International Journal of Communication 16(2022), 4050–4072 1932–8036/20220005

Mapping the Global Audiences of Russia's Domestic News: How Social Networks Function as Transmitters of Authoritarian News to Foreign Audiences

JULIA KLING[1]
University of Passau, Germany

In this study, I investigated the foreign Facebook audiences of Russia's most influential domestic news outlets (n = 50) with regard to the presence of criticism toward the political elite (nonleadership-critical, leadership-critical). Accordingly, I triangulated two Facebook application programming interfaces that have rarely been used in communication research. Findings demonstrate that, as of January 24, 2022–February 23, 2022, 40% of the outlets attract more than half of their Facebook audience abroad. The largest audiences are found (1) in the post-Soviet region, hence, in countries with high geographical and language proximity, and (2) for nonleadership-critical news outlets. This study is politically relevant, as it shows how Facebook primarily functions as a transmission channel of Russian state-aligned news to foreign audiences.

Keywords: international news flows, Facebook, Russia, social networking sites

Domestic news websites from the United Kingdom, such as *MailOnline*, *The Guardian*, and *The Independent*, attract more than 70% of their monthly audiences (based on the number of unique devices visiting a website) outside the country (Thurman, Hensmann, & Fletcher, 2021). With the digitalization of journalism, the above-mentioned news outlets have been working on growing an overseas audience in the recent years by expanding to Australia and the United States (Mayhew, 2020; *The Guardian*, 2021; Turvill, 2014). This special orientation should not be neglected. However, Thurman et al. (2021) explained that the successful growth of large foreign audiences is mostly because of proximity factors, such as common language and culture. These studied audiences were viewed as opportunities for increasing the news outlets' economic profitability (Thurman et al., 2021). Nevertheless, they can also be viewed as indicators of the degree of global informational influence of their origin country because of factors of proximity.

Social networking sites (SNSs) play an important role in disseminating stories (Wojcieszak, Menchen-Trevino, Goncalves, & Weeks, 2021) and act as secondary gatekeepers by recommending content to their users (Singer, 2014). According to a survey that covered 46 countries, Facebook was found to be

Julia Kling: julia.kling@uni-passau.de
Date submitted: 2021-11-24

[1] This article has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (Grant Agreement No. 819025).

the most used SNS for news consumption worldwide (Newman et al., 2021), with approximately 2.7 billion active users every month (Facebook, 2020b). Its global distribution of content was found to be biased about its advertisement targeting and news feed (see Cotter, Medeiros, Pak, & Thorson, 2021; DeVito, 2017) though research on international news flows and their hierarchies across the platform is scarce.

Prior news flow research assessed a country's degree of informational influence in traditional and digital contexts primarily by measuring how frequently a country was mentioned in the domestic news coverage of other countries (see, e.g., Blondheim & Segev, 2017; de Beer, 2010; Grasland, 2020; Segev, 2016). However, no study has assessed a country's informational influence in the context of news flows on SNSs, particularly Facebook, by measuring the extent to which its domestic news content in its domestic language is distributed to audiences outside of the country.

Single-country studies have shown that news content from Russia, a nondemocratic country, is consumed not only by large numbers of Russian speakers outside the country, particularly in the post-Soviet region (Rotaru, 2018; Vihalemm, Juzefovičs, & Leppik, 2019), but also in "Western" countries, such as Germany (Decker, 2020; Golova, 2020). Regarding audience research, Webster and Ksiazek (2012) distinguished between "media-centric" (pp. 42–45) and "user-centric" (p. 45) approaches. Scholars have researched the consumption of news produced by Russian state-aligned news outlets by Russian-speaking audiences in different national contexts following a user-centric approach with a focus on interviews (see, e.g., Juzefovičs & Vihalemm, 2020; Vihalemm et al., 2019, for Estonia and Latvia). Yet, previous research did not use a media-centric approach to focus on the global reach of different Russian news outlets.

To fill this gap, in this study, I measured the Russian-speaking audiences of Russia's most influential domestic news outlets (n = 50) outside the country. Based on Toepfl's (2020) theoretical framework of authoritarian publics, I categorized these news outlets by the degree of criticism toward their origin country's political elite (nonleadership-critical and leadership-critical). Thus, I leveraged an innovative methodological approach, namely, the triangulation of two Facebook application programming interfaces (APIs): Facebook Marketing API and Facebook Open Research and Transparency (FORT) API.

In sum, this study aims to address three gaps in the literature. First, it investigates international news flows on Facebook, one of the most used SNSs, by examining the distribution of a nondemocratic country's domestic news content in its domestic language as an indicator of its global informational influence. Second, it systematically assesses the audience reach of two categories of domestic news outlets from Russia (nonleadership-critical and leadership-critical) in various national contexts. Third, it introduces an innovative methodology by triangulating two Facebook APIs rarely used in communication research.

This study presents four important findings. First, it finds that foreign audiences constitute more than 50% of the total audience for 40% of the selected Russian news outlets. Thus, Facebook is primarily used by these outlets for foreign audiences. Second, contributing to news flow research on SNSs, it shows that domestic news content from Russia spreads across Facebook primarily to audiences in the post-Soviet region, that is, to countries with high geographical and language proximity. Third, the study demonstrates that Facebook is an important transmission channel for nonleadership-critical Russian news outlets, which

have shown the largest audiences across all post-Soviet countries. Fourth, the data from the two Facebook APIs strongly correlate in the context of this study. Therefore, further application of the introduced methodological approach to communication research is encouraged.

Because of Russia's invasion of Ukraine, Facebook prohibited Russian media from advertising and monetizing on its platform (Reuters, 2022a). Moreover, the Facebook pages of Russia's foreign broadcasters, RT (Russia Today) and Sputnik, have been banned in the European Union (EU) (Culliford, 2022), and the Russian government has banned (Milmo, 2022) and declared Facebook an extremist organization (Reuters, 2022d). The Facebook Marketing data were collected immediately before the event and are not accessible anymore. The limitations of this study include the impossibility of data replication.

Nevertheless, the study findings are politically relevant. They document the mechanisms behind Facebook's transmission of primarily Russian state-aligned news content to people outside of Russia, particularly those living in the post-Soviet region, before Russia's invasion. These mechanisms of spreading Russia's news content appear to have been effective, as Meta prohibited Russia's news media to advertise and monetize across its platforms two days after the invasion (Reuters, 2022a). Yet, the Facebook pages of Russia's nonleadership-critical domestic news outlets are still functional channels that serve audiences with authoritarian news at the time of writing this article (June 2022).

The remainder of this article is structured as follows. First, I present existing research on international news flows and Russia's foreign informational influence. Second, I outline the research question and the hypotheses of the study. Third, I introduce the two Facebook APIs triangulated in this study, discuss the validity of their data, and describe the methodological approach used in this study. Finally, I present the research results and highlight this study's contribution to the existing literature.

International News Flows on SNSs

News flow research gained popularity, especially through the report of the International Commission for the Study of Communication Problems (1980) at the UNESCO. The commission highlighted an imbalance in international news flows and, hence, an unequal representation of the world. The study of news flows was linked to world-systems theory (Wallerstein, 1974). This theory divides countries into three groups: core, semiperiphery, and periphery. Core countries, with the highest political, social, and economic power, are recognized as the most "newsworthy." Thus, they are more salient in other countries' news coverage than countries of less power.

The salience of a country in another country's news coverage is determined by national traits, relatedness, and significant events, such as global terrorism and natural disasters (Segev, 2016). Grasland's (2020) recent study has confirmed the major role of national traits, particularly size (area and population) and gross domestic product (GDP) per capita, in how often a country is mentioned in other countries' domestic news coverage. Nevertheless, the author also found that geographical distance and common language proximity influence international news flow hierarchies (Grasland, 2020).

