



Barbara Cyrek  <https://orcid.org/0000-0002-3270-6548>

Institute of Culture, Jagiellonian University

Malwina Popiołek  <https://orcid.org/0000-0002-9566-2773>

Institute of Culture, Jagiellonian University

Maxim Gorbachevsky

Professor of Practice – Cybersecurity in School of Business and Justice Studies,
Utica University
e-mail: magorbac@utica.edu

RUSSIAN AGGRESSION OF UKRAINE FROM THE PERSPECTIVE OF CNN, PBS, AND FOX NEWS – ANALYSIS OF FACEBOOK POSTS

Abstract

The article presents different ways of reporting the Russian aggression against Ukraine in 2022 by three American TV stations: CNN, PBS, and Fox News. Our study covered and categorized Facebook posts published between February 24th and May 31st. The analysis revealed three main themes around which reports about the war have been focused: the United States, Ukraine, and Russia, each one was treated differently by each station. The article shows and discusses the differences between them. The article also presents the overall context of discussing the war in Ukraine, which, right after it started, consisted of three main perspectives: 1) reports from the battlefield; 2) words and actions of Biden, Zelensky, and Putin; and 3) sanctions on Russia.

Keywords: CNN, PBS, Fox News, Facebook, Content Analysis, War, Russian aggression of Ukraine, social media, news

Introduction

The crisis in Ukraine, resulting from Russia's claims and military actions, lasted for years before the Russian invasion in 2022. Media researchers so far have undertaken this problem, especially in the context of fake news dissemination (Khaldarova, Pantti, 2016; Mejias, Vokuev, 2017; Jankowicz, 2020; IBIIMS, 2022) and algorithmic news recommendation (Makhortykh, Bastian, 2020). Newest media studies point out the possible impact of TV formats on governments (Lichtenstein, Koert, 2022) and the use of social media storytelling for help-seeking among refugees (Talabi et al., 2022). Moreover, Bintan Humeira and Andika Ramadhan (2022) revealed the impact of the use of social media by television journalists on the broadcast production process. Our study covers the issue of social media use, not from the perspective of news receivers but senders.

Three out of ten U.S. adults often get news from social media (Shearer, Grieco, 2019). Facebook has nearly 2.5 billion monthly users, which makes it the world's largest social media platform (Robinson, 2021–2022). It plays the role of communication and informative channel (Popiołek, 2018). In some areas of the world, it is even viewed as the entire Internet (Kreft, 2019). Facebook posts may play a crucial role in news dissemination (Bene, 2017; Kalogeropoulos, Newman, 2017). Even though the vast majority of analyzed posts are linked to sites with detailed descriptions, one cannot assume that users will follow the links to see the complete information. Moreover, users may see posts with news on war not only when they search for them but among other daily news on their main pages. Thus, short Facebook posts may become the only news source.

Materials and Methods

To reveal the most common ways of reporting news about the war in Ukraine used by American media, we decided to base our research on three TV stations: CNN, PBS, and Fox News. The choice of these stations was purposeful. We based on The Media Bias Chart published by Ad Fontes Media (2022) and chose one representative for *skews left* (CNN), *middle* (PBS), and *skews right* (Fox News). We included only the “bias” axis of the chart.

Our study was focused on social media – we analyzed posts published by these three stations on their Facebook profiles. Since simple scrolling of Facebook pages is an ineffective way of data collection (some of the posts may be hidden), we decided to collect data by searching keywords on studied profiles: CNN, PBS, and Fox News. We used the following search terms: *Russia*, *Moscow*, *Kremlin*, *Putin*, *War*, *Ukraine*, and *Zelensky*. Our study included all search results which concerned war

in Ukraine and were published from February 24th to May 31st. Hence, the database consisted of 478 Facebook posts (CNN – 219, PBS – 53, and Fox News – 203).

The collected data underwent qualitative content analysis. We applied the inductive (bottom-up) and summative approaches. The inductive way of carrying out research is based on data-driven coding. We chose analytical codes, which express the meaning of the encoded material from the perspective of the authors' understanding. The summative approach assumes the enumeration and comparison of codes or categories (Hsieh, Shannon, 2005), which is crucial for comparative analysis.

