlying logic or world view.

Data and methodology

In order to investigate potential disinformation campaigns directed at the V4 region, we have gathered and analysed close to one thousand individual disinformation news pieces from over 60 different sources collected from the EUvsDisinfo Database (EUvsDisinfo 2020a). This database is an open-source repository that has been created by and is under the curatorship of the EUvsDisinfo Project, established in 2015 by the European Union External Action Service's East StratCom Task Force. The East StratCom Task Force supports EU efforts at strengthening the media environment, particularly in the Eastern Partnership region of the Union, by publishing reports and analyses regarding disinformation trends affecting the European Union and its Member States (EEAS 2018). The EUvsDisinfo Project has the core objective of exposing disinformation narratives and media manipulation, with special focus on messages in the international information space that are identified as 'providing a partial, distorted, or false depiction of reality' (EUvsDisinfo 2020b). Although the aim of the EUvsDisinfo Project is to increase public awareness particularly around

misleading content that could be classified as disseminating pro-Kremlin disinformation narratives, it is important to note that their selection of news pieces 'does not imply, that a given news outlet is linked to the Kremlin or editorially pro-Kremlin or that it has intentionally sought to disinform' (ibid.). Within the scope of our analysis, we have accepted the classification used by the EUvsDisinfo Database in determining whether a certain news piece contained disinformation, and have not performed further evaluation regarding the accuracy of claims presented in the articles.[1]

The EUvsDisinfo Database (EUvsDisinfo 2020a) is compiled through media monitoring performed in 15 different languages and is updated on a weekly basis. At the time of the retrieval of the data[2], the Database contained more than 10,000 pieces of individual news items, with 943 news pieces that originally appeared in one of the V4 languages. The collection included 458 Czech, 285 Polish, 160 Hungarian and 40 Slovak language articles that appeared between January of 2015 and November of 2020, which we have retrieved and saved for the purpose of our analysis. The news pieces were originally compiled from more than 60 different online sources (predominantly news sites and blogs), with the majority of the articles originating from Sputnik News Czech Republic, American European News (Czech Republic), Sputnik News Poland, News Front Hungary and Zem & Vek (Slovakia). The rationale behind selecting news pieces that first appeared in one of the V4 languages was to identify pieces of disinformation that were specifically targeted at the internet users of the V4 countries. Although there are limitations to that assumption, as news pieces published in other widely spoken second languages in the region – for example English or German – could also be targeted towards V4 countries, it is a reasonable assumption to part from that those news pieces that were originally published in one of the four languages were the ones that have been specifically directed towards V4 readers. By retrieving the 943 news items, we have created our own database, which contained the publication date of the articles, the original language of publication, the titles of the articles, the URL or place of publication and the summary of the contents of each news item. Both the titles of the articles and

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1   The EUvsDisinfo Database is compiled through professional systematic media monitoring services, covering different channels of communication and a wide array of news outlets, particularly but not exclusively focusing on sources that are external to the EU and might spread key pro-Kremlin messages. In accordance with the EU Code of Practice on Disinformation (EC 2016), disinformation is defined as verifiably false or misleading information that is created, presented and disseminated for economic gain or to intentionally deceive the public. Verifying the falseness of information listed in the database is performed on a case-by-case basis, in which the editors of the database include a 'disproofs' section to each news item that explains the components that make a certain claim disinformation, using publicly available official documents and statements, academic reports and studies, findings of fact-checkers and reporting of international media. To ensure provability, links are provided to the original disinformation messages and their archived versions (EUvsDisinfo 2020c).

2   The data was retrieved between the 5th and 17th of November from the EUvsDisinfo (2020a) online database.

the summary of contents were provided in English language in the repository, which we have used for the purpose of our analysis.

In order to perform content analysis on such a large amount of natural language data, we have used a Natural Language Processing (NLP) algorithm[3] to extract information and categorise recurring topics within the individual news pieces. The use of NLP algorithms in (political) discourse analysis and specifically misinformation campaigns or 'fake news' is a field within social sciences that has been gaining increased attention in recent years. Zhou et al. (2019) have found that the explosive growth of fake news and its erosive effect on democracy make the study of misinformation an interdisciplinary topic, which requires joint expertise in computer and information science, political science, journalism, social science, psychology and economics. They have approached the problem from the perspective of news content and information in social networks, techniques in data mining, machine learning, natural language processing, information retrieval and social search to devise a holistic and automatic tool for the detection of fake news. Ibrishimova and Li (2020) have likewise used a framework for fake news detection based on a machine learning model to define and automate the detection process of fake news. Díaz-García et al. (2020) have presented a solution based on Text Mining that identified text patterns related to Twitter tweets that refer to fake news, using a pre-labelled dataset of fake and real tweets during the United States presidential election of 2016. Oshikawa et al. (2018) have highlighted the importance of NLP solutions for fake news detection, notwithstanding limitations and challenges involved, given the massive amount of web content produced daily. Farrell (2019) has utilised natural language processing and approximate string matching on a large collection of data to examine the relationship between the large-scale climate misinformation movement and philanthropy. Rashkin et al. (2017) have compared the language of real news with that of satire, hoaxes and propaganda to find linguistic characteristics of untrustworthy text using computational linguistics. Aletras et al. (2016) have built a predictive model based on natural language processing and machine learning to unveil patterns driving judicial decisions in the European Court of Human Rights cases, based solely on textual content.