SNSs are one of the main gateways to news worldwide, based on a survey across 46 countries (Newman et al., 2021). Hence, secondary gatekeepers, such as Facebook, function as Internet traffic transmitters to news companies across national borders by recommending content to its users based on a sophisticated algorithm rather than solely their geolocation (Thorson, Cotter, Medeiros, & Pak, 2021). Although Facebook's multilayered recommendation algorithm was found to be biased, for example, concerning its ad targeting (Cotter et al., 2021) and news feed (DeVito, 2017), research on the role of SNSs, and particularly Facebook, in spreading news content globally is scarce (see, e.g., Golan & Himelboim, 2016; Wu, Groshek, & Elasmar, 2016, for Twitter).

A country's informational influence in news flow research has been primarily assessed based on how often it was mentioned in other countries' domestic news coverage (see, e.g., Blondheim & Segev, 2017; Grasland, 2020; Segev, 2016). In a recent innovative approach, a country's informational influence in the digital context has been also measured according to its salience in other countries' Google trends in different languages (Segev, 2018). News flow studies on SNSs focused primarily on Twitter (e.g., Golan & Himelboim, 2016; Wu et al., 2016). A country's informational influence in the SNS context has been assessed, for instance, based on the number of mentions of a country (Wu et al., 2016) and the content distribution of different countries' government-sponsored English-language accounts (e.g., United States' Voice of America, Russia's RT, China's Xinhua News Agency, Qatar's Al Jazeera, and Saudi's Al Arabiya; Golan & Himelboim, 2016).

These studies on SNSs have provided empirical evidence that informational distribution hierarchies remain valid (see Golan & Himelboim, 2016; Wu et al., 2016). However, they have also revealed the possibility of a less hierarchical world (Wu et al., 2016) and regional contraflows that challenge these hierarchies through noninstitutional actors (Golan & Himelboim, 2016). This condition may be explained by Segev's (2019) proposition of two parallel processes: "cultural homogeneity" (p. 2), by prioritizing popular content, and "heterogeneity" (p. 2), by suggesting content based on personal needs and preferences. In these processes, SNSs collaborate when recommending content to their users. Nonetheless, no study thus far has quantified a country's informational influence on SNSs, particularly Facebook, by measuring the audience reach of multiple domestic news outlets in the country's domestic language beyond its borders.

One of the few existing studies that scrutinized the foreign audiences of domestic news outlets focused on the United Kingdom, a "Western" democratic country. Based on the count of unique devices visiting a website, Thurman and associates (2021) demonstrated that certain domestic U.K. outlets have grown more than 70% of their monthly audience abroad (*MailOnline*, *The Guardian*, and *The Independent*). The special attempts of the above-mentioned news outlets to reach a global audience should not be neglected (see Mayhew, 2020; *The Guardian*, 2021; Turvill, 2014). Nevertheless, Thurman and colleagues (2021) highlighted the role of proximity factors, such as common language and culture, in increasing such large audiences successfully. Although the authors studied the U.K. news outlets to shed light on the opportunities for maximizing the profits of these outlets, their research also provides insights into the degree of global informational influence of the origin country about the above-mentioned proximity factors.

That said, major news outlets in the United Kingdom are not tied to political elites. By contrast, in nondemocratic countries, media outlets are often the official mouthpieces of the government and hence help to distribute its narratives. Despite this phenomenon, previous research has not explored the global distribution of domestic news from a nondemocratic country with a less widely spoken language across different national contexts beyond its borders, particularly on SNSs.

Extant research has shown how authoritarian elites in nondemocratic countries manipulate content on SNSs, both targeting domestic and foreign audiences. For instance, prior research has demonstrated how authoritarian elites in China censor user-generated content that calls for collective action (King, Pan, & Roberts, 2013). In many contexts, activists that publish critical content are monitored or arrested (Pearce & Kendzior, 2012). In addition, several authoritarian countries also seek to manipulate public opinion abroad, with Russia's interference in the 2016 U.S. elections as a primary example (National Intelligence Council, 2017). Regarding the proactive manipulation of public opinion on SNSs, scholars investigated, for instance, the communicative practices of nondemocratic leaders on Twitter and Facebook (Barberá, Gohdes, Iakhnis, & Zeitzoff, 2022; Bulovsky, 2019) and the dissemination of "computational propaganda" (e.g., Woolley, 2016, p. 4886) and cyber troops (e.g., Bradshaw & Howard, 2017). Yet, no academic publication investigated the foreign audiences of a nondemocratic country's domestic news outlets on SNSs, particularly Facebook, as an instrument to gain leverage in another country's informational space.

This topic is important at least for two reasons. First, foreign news content in its domestic language from a nondemocratic country can impact the integrity of other countries' public spheres. This phenomenon is amplified by today's digital environments, particularly SNSs, because these provide a direct communication channel for governments to foreign audiences. For instance, prior research in the context of Russia claimed that its news media often disregard ethical and journalistic rules (Rotaru, 2018). This aspect is especially concerning in light of Russia's invasion of Ukraine, as it has been extensively demonstrated that Russia's news media disseminate disinformation (see, e.g., *EUvsDisinfo*, a project of the European External Action Service's East StratCom Task Force [https://euvsdisinfo.eu/]). Second, combining the SNS' audiences in different countries can constitute a large proportion of a news outlet's total audience on the SNS and, hence, shed light on the magnitude of the global informational influence of the authoritarian government's influence on the SNS.

Russia's Foreign Informational Influence: Research Question and Hypotheses

Russia has been aiming to achieve its foreign policy goals through informational influence strategies for promoting the Russian language, the Russian Orthodox Church, Russian business networks, and Russian-language media in recent years (Rotaru, 2018). The Russian Foreign Policy Concept of 2016 (Prezident Rossii, 2016) also highlighted the importance of Russian-language media concerning the global distribution of Russia's point of view on international processes.

Previous studies have highlighted the consumption of Russia's state-aligned news media, particularly by the Russian-speaking population in post-Soviet countries (Juzefovičs & Vihalemm, 2020; Rotaru, 2018; Vihalemm et al., 2019) and Germany (Decker, 2020; Golova, 2020). However, the degree to

which content from different Russian news outlets spreads outside of Russia including on Facebook has not been assessed. Hence, the RQ is as follows:

RQ1: What proportion of the Facebook audience of Russia's most influential domestic news outlets is situated outside of Russia (divided by post-Soviet and non-post-Soviet region)?

Post-Soviet countries are geographically proximate to Russia and share a Soviet past (Rotaru, 2018). In addition, certain post-Soviet countries have close trade relationships with Russia; Russia, Belarus, Kazakhstan, Armenia, and Kyrgyzstan are members of the Eurasian Economic Union (http://www.eaeunion.org/). Such relationships based on geographical proximity have previously been found to be a predictor of the hegemony of powerful nations in less powerful ones (Wu, 2003). Accordingly, I propose the first hypothesis as follows:

H1: Russia's domestic news media have larger Facebook audiences (relative to the population) in post-Soviet countries than in countries outside of the post-Soviet region.

Furthermore, the Russian language is widely used in the post-Soviet region (Rotaru, 2018) and continues to dominate the cyberspace, for instance, in Central Asia (Reyaz, 2020). The major role of common language proximity in the flow of international news was highlighted in previous research (Grasland, 2020; Thurman et al., 2021). The number of Facebook users among the post-Soviet countries might differ, because Facebook is less popular than Russian SNSs, VK and Odnoklassniki, in Central Asia (Reyaz, 2020), and some countries took measures to curb Russia's informational influence. For instance, Ukraine banned these Russian SNSs in 2017 (Roth, 2017). To account for this difference, the second hypothesis investigates the role of language proximity in the post-Soviet region relative to the Russian-speaking Facebook audience:

H2: In the post-Soviet region, the fraction of the Facebook audience interested in Russia's domestic media correlates with the fraction of the Russian-speaking Facebook audience.

Prior research explored Russia's informational influence mostly in national contexts. For instance, Erbsen (2019) analyzed Estonia and Latvia's common information space with Russia based on Yandex news headlines. In Germany, Golova (2020) investigated transnational public spheres based on reposts on VK, Russia's equivalent of Facebook. The patterns of the Russian state-aligned news consumption of Russian-speaking audiences abroad were also investigated predominantly in national contexts based on a user-centric approach (see, e.g., Juzefovičs & Vihalemm, 2020; Vihalemm et al., 2019, for Estonia and Latvia). By contrast, no study has thus far systematically compared the Russian-speaking public spheres across diverse post-Soviet countries using a media-centric approach to analyze the consumption of leadership-critical and nonleadership-critical Russian news outlets on Facebook.

