# 2023 Communication Strategies in Digital Society Workshop (ComSDS)

# Proceedings
# of the 2023 Communication Strategies in Digital Society Seminar
# (2023 ComSDS)

**April 12, 2023**

**St. Petersburg**
**Russia**
**2023**

**Preface**

The IEEE Russia North West Section, IEEE Russia Section and Saint Petersburg Electrotechnical University "LETI" are pleased to present the Proceedings of the 2023 Communication Strategies in Digital Society Seminar (2023 ComSDS) held in St. Petersburg, Russia on April, 12, 2023. This Seminar is proudly hosted by Saint Petersburg Electrotechnical University "LETI". The Organising Committee believes and trusts that we have been true to the spirit of collegiality that members of IEEE value whilst also maintaining a high standard as we reviewed papers, provided feedback and now present a strong body of published work in this collection of proceedings.

The theme for this seminar was chosen as a mean of bringing together the orientations of Digital Society research and teaching providing a basis for discussion of issues arising across the community in relation to humanitarian aspects and electronic engineering.

The aim in these proceedings has been to present high quality work in an accessible medium, for use in the teaching and further research of all people associated with Digital Society studies. To achieve this aim, all abstracts were blind reviewed, and full papers submitted for publication in this journal of proceedings were subjected to a rigorous reviewing process.

Dr. Viktor Sheludko
Chair, IEEE Russia North West Section – Technical Program Seminar Chair

# Automated Analysis of Communication Strategies of Telegram Channels in the Area of Psychology

Irina Bogdanovskaya
The Herzen State Pedagogical
University of Russia
Saint-Petersburg, Russia
0000-0001-7303-615X

Boris Nizomutdinov
University ITMO
Saint-Petersburg, Russia
0000-0002-4090-9564

Anna Uglova
The Herzen State Pedagogical
University of Russia
Saint-Petersburg, Russia
0000-0002-8072-0539

*Abstract.* — **Based on automated content analysis, the paper considered the specifics of the semantic-pragmatic organization of communicative strategies of psychological telegram channels with different popularity ratings. With the help of machine learning methods, it was determined which topic in the field of psychology the post in the form of text belongs to, the thematic structure of the content was described, statistical information on publication activity and the average volume of characters used in published posts was analyzed. The leading communication strategies implemented by channels with different ratings have been identified. Groups of communicative tactics that have a direct or indirect impact on the addressee are reconstructed. It is shown that the communication strategies of psychological telegram channels, regardless of their rating, are complemented by typical "network" methods of influencing the audience's opinion to attract traffic.**

*Keywords— communication strategies, information space, automated data collection, communication tactics, telegram*

## I. INTRODUCTION

With the development of virtual communication, the "digitalization" of society and social institutions, including professional communities, is increasing. The sphere of helping activities is also undergoing a major transformation, with many professionals providing psychological support to the population offering their assistance on information platforms. Modern professional discourse in the digital media is also changing its institutional attributes, which is connected with changes in the ways and channels of communication. In this situation there is a lack of research aimed at studying the communicative and pragmatic specificity of interaction in network communities dedicated to psychological issues. By "network communities" we mean websites that use collaborative applications and allow participants to communicate, create and share user-generated content [1,2]. Participants in network communities can use a variety of tools to create their own publications, participate in discussions, blog and microblog, broadcast live, and create virtual worlds [3]. Network communities allow their users to create their own public or private profiles, compile a list of other users with whom they share a connection, view and, if necessary, suppress the list of connections to their page, refer to the pages of other community members [4]. According to BrandAnalitic (a Russian developer of a system for monitoring and analyzing social media and mass media) at the end of 2022, the number of active authors in social media in Russia was 62.2 million, and authors wrote more than 1.5 billion public messages - posts, reposts and comments [5]. Psychologists, along with other professional groups, are increasingly using social media to provide professional services to the public, psychological outreach and education, and to promote personal brands. Studies of the effectiveness of online counseling by psychologists in a number of studies [6,7] have shown that they play the same role in maintaining the subjective well-being of the population as face-to-face counseling. Nevertheless, working online psychologists have to solve economic communication tasks, such as increasing recognition in social networks, achieving audience loyalty, and attracting new clients. The main task of economic communication is to influence the consumer in order to induce him to buy goods and services. The ethical tension arising in this situation is associated with the reputational aspect of the professional activity of the psychologist, which implies a high degree of responsibility for the information publicly broadcast by specialists [8]. However, at the moment there are no unambiguous rules governing the content and form of a psychologist's presentation of himself or herself in digital media [9]. In this situation, the study of communicative strategies that psychologists use in digital media becomes relevant.[1]