After examining analytical methods utilised in the cited literature, we decided to perform a text mining exercise on our database containing all 943 news items. We instructed the NLP algorithm to return the individual frequency of mentions of recurring topics and their relationship structure, based on co-mentions. We performed this exercise, both on an overall V4 and an individual country-level,

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3　The NLP solution used for our analysis is a proprietary algorithm designed by Neticle Plc. with unique language capabilities to understand text data with human-level precision. More information on the NLP solution is available at the Zurvey.io online platform.

for the datasets of the four languages. The frequency analysis method helped us unify insights and uncover tendencies and outliers in the datasets. To optimise search results, we manually incorporated theme-specific expressions and keywords into the NLP algorithm, and created custom queries to search for specific themes within the textual data. We used data-labelling connected to the custom queries to establish categories among the recurring topics, to group them into distinct subject matters and compare their relative frequency among the datasets of the four countries. Some custom queries required only a few keywords to maximise search accuracy (e.g., in the case of a renowned person's name), while some other themes appeared in the news articles in various and often imprecise contexts. In these cases, relevant expressions had to be collected and incorporated into the NLP algorithm manually, as mentioned above.

Table 1: Categories and custom queries created for the algorithmic analysis

Data labels	Custom queries (examples)	Keywords / Context for custom query (examples)
Person	Vladimir Putin	Putin
	Donald Trump	Trump
	Angela Merkel	Merkel
Country	Russian Federation	Russia, Moscow, Kremlin
	United States	United States, The US, USA, Washington, America, White House
	Germany	Germany, Berlin
Geographic location	Eastern Ukraine and Crimea	Eastern Ukraine, Donetsk, Donbass, Luhansk, Crimea, Crimean
	Nagorno-Karabakh	Armenia, Azerbaijan, Nagorno-Karabakh, Nagorno
Concept	Information War	disinformation, fake news, information war, hybrid war, propaganda, fake news, hybrid threat
	Gas Market	gas, pipeline, Nord Stream, LNG, energy, Gazprom
Organisation	EU	EU, Schengen, EP, Brussels, European Council, European Parliament, European Union, Council of Europe
	Deep State	deep state, global capital, shadow state, shadow government
	CIA	CIA, Central Intelligence Agency, American Intelligence Agency, American foreign intelligence
Event	MH17	MH17, Boeing, Crash, MH-17
	Brexit	Brexit
Ideology, Belief	Russophobia	anti-Russian, Russophobia, anti-Russia, against Russia, against Slavs, anti-Slav, war with Russia
	Bolshevism	Bolshevism, Bolshevik

Source: Own elaboration

As seen in Table 1., we have ordered the queries into seven main categories according to their context of use within the articles. The defined categories were: Person; Country; Geographic location; Concept; Organisation; Event; and Ideology, Belief. We must highlight that the categorisation of themes and keywords used for the custom queries within the scope of this study have been established exclusively based on their fit with the original language used in the articles, in order to optimise search results and uncover their frequency of mentions. Accordingly, categories and keywords used do not represent a statement of value or opinion in any way, but merely serve analytical purposes. The context of certain expressions and synonyms used within the articles predefined how these same expressions could be identified algorithmically within the analysed texts. For example, countries tended to be represented as individual actors, and as such, were often referred to by their capital city (e.g., 'Berlin' in order to denote Germany) or iconic place (e.g., 'White House' to refer to the United States). Similarly, geographic locations (e.g., Europe) were often used interchangeably with an acting organisation (e.g., the European Union). In order to resolve this inconsistency, we created two separate categories: 'Country' and 'Geographic location'. In the former, we listed themes that referred to countries as *actors* in the international arena, while in the latter we compiled *locations* where particular events have taken place. 'Organisation' by itself is a dual category, as the articles tended to refer to both legitimate international organisations, such as NATO and unclear actors such as the 'Deep State' in an equally axiomatic way. Therefore, in order to maintain the logic of the analysis, we had to include these qualitatively different concepts under the same category, as an organisation or group of people independently acting within the international space. In certain cases, we had to accept loose wording among synonyms for the queries to find relevant mentions in the text, as, for example, the European Union as an acting entity has been referred to in the articles in various ways, from 'Schengen' to 'Brussels' and 'EP'; of course, these denominations technically cannot be considered correct terms for representing the EU; however, from specific textual contexts, their intended meaning was clear. Such ambiguities in wording within the queries performed – some of which have also been listed above – are entirely attributed to using wording from the articles for the sake of finding relevant mentions within the data. Certain categorisations may seem arbitrary as global events, such as the Cold War in specific contexts could also be considered a concept rather than an event (e.g., 'Cold War logic'). Conversely, Crimea, primarily a geographic location, could be paraphrased as an event (e.g., 'the Crimean crisis'). Perhaps the most controversial ones are the themes within the 'Ideology, Belief' category as they include both religious beliefs (e.g., Islam), sentiments (e.g., Russophobia) and political ideologies (e.g., 'Nazism') that are difficult to delineate precisely. It is important to note that the reason for creating a categorisation of themes was primarily to be able

to perform comparative analysis on their frequency of mention, and uncover hidden trends within and between datasets. For this purpose, we have decided to use the predominant textual contexts of themes as they originally appeared in the articles, without evaluating other possible interpretations of wordings that were not relevant for the scope of our analysis.

Results and discussion

To establish recurring narratives and uncover outliers among the results returned by the NLP algorithm, we first looked at the distribution and frequency of mentions of the seven categories. We found that the category *Country* among the seven main categories showed overwhelming frequency both on a V4 average and an individual country level. On an overall V4 level, news items featuring countries made up 79% of the selection, showing a strong bias towards narratives that depict countries as main actors in the international arena and personifying nation states as entities that have their own will and act on their own motivation. The second category in terms of frequency on a V4 level was *Organisation*, with 37% of mentions, followed by *Concept* with 30%, *Geographic location* at 26%, *Ideologies and Beliefs* at 22%, *Person* at 15% and *Event* at 14%. Please note that the sum of individual category frequencies exceeds one hundred percent, as naturally there were co-mentions in the text among the different categories. By contrasting the frequency of mentions of the different categories among the four datasets, we were able to identify where we should look for discrepancies, as an excess or lack of mentions of a certain topic. Based on the outliers in data, we could identify both common themes and country-specific differences regarding narratives unfolding from the articles. We ordered our investigation around narratives pertinent to the seven main categories, moving from the most significant category in terms of frequency of mentions, which was *Country*, to the least cited one, *Event*.