The analysis was carried out in two stages. First, we did an initial review of the dataset to set the course of the study. Then, we coded the collected data.

The codes that emerged from the text may be divided into four main themes, which then split into inner categories, presented in Table 1.

Table 1. Codebook developed from text-based content analysis of Facebook posts about the war in Ukraine, published between January 24th and May 31st on fanpages: CNN, PBS, and Fox News

Themes	Categories
United States of America	1) U.S. help for Ukraine (including meetings and delegations); 2) U.S. relations with other countries; 3) the impact of war on the U.S.; 4) President Joe Biden's plans, statements and actions; 5) other.
Ukraine	1) reports from the field and course of fights; 2) situation in Ukraine (excluding above); 3) civilians in Ukraine; 4) refugees; 5) Ukraine's relations with other countries; 6) President Volodymyr Zelensky's history, plans, statements and actions; 7) genocide, war crimes and war crime trials in Ukraine; 8) start of the invasion; 9) other.
Russia	1) sanctions on Russia (including sanctions on the country and given citizens); 2) President Vladimir Putin's history, plans, statements and actions; 3) Russian economy; 4) companies withdrawing (or not) from Russia; 5) media in Russia (including fake news and pro-Putin propaganda ¹); 6) protests in Russia and Russian opposition; 7) Russian strategy; 8) Russian relations with other countries; 9) other.

¹ In terms of this article, *pro-Putin propaganda* is not the term that reveals propaganda in analyzed material, but the content of Facebook posts regarding propaganda and fake news about Russia's activities.

Other	1) global economy and logistics; 2) nuclear danger; 3) forecasts and possible actions; 4) situation in Europe; 5) other.
-------	--

Source: own study.

Results and Discussion

The results of the analysis are presented in Table 2. Some posts represented more than one category – the occurrence of categories in more than one post was marked in Table 2 in parentheses and described in detail for each TV station separately. Post usually represented one, but sometimes two categories, yet never three or more.

CNN

The search for keywords on CNN's profile on Facebook resulted in 219 posts. Only four posts were coded with more than one category. Those posts are regarded as follows: 1) nuclear danger & Russian strategy; 2) nuclear danger & course of fights; 3) U.S. help for Ukraine & refugees; and 4) explosion of Orsk warship & Russian media.

Dividing CNN's posts into four main thematic groups allows observing that the station reports on war usually by referring to what is happening in Ukraine and Russia. The third most often is the situation in the United States, but it occurs over three times less frequently than in Ukraine and Russia.

The war in Ukraine and its impact on America, presented in CNN's Facebook posts, is mainly drawn by the figures of three countries' leaders: Joe Biden, Volodymyr Zelensky, and Vladimir Putin. CNN most often describes their actions, history, and plans and quotes them. Posts about those leaders constitute almost 25% of all collected data. Posts about Biden and Zelensky were most frequent among those related to U.S. and Ukraine. Posts about Putin were second most frequent among those regarding Russia, and there were only more posts about sanctions. Both the macro- and the microscale of the war were described much less frequently. The big picture of war occurs in describing U.S., Russia, and Ukraine's relations with other countries, but it only appeared in seven posts. CNN also referred to global issues, especially market, and logistic issues, but only five times. As the only one of the analyzed stations, CNN wrote directly about the nuclear danger without intertwining it with other topics, for example, a post on March 4th stated:

Table 2. The results of content analysis of Facebook posts published between February 24th and May 31st by CNN, PBS, and Fox News regarding the war in Ukraine