Toepfl's (2020) theoretical framework of authoritarian publics suggests that publics (here, news outlets) in authoritarian regimes can be categorized into three groups based on the degree to which they criticize the regime's leadership: uncritical, policy-critical, and leadership-critical. In this study, I intensify the contrast between the categories and differentiate only between two categories of news outlets,

nonleadership-critical and leadership-critical, to find out to which content foreign audiences are predominantly exposed.

Russia's nonleadership-critical news outlets are expected to dominate in audience size in the post-Soviet countries for several reasons. First, according to Toepfl (2020), nonleadership-critical media by comparison with leadership-critical media reach a much larger audience also within Russia. Second, Russia has invested heavily in the reach of its media in the post-Soviet region (Rotaru, 2018; Saari, 2014). For instance, Russia's state-owned television programs are broadcast in most post-Soviet countries (Ćwiek-Karpowicz, 2012). Furthermore, several nonleadership-critical news outlets, such as Pervyy Kanal, NTV, *Komsomol'skaya Pravda*, and *Argumenty i Fakty*, have local versions in some post-Soviet countries (for instance, in Belarus, Kazakhstan, Kyrgyzstan, and Moldova). In contrast, leadership-critical outlets did not show such efforts. Second, previous research on the foreign audiences of Russia's news media reported primarily about the Russian state-aligned news consumption, particularly in post-Soviet countries (e.g., Juzefovičs & Vihalemm, 2020; Vihalemm et al., 2019, for Estonia and Latvia; e.g., Rotaru, 2018, for post-Soviet countries in general). Third, journalists in the post-Soviet countries often consider Russia's state-owned news agencies as the main source on global politics (Ćwiek-Karpowicz, 2012). Thus, I examine the third hypothesis as follows:

H3: The audience size of nonleadership-critical news media (relative to the population) across all post-Soviet countries is larger than that of leadership-critical news media.

Method

Facebook's APIs: Assessing Data Validity

At the time of this research in early 2022, Meta (the company that operates the Facebook platform) offered various tools and data sources for research purposes about public posts, ads, URLs, and the engagements associated with them (Facebook, 2020a). However, the FORT Pages and Marketing APIs are the only available tools that provide access to trends linked to Facebook users' demographic information.

Facebook's FORT Pages API was specifically developed for research purposes, allowing approved research partners to obtain data on the followers and posts of Facebook public pages by country and over time (Meta, 2022b). The API relies on Facebook's classification system that derives users' demographic data (their location and engagement) following a privacy protection code. Therefore, the follower count is not an exact value but an aggregated number and can slightly change due to algorithmic changes if requested at a different point in time.

Facebook's ad data on potential Facebook audiences are accessible via Facebook's Marketing API and allow users to estimate monthly active users (MAU), based on selected criteria and optimization goals. For this study, I used the optimization goal *reach*, which outputs the estimated number of unique eligible users who potentially see a Facebook ad (Meta, 2022d). A marketer can target their audience based on the criteria of age, geolocation, family status, education level, language, gender, platform, and Facebook *behavior* and *interest*.

Facebook *behavior* is linked to users' consumer behavior, such as previous purchases and device usage (Meta, 2022a). Facebook *interests* are built on a classification system that aims for economic profit using an algorithm that creates measurable categories of users. The categories are based on the degree to which user data (users' interactions and self-reported information; Meta, 2022e) fit a probabilistic prediction model developed by engineers who determined the conceptualization and operationalization of user *interests* (Cotter et al., 2021). Users are not required to provide their demographic characteristics, such as age, location, gender, and education. Thus, Facebook developed sophisticated algorithms that fill missing user information based on a sample of a user's Facebook friends to improve the classification (Zhou & Moreels, 2013). Former Facebook employees claimed that Facebook *interests* are not accurate as they also target people who are not interested in what they were classified as (Biddle, 2020). These limitations were not addressed in this study. Thus, the data may be vague for audiences that report minimal personal data or are not active on Facebook.

Facebook's FORT Pages and Marketing API comply with Facebook's data protection regulations. Thus, the assessed data do not link data points to specific users. Hence, I expect a bias in both data sets linked to absolute numbers and therefore base my assumptions in this study on data trends and rankings.

Despite the highlighted limitations, the data are relevant as they reveal an estimated audience of unique users with a high probability of being exposed to specific content. Although these users may not be interested in the content, the probability of their exposure to it is much higher than for users classified otherwise (Thorson et al., 2021). Researchers in other research disciplines have demonstrated that Facebook's ad data can be used to generate valid estimations of audience sizes and demographic characteristics (see, e.g., Dubois, Zagheni, Garimella, & Weber, 2018, for migrant research; Fatehkia, Kashyap, & Weber, 2018, for sociology; Saha, Weber, Birnbaum, & De Choudhury, 2017, for health research; Jäger, 2017, for political science). However, the data have rarely been used in communication research, particularly linked to news outlets.

The FORT Pages API was developed for research purposes to understand trends linked to analytics of public pages and posts whereas the Marketing API was developed for advertisers to increase their profit. The FORT Pages follower count reflects the number of users linked to a public page whereas the audience of a Facebook *interest* is grounded in a more vague classification. Users following a specific Russian news page are likely to be classified as being *interested* in that news outlet as the classification system relies on such information. Therefore, I expect the marketing estimates about a news outlet or country to be larger than the corresponding FORT Pages follower counts.

Previous researchers highlighted that Facebook creates *interests* based on market demand (Cotter et al., 2021). While for some Facebook news pages under scrutiny an identically labelled *interest* exists, this is not the case for all pages. Despite the difference in sample size between the two Facebook APIs, I argue, however, that the data remain comparable. Facebook's MAU corresponding to *interests* should be broader than Facebook's follower count corresponding to Facebook pages. Facebook's MAU relating to one *interest* may also include users interested in several Facebook pages that were set to correlate based on Facebook's algorithm. Hence, although a difference in the results is expected because of the nature and purpose of the two APIs, the data sets should show similar trends.

The APIs cannot provide insights into the audience exposed to specific news content but rather into the audience eligible to be exposed to that content. Therefore, in the Facebook news feed ranking system, the audience refers to the number of users with specific news content in their content inventory; this step is the first stage of Facebook's sorting process (Lada, Wang, & Yan, 2021). Thus, the size of an audience in a country *interested* in Russia's domestic media reflects the degree to which such content is potentially popularized and personalized in the Facebook news feed of users in that country. Therefore, the larger the estimated audience of Russia's domestic news outlets in a country, the larger the potential of exposure to Russia's news content in that country and, hence, the larger Russia's informational influence is there.

Facebook's Marketing API was triangulated with the FORT Pages API to understand the eligible audience size and its geographical distribution among different Russian domestic outlets. This process increases the validity of the findings and conclusions based on data from the individual APIs, which have their respective limitations. Triangulation allows for building statements on a rich and robust account combining observed trends and rankings from tools compiled for different purposes.

Sample of Russia's Domestic News Outlets

The sampling strategy of this study aimed to create a list of Russia's most influential domestic news outlets. For the purpose of this study, a news outlet was defined as a website that publishes predominantly Russian state and world news content. Its *influence* was operationalized based on two criteria: (a) the number of citations (how often a news outlet was cited by other news outlets and on SNSs [Twitter, Facebook, Vkontakte, and Odnoklassniki]) and (b) the number of website visits. The most influential news outlets were identified by relying on the combined data from Medialogia (https://www.mlg.ru/ratings/media/federal/10840/), Alexa (https://www.alexa.com/topsites/countries/RU), and LiveInternet (https://www.liveinternet.ru/rating/ru/media/). Medialogia provided rankings of the most-cited news outlets, based on an estimated number of citations in 2021 whereas Alexa and LiveInternet provided data on the most-visited websites. The Alexa and LiveInternet rankings are based on daily estimated unique visitors in the last 3 months and the last 31 days, respectively. The final list included 50 Russian domestic news pages and 15 corresponding news *interests* (the supplementary file[2] provides details on the selection procedure and the final list of news outlets).