News articles corresponding to the *Country* category made up 73–76% of the selection for Hungarian, Czech and Slovak language items respectively, while 92% of Polish language articles contained country-related mentions. The distribution of specific countries mentioned within the different datasets showed some commonalities but also considerable differences. Among country mentions for all V4 countries, we found both Russia and the United States in the top-three of countries cited for every data set, with numerous co-mentions of the two countries. Narratives concerning Russia showed significant commonalities in the four countries. The predominant narrative was not regarding Russia's strength or grandeur but rather depicting Russia as a victim of Russophobia and unfounded aggression originating both from its western neighbouring countries, and, most importantly, directed from the United States. We found that the majority of news articles described the deterioration of relations

Table 2: Frequency of mentions of the seven main categories on an individual country and V4 average level

Category	Polish language (%)	Hungarian language (%)	Slovak language (%)	Czech language (%)	V4 average (%)
Country	92	74	75	73	**79**
Organisation	29	36	50	41	**37**
Concept	21	33	20	36	**30**
Geographic location	22	37	15	26	**26**
Ideology, Belief	30	17	23	19	**22**
Person	12	13	8	19	**15**
Event	27	12	3	9	**14**

Source: Own elaboration

between Russia and the US, the EU, Poland, the Baltic States and Ukraine. The articles were mostly concerned with speculative American interests in reinstating Cold War-like circumstances, where Russia would become economically, politically and ideologically isolated from the West. The underlying argument was two-fold: both economic interests and ideological animosity between the two powers were identified. The mentioned economic interests involved European defence industry purchases from US suppliers and the promotion of Liquefied Natural Gas (LNG) imported to Europe from the United States. According to the identified narrative, this entails pushing Russia out of the European gas market and obstructing the Nord Stream 2 project, a system of offshore natural gas pipelines connecting Russia with Germany. The ideological hostility, as stated by the news pieces, manifests itself in attempts to defame Russia by fuelling anti-Russian sentiment through disseminating fake information.

The main focus of supposed western disinformation campaigns against Russia involved the Skripal and Navalny cases, insinuating Russian involvement in the United States presidential elections and *re-writing* or *falsifying* Second World War history in a way that depicts Russia as an aggressor. Narratives identified from the articles concerning Russia were overarching for all V4 countries; however, differences could be found in the frequency of mentions among them on a country-to-country basis. For example, the narrative regarding the *falsification of WWII history* was particularly strong among Polish language articles, where more than 50 articles of the 285 analysed occurred with such mentions, compared to a total of 8 articles in the other three languages combined. The articles claimed that the *liberation* of Poland by the Red Army is being increasingly narrated as an *invasion* by contemporary Polish politicians who actively

serve US interests. Furthermore, the articles stated that Red Army monuments in Poland were at threat of being vandalised or destroyed as a sign of growing Russophobia in the country. Comparatively, in the Hungarian language articles concerning Russia, country-specific emphasis was on the instances of Ukrainian aggression towards Russia and the Navalny case, as a theoretically CIA-led operation to sabotage Russian access to the European gas market through the provocation of economic sanctions. Czech and Slovak language articles frequently featured alleged FBI and CIA involvement in manipulating local media to spread anti-Russian sentiment with particular focus on the Skripal case.

Examining the articles mentioning the United States, we were also able to uncover a consistent geopolitical strategy narrative present in all four datasets. To a varying degree, the articles conveyed that the United States is gradually preparing to engage in economic warfare or even armed conflict with the Russian Federation in order to eliminate its rival and eventually gain access to Russia's natural resources. The United States, theoretically, is increasing its political influence, secret service operations and military presence in Europe, particularly in the Eastern and Baltic States. According to the related narrative, the US is actively supporting the creation of a North-South belt of federal states between Germany and the Russian Federation, which would be both anti-Russian and Eurosceptic. This would divide spheres of influence between the West and the East, and restrict both the expansion of Russia and the creation of a strong and united Europe. The tools for achieving this goal, according to the news pieces, range from underground operations of destabilising Post-Soviet territories, for instance by supporting the protests in Belarus or provoking conflicts such as the Ukrainian Maidan and the Nagorno-crisis, to performing false-flag operations, including the Skripal and Navalny cases, and even the Malaysia Airlines Flight 17 (MH17) disaster over Ukraine.

The narrative concerning the United States, claims that according to the American national security strategy, there exists no alternative to the leading role of the US globally, and therefore a multipolar world order shall not emerge. Therefore, the US needs to defend its interests militarily around the globe and cause *directed chaos* in a number of hot spots worldwide, whenever US supremacy gets questioned. The idea of a North-South cooperation among countries in Central Europe is, of course, nothing new under the sun. The current Three Seas Initiative (TSI), which brings together 12 states across Central and Eastern Europe and the Balkans in the area between the Black, Baltic and Adriatic Seas can be seen as the modern embodiment of the pre-WWII concept of Międzymorze (Intermarium) introduced by Józef Piłsudski in the interwar period (Gorka 2018). However, the articles suggest that recent American support for the TSI could be key to transforming Euro-Atlantic relations. The construction of the Via Carpathia North-South highway and the creation of Liquefied Natural Gas infrastructure, with sea terminals in Poland and Croatia

connected via pipeline, could advance American interests in the region while hindering Russia's influence. Within the grand scheme of creating a federal group of Central European states to counter Russian power and simultaneously weaken the EU, Poland is portrayed as a *vanguard of American interests*, which is why Poland's leadership role in the TSI project is crucial from an American standpoint, according to the news pieces.

