



UNIVERSITY OF AMSTERDAM

How fake is the news about Ukraine?

Comparing English, Ukrainian, Russian Narratives on Facebook in the
Pre-election Period

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1. Introduction

2019 will be a politically decisive year for Ukraine. In March, citizens will vote for a new president, and in October it will go to the polls to vote for a new parliament (Iwański, 2018). Petro Poroshenko, Ukraine's incumbent president, faces the leader of the 'Fatherland' ("Batkivshchyna") party: Yulia Tymoshenko. She is his most serious opponent in the race for the top seat. Other contenders for the presidency are Oleh Lyashko, leader of the Radical Party, and former defense minister Anatoliy Hrytsenko, each with a support rate of respectively 12.2 and 12.7% ("Ukraine Elections - March + October 2019," n.d.). The president that will take the seat in March will have to govern with the government coalition that is currently in place until it gets reelected in autumn.

The climate in which the presidential and parliamentary elections will take place is one of general mistrust in the current political system. The promises made after the Euromaidan protest in 2013-2014 were not fulfilled in the eyes of the electorate. For instance, the war in the Donbas-region has not ended, the oligarch's iron hold on the economy has not wavered, and corruption is still widespread across society. At the same time, living standards plummeted during the current government's tenure thanks to multiple devaluation rounds of Ukraine's national currency. Russian intervention in everyday life and the elections are additional signs of mismanagement that voters are blaming the current government for. Added to this climate of distrust is a plethora of disinformation being spread around by individuals and media from the whole world, with Russia being the most dominant source ("Disinformation Cases," n.d.).

As part of the Winter School data sprint, we looked into the extent to which disinformation has penetrated popular discourse. The reason why the examination of the topic seems certainly relevant is mainly because nowadays the culture we live in differs significantly from previous decades. Politicians collect their votes through promoting themselves on social media platforms, and contemporary societies will have to accept the shift to a post-truth regime. Through engagement with specific content on social media, such as Facebook, users contribute largely to the way how society thinks about Ukraine. Researching how posts from specific pages mention Ukrainian elections in English, Russian and Ukrainian language was our primary task in the week of Winter School 2019.

2. Research Questions

- To what extent has the 'post-truth regime' taken hold in the top posts on Facebook about the Ukrainian elections within the last 6 months?
- To what extent are the leading narratives anchored in the post-truth media infrastructure?
- How is engagement achieved for spreading the post-truth content (case studies)?

3. Methodology

Data Collection

This research focuses on analyzing the extent to which disinformation around Ukraine has entered popular discourses on Facebook in the past six months. We regarded Facebook as a more fitting representative of what people are talking about than social media like Twitter or Instagram, which have smaller and more niche reaches in the language spheres we conducted (“Top 20 Facebook Statistics - Updated January 2019,” 2019).

The data extraction of this Facebook research was conducted in two steps. The first step was to create lists of relevant Facebook pages that contain the discussion of Ukraine election by searching keywords “Ukraine election” for the English data; “Украинские выборы”, “Президентские выборы” for Russian data; and “вибори україна”, “українські вибори” for Ukrainian data. The aim was to collect 100 pages in each language context. Google search and Facebook Graph search were both used in this process. Using Google search, we filtered the search results with three criteria: restriction of the source (site: facebook.com); containing keywords mentioned; and the setting of date range from July 8, 2018 to January 8, 2019. By doing so, we were able to locate those Facebook posts that contain relevant information. Following that, we extracted the URLs of the search results with the Harvester tool and saved the URLs into a spreadsheet. The same criteria were used in the case of Facebook Graph search. However, it is worth noting that we used “Who Posted What”, a Facebook research tool with which, in the words of its developers: “you can search for posts on Facebook which have a keyword in it, on a specific date or between two dates”, to set the date range. By filtering posts this way, combined with the Google search, we intended to have a fair cross-section of what is being published regardless of manipulative algorithms based on the researcher’s personal Facebook settings. All the results were saved into the same spreadsheet in different sectors. Then we organized the data manually by adding the corresponding name of these Facebook pages and their Facebook ID (See Figure 1).