## II. LITERARY REVIEW

The information environment plays an increasing role in the life of professional communities, and as a consequence, the role and importance of communication in digital media is increasing. In this situation, there is a constant transformation of communicative connections and interactive communication in the virtual communication environment. Professional communication in digital media can be defined as a socio-verbal sphere with its inherent discursive practices and genre forms of implementation [10]. V.V. Stepanova understands professional discourse as a process of communication in a particular sphere of activity, characterized by the presence of a producer and a recipient of information (being in direct / indirect contact), at least one of which is a specialist (i.e. a person who has received a specialized education or has the necessary skills to work in a particular field of professional activity) [11]. The professional discourse of helping activities from the point of view of L. S. Beilinson can be defined "as the communication of specialists among themselves or with those who turn to them for advice or professional help". [12]. Given these definitions, professional psychological discourse in digital media in its most general form can be understood as communication on psychological topics occurring in a virtual environment, which can be viewed as an integral object in the unity of linguistic, communicative and pragmatic, cognitive, socio- and ethnocultural, communicative and technological characteristics [13]. At present, there are studies of some types of discursive interaction in digital media: engineering [14], scientific [15],

confessional [16], security discourse [17], media discourse [18]. It is necessary to note a number of works devoted to the network discourse of helping professionals (which includes specialists in the field of psychology): legal [19], medical [13]. There are very few works devoted to the study of communication practices of psychologists working in virtual space. We would like to mention the study of E. K. Novikova and E. V. Zvonova [20], dedicated to the promotion of the psychologist's expert blog. The authors have focused their attention to a greater extent on economic and social factors that condition psychologist's communicative practices in digital media, which, in turn, are realized through interesting content for the network community that is comprehensible and supplemented by techniques of visual self-presentation. Psychological aspects of interaction of the psychologist and the network community are addressed in their work by N.V. Klyueva et al. [21]. The study established the requirements for the presentation of the information about oneself by the psychologist-consultant on the personal page in the social network, not contradicting the ethical principles of helping activity, as well as ethically questionable and unacceptable communicative tactics. Despite the high significance of the results obtained in the aforementioned works, they did not cover the specifics of professional psychological discourse related to its types with their inherent genres, did not cover the specifics of communication practices of psychologists in the virtual space, and did not consider the possibilities of automated analysis of the network helping discourse. In this regard, the goals of our work included: 1) analysis of communicative strategies used by telegram channels of psychological orientation to achieve high attendance and engagement of their audience, 2) use of methods of automated analysis of professional psychological discourse in digital media. Taking into account the goals of the work, we would like to present 2 research questions.

RQ1. What is the specificity of the semantic-pragmatic organization of communicative strategies on psychological telegram channels with different popularity ratings?

RQ2. What are the techniques of psychological and specific "network" influence to implement the influence on the opinion of the audience?

## III. Research design

The Telegram platform was chosen for the study due to the fact that at the moment the audience of this resource in Russia exceeds 35 million people and includes more than 300 thousand channels. We considered the rating (by the number of subscribers) of channels devoted to psychological problems of the TGStat service, including 100 positions. All links to 100 educational channels, in descending order of popularity, as well as extended statistics for each channel were retained. The TGStat service provides various information, including citation index, publication coverage, external traffic, top publications, etc. The next step required the uploading of all the posts that had been published in the collection. Telegram has an advanced API for creating bots. The Bot API makes it easy to create programs that use Telegram messages for the interface. The Telegram API and TDLib APIs allow you to create your own customizable Telegram clients. At the same time, chats themselves can be unloaded without API using the standard functionality available in the messenger. Telegram's built-in messenger

functions were used to collect information; the PC program interface has the ability to unload messages in JSON format from the channel. The result of the collection was 100 Json files. Figure 1 shows a general scheme of data collection.
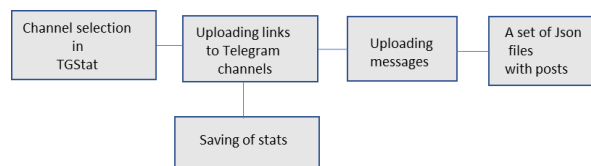


Fig. 1. General scheme of information collection

During the study, we compared the most popular channels with the less popular ones, for this purpose, we selected the first 10 channels from the selection and the last 10. The processing of textual information consisted in the following. Using the available set of publications of different psychology topics collected from Telegram, we automatically (without manual markup, using machine learning methods) determined, to which topic the post as a text refers. To do this, it was necessary to solve the task of text clustering, i.e., splitting the text array into an arbitrary number of groups (clusters) for further expert analysis to determine the approximate topics of a particular group of news. At this stage of the study, as an experiment, it was decided to use the ready-made service from Megaputer Intelligence - PolyAnalyst. PolyAnalyst supports all stages of the data analysis process: from downloading and processing data to advanced text and data analysis, as well as creating custom reports. PolyAnalyst provides clustering of documents using the KMeans method. The algorithm works by minimizing the total quadratic deviation of cluster points from the centers of these clusters themselves. Lists with top-10 keywords specific to each cluster were created for each of the formed clusters.
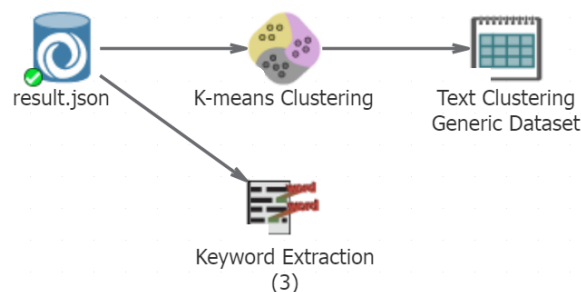


Fig. 2. General scheme of data analysis

In addition, we analyzed publication activity by year, statistics on the number of characters in posts, and other parameters.