Themes/categories	Number of posts				overall
	CNN	PBS	Fox News		
	215 single + 4 double	46 single + 7 double	185 single + 18 double	446 single + 29 double	
United States of America	27 (+1)	14 (+4)	45 (+8)	86 (+13)	
U.S. help for Ukraine	5 (+1)	2 (+1)	4 (+1)	11 (+3)	
U.S. relations with other countries	3	1	3 (+2)	7 (+2)	
the impact of war on U.S.	1	3 (+1)	7 (+2)	11 (+3)	
president Joe Biden's plans, statements and actions	10	5 (+2)	12 (+3)	27 (+5)	
other	8	3	19	30	
Ukraine	85 (+3)	17 (+5)	57 (+8)	159 (+16)	
reports from the field and course of fights	20 (+2)	4 (+2)	20 (+5)	44 (+9)	
the situation in Ukraine (excluding above)	18	5	12	35	
civilians in Ukraine	5	2	2	9	
refugees	1 (+1)	4	2	7 (+1)	
Ukraine's relations with other countries	1	0 (+3)	2	3 (+3)	
president Volodymyr Zelensky's history, plans, statements and actions	27	1	10 (+2)	38 (+2)	
genocide, war crimes and war crime trials in Ukraine	7	1	1 (+1)	9 (+1)	
start of the invasion	4	0	4	8	

other	2	0	4	6
Russia	80 (+2)	6 (+5)	66 (+11)	152 (+18)
sanctions on Russia (including sanctions on country and given citizens)	20	2	9 (+4)	31 (+4)
president Vladimir Putin's history, plans, statements and actions	15	3 (+1)	10	28 (+1)
Russian economy	4	0	2 (+3)	6 (+3)
companies withdrawing (or not) from Russia	12	0	1	13
media in Russia (including fake news and pro-Putin propaganda)	10 (+1)	0	10	20 (+1)
protests in Russia and Russian opposition	2	0 (+1)	9	11 (+1)
Russian strategy	2 (+1)	0	5	7 (+1)
Russian relations with other countries	3	0 (+3)	7 (+3)	10 (+6)
other	12	1	13 (+1)	26 (+1)
Other	23 (+2)	9	17 (+9)	49 (+11)
global economy and logistics	5	0	0	5
nuclear danger	3 (+2)	0	0 (+6)	3 (+8)
forecasts and possible actions	5	3	4 (+2)	12 (+2)
the situation in Europe	4	0	6 (+1)	10 (+1)
other	6	6	7	29

Source: own study.

Management at the nuclear power plant seized by Russia is working “at gunpoint,” the company says, as energy watchdog warns of “fragile” situation.

Besides global concerns, the station has dedicated four posts to the overall situation in Europe.

What we call the microscale of war is simply a tragedy of a single person, family, or community. Posts regarding civilians in Ukraine and refugees rarely occurred (only seven times such topics were mentioned). CNN is also concerned about the overall situation in Ukraine, describing Russian ‘filtration camps’ and referring to satellite photos of the invaded country. The Backup Ukraine project and the ‘Come Back from Ukraine Alive’ hotline were mentioned.

What distinguishes CNN from other analyzed stations is that on their Facebook profile, the case of war’s impact on the U.S. seldom occurred – it was the least frequent topic, together with Ukraine’s relations with other countries.

In conclusion, CNN pays more attention to leaders than whole countries or single-person tragedies. The station focuses on the situation in Ukraine and Russia more than U.S. or Europe and has no hesitation in writing directly about the nuclear threat. As the only analyzed station, CNN regards the global market and logistics.

PBS

The search on PBS’s profile on Facebook yielded with least results – we found only 53 posts regarding the war in Ukraine. Seven of them were coded with more than one category. Those posts regarded as follows: 1) Joe Biden’s speech & reports from the field; 2) reports from the field & gas prices; 3) Joe Biden’s words & U.S. help for Ukraine; 4) Vladimir Putin & Russian opposition; 5–7) Russia’s relations with other countries & Ukraine’s relations with other countries.

PBS’ reports on war mostly regarded Ukraine and the United States, but due to the small amount of source material, the differences are not as significant as for CNN or Fox News. Nevertheless, the references to Joe Biden were most frequent among all categories on PBS’ Facebook wall. On the other hand, only one post mentioned Volodymyr Zelensky – precisely his experience as a comedian:

Discover the rise of Ukrainian President Volodymyr Zelenskyy, from comedian to war-time leader. Stream “Zelenskyy: The Man Who Took On Putin” now on the PBS Video app.