Name	Facebook ID	URL
Free Online Journal	1516883131862059	https://www.facebook.com/freewebjournal
Новости Приднестровья	114253715396132	https://www.facebook.com/novostiiprmcom/
Улыбайтесь, господа	2784469698969443	https://www.facebook.com/smilegentlemen/
Укроп.org	1568403006712493	https://www.facebook.com/ukrop.org/
NEWS 24	543054192468020	https://www.facebook.com/news24inua/
UAINFO	184581101577773	https://www.facebook.com/NewsUAIinfo.org/
Информационный портал Новост...	2088708901410926	https://www.facebook.com/novostiurf/
Честные Выборы	296193660712999	https://www.facebook.com/Честные-Выборы-296193660712999/
Propaganda Watchdog	2115229805391084	https://www.facebook.com/PropagandaWatchdog/
The News. Новости Украины	142959462893927	https://www.facebook.com/thenews.com.ua/
Institute of Democratization and De...	209023315950448	https://www.facebook.com/isdanddevelopment/
Хабаровская Мингазета	140608862717640	https://www.facebook.com/khabmingazeta/
UA Qwiket	1397151687002283	https://www.facebook.com/ua.qwiket/
NewsFacts.com	1634758833504883	https://www.facebook.com/newsfactscom/
В курсе всего	1613368058728952	https://www.facebook.com/gornizakry/
Телеграф	556525641126922	https://www.facebook.com/telegraf.com.ua/
Українська Імперія	156547314966124	https://www.facebook.com/TOPSECRET6666/
Национальный Банк Новостей	363063207535005	https://www.facebook.com/nbnewsomua/
Новости Политики	796563153782798	https://www.facebook.com/duma.gov.ru/
РИА Новости	325794294270	https://www.facebook.com/riannu/
RU DELFI	295334965756	https://www.facebook.com/ru.DELFI/
РБК	140965502635514	https://www.facebook.com/rbc.ru/
Україна - Єдина Країна	709191359134685	https://www.facebook.com/yedyinakraina.ua/
Вибори-2019	300204010822107	https://www.facebook.com/Vibir.Ua/
24top.kz	266518253521886	https://www.facebook.com/24topkz/
Перепись населения Украины	261045714536559	https://www.facebook.com/naseleniya.ua/

Figure 1. Screenshot of the lists of Facebook pages (partial image)

The second step was to extract all posts from these Facebook pages through Netvizz and Facepager. Netvizz is a “data collection and extraction application that allows researchers to export data in standard file formats from different sections of the Facebook social networking service” (Rieder, 2013). We used “page posts” module within Netvizz to analyze the activities around the posts on certain pages by entering the page ID manually. Detailed settings were demonstrated in Figure 2 below. The results, which contain types of posts (link/photo/video/status), posts content, total numbers of engagements (a total number adding up by numbers of comments, shares and “likes” etc.), were exported into csv files and saved in a spreadsheet.

page id: (find page ids [here](#) or through Netvizz' [search module](#))

date scope: ☐ last posts (max. 999)
☒ posts between and

data to get: ☐ post statistics only (post metrics, stats per day)
☐ post statistics and 200 top ranked comments per post
☒ full data (full comment files, can fail for larger pages)

get [post by page only](#) or [posts by page and users](#)

Figure 2. Screenshot of the Netvizz application “page posts” module.

However, due to a huge number of the selected Facebook pages, extracting posts from Netvizz per page becomes a limitation of effectiveness. We turned to another tool called Facepager, which “was made for fetching public available data from Facebook and other JSON-based APIs” (Jünger, 2012/2019). Similar to Netvizz, this tool allows us to add multiple Facebook IDs and extract information about the posts including page names, types of posts and other information at once (See Figure 3). Data was exported to csv file format and saved into a spreadsheet. The only difference between Netvizz and Facepager is that Facepager does not provide the total numbers of engagements of posts; therefore, we added up the numbers by ourselves using the “SUM” function within the spreadsheet.