The identified news outlets were categorized based on Facebook page content published from January 2021 to January 2022. It was retrieved from Facebook's CrowdTangle (https://www.crowdtangle.com/), a public insights tool on social media content, as Facebook's search function does not allow full coverage of all content. Two independent coders coded each news outlet manually. These coders are (the author being one of them) fluent in Russian and knowledgeable about

[2] The supplementary file and data are available in the Open Science Framework at https://osf.io/6bm9x/?view_only=16edc18943ed4c53a5331e48a4bde34f

Russia's media landscape grounded in Toepfl's (2020) theoretical framework of authoritarian publics. The news outlets were coded into the following two categories (coding timeframe: February 14–23, 2022):

1. *Leadership-critical outlets*: News coverage shows a full range of criticism, including toward Russia's political leadership.
2. *Nonleadership-critical outlets*: News coverage shows no criticism toward Russia's political leadership but may regularly show criticism toward low-level officials and their policies.

Each Facebook page was searched for regular news coverage of Russia's political leadership (president and other high-level officials) and assigned to the first category if such criticism was found. Otherwise, the news page was assigned to the second category. The intercoder reliability reached a perfect agreement (Krippendorff's $\alpha = 1$). In sum, the 50 selected Facebook news pages were categorized into 41 nonleadership-critical and 9 leadership-critical pages, and the 15 Facebook *interests* into 11 nonleadership-critical and 4 leadership-critical *interests* (see supplementary file).

Facebook's APIs: Data Collection

Both the FORT Pages and Marketing data were collected for the timeframe January 24, 2022–February 23, 2022. The method *search_pages* (Meta, 2022b) was used to collect data from the FORT Pages API about the page IDs of the 50 selected news outlets. Then, the method *get_follower_counts* (Meta, 2022b) was used to obtain the number of followers for each news page by country and day. Next, the number of followers were averaged by news outlet and country for the month. The API method *ad set delivery estimate* of the Facebook Marketing API (Meta, 2022c) was used to estimate the number of MAU who are likely to match the criteria by which advertisers would like to target their audience. This process can be done before launching the ad and is therefore free (for details on API requests, see supplementary file).

The subsequent analysis included all countries ($n = 72$) outside of Russia, where the FORT Pages API showed followers for any of the selected 50 domestic outlets from Russia. Syria was also included in the sample initially but had to be excluded because Facebook does not allow targeting people in this country and therefore will not show any MAU (for the complete list of countries, see available data).

The estimated MAU and follower count in a country were set relative to its population size and the estimated number of Facebook users. Data on the country's population size and estimated number of Facebook users were derived from the United Nations World Population Prospects 2019 (United Nations, Department of Economic and Social Affairs, Population Division, 2019) and the Facebook Marketing API, respectively.

Results

Reach of Russia's Domestic News Content Abroad

RQ1 aimed to determine the fractions of Russia's domestic news outlets' Facebook audience from outside the country. The FORT Pages data were used to address this question. All followers outside of Russia were summed by news outlet and region and set relative to the news outlet's total audience. As a result, it was found that 40% of the selected news outlets (n = 20) have more than 50% of their Facebook followers abroad. More than 50% of the Facebook audience outside of Russia situates for most news outlets in the post-Soviet region, except for Telekanal ZVEZDA (see Figure 1). Telekanal ZVEZDA's largest audiences are in Myanmar (11%), Ukraine (8.48%), and Kazakhstan (3.31%; for news outlets' audience distribution by country, see available data).

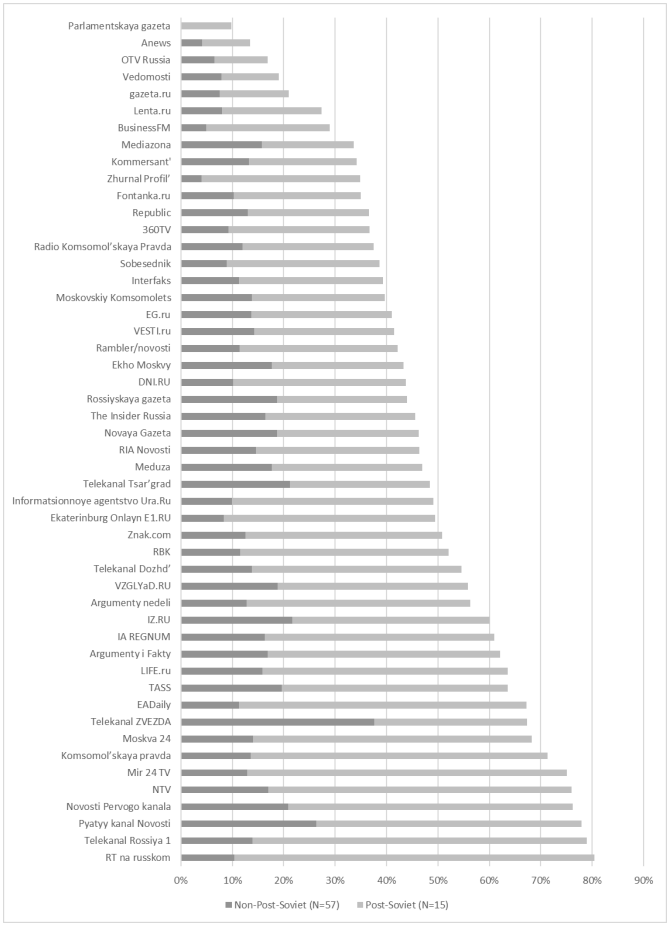

Figure 1. Proportions of Facebook audiences outside of Russia by news outlet and region (post-Soviet, non-post-Soviet) based on follower data.

International News Flows and Proximity Factors

Geographical Proximity

I investigated whether the Facebook audience of Russia's domestic news outlets (relative to population) is larger in post-Soviet countries than in non-post-Soviet countries (H1). Accordingly, data from Facebook APIs (FORT Pages and Marketing APIs) have been used. A preliminary analysis revealed a positive, statistically significant, and strong linear relationship between the number of followers and MAU per country (r (70) = .99, p < .001), but the data sets were still separately analyzed to detect potential differences.

Our data were not normally distributed. Thus, for the analysis based on both Facebook APIs, the Mann–Whitney U test was used to determine possible differences between the group of post-Soviet (n = 15) and non-post-Soviet countries (n = 57). This test evaluates the difference between the groups' medians if the groups have similarly shaped distributions. If the groups' distributions differ, the test evaluates the difference between the groups' whole distribution (Divine, Norton, Barón, & Juarez-Colunga, 2018).

For FORT Pages data, the news outlets' followers were summed by country and set relative to the population. The distributions did not differ between both groups, with Kolmogorov–Smirnov p > .05. The population fractions were statistically significantly larger for the group of post-Soviet (Mdn = 7.04%) than for the group of non-post-Soviet country members (Mdn = 0.11%), with U = 42.00, p < .001. For the Marketing data, the MAU were also set relative to the country population. The distributions differed between both groups, with Kolmogorov–Smirnov p < .05. However, the population fractions between the groups of post-Soviet (M = 2.28%, SD = 0.021) and non-post-Soviet countries (M = 0.05%, SD = 0.001) were statistically significantly different, with U = 32.00, p < .001. Therefore, the results based on both Facebook APIs confirm H1.

Language Proximity

Despite the strong linear relationship between followers and MAU, the two API data sets were analyzed individually to validate H2. The Pearson's correlation coefficient was computed to investigate the relationship between the Facebook audience fraction of users interested in Russia's domestic news media and users speaking Russian across all post-Soviet countries (H2). For FORT Pages data, the news outlets' followers were summed by country and set relative to the Facebook audience. The Marketing data were also set relative to the Facebook audience. As a result, a strong positive, statistically significant correlation was found for the Marketing data (r (13) = .80, p < .001) and a positive, statistically significant correlation for the FORT Pages data (r (13) = .67, p = .006), thus confirming H2. Figure 2 presents the relationship between the Facebook audience fractions of users interested in Russia's domestic news and users speaking Russian by country based on Facebook's Marketing data.