## IV. Results

Professional psychological discourse in Telegram can be characterized by such properties as heterogeneity of the subject sphere (the subject can be any person who decided to join or view the channel, and, as we pointed out above, at least one of the subjects (author, addressee) is a psychologist), polycodality (use of iconic, symbolic and verbal communication codes), interactivity, hypertextuality. At the same time, the communication strategies of psychological telegram channels are mediated by a number of characteristics of digital media: the ability to work with individual elements of the web page, the use of links, the

standardization of many functions and communication elements, the presence of non-text elements (such as animation, recorded sound and video) in hypertext, and the presence of software (electronic) agents that send standard messages in the absence of the user, interact with other software agents. The leading functions of professional psychological discourse in Telegram indicate the integration of its types such as educational-educational, professional-practical, advertising-commercial.

Psychological telegram channels with high ratings represent long-term projects, with the volume of publications increasing evenly over the last 5 years. At the same time, low-rated telegram channels posted most of their information in 2022, attracted by the simplicity and capabilities of the messenger, and motivated by the need for mass transfer of target subscribers from Instagram. Figure 3 shows in red the 10 channels trailing the rankings (least popular), the channels from the top 10 are shown in blue.
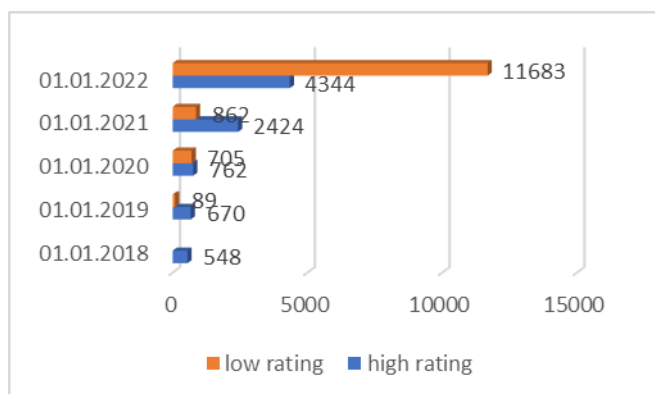


Fig. 3.  Publication activity

At the next stage of processing the statistical information about the content of telegram channels, we analyzed the average volume of characters used in the posts published. It was found that psychological telegram channels with high ratings mainly publish rather short messages (39% of the content - posts of up to 500 characters), while the content of telegram channels with low ratings is diverse, with posts of up to 500 characters - 14%).  Perhaps due to the fact that educational telegram channels with a high rating publish more concise and concise information, it is easier to perceive and attracts a larger audience.

The work analyzed the content aspects of the content posted from the 10 most popular channels and 10 least popular channels. After conducting a cluster analysis, lists with the top 10 keywords specific to each cluster were created for each of the clusters formed. The results of visualizing the distribution of posts across clusters are shown in Figures 4 and 5.
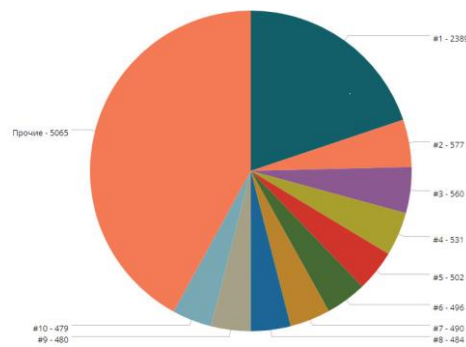


Fig. 4.  Categorical structure of communicative tactics of psychological telegram channels with a high rating

It was revealed that the leading communicative tactics of highly rated telegram channels are associated with the spheres of intimate-personal (1 cluster, key words: man, woman, sex, sexual, female), interpersonal (2, 9 and 10 clusters, key words: person, interlocutor, often, like, colleague, look, phrase, compliment, stand), family (clusters 3, 6, 7 and 8, keywords: man, woman, sociotype, wife, character, function, love, forgive, happiness, let go) and existential (cluster 5, keywords: life, purpose, live, meaning, happiness, achieve, start) aspects of the relationship system.

The next most pronounced communicative tactic is related to the presentation of information related to psychological preparation in the situation of choosing an educational route (cluster 4, key words: ticket, public, online consultation, meeting, soon, fear, find, July, June, talk).

Thus, the analysis of the semantic and pragmatic organization of highly-rated psychological telegram channels allowed to reconstruct two groups of communicative tactics, implementing a direct or indirect impact on the addressee. One of them is combined in a strategy that can be designated as "Psychological education in the sphere of relations". The psychological prerequisite for influence in this case is the person's need for healthy relationships, the deficiency of which, often unconsciously, reduces the quality of ordinary life.   The second group of tactics forms the strategy designated by us "Psychological Support of Choice of Educational Route" focused on young people and their parents. The psychological prerequisite for the impact for this strategy is the conflict between the need for self-development and the need for emotional security.