Describing the situation in the U.S., PBS mostly referred to Biden or the war’s impact on America: gas prices, oil prices, inflations, and overall main woes of the U.S.:

A week into Russia’s invasion of Ukraine, global oil prices reached a peak — \$113 a barrel as of Wednesday. That’s the highest price since 2014. (From PBS NewsHour)

How high could gas prices go as sanctions ratchet up on Russia?

Only a little more than a week ago, President Biden's first State of the Union address was focused largely inward, looking at the economic and public health woes besetting the U.S. But Russia's invasion of Ukraine and the war that has ensued changed all that. (From PBS NewsHour)

Referring to Ukraine, the station usually reported the course of fights or the situation on the ground:

They lack the very basics. But some of their fellow Ukrainians are risking everything to help them, homegrown heroes delivering food, formula, and sometimes a ride out of the war zone. (From PBS NewsHour)

Russian troops closed in on Ukraine's capital Saturday after a night of explosions and street fighting sent Kyiv residents seeking shelter or fleeing the city. The country's leader claimed Ukraine's forces had repulsed the assault. (From PBS NewsHour)

The references to Holocaust and the term *refugee crisis* occurred. On the other hand, the situation in Russia mainly was described with reference to Vladimir Putin – PBS paid much more attention to the presidents of the U.S. and Russia than to the Ukrainian leader.

The situation in Europe and global concerns – including nuclear danger – did not occur in PBS' posts. Station posted some forecasts and possible solutions. Among the 'other' categories were the posts about nomenclature: *pro-Russia* vs. *pro-Putin*, the problem of discussing war with children and explaining to them the current situation, and the problem of fake videos and proofs.

In conclusion, PBS paid more attention to the U.S. than Russia but focused more on Vladimir Putin and Joe Biden than on Volodymyr Zelensky. There were no posts on the Russian economy, media, or opposition. The station also omitted the European and global concerns, focusing on war's impact on the U.S., forecasts, and possible solutions. While referring to Ukraine, PBS mainly reported on the course of fights and the overall situation in the invaded country. The history of relations between Russia and Ukraine was recalled three times.

Fox News

Our search for posts regarding the war in Ukraine on Fox News' profile on Facebook resulted in 203 posts, and 18 of them represented two categories. The analysis of the co-occurrence of topics shows repeating patterns. The nuclear danger never occurred as a single topic but was recalled twice with forecasts, three times with reference to Ukraine, and once with respect to Russia. The Russian economy was described along with sanctions and the country's relations with China. Biden's words and actions are sometimes described as the causes or consequences of events in Russia, Ukraine, and the U.S.

Dividing Fox News' posts into four main thematic groups results in the conclusion that the station mainly refers to Russia. Ukraine is the second, and the U.S. is the third most frequent subject of Fox News' Facebook communication.

In Fox News' reference to Russia, the most frequent set of posts is without any pattern – we coded such content as 'other.' This data consists of the overall situation in Russia, of statements: what Russians say about Russian and U.S. authorities, of conscription in Russia, and – as the station calls it – of *Putin's inner circle*.

While Fox News pays much attention to sanctions on Russia, only one post regarded the suspending businesses in Russia – by Visa and Mastercard. Station has allocated space for describing pro-Putin propaganda and the situation of Russian media. The Russian opposition and protest in Russia were discussed by Fox News more often than by CNN and PBS altogether – and the same with describing Russia's relations with other countries.

Unlike CNN, Fox News doesn't refer to Biden, Zelensky, and Putin most often. A comparison of the number of posts regarding those presidents' history, actions, statements, and plans shows that on Fox News' Facebook wall, Joe Biden gets more space, and Vladimir Putin – least.

While reference to Joe Biden is the most popular revealed topic of Fox News' Facebook posts on America during the war, most posts have no category assigned. Among them are statements of American politics and about American politics, information about press briefings and conferences, and stories about single-person tragedies: artists and members of U.S. families fleeing Ukraine or Russia.