This brings us to the rationale behind why country-related mentions were so overrepresented in the case of Polish language articles. The excess of country mentions – more than 20% difference compared to other V4 countries – in the case of Polish language articles was largely a result of mentions concerning Poland itself. Most of the narratives we have identified fed into previously listed topics; however, they occurred with a higher frequency, and they focused on Poland's role as a *vessel for US interests* in Europe and the country's strategic position in a system of *Post-Atlantism* or *Neo-Atlantism*. Poland's intended role within the geopolitical meta-narrative would entail the obstruction of Russian--European energy cooperation. There were several mentions of assumed Russophobia among the Polish political elite and the intentional *falsification of WWII history*, along with the *war on (Red Army) monuments*. The articles showed particular concern regarding Poland's role in the Belarusian protests, stating that Polish political elites try to interfere with Belarusian domestic affairs, supporting the Belarusian opposition in order to extend Poland's sphere of influence and destabilise the post-Soviet region. Another segment of Polish language articles introduced a different narrative which we have not found in the other datasets. This line of narrative stated that Polish nationals were increasingly dissatisfied with their own country's leadership due to economic problems, and that recent pro-choice demonstrations in Poland had been, in reality, anti-government protests, exposing growing political discontent among Polish citizens. Articles concerning Poland that originally appeared in the Polish language made up 60% of the respective dataset, compared to only 21% of articles on the Czech Republic that appeared in the Czech language, 13% on Slovakia in Slovakian and merely 3% on Hungary in Hungarian. Regarding the latter three, common recurring narratives included threats posed at the countries by the European migration crisis and foreign (Western) secret service operations, as well as the oppression and economic exploitation of the states in the *second tier of Europe* by *Brussels*, but we have not identified anti-government narratives as in the case of Poland. We have, however, identified a unique same--language country discourse concerning the doubted independence of Czech media from foreign influence.

A further instance of overrepresentation in the frequency of mentions of a specific country was the case of articles on Ukraine in the Hungarian language news. More than one third of the Hungarian dataset contained mentions on Ukraine, making it the number one country cited in the dataset (before even

the United States and Russia, with 32% and 28% of mentions respectively). In comparison, only 17% of Polish, 14% of Czech and 5% of Slovak language articles contained news on Ukraine. Common narratives for the four countries included the hypothesised role of the United States in organising the Euromaidan, a wave of demonstrations in Ukraine which began in Maidan Nezalezhnosti (Independence Square) in Kyiv, later on followed by the Crimean crisis. The supposed rationale of the US was the provocation of Russian involvement in the Crimean crisis and ultimately the incitement of economic sanctions against Russia as well as nurturing Russophobia in neighbouring countries. The MH17 disaster was also linked as a planned incident to *punish* the Russian Federation for the annexation of Crimea. In both the Hungarian and Czech language news, the Nagorno-crisis has been connected to Ukraine as well, with the alleged support of Kyiv to Azerbaijan during the conflict. It was described as a gesture to Turkey, an ally of Azerbaijan, for opposing the Russian annexation of Crimea. In the Hungarian language news specifically, we found mentions of adverse economic and living circumstances in Transcarpathia – the bordering Ukrainian region with a significant Hungarian ethnic minority – as well as the envisioned disintegration of Ukraine and the annexation of its territories to neighbouring countries.

The second most frequently mentioned category on a V4 level was *Organisation*, with 50% of mentions in Slovak language articles, 41% for Czech, 36% for Hungarian and 29% for Polish. The top two organisations mentioned for all four datasets were the European Union and the North Atlantic Treaty Organization. The EU was mentioned in 20% of Slovakian, 18% of Czech, 14% of Polish and 13% of Hungarian language articles. Common V4 narratives regarding the EU included the suspected manifestation of vested American interests behind the EU instituting sanctions against Russia – and particularly the Russian gas business – as well as an unrealistic fear of Russia stemming from the leaders of the European Union. It has been stated multiple times in the articles that the EU is not a democratic institution but a *club led by Germany* or *Berlin ruling the continent*, always in accordance with US interests. Brussels' role in *forcing* and *organising* migration to the continent has also been a common V4 narrative as well as the *exploitation* of Eastern European countries by old member states and the intentional conservation of a *two-speed Europe*, which is economically unbeneficial for newer members and weakens the integrity of Central Eastern Europe. The EU was named an *imperialistic regime* that would soon dissolve, as showcased by its *inability* to deal with the Coronavirus epidemic. Country specific narratives regarding the EU were found in the case of Poland and Hungary. In Polish language articles, we found references of Poland losing its sovereignty to the European Union and claims that recent Polish protests had been supported by Brussels in order to remove the conservative political elite, who refused to act in line with United States interests. Hungarian language

articles contained mentions of EU leaders supporting Ukrainian aggression towards Russia.

Mentions of the NATO were present in 18% of Slovakian, 11% of Polish, 10% of Czech and 9% of Hungarian articles, which presented a consistent narrative overarching all four datasets. NATO was described as a *Cold War relic* that is a *tool for US interventions* around the globe and an *ally of the American military-industrial complex*. NATO supposedly continues to see an enemy in Russia and, therefore, is preparing for war at Russia's western borders by deploying military bases and equipment in Central Europe and the Baltics as well as expanding its operations to countries such as Ukraine, Georgia and Moldova, despite earlier consensuses. Central European states, according to the narrative, serve as *stationary aircraft carriers of NATO* and shall be involved in anti-Russian provocation. NATO, therefore, is a threat to the national security of Central European states, as according to the articles, these countries would be sacrificed by Western powers in a (nuclear) confrontation with Russia.

The third most important organisation in terms of frequency of mentions was the Islamic State (ISIS), which has been cited in 13% of Slovakian, 8% of Hungarian and 5% of Czech language articles. Interestingly, only 1% of Polish articles cited ISIS. We could not identify a cohesive narrative, except for the United States being behind the creation or supporting the Islamic State. However, the alleged reasons for doing so varied from hindering the peace process in Syria in order to destabilise the Commonwealth of Independent States (CIS), and trying to destroy Europe by fuelling the migration crisis, to buying cheap oil from ISIS, with Turkey and the NATO acting as intermediaries. Further organisations mentioned in the articles with an average of 1–4% frequency included the CIA, the FBI, 'the West', 'NGOs', the United Nations, the White Helmets and the 'Deep State'. These organisations did not carry a particular narrative, but were rather mentioned in connection to previously described discourses, as a reinforcement regarding theories on alleged underground operations.

