Gabriele Meiselwitz · Abbas Moallem · Panayiotis Zaphiris · Andri Ioannou · Robert A. Sottilare · Jessica Schwarz · Xiaowen Fang (Eds.)

HCI International 2022 – Late Breaking Papers

Interaction in New Media, Learning and Games

24th International Conference on Human-Computer Interaction HCII 2022, Virtual Event, June 26 – July 1, 2022 Proceedings





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Digital Traces of News Media Public on Facebook: Comparing Estonian and Latvian Russophone Publics

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Abstract. Digital traces that users leave in the course of everyday liking, commenting or sharing posts on Facebook pages allow the researchers to get a glimpse at least of their interpretative and productive activity [12]. This research aims to explore the interpretative and productive activity of followers of diasporic news media on Facebook. I focus on the geo-ethnic storytelling [9] assuming that diasporic media provide their audiences with access to both national public spheres, of the host and the home countries. To meet the informational needs of their audiences, they cover news agenda of the host country in the native language different from the language of mainstream media, possibly considering it from the angle of ethno-cultural or linguistic minority. Diasporic media also continue to include news from the home country, despite the fact that the mainstream media of this country can be accessible through Internet or in other ways. As other media, diasporic media create Facebook pages where users can easily interact with the news items published on these pages. Based on knowledge about connections between emotional responses and reactions provided by Facebook pages I assume that connection between geography of a news item and Facebook reactions on it reflect the user involvement into the public sphere of the host or home country. To explore this connection in detail, I compare the news user behavior on six Estonian and Latvian news media Facebook pages.

Keywords: News engagement · Russophone publics · Facebook reactions

1 Introduction

As shown by a comparative study of news user behavior in six countries, the number of users commenting and sharing news items in social media is higher than in the websites [7]. Still, the ongoing discussion tends to criticize the quality of discussions formed in the comment sections on a Facebook page even harder than for the news websites. This research aims to measure the level of the user engagement in the discussions that are formed through comments under FB posts published on the news media FB page. I focus on the media for migrants, since this group of Internet users tend to be excluded from the public sphere of the host country, but migrant media allow them to join the deliberation process.

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The Russian-speaking community in Baltic region constitutes a large ethno-linguistic minority (37% and 33% of the entire populations of Latvia and Estonia, respectively). 75% of the Russian-speaking community consider Estonia/ Latvia to be their homeland [6]. The media repertoires of the Baltic Russian-speakers include Russian-origin media, locally-produced Russian-language media and, to lesser extent, Western media [16]. Previous research on Russophone audiences in Baltic states have reported Facebook to be the most popular social networking site among them. "Baltic Russian-language social media should be treated as a rather distinctive, unique space where local-national information flows are blended with those originating in Russia and elsewhere" [6].

2 Theoretical Framework

2.1 News Engagement with Multiple National Public Spheres

The national model of the public sphere assumes that public communication is conducted on a national language of the state, while the existence of a common identity motivates citizens to participate in discussions on common issues. The Habermasian model states that the consensus articulated in the public sphere of the nation-state should be translated into laws binding on the citizens of the state. Thus, the language nature of the public sphere of the state and the predjudices of journalists working in the national mainstream media lead to the displacement of part of the members of the society outside the public discussion. Within such "national-oriented" media system, the media diet of the residents without citizenship of the host country might include mainstream media from the host country, or media produced in the country residents (or their parents) moved from, or media produced by and for migrants in the host country.

Mainstream news media in a modern state "still show a strong connection with their native audience, whose language they speak, whose opinion about political and other processes, world events they share or determine themselves, finally, many prejudices, ethnocentric worldviews and styles of foreign policy national interests" [3:729]. N. Fraser points out one of the reasons why in a modern multi-ethnic state the national public sphere cannot ensure the interaction of all social groups: the model of the public sphere proposed by J. Habermas suggests that "public communication is conducted in the national language and transmitted through the national media" [2: 11]. This ability of a dominant public sphere to exclude certain groups of the population from the potential participants in a public discussion leads to the dissatisfaction of minorities' communicative needs. Negativism in the coverage of immigrants in the mainstream media influences their news exposure.