In turn, Fox News does not frequently discuss civilians and refugees of non-American citizenship on their Facebook wall. While referring to Ukraine, the station focuses on the course of the fight, reports from the field, and the overall situation in the invaded country.

In conclusion, Fox News' Facebook wall is focused on Russia, but not on Vladimir Putin himself – most of the posts quote some Russian officials or statements on Russian officials, posts discuss sanctions, Russian opposition, and protests, as well as the problem of fake news and pro-Putin propaganda. While referring to presidents, Fox News usually recalls Joe Biden and Volodymyr Zelensky after him. Personal tragedies are described when they regard American citizens or their families. Ukraine is depicted by reports from the field or overall country situation, not by personal dramas.

Overall results

The overall results of our study are presented as a research summary rather than an unambiguous diagnosis of American TV stations' activity on Facebook. We realize that the summative results do not reflect the entire image of the Russian-Ukraine war on Facebook. We decided to discuss the overall results as they may be helpful for future studies.

The content analysis of CNN's, PBS's' and Fox News' Facebook profiles showed the occurrence of the three most popular topics: Ukraine, Russia, and the United States.

Reports on war regarding Ukraine usually describe the course of fights or reports from the field. The second most common topic is president Volodymyr Zelensky – his history, actions, plans, and statements. The third most popular topic is the overall situation in Ukraine – destruction, challenges, and needs. What occurs the least frequently is Ukraine's relations with other countries.

Posts regarding Russia usually describe the sanctions on the country or given citizens. The second most popular way of describing war is through the persona: of Vladimir Putin. While the third most common set of posts was without a pattern, the next most frequent after that is the topic of Russian media, fake news, and propaganda.

Posts regarding the U.S. usually refer to Joe Biden's words and actions. In overall results, Biden is the second most recalled president, after Volodymyr Zelensky, whose popularity in the collected material is thanks to CNN. Posts about the U.S. often occur without a pattern, but the third most popular set of data regarding America is discussing U.S. help for Ukraine and the impact of war on the U.S.

Other topics are also usually unrelated, but forecasts and possible solutions are discussed quite often. While PBS omits the situation in Europe and nuclear danger, only CNN takes up the issue of global markets and logistics.

In conclusion, the Russian invasion of Ukraine from the perspective of CNN's, PBS's' and Fox News' Facebook posts is mainly described by reports from the field in Ukraine and the overall situation in the country, and by actions and words of U.S., Ukraine, and Russia presidents. Sanctions on Russia and Russian citizens are often discussed in Facebook posts, but only CNN focuses on companies withdrawing from Russia.

CNN, PBS, and Fox News put the center of gravity in their Facebook posts in different places. CNN focuses primarily on Ukraine than on Russia. PBS gives most of the space to Ukraine than to the United States. Fox News discusses mostly Russia more than Ukraine.

News value classical theories mentioned above are only partially reflected in Fox News, and PBS reports on Facebook. In the case of Fox News, we can find some matches, such as the relatively frequent use of the frame of human tragedy. However, the news set is not typical, as is the case with CNN. McGregor's (2002) reflection, which draws attention to the fact that contemporary journalism has changed a lot, may be helpful in understanding this difference. Contemporary media report large numbers of events, much more than a few decades ago. Since the paradigm of managing the audience's attention shifted, McGregor (2002) distinguished four additional factors that, in her opinion, are becoming more and more important in the context of newsworthiness: visualness, emotion, conflict, and the "celebration" of the journalist.

In the context of PBS, an additional aspect is a special emphasis on internal politics, even when reporting news about world events. It seems that in this case, we

can look for a simple explanation in the agenda-setting theory (McCombs, Shaw, 1972) or the news value theory of Harrison (J.L. Harrison, 1995) (J. Harrison, 2008). McCombs and Shaw, in their well-known research on agenda-setting, noted that a lack of consensus on a media agenda could be due to the internal policy and bias of any news medium. Editorial policies and the culture of a particular news organization result in different agendas. This perspective corresponds with Harrison's theory, which, when considering newsworthiness, focused also on the conditions related to a different organizational culture. Moreover, the gatekeeping process circumstances will obviously differ between public and commercial broadcasters.