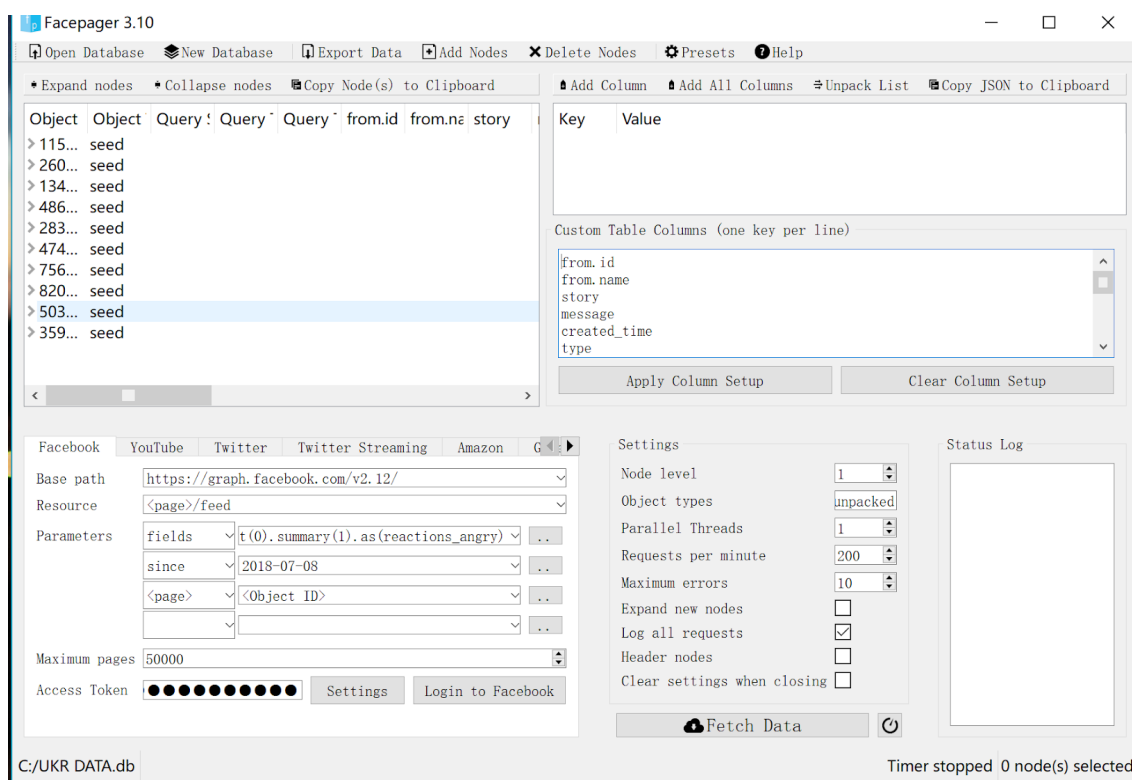


Figure 3. Screenshot of the Facepager tool with detailed settings

Data analysis

Once all data regarding the posts from selected Facebook pages in the past 6 months were collected and put together per language, we filtered the posts containing the keyword “Ukraine” (for English pages), “україна” (for Ukrainian pages), and “украина” (for Russian pages) out through coding in Python. The filtered data was finally saved into different spreadsheets based on languages and ranked by a total number of engagements, namely ‘engagement score’. The ‘engagement score’ refers to the sum of likes, dislikes, other possible emotions users can leave under a post. Per language dataset, the 50 posts which have the highest engagement scores were used for further analysis for the reason that they are representative posts in relation to the popular discourses around Ukraine.

Finally, close readings on the 50 posts with the highest engagement scores per language were conducted. By doing so, the general narratives around the discussion of Ukraine in different language context could be identified and compared. The close reading step required us to go through the links of the posts, examine the types of posts and what kinds of pages were posting and also record unique findings about the content (See Figure 4). Besides, a rough categorization of the posting pages was conducted. In the case with English pages, they were categorized into: official politician (O/P); official political actors (O/PA); official organizational actors (O/OA); official media (O/M) and non-official others (NO/OTH). In the case with Russian pages and Ukraine pages, the most engaged posts were dominated by several specific pages, so we focused the close readings more on the content within these posts.