Analysis of the content of educational telegram channels with low ratings allowed to identify 10 thematic clusters. It was revealed that the leading communicative tactics can be designated as "Incitement to personal growth". Key words are located in 1, 2, 6, 12 and 13 clusters (day, charge, success, tracker, do, video, pass, complete, outline, new, training, challange, day, do, flat, course, broadcast, recording, link, mirror, news, site, marathon, training, place).
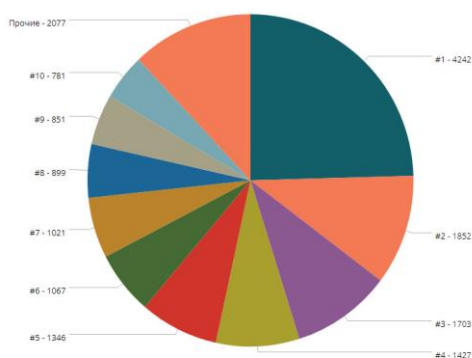
Fig. 5. Categorical structure of communicative tactics of psychological telegram channels with a low rating

This tactic is associated with the promotion of various self-development info-products, as well as the constant monitoring of the level of audience involvement through the organization of contests, marathons, Challenges, trainings and other types of online activity. The next most frequent tactic is "Offering time-management techniques" (clusters 3 and 7, keywords: task, case, goal, time, work, list, perform, important, habit, performance, make, prepare, plan, make up). It is oriented to people seeking to improve their efficiency, as well as those who are prone to procrastination. The third tactic is "Introduction to the techniques of wish fulfillment" (clusters 4, 8, 9, key words: life, live, failure, think, fear, affirmation, dream, mistake, believe, world, friend, parable, man, love, woman, son, once, love, god, meditation, do). This tactic stimulates psychological attunement to work with the individual unconscious and implements techniques used in both scientific and pseudoscientific psychology (affirmations), spiritual-religious or wellness practices (meditations), and in the psychotherapeutic practice of specialists working with metaphor (parables). The fourth tactic "Informing about mental disorders" (cluster 10, key words: disorder, patient, mental, illness, depression, syndrome, schizophrenia, suffer, condition, symptom). The use of this tactic seems to be related to the fact that recently the topic of mental health is no longer taboo, and mental illness itself is no longer something shameful in the public consciousness. Moreover, in some cases, it is possible to encounter people who have not sought specialized help attributing a mental disorder to themselves. Thus, this tactic is focused on people who are acutely experiencing problematic situations, who experience difficulties in maintaining a healthy mental state, who are inclined in some cases to run away from other problems and unwillingness to take responsibility.

In general, the analysis of the semantic and pragmatic organization of low-rated psychological telegram channels suggests that they implement the communicative strategy "Choice of popular and effective promotion mechanics". Psychological prerequisites of influence have more pronounced manipulative overtones and are associated with the use of value-attractive models of "success", "self-development", "personal growth", the formation of an "attitude to a miracle", the promotion of self-infusion techniques, which for some people will not have the desired effect, because they should have resorted to the help of a qualified specialist.

The communication strategies of psychological telegram channels, regardless of their rating, are supplemented by typical "network" techniques of influencing the opinion of the audience in order to attract traffic, through effective channel design techniques (use of video and gif-images, cross-posting techniques, through and contextual linking, etc.), as well as placement of advertising posts, which can be presented in verbal, iconic and mixed forms.

## V. CONCLUSIONS

The paper was based on the automated content analysis to consider the specificity of semantic and pragmatic organization of communicative strategies of psychological telegram channels with different popularity ratings. Using machine learning methods it was determined to which topic in the field of psychology the post as a text refers, described the thematic structure of the content, analyzed statistical information about the publication activity and the average volume of characters used in the published posts. It was found that highly rated channels implement communication strategies "Psychological relationship education" and "Psychological support for the choice of educational route", while channels with a low rating adhere to the strategy "Choice of popular and effective promotion mechanics". The analysis of psychological telegram channels made it possible to reconstruct groups of communicative tactics that implement direct or indirect influence on the addressee. For high-rating channels they are associated with addressing the sphere of intimate-personal, interpersonal and existential aspects of the system of relations, as well as with the preparation for the situation of choosing an educational route. The psychological prerequisites for influence are the needs for healthy relationships and the conflict between the need for self-development and the need for emotional safety. The influence on the addressee on low-rated channels is realized through such tactics as "encouragement to personal growth", "offer of time-management techniques", "technologies of wish fulfillment", "informing about mental disorders". Psychological prerequisites of influence have more pronounced manipulative overtones and are associated with the use of value-attractive models of life activity, the formation of a "miracle attitude", the promotion of self-insertion techniques. Communicative strategies of psychological telegram channels regardless of their rating are supplemented by typical "network" techniques of influencing the opinion of the audience in order to attract traffic which include effective techniques of content design: use of video and gif-images, cross-posting techniques, through and contextual symbols.