The generally small number of references to the war in Ukraine may be due to the specificity of PBS, which is primarily related to the public nature of the broadcaster and has a relatively small share of the overall audience. The stations affiliated with PBS broadcast a diverse program – both in terms of genre and the planned audience – whose primary goal should be to educate or fill in the gaps of the existing media system, e.g., by providing viewers with programs that commercial broadcasters are unwilling or unable to deliver. Genres where PBS outperforms its commercial competition include programs for children, nature and culture programs, lifestyle magazines, and educational programs (Kuś, 2013). Therefore, the large involvement of commercial stations in the Russian invasion of Ukraine topics covered the demand for news in this area. Due to the specificity and mission² of the PBS, newsworthiness factors will be different there. Since PBS aims to supplement the media offer with content underrepresented in the other media may have a higher priority.

However, this could explain the relatively small amount of news about the war overall, but it does not fully explain the general principles of news selection. It seems, therefore, that an unambiguous determination of the reasons would require research with individual editors, which could give a more accurate answer.

An attempt to interpret the selection of news through the prism of classical news theories allows us to put forward certain hypotheses but does not give unambiguous answers. In addition, it would be worth analyzing the material, also taking into account the theory related to reporting news on wars. Above all, it would be worth looking at it, especially from the perspective of theories regarding the value of news presented in social media, comparing the social media space with the

² The mission and editorial standards of PBS assume that: “PBS is a non-profit membership organization that, in collaboration with its member stations across the country, serves the public interest through content that informs, educates, inspires, and entertains. (...) PBS treats the public as citizens rather than consumers. (...) PBS content includes programming that gives children the tools to succeed; documentaries that responsibly explore challenging subjects; news that keeps citizens informed on world events; and programs that expose the audience to a wide range of music, theater, dance, and art. PBS strives to offer content that expresses diverse perspectives and furthers the goals of a democratic society. PBS does this by giving the public access to content on a range of issues so that they can participate in civic dialogue and make informed judgments about the significant issues of the day. In doing so, PBS aims to reflect the pluralism of society and address the needs of unserved and underserved audiences.” (PBS mission: retrieved from: <https://www.pbs.org/about/producing-pbs/editorial-standards.pdf>; accessed: 5.01.2023).

traditional media space. All this would undoubtedly be interesting, unfortunately, there is not enough space here for such an analysis. We have only indicated the possible ways of interpretation.

Additional observations

Since our study concerned American TV stations' profiles, the topic of war's influence on the U.S. is a recurring issue in the analyzed material. The problem of energy distribution is noticed not only by the media but also by researchers (Adekoya et al., 2022). Same with the global market (Boungou, Yatié, 2022) and global healthcare (Uwishema et al., 2022). In the global world, corporate decisions are not without ethical consequences, and the situation in Russia and Ukraine proves it (Tosun, Eshraghi, 2022). The consequences for America may be used as a tool to ridicule or criticize the president, politics, or a given party. But they also materialize the conflict, and help to understand, that some events are happening – they are not just stories from another side of the world. Such ambiguity in the news reporting on the situation in the U.S. requires proper media education for readers not to get confused or manipulated.

During the time of the data collection, the U.S. struggled with a school shooting in Uvalde. This led to a discussion on the allocation of funds – helping Ukraine or investing in children's safety. In our data set, only one post discussed such a dilemma, but we bring it to the surface to notice that American citizens' issues and issues, which Polish citizens struggle with, are different. What may be perceived as the greatest threat in Poland may not be so urgent in the U.S.

Last but not least, some of the posts regarding the U.S. but coded as "other" recalled U.S. celebrities' comments on the war. We perceive such a phenomenon as ambiguous. It has potential for edutainment – and Facebook is proven to be a successful environment for edutainment (Raihan, Hasan, Shamim, 2013). Celebrities' opinion leadership may be crucial for their fans' understanding of the war. Polymorphic opinion leaders are considered as specialists across multiple-topic areas, not only their specialty (Bamakan, Nurgaliev, Qu, 2019; van der Merwe, van Heerden, 2009). However, using war for personal benefits and publicity raises ethical doubts. Perhaps such a phenomenon requires further investigation, for example, on Ukrainians' perception of it.