	A	B	C	D	E	F	G	H
	from_name	message	type	engagement	Number of Followers	Special findings	Page Category	Comment about the post
1	Elbert Lee Guillory	My advisors have recommended that I not v photo	photo	180299	219287	US. politician	O/P	Mentioned he has been to
2	Radio Free Europe/Radio	Today four years ago, passenger flight MH1	video	5570	514723		O/M	about what happen to MH
3	The New York Times	For centuries, the Orthodox Church of Ukra	link	3989	16310965		O/M	about the Orthodox Chur
4	Ukrainian Congress Comm	Requiem Service and Commemoration of th	video	3064	8830		O/OA	Commemoration of the Holod
5	Radio Free Europe/Radio	Ukraine celebrated its 27th Independence	video	1803	514723		O/M	Ukraine parade; Military fi
6	CNN Politics	Special counsel Robert Mueller believes the	link	1239	2782027	US. media	O/M	American politician's actio
7	FBI – Federal Bureau of In	Russian national Elena Alekseevna Khusya	link	1086	2326189	US. Official	O/PA	Russian conspiracy to inte
8	Congressman Ted Budd	At this point, there remains zero evidence o	status	895	14960	Us. politician	O/P	Comments on Russia's in
9	Russia Cybergate	So now Russia wants to attack Ukraine for	link	779	9580	US. related	NO/OTH	Comments on news al
10	FRONTLINE	Ukraine's warnings before the 2016 U.S. pr	link	647	1955232	US. Public Broadcasting Service rela	O/M	About Russian misinform
11	Tom Joad	Trump is in Argentina, but his mind stayed i	photo	632	32453	US. related	NO/OTH	A not-existent figure, com
12	Ukrainian Congress Comm	Ambassador Nikki Haley of the Permanent	link	514	8830	US. related	O/OA	US's support of Ukraine
13	Ukrainian Congress Comm	Ukraine is not antagonizing Russia. Russia	video	513	8830	US. related	O/OA	Ukraine and Russia's rela
14	Reuters	The leader of Russian-backed separatists i	link	483	4081282		O/M	Sharing news about Ukari
15	Newsweek	Trump told 'The Washington Post' that he w	link	470	1341509	US. related	O/M	Sharing news about Trum
16	Ukrainian American Coord	Russia attacks Ukrainian ships in Azov sea	link	452	25945	US. related	O/OA	Sharing news about Russ
17	Ukrainian American Coord	Our sincerest condolences to the McCain fa	link	425	25945	US. related	O/OA	Sharing news about John
18	The Daily Beast	A secret ledger showed \$12.7 million in pay	link	375	2061623	FAKE NEWS SITE? alternative	N/M	About US-Russia relation
19	Borys Wrzesnewskyj	Fantastic weekend at the Toronto Ukrainian	photo	373	7118	Canadian Politician	O/P	About Toronto Ukrainian f
20	Russia Cybergate	Wow, just wow. Russia is planning a false	link	337	9580	US. related	NO/OTH	Sharing news about Russ
21	CounterPunch	The new Cold War is entirely an American	link	333	128685	US alternative media, conspiracies	O/M	The situation in Ukraine is
22	Ukrainian Congress Comm	DOD Statement on Open Skies Flight Over	video	331	8830	Ukrainian diaspora organization	O/OA	Discusses how US showe
23	Embassy of Ukraine in Can	Заява Прем'єр-міністра Канади Дж. Трюдо	photo	325	3896	Ukrainian embassy	O/PA	Cites Canadian PM who c
24	Russia Cybergate	So finally, the US media is starting to warn	link	321	9580	US page/community	NO/OTH	Criticizing Russia's milita
25	Mission of Ukraine to the E	Statement of the Ministry of Foreign Affairs	photo	315	29242	Ukrainian political organization	O/PA	Criticizing Russia's milita
26	Reuters	Ukraine's Orthodox Christian Church celebr	link	308	514731	US congress funded media	O/M	Independence of Orthodo
27	Radio Free Europe/Radio	Russia says it has finished building a barrier	link	305	514731	US congress funded media	O/M	Reports that Russia has t
28	Borys Wrzesnewskyj	A large solemn gathering of Ukrainian Cana	photo	298	7118	Canadian politician	O/PA	Talks positively about ope
29	The Moscow Times	"We won't go to war with Ukraine, I promise	link	295	715800	Russian English-language newspape	O/M	Russian foreign minister p
30	Borys Wrzesnewskyj	Overjoyed that my motion calling for the est	photo	285	7118	Canadian politician	O/PA	Discusses the establishm
31	Embassy of the Netherlands	Happy birthday, Ukraine!	status	283	4034	Dutch embassy	O/PA	Congratulates Ukraine on