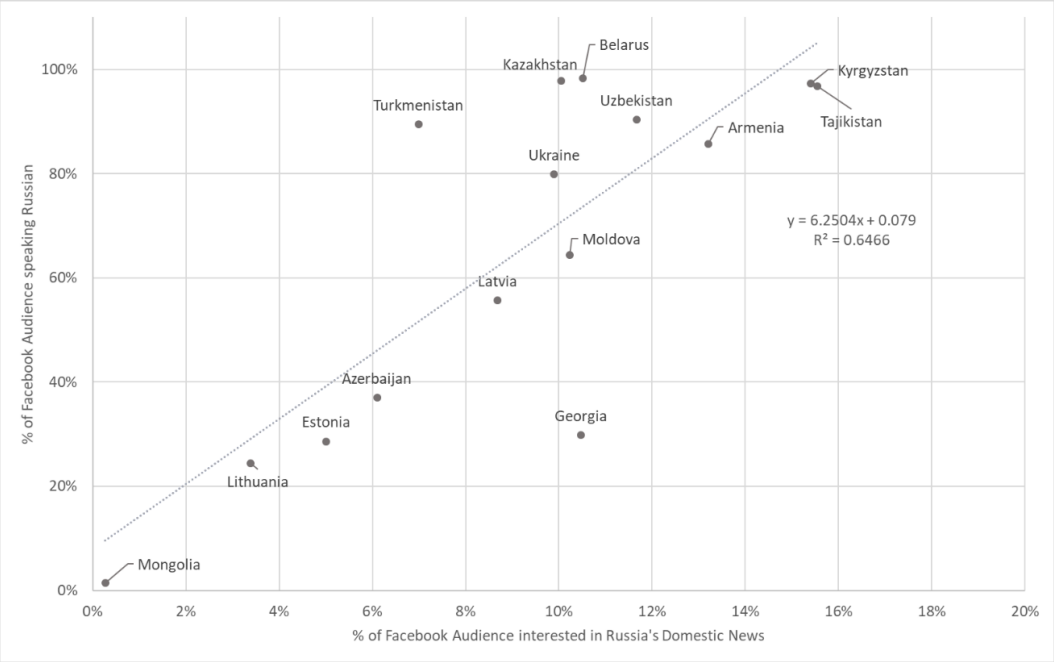

Figure 2. Relationship between Facebook audience fraction of users speaking Russian and users interested in Russia's domestic news based on marketing data.

Reach of Different Categories of Russia's Domestic News

H3 claimed that the audiences of Russia's nonleadership-critical news outlets are larger than those of leadership-critical ones (relative to the population) across all post-Soviet countries. The API data sets were analyzed separately to validate this hypothesis.

The data were not normally distributed. Therefore, the Mann–Whitney *U* test was calculated to determine a possible difference between the groups of nonleadership-critical (FORT Pages: $n = 41$, Marketing: $n = 11$) and leadership-critical news outlets (FORT Pages: $n = 9$, Marketing: $n = 4$) for both Facebook APIs.

For FORT Pages data, the number of followers for a news outlet in a country was set relative to the country's population. These news outlet population fractions were then grouped into their news outlet's category. The distributions differed between both groups, with Kolmogorov–Smirnov $p < .05$. However, the population fractions between the group of nonleadership-critical ($M = 0.22\%$, SD = 0.004) and leadership-critical news outlets ($M = 0.10\%$, SD = 0.002) showed a statistically significant difference, with $U = 26987.00$, $p = .003$.

The Marketing API request was based on a logical OR statement (logical disjunction), which outputted the MAU per country who are *interested* in at least one of the news outlet *interests* grouped into a category. The outputted MAU per country and news outlet category was set relative to the country's

population. The distributions did not differ between both groups, with Kolmogorov–Smirnov $p > .05$. The median population fraction was significantly larger for the group of nonleadership-critical ($Mdn = 1.67\%$) than for the group of leadership-critical ($Mdn = 0.33\%$) news outlets, with $U = 44.00$, $p = .004$. Thus, the results based on both APIs confirm H3. Figure 3 demonstrates the dominance in reach of nonleadership-critical news across all post-Soviet countries based on Facebook's Marketing data.

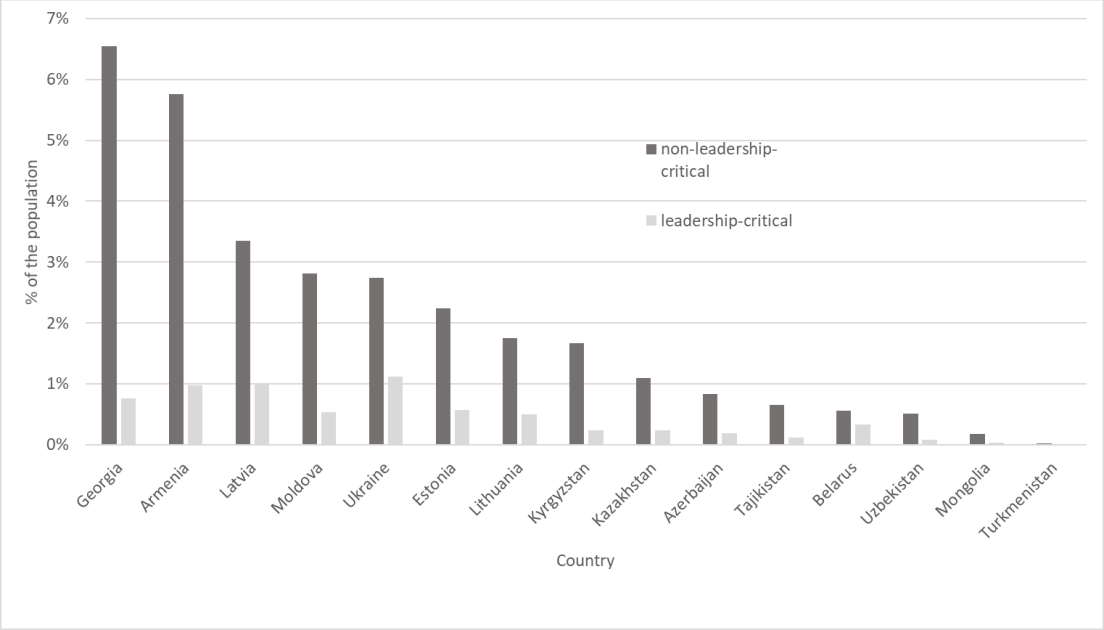

Figure 3. Distribution of Facebook audiences interested in Russia's domestic news media (relative to the population) across the post-Soviet countries by news outlet category (nonleadership-critical, leadership-critical) based on marketing data.

Summary and Discussion

International Flow of Russia's Domestic News Content

This study is the first to shed light on the global informational influence of a nondemocratic country on particularly Facebook by examining the international flows of its domestic news content outside its borders.

For RQ1, it was found that 40% of the selected Russian domestic news outlets attract more than half of their Facebook followers abroad. The majority of these foreign followers is situated in the post-Soviet region for most news outlets, except for Telekanal ZVEZDA (see Figure 1). Telekanal ZVEZDA's largest foreign audiences are situated in Myanmar (11%), Ukraine (8.48%), and Kazakhstan (3.31%). While the outlet's audience presence in Ukraine and Kazakhstan goes in line with the other observations of this study, its audience in Myanmar requires further investigation.