Practical importance of the received results is connected with possibility of their use for development of tools for the analysis and monitoring of the professional psychological communication in the Internet. The technique of the automated cluster analysis of communicative strategies of psychological telegram channels will be demanded by a wide range of experts in the field of management of psychological services, developers of content of educational Internet channels, marketologists, psychologists working in the virtual environment.

## REFERENCES

[1] A. M. Kaplan and M. Haenlein, "Users of the world, unite! The challenges and opportunities of social media" in Business Horizons vol. 53, is. 1, 2010, pp. 59 – 68.

[2] M. Castells, "The Rise of the Network Society", Hoboken, NJ: Wiley-Blackwell, 2000.

[3] D. G. Lannin and N. A. Scott, "Social networking ethics: Developing best practices for the new small world" in Professional Psychology: Research and Practice article, vol.44, pp. 135-141, 2013.

[4] D. M. Boyd, and N. B. Ellison, "Social network sites: Definition, history, and scholarship" in Journal of Computer-Mediated Communication, vol. 13, 2007, pp. 210–230.

[5] V. Chernij, "Social networks in Russia: numbers and trends, fall 2022", published online in russian, URL: https://br-analytics.ru/blog/social-media-russia-2022].

[6] A. Barak, L. Hen, M. Boniel-Nissim and N. Shapira, "A comprehensive review and a meta-analysis of the effectiveness of Internet-based psychotherapeutic interventions" in Journal of technology in human services, vol. 26, is. 2-4, 2008, pp. 109–160.

[7] A. Drago, T. N. Winding and N. Antypa, "Videoconferencing in psychiatry, a meta-analysis of assessment and treatment" in European Psychiatry, vol. 36, 2016, pp. 29–37.

[8] N. V. Kljueva, Ethics and professional communications of counseling psychologist, Yaroslavl: P. G. Demidov Yaroslavl state university, in russian, 2016, p. 52.

[9] N. V. Kljueva and A. I. Fedotova, "Ethical aspects of self-presenting in social networks by a counseling psychologist" in Human factor: social psychologist, vol. 1 (37), 2019, in Russian, pp. 262-268.

[10] N. D. Golev and N. N. Shpilnaya, "Everyday media communication as a social-speech sphere: problem statement and appearance boundaries" in Medialinguistics, vol. 8 (1), 2021, in Russian, pp. 23-34.

[11] V. V. Stepanova, "On the types of sectoral professional discourse", in News of F. Skorina Gomel state university, ser. Liberal arts, vol. 1(112), 2019, in Russian, pp. 137-140

[12] L. S. Beilinson, "Professional discourse: profile attributes" in Liberal and social arts, vol. 6, 2016, in russian, pp. 179-182

[13] K. V. Ahnina and V. B. Kurilenko, "Medical net-discourse: essence, qualities, structure" in Polylinguality and transculture practices, vol. 1, 2015, in Russian.

[14] L. I. Ivanova, "Electronic online foreign-language engineering discourse and its linguodidactic possibilities" in News of South federal university, ser. technical arts, vol. 10 (111), 2010, in Russian, pp 72-75.

[15] Y. Yunping, "From abstracts to "60-second science" podcasts: Reformulation of scientific discourse" in Journal of English for Academic Purposes, vol. 53, 2021.

[16] E. N. Aznacheeva and Y. V. Mamonova, "The interplay of instructionality and incitement in orthodox religious communication" in News of Chelyabinsk state university, vol. 6 (428), 2019, pp. 7-16.

[17] B. Nizomutdinov, A. Uglova and A. Kozyreva, "Development of a method for assessing the safety of the urban environment based on the analysis of the communication practices of city residents in geoinformation services" in Procedia computer science, vol. 212 (C), 2022, pp. 34–41.

[18] I. M. Bogdanovskaya, A. B. Uglova, and N. N. Koroleva, "Psychological factors of trust in popular video bloggers among modern youth" in Journal of the Higher School of Economics, vol. 18 (3), 2021, pp. 451–467.

[19] A. A. Hustenko, "New forms of lawyers professional communication in media environment (based on web communities publications)" in News on Tomsk state pedagogical university, vol. 6 (218), 2021, in russian.

[20] E. K. Novikova, "Promotion of psychologists expert blog in Instagram social network" in Sociosphere, vol. 3, 2021, in Russian, pp. 87-90.

[21] N. V. Kljueva, A. I. Pavlova, "Psychological aspects of self-positioning as a counseling psychologist in social networks" in Perspectives of science and education, vol. 4 (46), 2020, in russian.