F. Oji, S. Weber-Menges, A. Fleras and other researchers of ethnocultural, diaspora, immigrant media claimed that the exclusion of immigrants, ethnic minorities and indigenous peoples from the dominant public sphere, via underrepresentation or biased coverage of events leads to the creation of the alternative media institutions [1]. "The subjective feeling of those concerned that the information they produce, messages, news, etc. do not find their way into the mainstream media" [17: 96], or the real lack of reflection in the mainstream media of the experience of this social group leads to the creation of platforms for discussing and sharing marginalized experience. The editorial policy of the immigrant and diaspora media addresses the needs of their audiences. If the information

needs of the audience differ from the requests of the media audience of the host society, the agenda of diaspora media differs. Thus, media outlets might pay more attention to the news form the country (countries) of origin or cover agenda of the host country in the native language(s) of their audiences. More sophisticated editorial policy includes alternative framing of the events in the host country and in the country (countries) of origin that reflects unique interests and opinions existing in the immigrant or diaspora publics.

There is a large volume of published studies describing the balance between covering news from the host and home countries in immigrant or diaspora media. The digital traces Facebook users leave while interacting with the news allow the examination of how decisions of the editors about news agenda meet the public's needs and interests.

2.2 Digital Traces of News Exposure on Facebook

Steensen, Ferrer-Conill, and Peters stressed the need of conceptualizing different types of engagement and interactionist behavior. In this paper I follow Sang and colleagues who defined news engagement as "news users' varying modes of interaction with news content and/or other users" [14: 468]. Following a Facebook page of a news outlet provides a user with one of the most convenient ways to engage with the news. The platform affordances even include the buttons for a rapid and spontaneous emotional sharing. "By curating one's news repertoire on Twitter or Instagram individual users are able to select and filter their own "newspaper edition", thereby becoming an editor or gatekeeper in their own right through practices of personal news curation" [11:1022] - the same words could be written about Facebook. Merten describes the news exposure on social media as incidental, non-exclusive and influenced by social contacts of a user [11]. The incidental character on the news exposure is partly designed by the algorithms of social media platforms. Digital traces a user might leave on a Facebook page of a news media influence the further structure of the individual Facebook feed.

A large and growing body of literature has investigated these digital traces. Much of the current literature on Facebook user reactions pays particular attention to the emotional nature of these small actions. Still, previous research findings remained contradictory. Heiss et. al. [5] have shown that positive emotions increased all three types of possible news user actions - shares, likes and comments. Among positive emotions, humoristic elements tend to be virally shared and commented [5], however, content inducing anger also induces users to share and to comment it [8]. Lischka & Messerli [10] argued that commenting a news item correlates with dissatisfaction of a news user. The regression analysis conducted by Tian and colleagues revealed that a significant predictive role for emotional, functional, communal, and overall social media engagement is played by warmth, and not by competence [15]. Guo and Sun studied Facebook pages of the local TV stations and found that political news attract more user comments than more consumer-oriented content. The latter tends to be shared more often, since Facebook users aim to be helpful and useful for their audiences. "News stories on crimes, entertainment, civic information, sports, transportation, environment/nature/animals significantly influenced at least two types of user engagement behaviors, while news posts on emergences, weather, health, education only affected one of three types of user interactions" [3: 748]. In this paper I adopt the methodological principles that were developed by Guo

and Sun and explore which patterns of user behavior could be observed on Facebook pages of Russian-language media in Estonia and Latvia.

3 Methodology

For this study I selected six major news media in Estonia and Latvia. Posts from their official Facebook pages and their metadata for analysis were downloaded in January 2022 with Popsters, a Russian-based service for social media management. The general sample of posts published by six media outlets contains 41239 items published from 1st January 2018 to 31st December 2021. On average, a news outlet in the sample publishes 1700 posts during the year (MD = 1728, 5; and the difference in the Facebook posting policy between outlets has diminished in these four years: SD (2018) = 44,88, while SD (2021) = 17,92). Metadata for each post includes following: day and time the post was published; number of users' reactions (likes, shares and comments); multimedia attached to the post (link to the website, or photo, or video). Popsters also provides data about number of followers and engagement rates measured for each media outlet Facebook page (Table 1).