The nonleadership-critical Facebook pages of Russia's international (RT na russkom) and domestic television networks (Telekanal Rossiya 1, Pyatyy kanal Novosti, Novosti Pervogo kanala, NTV, and Mir 24 TV) had the largest audiences (more than 75% of their Facebook audience) outside of Russia. In certain countries, this finding may be because of the inaccessibility of Russian television. For example, since 2014 Ukraine had started to ban Russian television channels, including Telekanal Rossiya 1, Channel One (here Novosti Pervogo kanala), and NTV, (Ennis, 2014). The study's results show, however, that users in Ukraine made up 33.28% of Telekanal Rossiya 1's Facebook audience, 13.30% of Novosti Pervogo kanala's Facebook audience, and 17.88% of NTV's Facebook audience at the time of the data collection. Previous Ukrainian television consumers may still prefer to follow Russian channels and therefore subscribe to the outlets' updates and video content on Facebook. Hence, it appears that government restrictions can be circumvented through Facebook. For instance, Facebook can provide users access to content from prohibited news outlets mostly because of factors of proximity.

As a consequence of Russia's invasion of Ukraine, several measures have been implemented that are relevant to this study. On the one hand, the Facebook pages of Russia's foreign broadcasters, RT and Sputnik, have been banned in the EU (Culliford, 2022). This measure indicates that Russia's news outlets appear to have been effective in spreading their content on Facebook. On the other hand, the Russian government has banned (Milmo, 2022) and declared Facebook an extremist organization (Reuters, 2022d). Considering this study's results, the fact that most Russian nonleadership-critical domestic news pages are, however, still functioning on Facebook at the time of writing this article (June 2022) is concerning, as it can be assumed that these outlets continue to serve their foreign audiences, particularly in the post-Soviet region.

The study agrees with the basic tendencies about domestic English-speaking news outlet websites (*MailOnline*, *The Guardian*, and *The Independent*) that have grown large website audiences outside of the United Kingdom (Thurman et al., 2021), a democratic country. The study results demonstrate that Russian-speaking news outlets from Russia, a nondemocratic country, have also grown a large audience on Facebook beyond their origin country's borders because of proximity factors.

Geographical and language proximity factors play a major role in international news flows (Grasland, 2020). Accordingly, this study scrutinized the role of these factors in the distribution of Russia's domestic news content on Facebook. H1 posited that the audiences of Russia's domestic news outlets in post-Soviet countries are larger than in non-post-Soviet states because of geographical proximity. H2 posited that, the higher the prevalence of Russian-speaking Facebook users, the larger are the audiences of Russia's domestic news on Facebook, specifically in the post-Soviet countries because of language proximity. Statistically significant results confirm both hypotheses based on the data from both APIs (Facebook's FORT Pages and Marketing APIs).

Previous news flow research on SNSs found that imbalances in international news flow hierarchies remained valid on Twitter (e.g., Golan & Himelboim, 2016; Wu et al., 2016). Accordingly, this study confirms the importance of geographical and language proximity in the global distribution of news content on Facebook. This news distribution is not based on a country's dominance in other countries' news coverage (Grasland, 2020), but on data from Facebook, an SNS that has not been investigated in this context before.

Reach of Different Categories of Russia's Domestic News

This study is the first to systematically analyze the global reach of two different categories of Russia's domestic outlets on Facebook. The purpose is to identify the type of news to which foreign audiences are predominantly exposed. Previous research highlighted the reach of Russia's nonleadership-critical news outlets, particularly in the post-Soviet region (see Juzefovičs & Vihalemm, 2020; Reyaz, 2020; Rotaru, 2018; Saari, 2014; Vihalemm et al., 2019). Thus, H3 postulated that nonleadership-critical news outlets have larger audiences than leadership-critical ones across all post-Soviet countries. The results based on the data from both Facebook APIs confirmed H3. Consequently, Facebook has a major role in serving as a transmission channel of Russia's state-aligned news content for audiences in post-Soviet countries.

Russia has been investing to increase the reach of its news media, especially in post-Soviet countries (Rotaru, 2018), and previous research stated that Facebook creates *interests* based on market demand (Cotter et al., 2021). In the index of Facebook *interests,* I found 11 nonleadership-critical Russian news *interests*, but only four leadership-critical *interests*. The nonleadership-critical news outlets also have the largest audiences in the post-Soviet region. These circumstances, moreover, suggest that the outlets investing the most money on their promotion also grow the largest Facebook audiences. Therefore, it appears that Facebook's primary interest is focused on economic profitability.

Because of the measures implemented by Meta as a result of Russia's invasion of Ukraine, the findings are politically relevant at least for two reasons. First, Facebook still acts as a transmission channel of Russian state-aligned news for audiences outside of Russia. Although there are fears of Russian military aggression increasing in post-Soviet countries (see Milne, 2022), this study's results have also shown the largest audiences of Russia's nonleadership-critical news outlets in these countries. Hence, Facebook's inaction contributes to Russia's state-aligned domestic news outlets being powerful tools of foreign influence. Second, Russia's leadership-critical news outlets were targeted with harsh repressions by Russia's authoritarian elites (Agence France-Presse, 2022). Certain leadership-critical news outlets, such as TV Dozhd', Ekho Moskvy, and *Novaya Gazeta*, stopped working temporarily or shut down (Reuters, 2022b, 2022c; Roth, 2022). This condition drastically reduces the visibility of leadership-critical news outlets and leaves foreign Facebook consumers of Russian-language news with predominantly Russian state-aligned news content.

Triangulation of Two Facebook APIs

In this study, the triangulation of two Facebook APIs rarely used in the field of communication was scrutinized to analyze the foreign Russian-speaking audiences of Russia's domestic news outlets in different national contexts. The FORT Pages data reflects the followers of the outlets' Facebook page whereas the Marketing data reflects the audience eligible to be targeted by Russia's domestic news content only because Facebook classified those users as being *interested* in such content (DeVito, 2017). Therefore, I conclude that users classified as *interested* in a Russian news outlet may not be followers of the outlet's Facebook page. Despite their limitations, the follower counts and MAU demonstrated a strong statistical correlation. This finding solidifies the conclusions and encourages the future use of these APIs in communication research to generate knowledge on global news audiences' size and geographical distribution. The APIs do not serve

to generate valid absolute numbers. However, they are valid to compare audiences (a) by country and (b) by Facebook pages/*interests*.

Finally, this study has two important limitations. First, I measured the foreign audiences of Russia's domestic news outlets who have a high probability to be exposed to Russia's news content on Facebook. However, the results do not refer to audiences exposed to this content. Hence, the data should be further investigated, for instance, by conducting a survey on Facebook users targeted by news outlet *interests* to (a) determine whether they are interested in what they were classified into, (b) identify the content that users in different countries are exposed to, and (c) study users' motivation to consume, particularly, Russia's nonleadership-critical news media. For example, their motivation may be linked to the narratives these outlets convey (see Hinck, Kluver, & Cooley, 2018, for strategic narratives). Second, this study focused on the global audiences of Russia's domestic news outlets and, thus, did not scrutinize the differences between the individual countries' and news outlets' audiences. Figure 1, for instance, shows that Russia's nonleadership-critical news outlet, Telekanal ZVEZDA*,* reaches its largest foreign audience not, like all other selected domestic news outlets, in a post-Soviet country, but in Myanmar (11%). This finding needs further investigation. Moreover, Figures 2 and 3 demonstrate that there are great differences among the post-Soviet countries. Scholars are encouraged to explore additional factors that influence the individual news outlets' audiences, particularly in the post-Soviet region. For instance, prior research suggested that media landscapes and the degree of Internet freedom vary (Reyaz, 2020). Also, the attitude toward Russia and the Russian language differs among the countries (Rotaru, 2018). For instance, Ukraine has been targeted by Russia's propaganda for years (see, e.g., Erlich & Garner, 2021) and banned Russian media in 2017 (Roth, 2017).

Despite its limitations, this study highlights the major role of SNSs, such as Facebook, in today's world affairs. Regarding Russia's invasion of Ukraine, the presented findings show how Facebook functions as a transmission channel of predominantly state-aligned news from Russia to foreign audiences, especially in post-Soviet countries. Considering this study's results, the distribution of Russia's domestic nonleadership-critical news content on Facebook should be banned or de-ranked at least during the Russia–Ukraine war, as Russia's state news have been extensively accused of spreading disinformation (see, e.g., *EUvsDisinfo*; https://euvsdisinfo.eu/). From a normative perspective, Meta's inaction in this regard is highly undesirable, because Russian-speaking Facebook users are predominantly exposed to Russian media outlets that are controlled by Russia's authoritarian elites that unconditionally support the regime's brutal invasion of Ukraine.