Limitations and further research suggestions

As the selection of the stations and keywords is purposeful and the distribution of samples is unequal, and because the research carried out was of a qualitative nature, this study is not representative. We only accessed the analyzed material through keyword searching. One cannot assume that potential users, even if they follow a given station's profile, saw all the posts we analyzed. And even if they did, this still

does not guarantee that they would perceive this content as we did. The studies have shown that depending on views, people evaluate the same news content in a different way (Perloff, 2015), which also applies to Facebook (Kim, 2021). Therefore, our study does not include the posts' content evaluation. How actual users perceive those posts is an issue that requires further investigation. Since chosen stations have an international range, a study on their Facebook posts' perception may provide interesting results in comparing Americans' and non-Americans' views.

Further studies on TV stations' Facebook profiles may also regard methods. Repeating the analysis with different keywords may give a fascinating view of the algorithmic management of the content available to users.

Bibliography

- Ad Fontes Media (2022). *Media Bias Chart 9.0 – Static Version*. <https://adfontesmedia.com/static-mbc/> (accessed: 9.06.2022).
- Adekoya O.B., Oliyide J.A., Yaya O.S., Al-Faryan M.A.S. (2022). "Does Oil Connect Differently with Prominent Assets During War? Analysis of Intra-day Data During the Russia-Ukraine Saga". *Resources Policy*, 77, article no. 102728. <https://doi.org/10.1016/j.resourpol.2022.102728>.
- Bamakan S.M.H., Nurgaliev I., Qu Q. (2019). "Opinion Leader Detection: A Methodological Review". *Expert Systems with Applications*, 115, pp. 200–222.
- Bene M. (2017). "Influenced by Peers: Facebook as an Information Source for Young People". *Social Media + Society*. <https://doi.org/10.1177/2056305117716273>.
- Boungou W., Yatié A. (2022). "The Impact of the Ukraine-Russia War on World Stock Market Returns". *Economics Letters*, 215, article no. 110516. <https://doi.org/10.1016/j.econlet.2022.110516>.
- Harrison J. (2008). "Exploring News Values: The Ideal and the Real". In: J. Chapman, M. Kinsey (eds.). *Broadcast Journalism: A Critical Introduction* (pp. 69–78). London: Routledge.
- Harrison J.L. (1995). *British Television News in the 1990s: Newsworthiness in a Multi-organisational and Multi-programme Environment*. PhD thesis, University of Sheffield.
- Humeira B., Ramadhan A. (2022). "The Uses of Social Media in Journalism Practices: The Reversed-Agenda Setting on Television News Production". *JSJ: Jurnal Studi Jurnalistik*, 4(2), pp. 19–34.
- Hsieh H.-F., Shannon S.E. (2005). "Three Approaches to Qualitative Content Analysis". *Qualitative Health Research*, 15(9), pp. 1277–1288.
- IBIIMS (2022). *Komunikat ws. dezinformacji ws. sytuacji na Ukrainie w internecie*. <https://ibims.pl/komunikat-ws-szerzenia-dezinformacji-ws-sytuacji-na-ukrainie-w-polskiej-przestrzeni-internetowej/> (accessed: 17.06.2022).
- Jankowicz N. (2020). *How to Lose the Information War: Russia, Fake News, and the Future of Conflict*. London: Bloomsbury Publishing.
- Kalogeropoulos A., Newman N. (2017). *I Saw the News on Facebook: Brand Attribution When Accessing News from Distributed Environments*. Online: Reuters Institute for the Study of Journalism. <https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2017-07/Brand%20attributions%20report.pdf> (accessed: 17.06.2022).
- Khaldarova I., Pantti M. (2016). "Fake News. The Narrative Battle over the Ukrainian Conflict". *Journalism Practice*, 10(7), pp. 891–901. <https://doi.org/10.1080/17512786.2016.1163237>.