Figure 4. Screenshot of the TOP 50 most engaged posts (English pages) and analysis process (partial image)

This final step allowed us to demonstrate and summarize not only the general narratives around the discussion of Ukraine in a different context, but also helped to further identify the ‘misleadingness’ of these posts by looking into the content. As for the English data, an extra approach was used for identifying the ‘misleadingness’ by comparing the sources of the posts (external links) with those appearing in “Disinformation cases” - a database that “represents a collection of all disinformation cases as they were reported by the East Stratcom Task Force’s network of contributors in the course of the Disinformation Review project” (“Disinformation Cases,” n.d.). By doing so, this research found a solid foundation to tell how fake the narratives around Ukraine could be.

4. Findings

Among the 50 most engaged English Facebook posts we analyzed, 18 are posted by official media, 26 are posted by official political/organisational actors, 6 by unofficial pages such as “Russia Cybergate”, a page that mainly focuses on the Russian intervention in the U.S. presidential elections, and a page named after a fictional character Tom Joad (from John Steinbeck’s novel ‘The Grapes of Wrath’) that is critical towards the U.S. president Donald Trump. These informal and alternative media pages stand out from the others by their more emotional and visual (photos and memes) content. The most engaged post in English data has an engagement score of 180,299 and is posted by “Elbert Lee Guillory”, a former politician who distributed conspiracy theory of Obama’s administration meddling with previous Ukrainian election. From Figure 5, we can see that the narrative generated from English pages is predominantly U.S./Russia/Ukraine relationship, while other narratives about MH17 or Russia’s aggression towards Ukraine have lower engagement scores, which means that they are not gaining as much attention as the conspiracy theory.

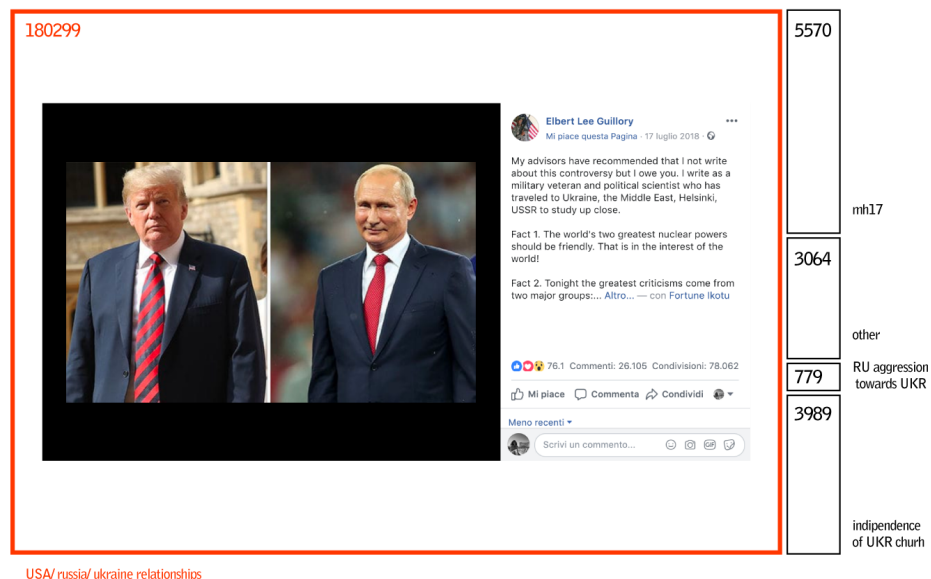


Figure 5. Visualisation of the TOP 50 posts from English pages

In the case of Top 50 posts from Ukrainian pages, generally speaking, election content on junk sites have a much higher engagement scores than on official Ukrainian media or sites. Diversified narratives can be generated from Ukrainian pages, while the dominating two is fake narratives and junk content (See Figure 6). For instance, one of the most popular pages is “Pseudo-patriotic”. It’s using junk content not related to elections like ‘how to tie a tie’ video, to spread political methods. Sophisticated fake news, some messages criticizing Ukrainian government are not from opposition parties, but from individual micro-politicians with little affiliation with political parties. However, these micro-politicians are highly active on Facebook, using tactics such as asking people to repost in order to win something in return. Election related promotional content and holiday greetings from politicians also gathered engagements on Facebook, with the engagement scores at 28,110 and 93,720 separately.