References

Agence France-Presse. (2022, March 16). Russia blocks access to BBC, vows more media retaliation. *The Moscow Times*. Retrieved from https://www.themoscowtimes.com/2022/03/16/russia-blocks-access-to-bbc-vows-more-media-retaliation-a76964

Barberá, P., Gohdes, A. R., Iakhnis, E., & Zeitzoff, T. (2022). Distract and divert: How world leaders use social media during contentious politics. *The International Journal of Press/Politics,* 1–27. doi:10.1177/19401612221102030

Biddle, S. (2020, December 24). Facebook managers trash their own ad targeting in unsealed remarks. *The Intercept*. Retrieved from https://theintercept.com/2020/12/24/facebook-ad-targeting-small-business/

Blondheim, M., & Segev, E. (2017). Just spell US right: America's news prominence and soft power. *Journalism Studies, 18*(9), 1128–1147. doi:10.1080/1461670X.2015.1114899

Bradshaw, S., & Howard, P. (2017). *Troops, trolls and troublemakers: A global inventory of organized social media manipulation* (Working Paper No. 2017.12). Oxford Internet Institute. Retrieved from https://ora.ox.ac.uk/objects/uuid:cef7e8d9-27bf-4ea5-9fd6-855209b3e1f6/download_file?file_format=pdf&safe_filename=Troops-Trolls-and-Troublemakers.pdf&type_of_work=Report

Bulovsky, A. (2019). Authoritarian communication on social media: The relationship between democracy and leaders' digital communicative practices. *International Communication Gazette, 81*(1), 20–45. doi:10.1177/1748048518767798

Cotter, K., Medeiros, M., Pak, C., & Thorson, K. (2021). "Reach the right people": The politics of "interests" in Facebook's classification system for ad targeting. *Big Data & Society, 8*(1), 1–16. doi:10.1177/2053951721996046

Culliford, E. (2022, February 28). *Facebook owner Meta will block access to Russia's RT, Sputnik in EU*. Reuters. Retrieved from https://www.reuters.com/business/media-telecom/facebook-owner-meta-will-block-access-russias-rt-sputnik-eu-2022-02-28/

Ćwiek-Karpowicz, J. (2012). *Limits to Russian soft power in the post-Soviet area*. (DGAP-Analyse, 8). Berlin, Germany: Forschungsinstitut der Deutschen Gesellschaft für Auswärtige Politik e.V. Retrieved from https://nbn-resolving.org/urn:nbn:de:0168-ssoar-350247

de Beer, A. S. (2010). News from and in the "dark continent." *Journalism Studies, 11*(4), 596–609. doi:10.1080/14616701003638509

Decker, P. K. (2020). "We show what is concealed": Russian soft power in Germany. *Problems of Post-Communism, 68*(3), 1–15. doi:10.1080/10758216.2020.1753082

DeVito, M. A. (2017). From editors to algorithms. *Digital Journalism, 5*(6), 753–773. doi:10.1080/21670811.2016.1178592

Divine, G. W., Norton, H. J., Barón, A. E., & Juarez-Colunga, E. (2018). The Wilcoxon–Mann–Whitney procedure fails as a test of medians. *The American Statistician, 72*(3), 278–286. doi:10.1080/00031305.2017.1305291

Dubois, A., Zagheni, E., Garimella, K., & Weber, I. (2018). Studying migrant assimilation through Facebook interests. In S. Staab, O. Koltsova, & D. I. Ignatov (Eds.), *Social informatics* (pp. 51–60). Cham, Switzerland: Springer International Publishing. doi:10.1007/978-3-030-01159-8_5

Ennis, S. (2014, March 12). *Ukraine hits back at Russian TV onslaught*. BBC. Retrieved from https://www.bbc.com/news/world-europe-26546083

Erbsen, H. (2019). A parallel yet divided information space: Testing the overlap of Yandex Russian language news media discourses in Estonia, Latvia, and Russia. *Russian Journal of Communication, 11*(3), 217–239. doi:10.1080/19409419.2019.1673203

Erlich, A., & Garner, C. (2021). Is pro-Kremlin disinformation effective? Evidence from Ukraine. *The International Journal of Press/Politics,* 1–24. doi:10.1177/19401612211045221

Facebook. (2020a). *Facebook datasets* [PDF file]. Retrieved from https://research.fb.com/wp-content/uploads/2020/07/FB_Datasets.pdf

Facebook. (2020b). *Facebook reports third quarter 2020 results* [PDF file]. Retrieved from https://s21.q4cdn.com/399680738/files/doc_news/Facebook-Reports-Third-Quarter-2020-Results-2020.pdf

Fatehkia, M., Kashyap, R., & Weber, I. (2018). Using Facebook ad data to track the global digital gender gap. *World Development, 107*(0305-750X), 189–209. doi:10.1016/j.worlddev.2018.03.007

Golan, G. J., & Himelboim, I. (2016). Can world system theory predict news flow on Twitter? The case of government-sponsored broadcasting. *Information, Communication & Society, 19*(8), 1150–1170. doi:10.1080/1369118X.2015.1106572

Golova, T. (2020). Post-Soviet migrants in Germany, transnational public spheres and Russian soft power. *Journal of Information Technology & Politics, 17*(3), 249–267. doi:10.1080/19331681.2020.1742265

Grasland, C. (2020). International news flow theory revisited through a space–time interaction model: Application to a sample of 320,000 international news stories published through RSS flows by 31 daily newspapers in 2015. *International Communication Gazette, 82*(3), 231–259. doi:10.1177/1748048518825091

Hinck, R. S., Kluver, R., & Cooley, S. (2018). Russia re-envisions the world: Strategic narratives in Russian broadcast and news media during 2015. *Russian Journal of Communication, 10*(1), 21–37. doi:10.1080/19409419.2017.1421096

International Commission for the Study of Communication Problems (Ed.). (1980). *Many voices, one world: Communication and society, today and tomorrow: Towards a new more just and more efficient world information and communication order*. Paris, France: UNESCO.

Jäger, K. (2017). The potential of online sampling for studying political activists around the world and across time. *Political Analysis, 25*(3), 329–343. doi:10.1017/pan.2017.13

Juzefovičs, J., & Vihalemm, T. (2020). Keeping channels open or screening out? The digital practices of Baltic Russian-speakers during the Russia-Ukraine conflict. *Russian Journal of Communication, 12*(3), 262–283. doi:10.1080/19409419.2020.1851454

King, G., Pan, J., & Roberts, M. E. (2013). How censorship in China allows government criticism but silences collective expression. *American Political Science Review, 107*(2), 326–343. doi:10.1017/S0003055413000014

Lada, A., Wang, M., & Yan, T. (2021, January 26). *How machine learning powers Facebook's News Feed ranking algorithm*. Engineering at Meta. Retrieved from https://engineering.fb.com/2021/01/26/ml-applications/news-feed-ranking/

Mayhew, F. (2020, November 4). *Independent CEO Zach Leonard on going global*. Press Gazette. Retrieved from https://pressgazette.co.uk/independent-ceo-zach-leonard-digital-newsbrand-global/

Meta. (2022a). *Basic targeting*. Meta for Developers. Retrieved from https://developers.facebook.com/docs/marketing-api/audiences/reference/basic-targeting#behaviors

Meta. (2022b). *FORT Pages API documentation*. Meta for Developers. Retrieved from https://developers.facebook.com/docs/fort-pages-api/overview/

Meta. (2022c). *Graph API version v14.0 ad set delivery estimate documentation*. Meta for Developers. Retrieved from https://developers.facebook.com/docs/marketing-api/reference/ad-campaign/delivery_estimate/

Meta. (2022d). *Graph API version v14.0 ad set documentation*. Meta for Developers. Retrieved from https://developers.facebook.com/docs/marketing-api/reference/ad-campaign/