# Axiological Factors for the Krasnoyarsk City Inhabitants' Involvement in Housing Resident Chat Rooms

Alexey V. Mikhaylov
*Department of Public Relations*
*Reshetnev Siberian State University of Science & Technology*
Krasnoyarsk, Russia
avm_2006_64@mail.ru

Svetlana V. Uskova
*Department of Public Relations*
*Reshetnev Siberian State University of Science & Technology*
Krasnoyarsk, Russia
s_us78@mail.ru

Elena A. Chizhova
*Department of Public Relations*
*Reshetnev Siberian State University of Science & Technology*
Krasnoyarsk, Russia
chigovaea@yandex.ru

Andrey A. Maximov
*Department of Public Relations*
*Reshetnev Siberian State University of Science & Technology*
Krasnoyarsk, Russia
andrymaxsis@gmail.com

*Abstract*—**The paper analyses the factors for the Krasnoyarsk city residents' involvement in local online groups. These groups are connected by their place of residence, activity or a specific problem. The global Internet is abounding with small communities, and social practices are constantly transforming. Being or not being affiliated with a community is not always determined by age or information technology proficiency. Axiological characteristics that affect the participation and contribution to housing resident chat rooms are revealed.**

*Keywords—network society, online groups on social networks, virtual community, Krasnoyarsk, personal values.*

## I. INTRODUCTION

Information technologies have become ubiquitous and are used by modern society to solve technical and social problems [1]. Organizations and institutions rely on their information technology infrastructure [2]. Modernization and progress in the public mind are often associated with information technology [3].

The nature of information technologies is most often understood as: a tool for achieving certain goals through the expansion of human capabilities [4] or as a continuation of social interactions, the result of social determinism, an event that itself affects society [5]. Axiological factors are considered in terms of the second approach. New practices created as a result of changes in social reality due to the impact of information technologies do not only expand the horizons of social concepts, but also form new social strata and institutions.

Each information technology potentially embodies needs, interests and values. Practices in which information technologies are introduced become ethically significant. Particular attention of researchers is drawn to the role of information technology as a tool to overcome the limits of the 'permanent present' [6]. It becomes possible not only to establish facts of the past using technical means, but also to relive and re-evaluate them. With regard to the future, information technology also affects the conditions of life and the people themselves: '…when we develop new technological systems, we also develop the kind of people that we are (or will become)' [7]. Thus, through technology a person creates individuals of the future. Interestingly, the people of the future perceive the new reality created by information technologies as a fact of life, as part of their ongoing activity.

The impact of information technology on human values and rights is a major ethical issue in this field. The stratification of people according to their ability to use technological advances divides society into layers that differ in the type of information sources they exploit. New ways of obtaining information and ways of interacting with each other are changing most of the socio-demographic and psychographic characteristics of society.

## II. OVERVIEW OF THE SUBJECT AREA

At the 7th St. Petersburg Winter Festival of Practical Psychology in 2021, psychologists concluded: 'We are faced with a new reality — the world of a hybrid offline and online human existence… we should not set the digital world against reality' [8]. Digital socialization, as a process of mastering and appropriating social experience by a person mediated by information and communication technologies, is similar to its traditional form. Digital socialization is characterized by an increase in the time of user activity (hyperconnectivity), blurred boundaries between online and offline (mixed reality) - the phenomenon of 'digital personality'. Accordingly, in a hybrid world, values are also to be hybrid.

A number of researchers argue that the following values are often inherent in the new sociality of a hyperconnected person: the idea of the Internet as a source of absolute knowledge; denial of semantic control of open information spaces; potential accessibility and easy development of the cultural fields of all nations and social groups [9]. The listed values confirm the idea of post-materialists that in the mindset of a modern person, the former 'material', tangible and understandable values of adaptation to the outside world and the desire for security have been replaced by post-material values: self-realization, self-development, ecological thinking and 'self-concern' [10].

At the same time, the data of sociological studies contradict the conclusions of theorists: traditional values have remained the same and dominate over digital ones. According to the All-Russian Public Opinion Research Center [11], the most important value for Russians is a high level of personal and family well-being, safe and comfortable living conditions, and the opportunity to communicate with

friends and relatives (these points were noted by more than half of the respondents). Table I shows the response options to the question: 'Please tell us to what extent the following areas of life are important to you?' and data on the parameter 'very important'.

| Answer option | Parameter 'very important' (%) |
|---|---|
| Your own health and the health of family members | 89 |
| Relationship in the family | 84 |
| Personal and family safety | 83 |
| Your financial situation and that of family members | 73 |
| Habitat, ecology in the place of residence | 69 |
| Social infrastructure in the place of residence | 62 |
| Opportunity to communicate with friends and family | 57 |
| Opportunities to achieve goals | 49 |
| General economic and political environment | 47 |
| Availability of leisure and opportunities for its implementation | 33 |
| Creative self-realization | 25 |
| Your social status, position in society | 20 |
| Career advancement, the opportunity to reach a high position | 12 |
| Participation in public and political life | 10 |

Thus, the hybridization of values has not yet occurred. In any case, the values of Russians in the context of digitalization are a unifying concept for representatives of various social groups. Every Russian wants to live in a safe place where the well-being of loved ones can be controlled, and plans for the future can be made. One of the conditions for prosperous living is knowing your neighbours and being able to communicate with them. In small towns and communities, face-to-face communication is a natural phenomenon. In the city, the places where the community could function are high-rise blocks and their yards. The digital age has had an impact on the way that neighbours of high-rise buildings, especially new ones, interact. Residents create their own chat rooms for information exchange and communication. Already at the construction stage, future owners can get acquainted and understand what kind of neighbours they are going to live with.