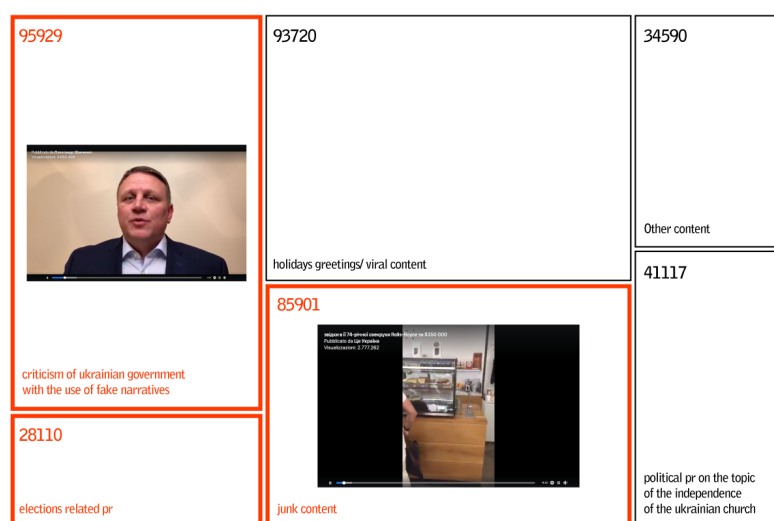


Figure 6. Visualisation of the TOP 50 posts from Ukrainian pages

As for the top 50 posts from Russian pages, we found that the most engaged content is created by pro-Russian Ukrainian politicians, who distribute conspiracy theories. For instance, “Ukraina.ru” is a page made to present Ukrainian content, but it is constantly spreading disinformation about topics such as the medical reform. We also discovered a relatively new page called “Hybrid Politics”, which was created on October 2018 and only has 7211 likes, appeared in the top 20 most engaged content. Generally, as can be seen from Figure 7, junk content has a high degree of visibility with engagement scores of 8,405 in total.



Figure 7. Visualisation of the TOP 50 posts from Russian pages

Meanwhile, by examining the types of posts, it is worth noting that 25 of the English posts have used external links, which enabled us to conduct further analysis on the degree of ‘misleadingness’. Through comparing the source with “Disinformation case”, 24 out of 25 links could be considered as reliable sources while only one source, Counterpunch (<https://www.counterpunch.org/>), is marked as “Fake news website”. The related post advocates conspiracy theories about America starting a new cold war aligned with Ukraine. On the contrary, Russian and Ukrainian posts are mostly not referenced.

5. Discussion

When discussing Ukraine-related content on Facebook, junk pages and junk posts produce the highest engagement scores and make the posts highly popular. For instance, conspiracy comments from a former U.S. politician, the misleading information on the medical reform of Ukraine government, and promotion of winning skiing vacations, mixing lifestyle content with political

messages, show the sophistication of the variety of tactics that pages use to spread. These tactics are the most significant finding in our research.

As for most dominant narratives for this case study, two were highlighted: general mistrust in the current political system and Russian intervention as dominant driver in the spreading of fake narratives. The most engaged post in Russian language query is the one containing disinformation (checked by Stop Fake) on the vaccinations and failed medical reform, making a great example of Russian intervention narrative. Second leading narrative (mistrust in the current political system) found itself as the example in English language query, as the most engaged post there is a conspiracy theory of Obama's administration meddling with Ukrainian elections previously.