Meta. (2022e). *Likes and interests*. Meta Business Help Center. Retrieved from https://www.facebook.com/business/help/150756021661309

Milmo, D. (2022, March 4). Russia blocks access to Facebook and Twitter. *The Guardian*. Retrieved from https://www.theguardian.com/world/2022/mar/04/russia-completely-blocks-access-to-facebook-and-twitter

Milne, R. (2022, February 20). Baltic states fear encirclement as Russia security threat rises. *Financial Times*. Retrieved from https://www.ft.com/content/38b1906f-4302-4a09-b304-dc2ecf5dc771

National Intelligence Council. (2017). *Assessing Russian activities and intentions in recent US elections*. Retrieved from https://www.dni.gov/files/documents/ICA_2017_01.pdf

Newman, N., Fletcher, R., Schulz, A., Andı, S., Robertson, C. T., & Nielsen, R. K. (2021). *Reuters Institute digital news report 2021* (No. 10) [PDF]. Retrieved from https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2021-06/Digital_News_Report_2021_FINAL.pdf

Pearce, K. E., & Kendzior, S. (2012). Networked authoritarianism and social media in Azerbaijan. *Journal of Communication, 62*(2), 283–298. doi:10.1111/j.1460-2466.2012.01633.x

Prezident Rossii. (2016, November 30). Ukaz Prezidenta Rossiyskoy Federatsii № 640 [Decree of the President of the Russian Federation]. Retrieved from http://kremlin.ru/acts/bank/41451

Reuters. (2022a, February 26). *Meta to bar Russian state media from running ads, monetizing on platform*. Retrieved from https://www.reuters.com/technology/meta-bar-russian-state-media-running-ads-monetizing-platform-2022-02-26/

Reuters. (2022b, March 1). *Liberal Russian radio station is taken off air*. Retrieved from https://www.reuters.com/world/europe/russian-prosecutors-demand-restricted-access-radio-station-tv-2022-03-01/

Reuters. (2022c, March 3). *Russian TV channel says it is temporarily halting work*. Retrieved from https://www.reuters.com/business/retail-consumer/russian-tv-channel-says-it-is-temporarily-halting-work-2022-03-03/

Reuters. (2022d, March 21). *Russia finds Meta guilty of "extremist activity" but WhatsApp can stay*. Retrieved from https://www.reuters.com/technology/meta-asks-russian-court-dismiss-proceedings-extremism-case-reports-2022-03-21/

Reyaz, M. (2020). Cyberspace in the post-Soviet states: Assessing the role of new media in Central Asia. *Jadavpur Journal of International Relations, 24*(1), 7–27. doi:10.1177/0973598419875266

Rotaru, V. (2018). Forced attraction? How Russia is instrumentalizing its soft power sources in the "near abroad." *Problems of Post-Communism, 65*(1), 37–48. doi:10.1080/10758216.2016.1276400

Roth, A. (2017, May 16). In new sanctions list, Ukraine targets Russian social-media sites. *The Washington Post*. Retrieved from https://www.washingtonpost.com/world/in-new-sanctions-list-ukraine-blocks-russian-social-media-sites/2017/05/16/a982ab4e-3a16-11e7-9e48-c4f199710b69_story.html

Roth, A. (2022, March 28). Russian news outlet Novaya Gazeta to close until end of Ukraine war. *The Guardian*. Retrieved from https://www.theguardian.com/world/2022/mar/28/russian-news-outlet-novaya-gazeta-to-close-until-end-of-ukraine-war

Saari, S. (2014). Russia's Post-Orange Revolution strategies to increase its influence in former Soviet republics: Public diplomacy po russkii. *Europe–Asia Studies, 66*(1), 50–66. doi:10.1080/09668136.2013.864109

Saha, K., Weber, I., Birnbaum, M. L., & De Choudhury, M. (2017). Characterizing awareness of schizophrenia among Facebook users by leveraging Facebook advertisement estimates. *Journal of Medical Internet Research, 19*(5), 1–13. doi:10.2196/jmir.6815

Segev, E. (2016). The group-sphere model of international news flow: A cross-national comparison of news sites. *International Communication Gazette, 78*(3), 200–222. doi:10.1177/1748048515620858

Segev, E. (2018). Googling the world: Global and regional information flows in Google trends. *International Journal of Communication, 12*, 2232–2250. Retrieved from https://ijoc.org/index.php/ijoc/article/view/7947

Segev, E. (2019). Volume and control: The transition from information to power. *Journal of Multicultural Discourses*, *14*(3), 240–257. doi:10.1080/17447143.2019.1662028

Singer, J. B. (2014). User-generated visibility: Secondary gatekeeping in a shared media space. *New Media & Society, 16*(1), 55–73. doi:10.1177/1461444813477833

The Guardian. (2021, December 14). *The Guardian reaches one million digital subscriptions milestone*. Retrieved from https://www.theguardian.com/gnm-press-office/2021/dec/14/the-guardian-reaches-one-million-digital-subscriptions-milestone

Thorson, K., Cotter, K., Medeiros, M., & Pak, C. (2021). Algorithmic inference, political interest, and exposure to news and politics on Facebook. *Information, Communication & Society, 24*(2), 183–200. doi:10.1080/1369118X.2019.1642934

Thurman, N., Hensmann, T., & Fletcher, R. (2021). Large, loyal, lingering? An analysis of online overseas audiences for UK news brands. *Journalism, 22*(8), 1892–1911. doi:10.1177/1464884919892411

Toepfl, F. (2020). Comparing authoritarian publics: The benefits and risks of three types of publics for autocrats. *Communication Theory, 30*(2), 105–125. doi:10.1093/ct/qtz015

Turvill, W. (2014, October 28). *Mail Online sets out global ambition as it plans to get "boots on the ground" around the world*. Press Gazette. Retrieved from https://pressgazette.co.uk/mail-online-sets-out-global-ambition-it-plans-get-boots-ground-around-world/

United Nations, Department of Economic and Social Affairs, Population Division. (2019). *World population prospects 2019, online edition. Rev. 1* [Data file]. Retrieved from https://population.un.org/wpp/Download/Archive/Standard/

Vihalemm, T., Juzefovičs, J., & Leppik, M. (2019). Identity and media-use strategies of the Estonian and Latvian Russian-speaking populations amid political crisis. *Europe–Asia Studies, 71*(1), 48–70. doi:10.1080/09668136.2018.1533916

Wallerstein, I. (1974). *The modern world-system*. New York, NY: Academic Press.

Webster, J. G., & Ksiazek, T. B. (2012). The dynamics of audience fragmentation: Public attention in an age of digital media. *Journal of Communication, 62*(1), 39–56. doi:10.1111/j.1460-2466.2011.01616.x

Wojcieszak, M., Menchen-Trevino, E., Goncalves, J. F. F., & Weeks, B. (2021). Avenues to news and diverse news exposure online: Comparing direct navigation, social media, news aggregators, search queries, and article hyperlinks. *The International Journal of Press/Politics,* 1–27. doi:10.1177/19401612211009160

Woolley, S. C. (2016). Political communication, computational propaganda, and autonomous agents—Introduction. *International Journal of Communication, 10*, 4882–4890. Retrieved from https://ijoc.org/index.php/ijoc/article/view/6298/1809

Wu, H. D. (2003). Homogeneity around the world? Comparing the systemic determinants of international news flow between developed and developing countries. *Gazette (Leiden, Netherlands), 65*(1), 9–24. doi:10.1177/0016549203065001134

Wu, H. D., Groshek, J., & Elasmar, M. G. (2016). Which countries does the world talk about? An examination of factors that shape country presence on Twitter. *International Journal of Communication, 10*, 1860–1877. Retrieved from https://ijoc.org/index.php/ijoc/article/view/5002

Zhou, D., & Moreels, P. (2013). *Inferring user profile attributes from social information* (United States Patent No. US 8.495,143 B2). Retrieved from https://patentimages.storage.googleapis.com/68/0b/57/217ff374a0cbf6/US8495143.pdf