Public authorities began to use this form of social interaction for their own purposes and even tried to control it. Thus, Moscow officials have created a single platform 'Electronic Home'. Now, according to Rossiyskaya Gazeta, 90% of Moscow high-rise buildings are connected to it [12]. As planned, all issues related to housing can now be resolved in one place. On the other hand, the authorities use this platform to communicate with tenants, especially during election campaigns. It is assumed that tenants of old buildings who have never had a resident chat room will become active users of the new service.

Thus, a question arises. Since resident chat rooms are more natural for new buildings, with the majority of residents living in houses of the old type and not having chat rooms or not using them even where they do exist, do the tenants of old and new houses differ axiologically? Does the economic performance of people and their level of access to information technology affect the emergence of a digital community such as 'resident chat rooms'? Can a 'house tenant chat room' be a channel of communication between the authorities and the population?

14 residential blocks have recently been built in the Bolshoi Vavilovskiy housing estate of Krasnoyarsk, and five more are planned to be built in the near future. The marketing department specialists of the developer identified three main problems of the housing estate.

1. Blocks which are not included in the renovation programme.

2. The existing layout of the area does not allow residential developments to be built according to new standards with large yards and car parks.

3. Even with the demolition of wooden houses, many old blocks and facilities with outdated infrastructure remain.

4. Lack of a unique concept that would add value to the area.

At meetings of housing estate activists with the administration and representatives of the developers, the following criticisms are also expressed: residents do not have enough green spaces for walking; the overcrowding in the area is frightening (the territory will be densely built up with high-rise blocks, and due to overloaded facilities, it will be difficult to obtain educational and healthcare services). People are worried about the risk of traffic congestion. At the same time, an objective study of the needs and interests of the Vavilovskiy housing estate residents has not been conducted before. As a result, at present, the long-term dwellers blame the tenants of new buildings for their troubles, who, in turn, demand that the district and city authorities solve the problems of the housing estate. The confrontation between the three parties has reached a dead end: long-term dwellers oppose further development of the Vavilovskiy housing estate, the new settlers are building fences around their blocks, and authorities are searching for communication channels and ways to influence the current situation.

In this regard, we conducted a study aimed at identifying the current social needs and interests of the Bolshoi Vavilovskiy tenants. As part of our study, we rely on the option of understanding individual values, bringing them closer to the concepts of need and motivation, which will help us link values and needs in the structure of the semantic regulation of the individual [13].

III. PROBLEM STATEMENT AND METHOD OF ITS SOLUTION

Research objectives:

1. Identification of the objective prerequisites for the social needs of the Bolshoi Vavilovskiy tenants using the analysis of statistical data;

2. Identification of quantitative and qualitative data on the current social needs and interests of the Bolshoi Vavilovskiy tenants.

The database of the study:

- statistical data provided by property management companies about the tenants included in the study sample;

- statistical data of schools and polyclinics to which the tenants of the above houses are attached;

- results of a survey among tenants of the housing estate;
- results of research in focus groups among the housing estate tenants.

The survey respondents were selected by applying a two-stage stratified sampling method. The first stage selection units were the dates when the housing occupied by the respondents was commissioned: 'new' housing was occupied no later than the last 12 years; 'old' housing is more than 50 years old. From the lists of residential blocks in the housing estate, typical buildings were selected: 'Stalinka' (years of construction - 1933-1958), 'Khrushchevka' (years of construction - 1960-1984) and two multi-storey new buildings. It should be noted that there are two times fewer new buildings in the district than 'old' blocks, while the number of long-term residents and 'brand new' ones is almost the same.

At the second stage, lists of tenants of selected houses over 18 years old were taken as the sampling frame. Based on them, the quota for the number of people living in the block was calculated. Thus, the sample of respondents reproduced the structure of the inhabitants of the selected blocks. The total number of people over 18 comprised 923, and the number of survey participants equalled 314. The confidence level was 95%.

A total of four focus group studies were conducted. Focus group participants were represented by tenants of the housing estate and distributed by age:

- tenants aged 18-25;
- tenants aged 26-45;
- tenants aged 46-65;
- tenants over 66.

## IV. Experiments

Tenants of 'new' housing have the highest income level: they can buy large household appliances more often than tenants from 'old' houses (46.7% compared to 13.4%). Tenants of 'old' housing have a low level of income: a third of the respondents can only afford food and utility bills (34.6%), and half of the respondents can buy small household appliances (50.3%).

Analysis of the results obtained showed that respondents of retirement age mostly live in 'old' houses (82% of the total number of pensioners), while younger tenants live in new buildings.

A comparative analysis of the marital status data of survey participants found that more family people live in 'new' housing (38% more than in 'old' housing); significantly fewer were divorced (by 15%) or were widows or widowers (by 14%).