- Kim M. (2021). "Facebook News Sharing, Hostile Perceptions of News Content, and Political Participation". *Social Media + Society*. <https://doi.org/10.1177/205630512111044239>.
- Kreft J. (2019). *Władza algorytmów. U źródeł potęgi Google i Facebooka*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Kuś R. (2013). *PBS: Amerykańska telewizja publiczna*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Lichtenstein D., Koerth K. (2022). "Different Shows, Different Stories: How German TV Formats Challenged the Government's Framing of the Ukraine Crisis". *Media, War & Conflict*, 15(2), pp. 125–145. <https://doi.org/10.1177/1750635220909977>.
- Makhortykh M., Bastian M. (2020). "Personalizing the War: Perspectives for the Adoption of News Recommendation Algorithms in the Media Coverage of the Conflict in Eastern Ukraine". *Media, War & Conflict*, 15(1), pp. 25–45. <https://doi.org/10.1177/1750635220906254>.
- McCombs M.E., Shaw D.L. (1972). "The Agenda-Setting Function of Mass Media". *Public Opinion Quarterly*, 36(2), pp. 176–187.
- McGregor J. (2002). "Restating News Values: Contemporary Criteria for Selecting the News". Refereed articles from the Proceedings of the ANZCA 2002 Conference, Coolangatta. *Communication: Reconstructed for the 21st Century*.
- Mejias U.A., Vokuev, N.E. (2017). "Disinformation and the Media: The Case of Russia and Ukraine". *Media, Culture & Society*, 39(7), pp. 1027–1042. <https://doi.org/10.1177/0163443716686672>.
- Perloff R.M. (2015). "A Three-Decade Retrospective on the Hostile Media Effect". *Mass Communication and Society*, 18(6), pp. 701–729. <https://doi.org/10.1080/15205436.2015.1051234>.
- Popiołek M. (2018). *Czy można żyć bez Facebooka? Rola serwisów społecznościowych w sieciowym społeczeństwie informacyjnym*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Raihan A., Hasan M., Shamim R.H. (2013). "Facebook, The New Edutainment Avenue in TVET for Affective Learning". *IOSR Journal of Engineering (IOSRJEN)*, 3(12), pp. 16–28.
- Robinson R. (2021, updated 2022). *The 7 Top Social Media Sites You Need to Care About in 2022*. <https://www.adobe.com/express/learn/blog/top-social-media-sites> (accessed: 9.06.2022).
- Shearer E., Grieco E. (2019). *Americans Are Wary of the Role Social Media Sites Play in Delivering the News*. Online: Pew Research Center. https://www.journalism.org/wp-content/uploads/sites/8/2019/09/PJ_2019.09.25_Social-Media-and-News_FINAL.pdf (accessed: 18.06.2022).
- Talabi F.O., Aiyesimoju A.B., Lamidi I.K., Bello S.A., Okunade J.K., Ugwuoke C.J., Gever V.C. (2022). "The Use of Social Media Storytelling for Help-seeking and Help-receiving among Nigerian Refugees of the Ukraine-Russia War". *Telematics and Informatics*, 71, article no. 101836. <https://doi.org/10.1016/j.tele.2022.101836>.
- Tosun O.K., Eshraghi A. (2022). "Corporate Decisions in Times of War: Evidence from the Russia-Ukraine Conflict". *Finance Research Letters*, 48, article no. 102920. <https://doi.org/10.1016/j.frl.2022.102920>.
- Uwishema O., Sujanamulk B., Abbass M., Fawaz R., Javed A., Aboudib K., Mahmoud A., Oluyemisi A., Onyeaka H. (2022). "Russia-Ukraine Conflict and COVID-19: A Double Burden for Ukraine's Healthcare System and a Concern for Global Citizens". *Postgraduate Medical Journal*, 98(1162), pp. 569–571. <http://dx.doi.org/10.1136/postgradmedj-2022-141895>.
- van der Merwe R., van Heerden G. (2009). "Finding and Utilizing Opinion Leaders: Social Networks and the Power of Relationships". *South African Journal of Business Management*, 40(3), pp. 65–76.