Moreover, the popular types of posts on Facebook varied in three language content. In the English context, the dominating type of posts are posts with external links, normally redirects readers to news sources, while in the Russian and Ukrainian context, most posts are unreferenced information. Videos and photos are highly visible. Another unexpected finding was that although the English content used external links, mostly from reliable mainstream media sources, the posts were not as engaged as those in the Russian or Ukrainian content without referencing. That is to say, "the importance of marketing, algorithms, epistemic logic, and impetus to participate digitally, through user-generated content, liking and sharing" (Harsin, 2015) embedded within the post-truth media infrastructure should be noticed.

Our key finding is that the Ukrainian and Russian discussion is not embedded in post-truth infrastructure, as predominant content of studied Facebook pages is junk or random non-related to political content and did not include fake news, as we expected to detect. It should be noted that in Ukrainian and Russian language posts reflect the absence of transparency in media environment as a whole. It shall be underlined that in Russia and Ukraine the so-called 'opinion journalism' has taken the lead in the media infrastructure, and thanks to wide spread of technology anyone can take part in telling stories, which are not necessarily legitimate. If thousands of users are easily engaged with cat pictures, funny videos and mass content, throwing a dash of preformed political agenda might be convenient for the page administrators. Thereby, the post that got the highest engagement score in Ukrainian language query was a Christmas congrats by a micro politician, which demonstrates irrelevance concerning tactics in the post-truth regime.

Among the diverse topic issues around Ukraine on Facebook, in order to compete with other narratives and achieve higher engagement scores, those who produce posts used multiple strategies or tactics. Three patterns could be summarized from the highly engaged posts that we identified. First, junk content in the Top 50 most engaged posts in the Ukrainian language was produced by a page called "This is Ukraine", that appears as a patriotic page when judging by its cover picture. They mostly post viral content that is, by all means, irrelevant to Ukrainian patriotism and the country's political situation. However, among those posts, such as "how to tie a tie" video or images of animals, political messages and fake narratives were incorporated. In this research, we allocate the mixing of junk content and these political messages and fake narratives to 'content placement strategy'. Secondly, in the Ukrainian context, 'micro-politicians' dominate the most popular posts. Usually, they use promotional tactics such as "like and repost" to offer the users a chance to get some material feedback. In reality, these "micro-politicians" do not have a strong presence in the country's political agenda, but they could be considered greatly influential on

Facebook or other social media platforms. Through the giveaway, high engagement scores have been achieved. Thirdly, the “Hybrid Politics” page that showed up in the Russian results uses a typical advertisement scheme to promote its content. The link in that specific post leads the reader to online voting, asking them to log in through Facebook. The website was registered in the Netherlands. Interestingly, the first Facebook page to share the link with is “Party of Regions”, was assigned to the former president Yanukovich.

6. Conclusion

When looking at the range of themes surrounding Ukraine, aggression, Ukrainian church independence from Russia, and the relations between Ukraine and EU/U.S./Russia have been the most addressed topics. It must be said, however, that there are differences among the top issues between different languages. Although political themes are common when talking about the Ukraine, the most engaged content was junk or non-relevant posts from Ukrainian and Russian pages, while in the English case, posts with reliable sources were not highly engaged. It opens up the analysis for how the ‘post-truth regime’ taken hold in the posts on Facebook concerning Ukrainian elections. The case studies of showing the interfaces of the pages and visualizing the posts emphasize that unreliable content had achieved high engagement due to different tactics. One of them includes unexpected content placement, and another example would be offering giveaways to push self-advertisement. Generally speaking, the top posts on the ranked engagement list seemed not embedded in the post-truth media infrastructure.

Overall the report has shown that in each of our examined languages, the posts with the highest engagement score mostly spread unreliable content - a conspiracy theory in the English language, disinformation in the post written in Russian, and a fake narrative in the Ukrainian language. The most apparent finding when comparing the languages was that Ukrainian and Russian posts generally do not link to any sources whereas English Facebook pages predominantly use reliable news sources to reference their posts.

To sum up, the conducted research has focused on the past six months of Facebook posts around the 2019 Ukraine election, in a three-language context. Since the upcoming election is estimated to have further influence on local Ukrainian issues, international relations and other aspects of the current political and economic system, it would be interesting to maintain focus on the discussion of this topic on Facebook and identify the changes of narrative around the election in the following six months. It is possible that more patterns for spreading post-truth content on social media could emerge when the election campaigns flourish in the future.

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