The category *Concept* has been established to be able to identify narratives around phenomena that cannot be linked to one particular event, specific country or geography, but hold significant importance in constituting narratives. Such concepts have been mentioned in 36% of Czech, 33% of Hungarian, 21% of Polish and 20% of Slovak language articles. 'Terror' has been the number one concept for the Hungarian, Slovak and Czech language datasets, with a relatively consistent distribution of mentions, at 16%, 15% and 11% respectively. In Polish language articles, terror was not among the top three concepts, with merely 1% of mentions. The prevailing narrative around 'terror' in all datasets concerned the United States allegedly managing global terrorism, and recent terrorist attacks in Europe being staged. The supporting arguments and rationale for the account remain unclear, except for the supposed desire of the US to exercise power around the globe and further its geopolitical strategies. The

Hungarian dataset, in particular, contained a number of mentions on 'terror' in the context of Ukraine. However, we could not establish a specific narrative in this case, as the term 'terror' and 'terrorist' have been used to describe both a pejorative propaganda term allegedly used by the Ukrainian leadership to label pro-Russian separatists, as well as to denote the Ukrainian regime as a form of *state terrorism* itself. Juxtaposing the different meanings, we have concluded that the mentions on 'terror' in the context of Ukraine in Hungarian language articles, albeit numerous, were mostly used as a tool to express offensive language and no clear narrative could be established from it.

'Migration' was mentioned in 11% of Hungarian and 10% of Czech news pieces, making it the second most frequently cited concept in the two languages, while we have found only one pertinent article in the Polish and Slovakian datasets. The focus was on the European migration crisis, which was described as a planned operation of the United States in order to undermine the European Union, transform its demographics and eventually destroy European culture. The articles contained references to the economic burden of supporting refugees, the prospects of refugee family reunification and deteriorating crime rates in Western Europe. In comparison, the second most frequently cited concept in Polish and Slovak language articles was 'information war', with 4% and 5% of mentions respectively, mainly referring to anti-Russian propaganda and attempted falsification of WWII history performed by the 'the West'. Distinctively, the number one concept for Polish language articles was 'gas' with 5% of mentions, which was not a frequently cited concept in other datasets. The emphasis again was on Poland's strategic position in advancing American economic interests and pushing Russia out of the European gas market, feeding into previously mentioned narratives. The Skripal and Navalny cases were linked to the matter, as well as claimed CIA involvement in them. 'Coup d'état' was another mutual theme, with 2–4% of mentions, ranking third or fourth place among concepts in Czech, Polish and Hungarian news. The articles identified the United States as the suspected organiser behind the recent upheavals in Ukraine, Turkey, Syria and the Greek coup of 1967 as well as a planned take-over of power in the Czech Republic and Armenia.

Within the *Geographical location* category, we have gathered localities that do not belong to the *Country* category because they tend to denote a specific location where events have taken place, rather than representing an acting entity. Geographical locations have been mentioned in 37% of Hungarian, 26% of Czech, 22% of Polish and 15% of Slovakian articles. The top three locations mentioned in the four datasets were Europe; Eastern Ukraine and Crimea; and the Middle East. The narratives around 'Europe' included both narratives on the European Union and on Europe's geopolitical situation (vis-à-vis the United States) that have already been described above. The term 'Europe' has been used rather freely in the articles to refer to both the continent, the people of Europe

and the European Union, which is why mentions of 'Europe' as a geographic location is difficult to strictly outline.

The Middle East was cited in a relatively high percentage of Hungarian and Czech language articles, with 14% and 11% of mentions respectively, while it was quoted in only 5% of Slovakian and 1% of Polish language articles. Narratives on the Middle East were consistent among datasets. The American involvement in the Syrian civil war was portrayed as an instance of *directed chaos*, which is supposed to be a tool to justify the presence of the United States as *world police* in the region. Whereas, according to the articles, it is indeed the US who is behind supporting terrorists in the Middle East with the help of the White Helmets, a volunteer organisation of Syrian civil defence. It was stated that while Russia propagates peace, American interests lie in maintaining an *impenetrable zone of conflict* even at the price of risking the outbreak of a third world war. We found a unique line of narrative in Czech language articles that stated that the European Union is preparing the establishment of a *European Empire*, which would spread to North-Africa and the Middle East, which is why European leaders are supposedly facilitating migration to Europe from countries in the region.

References to Eastern Ukraine and Crimea were found in 15% of Hungarian, 5% Polish and 4% of Czech news pieces, while no relevant mentions were identified in Slovakian articles. Common narratives emphasised the democratic legitimacy of the 2014 Crimean status referendum, assessing the local population's political will whether Crimea should join the Russian Federation as a federal subject. It was also expressed that ever since its annexation to Russia, Crimea supposedly enjoyed greater infrastructural and economic development than the rest of Ukraine, and could provide better quality of life for its citizens. This piece of information was presented as evidence regarding the assumption that sanctions against Russia due to the Crimean Crisis had been purely based on excuses. In Czech and Hungarian language news, we found mentions of supposed groundworks of planned NATO bases in the Donbass region of Ukraine, specifically in Sievierodonetsk and Mariupol, with the aim of threatening Crimea and the Russian Federation itself. In Hungarian articles, Crimean events were linked to the Nagorno-Karabakh Conflict, with an expected Ukrainian-Turkish alliance against Russia and the support of the Crimean Tatar autonomist ethnic minority by Turkey.