Country	Media title	N of FB followers	General N of posts 2018–2021	ER per post	ER per day
Estonia	ETV +	32475	6785	0.513	2.383
Estonia	Delphi (Estonian branch; Russian language)	18104	6974	0.189	0.902
Estonia	Postimees	23108	6977	0.444	2.123
Latvia	LSM	43890	6789	0.586	2.721
Latvia	Mixnevs	72110	6740	0.070	0.324
Latvia	Delphi (Latvian branch; Russian language)	149471	6974	0.091	0.440

Table 1. General data about user engagement with the media outlets in the sample

Since the number of posts per outlet is very similar, as well as the intensity of posting, for the dataset 100 hundred posts has been chosen for each outlet randomly. Text of each post was coded accordingly to the geography of news mentioned in the post, or in the title of the publication on the news website the link was leading to. The list of binary variables included mentions of 1) host country 2) Baltic region 3) Russia 4) other post-Soviet country (0 – not mentioned, 1 – mentioned).

4 Results

4.1 RQ1. News from Which Countries Are Covered on the FB Pages of Russian-Language News Media Outlets in Estonia and Latvia?

The majority of posts included into the randomized dataset were dedicated to the host country: Estonia or Latvia accordingly (Fig. 1). The international news website *Delphi* in both countries covered the events in the host country less often than other outlets, followed by Postimees (four out of five posts connected to the Estonian news) and the group of the last three outlets where only each tenth post did not mention the host country. Russia is mentioned on average 3 times more often than other Baltic countries. A possible explanation might be that the coverage of Russian news represents the political position of the outlet, while neighbourhood states from the tightly intertwined region could be easily consumed from other sources of information. Other post-Soviet countries can be covered even more often, first of all, in case of Ukraine and Belarus due to the importance of the Russian-Ukrainian conflict.

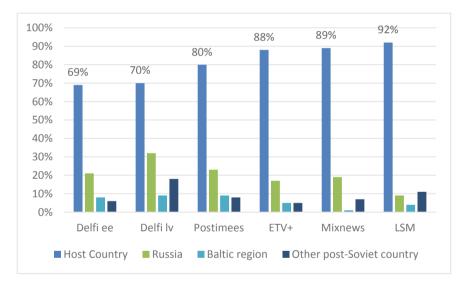


Fig. 1. Geography of the posts in the randomized dataset (N = 600, 100 posts per outlet).

4.2 Does the Context of the News Piece Correlate with the Data About the User Engagement on Facebook?

To analyze context of the news piece, I've chosen following criteria: host country where the media outlet is published; the media outlet itself; the number of followers on the Facebook official page of the media outlet; the community type of the page; year of the publication and the multimedia item included into the post. As data in the Table X suggests, Estonian Facebook users tend slightly less to like posts of the media outlets, while Latvian Facebook users tend slightly more to repost news pieces to their own FB pages. The correlation with comments is statistically insignificant.

The media outlet is also slightly connected to the likes and reposts. The possible explanation might be the political position of a particular media outlet and its reputation that can influence the decision of public support and inclusion of the news piece into the digital representation of self on the Facebook page of a user. The inverse correlation between number of followers and likes per follower has been already shown in the existing literature on the user engagement, first of all, in the field of marketing research.

Community type of the Facebook page was coded accordingly the data in Table 2; Mixnews and Delphi (Latvian branch) are characterized as unengaged type: the biggest number of followers, the lowest engagement rate per post, the lowest engagement rate per day). Delphi (Estonian branch) could be described as a regular type: although the number of followers is the smallest in our sample, the engagement rate per day is twice more than on the pages of the unengaged type. The third type includes Postimees, ETV+ and LSM: they are characterized by the medium number of followers and the highest engagement rates. My results suggest that followers of the third type tend more to like posts on the Facebook page of a media outlet they follow (a moderate correlation) and slightly more to comment (a weak correlation) the posts.

	Likes per follower	Reposts per follower	Comments per follower
Country	-0,20*	0,18*	-0,08
Media outlet	-0,23*	0,21*	-0,10
N of followers	-0,24*	0,08	-0,13
Community type	0,38*	0,13	0,15*
Year	0,20*	0,001	0,19*
Media 1	0,089	-0,004	-0,007
Media 2	-0,121	0,046	-0,013

Table 2. Spearman's rho: context and user engagement

(*Marked correlations are significant at p <,001).

Year of the post demonstrates the tendency of growing user engagement from 2018 to 2021. Of course, pandemic has increased the time of internet usage and people's involvement into discussions about news as well as the emotional intensity of their reactions. However, the correlation's strength is quite weak, and the absence of a statistically significant correlation between date of publication and reposts per follower could lead to even more fruitful discussion about the difference between these types of user behavior.