The category *Ideologies and Beliefs* has been established jointly, as the articles convoked ideological and religious beliefs in similar contexts. They were presented as governing world views that can explain certain events and underlying motivations both in domestic affairs and international relations. Ideologies and religions were mentioned in 30% of Polish, 23% of Slovakian, 19% of Czech and 17% percent of Hungarian articles. 'Russophobia' came up as the most often cited ideology in Polish, Czech and Hungarian language news with 18% and 6–6% of mentions respectively, while it reached second place in Slovakian

articles with 8% frequency. A sentiment of increasing Russophobia was cited in connection to a previously mentioned geopolitical meta-narrative of Neo- or Post-Atlantism, and the economic sanctions introduced against Russia after the Crimean Crisis. The media campaign against Russia concerning the Navalny case, as well as inferred censorship efforts of Russian news sites on American social media platforms were linked to anti-Russian attitudes as well. Russophobia was described as a form of xenophobia and intentional dehumanisation of a group of people because of their nationality. Russophobia was a very important meta-narrative in constituting the general world view expressed by the articles. It was connected to the falsification of WWII events, destruction of Red Army monuments, and the retrospective portrayal of Russia as an aggressor in the Second World War. Russophobia, along these lines, was linked to Nazism, the second most cited ideology with 10% of mentions in Polish and Slovak language news and 4% percent frequency in Czech and Hungarian articles. 'The West', the European Union and Ukraine were all labelled Fascists or Nazis in their adversarial tendencies with Russia. Russophobia and Nazism were co-mentioned as two sides of the same coin.

In comparison, 'Islam', the third most frequent topic in the category was featured only in 5% of Slovakian, 3% of Hungarian and Czech and 1% of Polish language articles. It was referred to in relation to the migration crisis, as a threat to European culture. Other ideologies mentioned included 'multicultural', 'open-society', 'gender', 'capitalist', 'democratic', 'socialist' and 'anti-establishment', albeit with a very low incidence. The gap in the frequency of mentions among Russophobia and Nazism contrasted with all other ideologies cited showcases where the dominant dividing lines lie according to the meta-narratives outlined by the news pieces.

Person-related narratives were featured with a noticeably lower frequency than narratives concerning nation states or organisations. This underlines the inherent geopolitical thinking behind notions unfolding from the narratives and meta-narratives uncovered above. The *Person* category reached 19% of mentions in Czech, 13% in Hungarian, 12% in Polish and 8% in Slovak language articles. Articles featuring renowned people tended not to carry specific storylines related to the persons quoted, but rather, individuals mentioned were linked to previous narratives and allocated to the righteous or sinister side of events, as an indication of their character, or more precisely of how they were intended to be portrayed. It is also interesting to note that those news pieces that were more openly citing conspiracy theory-like ideas were overrepresented in this category. In Czech, Hungarian and Polish articles, Vladimir Putin consistently ranked among the top people quoted, with 3–4% of mentions. The Russian president was described as someone whose main aim is to protect peace, while being under constant threat from foreign powers and secret services as well as a victim of bad publicity directed towards him from international media. Among

American politicians, we predominantly found mentions of Hillary Clinton, Barack Obama and Donald Trump, albeit with a generally lower frequency of below 3%, and with no mentions in the Slovakian dataset. While all three politicians were linked to some extent to furthering American geopolitical strategies with potentially devious tools, President Trump was occasionally also portrayed as someone open to establishing friendlier relationships with Russia, though he is unfortunately controlled by the 'Deep State'. Polish president Andrzej Duda were mentioned uniquely in Polish language articles, with a comparable frequency of mentions to President Trump, at 2% within the respective dataset. President Duda was linked to Poland serving US and NATO interests in Europe. George Soros received a noticeable share of mentions in Slovakian, Hungarian and Czech news, with 5%, 3% and 2% respectively. Soros' name was brought up in relation to non-governmental organisation activities in Europe, reportedly supporting anti-establishment protests in Central Europe and managing organised migration. Angela Merkel received 1–3% of mentions across the four datasets, mostly referring to American geopolitical grand strategy in Europe. Alexei Navalny was mentioned in the Czech, Hungarian and Polish datasets with 1–2% frequency, in relation to the poisoning being faked with possible CIA involvement, in order to create an atmosphere of international distrust towards Russia.

Events or occurrences have been cited with the lowest frequency among all categories, with 27% of Polish, 12% of Hungarian, 9% Czech and only 3% of Slovakian articles. This tendency underlines the logic of unfolding meta-narratives that mainly focus on actors in the international arena and their general, rather static stances towards each other. This gives little attention to passing events and expresses a logic of Cold War-like frozen conflict, where animosity seems constant. Nevertheless, we have found some distinct tendencies among countries, with the Second World War as an event being overrepresented at 20% of mentions in Polish language news, compared to 1–3% in the other three datasets, and the MH17 disaster cited with a salient 9% frequency in Hungarian articles, compared to 0–1% in other languages. Both of these themes respectively account for the higher share of events mentioned in Polish and Hungarian language news. A common occurrence brought up in the Polish, Czech and Hungarian datasets, albeit with a fairly low frequency of 2–4%, was the Coronavirus epidemic. The relatively low rate of mentions is, of course, also due to the fact that references to the Coronavirus appeared only in 2020, while articles in the dataset include news pieces starting from 2015. Articles on the COVID-19 pandemic mostly focused on the *inability* of the European Union to deal with the epidemic that puts an end to *500 years of global domination of Europe*. The dissolution of the European Union was envisioned following the crisis caused by the pandemic. There were references to attempts in worldwide media to create bad publicity for the Sputnik V vaccine developed in Russia as well as

to undervalue international aid provided by Russia to other countries during the crisis. The creation of the Coronavirus itself has been occasionally linked to the United States, according to the narrative, as an attempt to defame China.

Narratives and Meta-narratives

By systematically examining the narrative structure outlined by the thematic analysis of the close to one thousand news pieces examined, using frequency analysis and mapping relationship structures among topics, we were able to uncover not only overarching narratives but also meta-narratives unfolding from the articles that were present in multiple datasets. Meta-narratives provide larger explanations to individual narratives and construct a big picture view of the world organised around questions concerning power relations, political order, ideological divisions, historical consciousness and cultural identity. They play an integrative role in structuring individual occurrences and socio-economic contexts into a universal pattern of understanding that can shape people's views and attribute meaning to their subjective experiences. As Jankowicz (2020) points out, the most successful narratives in disinformation campaigns are the ones that are grounded in 'truth' – whether objective facts or perceived realities of life – as they can effectively sow doubt, distrust and discontent in targeted groups of society. While country-specific narratives identified in the disinformation news pieces aimed at distinctive vulnerabilities, such as historical remembrance of WWII events in Poland, views on Ukrainian nationalism in Hungary or media independence in the Czech Republic and Slovakia, overarching meta-narratives sought to weaponize emotions exploiting fissures in general attitudes and cultural identity of V4 countries.

As described in Table 3., we have identified 5 meta-narratives that united 16 standalone narratives in an umbrella-like fashion that were reinforced by about 25 supporting discourses. The five meta-narratives identified were: (1) growing Russophobia in the West; (2) the preparation of a war against Russia by the US and NATO; (3) the United States seeking global hegemony; (4) the establishment of a system of Post-/Neo-Atlantism by dividing Europe; and (5) the envisioned collapse of the European Union. Meta-narratives used polarising framing to play on deep-rooted issues like V4 nations' preference for a strong NATO presence in the continent, the legacy of Soviet geopolitical dominance in Eastern Europe and its interplay with Euro-Atlantic relations, or the Visegrád countries' position on economic sanctions against Russia. We can also recognise emphasis on potential pain points around the economic centre-periphery relationship and balance of power among the Franco-German EU core and newer member states, as well as the debate on moving toward a less integrated Europe with stronger nation states and emerging regional alliances. Meta--narratives recognisably used these existing cultural-historical references as

Table 3.: Narratives, meta-narratives and supporting discourses identified from the thematic analysis

| Meta-narratives	Narratives	Supporting discourses
GROWING RUSSOPHOBIA	• Falsification of WWII history events • Destruction of Red Army monuments • Disinformation campaigns directed by the US to defame Russia	• Anti-Russian sentiments growing in neighbouring states • Ukrainian involvement in Nagorno-crisis • Turkey supports Crimean Tatar autonomy • Czech media is being influenced by the CIA • Navalny and Skripal cases were staged
THE US AND THE NATO PREPARE FOR WAR WITH RUSSIA	• Crimean crisis was provoked intentionally • NATO bases being established in Central and Eastern Europe • Destabilisation of the CIS region	• Ukrainian Maidan organised by the CIA • Legitimacy of the Crimean referendum • Living conditions in Crimea have improved • MH17 disaster was a false flag operation • US wants to get hold of Russia's natural resources • Intentional creation of zone of conflict in the Middle East
AMERICAN GLOBAL HEGEMONY	• A multipolar world order cannot emerge • The US wants to keep Russia in isolation • The US wants to destroy Europe • The US wants to defame China	• The US manages global terrorism • Hot-spots of US intervention around the globe • The US organises coups against democratically elected governments • The US and the NATO buys oil from the ISIS • Organised migration supported by the US • Coronavirus invented by the US
POST- / NEO-ATLANTISM	• American support for the TSI project • Poland is a vanguard of American interests • Fight over access to the European gas market	• North-South belt of Central European States to divide the continent • Polish involvement in Belarusian affairs • Skripal and Navalny cases fabricated to uphold sanctions against Russia
THE EUROPEAN UNION IS DISMANTLING	• The EU is unable to deal with the COVID-crisis • Two-speed Europe • EU leaders support organised migration	• Brussels bureaucracy hinders member states • The EU is a club led by Germany • Economic exploitation of newer member states • Central European states loose sovereignty • Western culture is under attack

Source: Own elaboration

groundworks to communicate a grand scheme of affairs that reaches beyond the Central-European region. The five meta-narratives described a coherent system pertaining to a world view that follows a very much Cold War-like logic, with the long-standing ideological animosity between two great powers, the United States and the Russian Federation being the most important defining tendency in the current state of global affairs. All other 'circumstantial phenomena', such as the dismantling of the European Union, the war in the Middle East, the migration crisis, the Coronavirus epidemic essentially somehow play into the meta-narrative of a frozen but now reheating conflict, where everything happens for a reason that can be linked to the geopolitical motives and ideological convictions of great powers luring in the background.

According to the meta-narratives, the United States seeking global hegemony seems to be the root cause of Russophobia being fuelled in the West, that can serve as rationalisation for the intentional isolation of Russia, and in the longer--term war against Russia led by NATO. Meta-narratives point at a divide-and--conquer strategy employed by the US in the European continent, through the establishment of a Post-/Neo-Atlantist system that would inevitably entail the break-up of the European Union, and at the same time present an opportunity for the creation of an anti-Russian stronghold in Central and Eastern Europe. To illustrate the interplay among topics, we have generated a network displaying pro-Kremlin disinformation narratives affecting the V4 countries, which seeks to visualise the connections between the most important meta-narratives and narratives that create a system of mutually reinforcing storylines.

While we have no evidence to assume any coordination of efforts or clearly defined motivations behind narratives being communicated through possibly pro-Kremlin disinformation news sources in the V4 region, it calls for further investigation to uncover what benefits could be attributed to the spread of these particular narratives and meta-narratives in relation to the Visegrád Countries. Overall, the framing of events, even if it mostly employs a victim narrative (e.g., Russophobia), calls attention to Russia's grandeur as the sole true enemy of the most powerful country in the world, the United States. We could argue that it also seeks to plant seeds of discontent and suspicion among citizens of V4 countries, in some cases toward their own country's leadership (e.g., in the case of Poland), toward their neighbouring countries (e.g., in the case of Hungary and Ukraine) and in general toward the leadership, institutions and older member states of the European Union. Finally, it also questions the motives behind the grand strategy of the United States in the continent and the long-term faith of the Central European region as hypothetically devised by the US. To appreciate the significance of disinformation narratives being planted via computational propaganda, further research directions should focus on uncovering the actual effects that these narratives have on people's perceptions and attitudes in the V4 region, and how it might be possible to combat such effects.