Finally, according to my data, the presence or absence of multimedia does not correlate with the user engagement: I did not reveal any statistically significant correlation between them. Only 1% of all posts did not contain any multimedia object; while the two thirds of the posts included into the dataset contained a link to the website of the media outlet (63%). Every fifth post included photo (19%), and in 17% of cases the video was the main item of the content or was attached to a textual part.

4.3 Do Users Tend to Repost Posts They Like More Than Comment on Them?

The six media outlets have not shown similar tendencies in the strength of association between types of Facebook reactions (see Table 3). At least for my dataset, such media as ETV+, Delphi (Estonian), and LSM support the consistent pattern revealed in the previous studies, namely, people tend more to repost pieces they liked and less to comment on them.

Media title	Likes & Comments	Likes & Reposts	Comments & Reposts
ETV+	0,54*	0,97*	0,55*
Delphi (Estonian)	0,35*	0,78*	0,33*
Postimees	0,62*	0,15	0,01
LSM	0,43*	0,84*	0,51*
Mixnews	0,58*	0,17	0,08
Delphi (Latvian)	0,72*	0,26*	0,06

Table 3. Relations between different type of Facebook reactions

(* Marked correlations are significant at p < 0.05).

The significant correlation between comments and reposts contradicts the previous results suggesting that people tend to comment on pieces to disagree and to argue with them, thus, commenting should be not strongly connected to reposts. This result needs further investigation. Based on the existing literature, one possible explanation might be that the polarized audience leaves digital traces demonstrating level of engagement but not a consensus in feelings and evaluations of the content.

The most surprising aspect of the data is the strong correlation between likes and comments in all news media in the studied dataset. Followers of Facebook pages of Delphi (Latvian), Postimees and Mixnews tend more to comment the posts they like rather than repost them. There is no significant correlation between likes and reposts in case of Postimees and Mixnews, and in case of Delphi (Latvian) the correlation between likes and reposts is tree times weaker than between likes and comments.

4.4 Do the Users of Media Outlets Differ in the Manner They Engage with the News About Their Host Country?

What stands out in the Table 4 is that the posts covering news about the host country slightly tend to engage users more than news about other states, including country (countries) of origin. Moreover, the news from the host country trigger the user behavior explicitly connected to the positive emotions and support (likes and reposts).

	Likes per follower	Reposts per follower	Comments per follower
Host country	0,11*	0,13*	0,075
Baltic region	-0,006	-0,007	-0,017
Russia	-0,048	-0,098	-0,034
Other post-Soviet country	-0,020	-0,029	0,045

Table 4. User engagement with the news covering different countries

(* Marked correlations are significant at p <,05000).

The patterns of followers' behavior differ for media outlets selected for analysis (Table 5(. The single most striking observation to emerge from the data comparison that followers of the Facebook page of Delphi (Latvian) tend to comment posts they like, while the data about the host country contradicts this tendency.

Media title	Likes	Reposts	Comments
ETV +	0,34*	0,41*	0,25*
Delphi (Estonian)	nonsignificant	nonsignificant	nonsignificant
Postimees	nonsignificant	0,30*	nonsignificant
LSM	nonsignificant	nonsignificant	nonsignificant
Mixnews	nonsignificant	nonsignificant	nonsignificant
Delphi (Latvian)	0, 24*	0,39*	nonsignificant

Table 5. News about host country and ...

(* Marked correlations are significant at p <,05000).

While overall data about ETV+ page followers has shown that the more a post is liked the more it will be reposted, the data towards host country suggests that posts about host country tend to be slightly more reposted than liked. This result is somewhat counterintuitive, but comparing it with the high level of engagement of ETV+ followers I assume that publication of Estonian news even intensifies their involvement.

In summary, these results show that the geography of a news item does not play a one consistent and holistic role as a factor predicting user engagement with the diaspora media. This study has found that generally news from the host country inspire users to engage more actively in a supportive way via likes and reposts. The findings provided a deeper insight into the heterogenous nature of the diaspora/immigrant segments of media landscape of a modern state. Instead of general tendencies typical for the diaspora/immigrant media, the difference between media outlets and publics engaged on Facebook into the interaction with the news content seems to play a more important role.

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