Figure 1: Network of potential pro-Kremlin disinformation narratives in the V4 region
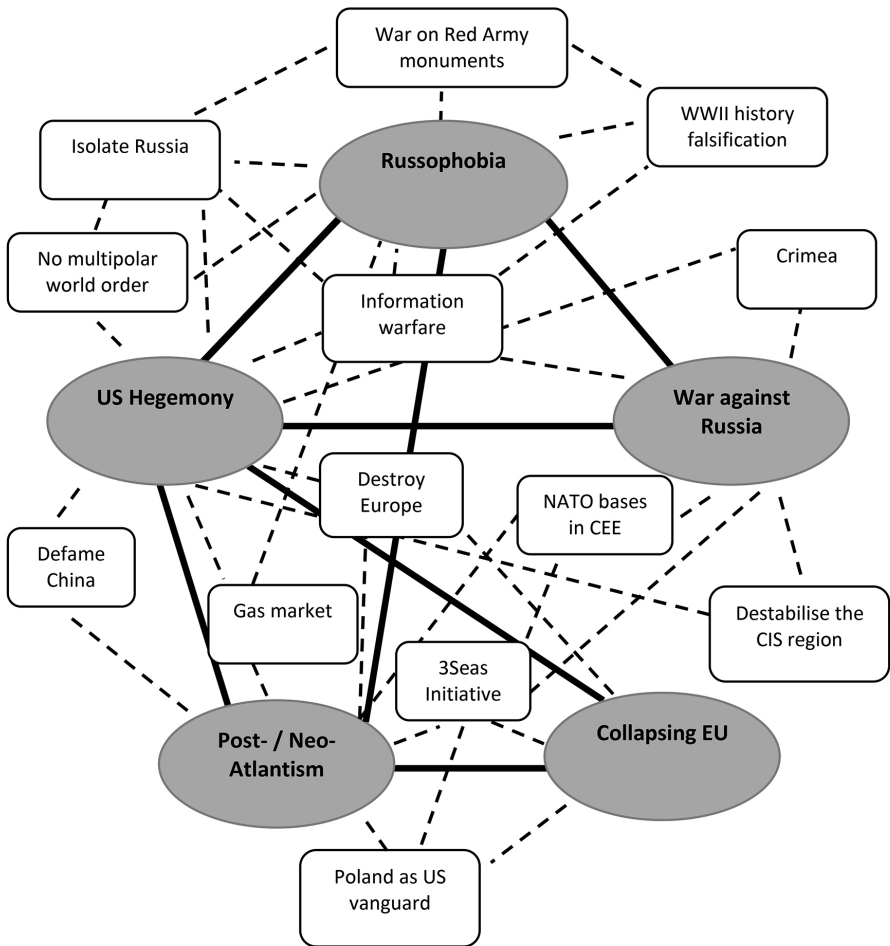
Source: Own elaboration

Conclusion

Selective exposure to news content facilitated by modern digital technologies has the potential to drive people toward more extreme attitudes and increase the polarisation in our societies (EPRS 2019a; Rosůlek 2018; Sunstein 2007). As automation and algorithms become more embedded in day-to-day life, we must make sure that we can maintain our capacity to establish a general consensus on questions pertinent to a healthy functioning of democracy (Sunstein

2007). Disinformation and purposeful deception work through the unwitting participation of individuals who readily accept and share content that seeks to influence based on instinctive emotions instead of rational arguments or scientific facts (Bastos – Mercea 2018). If we can identify tools of storytelling used to create powerful messages to incite certain group behaviour and aggravate existing societal grievances, perhaps we will be better equipped to protect ourselves from malevolent disinformation campaigns intentionally targeted to create discord (Jankowicz 2020; Rosůlek 2018). The Visegrád Group has managed to profile itself internationally as a significant collective actor (Cabada – Waisová 2018), and as such, should expect to become the target of disinformation campaigns aimed at manipulating public opinion. Within the scope of this study, we have employed a sophisticated research design on a large amount of textual data, using a natural language processing algorithm to examine the frequency and relationship between recurring topics in disinformation news pieces and identify overarching narratives and meta-narratives communicated through them. By analysing close to one thousand disinformation news pieces from more than 60 different online sources that originally appeared in the languages of the V4 countries, collected by the EUvsDisinfo database (2020a), we were able to identify consistent narratives and meta-narratives that feed into a coherent system of beliefs. We have uncovered 5 meta-narratives: (1) growing Russophobia in the West; (2) the preparation of a war against Russia by the US and NATO; (3) the United States seeking global hegemony; (4) the establishment of a system of Post-/Neo-Atlantism by dividing Europe; and (5) the envisioned collapse of the European Union. These meta-narratives were constructed through 16 standalone narratives and supported by around 25 individual discourses. While we cannot assume coordination or intentionality behind the narrative structure unfolding from the news pieces analysed, further research might be able to unveil the potential consequences of what could be understood as a possible endeavour to create discontent and suspicion among citizens of the V4 countries toward the current European political and economic system, particularly the European Union, and the stance of the United States and NATO in the continent. Information warfare is a powerful geopolitical tool that could negatively affect any Central European state or the European Union itself, and it remains a challenge to protect our societies from it. The evaluation of the effectiveness of such disinformation campaigns in transforming citizens' attitudes calls for further research, including how education plays a part in improving critical thinking and providing tools for people to recognise intentional disinformation patterns.

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