79% of children live in 'new' housing, compared to 21% for 'old' blocks (Figure I). Respondents in new homes have more children of school (by 45%) and preschool (by 28%) ages. The survey data practically coincide with the statistical data presented in Table II.
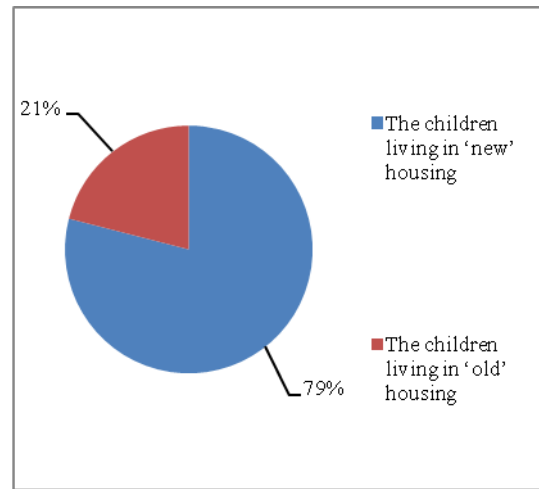


Fig. 1. Distribution of the number of children living in 'new' and 'old' housing, based on survey data (%)

TABLE. II. DISTRIBUTION OF TENANTS INCLUDED IN THE STUDY SAMPLE, DEPENDING ON AGE

| House type | Adult tenants (persons/%) | Children up to 18 (persons/%) |
|---|---|---|
| New block no. 1 | 398 / 43% | 134 / 48% |
| New block no. 2 | 216 / 23.5% | 87 / 31% |
| 'Khrushchevka' | 175 / 19% | 35 / 12.5 |
| 'Stalinka' | 134 / 14.5% | 23 / 8.5 |
| **Total number** | 923 / 100% | 279 / 100% |

The dependency ratio k in 'new' housing is 0.35, compared to 0.19 for 'old' blocks.

The formula for calculating the dependency ratio: $k = n1/n2$, where n1 is the number of children living in the study area; n2 is the number of residents in the study area.

Tenants of three of the four blocks included in the sample have chat rooms: two in new buildings and one in a Khrushchevka. Moreover, 90% of the residents of the newly-built blocks are participants in chat rooms, while only eight people out of 175 (4.5%) tenants of Khrushchevkas are subscribed to their chat room (Table III). Tenants of the 'old' housing explain that there is no need for a chat room (no desire to participate in it, no interest or practical need).

TABLE. III. DISTRIBUTION OF TENANTS PARTICIPATING IN THE HOUSE CHAT ROOM

| House type | The total number of the housing tenants | Number of participants in the chat (persons) |
|---|---|---|
| New block no. 1 | 398 | 359 |
| New block no. 2 | 216 | 201 |
| 'Khrushchevka' | 175 | 8 |
| 'Stalinka' | 134 | 0 |

According to the results of the study in focus groups, the needs of the respondents are structured in accordance with the social infrastructure of the municipality: 1) the transport system (transport lines serving the population); 2) information and communication system (mass media, communications, Internet); 3) a complex of the consumer market (trade, public catering and consumer services); 4) socio-cultural complex (facilities relating to healthcare, education, science, culture, art, leisure, fitness and sports); 5) housing and municipal complex [14].

Speaking about the housing estate, the respondents name the problems that are mainly related to the housing and municipal complex:

- lack of electric lighting in the streets and yards;
- stray dogs (they notice attacks), rats;
- uncollected waste from waste bins, or their absence;
- old trees that block the light to the windows of flats not only on the lower floors, but also on the upper floors, or there is a threat of them falling;
- poor quality of the road surface or its absence;
- lack of pavements or their 'deplorable state'.

The problems associated with the housing and municipal complex include conflicts related to new buildings. Households claim that the new blocks 'steal' the adjacent territory of the 'old' ones, infringing on the rights of long-term residents: people argue about parking spaces, playgrounds, and debris left after construction. The low-key role of management companies and activists of 'old' housing should also be noted: the issues of relocating the waste collection site, developing the adjacent territory, and renovation remain unresolved.

The social and cultural structure of the district (facilities relating to health care, education and science, social protection, culture, art and leisure, fitness and sports), which is designed for a smaller number of residents and cannot cope with the current situation, also causes great tension. The load on schools is almost twice as much as allowed (1,426 people against a maximum load of 700 people). There are no leisure and sports centres for either children or adults.

Respondents also express criticisms of the transport structure, but to a lesser extent: traffic congestion, lack of shuttle buses, and "wrong" road layouts for public transport (that impede traffic).

The complex of the consumer market (trade, public catering and public services) causes the least criticism. Most often, respondents note that 'everything is sufficient', 'everything is present'.

The information and communication structure is generally outside the attention of focus group participants. The interests and actual needs of the respondents are not connected with it. Chat rooms are needed to solve the everyday problems of tenants residing in new buildings. For them, moving to a newly-built block is associated with the development of new land and the creation of a new settlement. For interaction, they use all communication tools, including innovative ones. The residents of the 'old' houses do not have the task of creating a new community, and therefore, they are not willing to change the established practices of communicating with their neighbours [15].

## V. RESEARCH RESULTS

A significant difference was revealed in the socio-demographic characteristics of the tenants of houses that have recently been put into operation ('new') and housing that has been occupied for a long time ('old'). The 'old' housing is are mostly inhabited by people of retirement age with an income below the average and without minor family members. In the 'new' housing, tenants are younger than the long-term residents of the housing estate, their income is higher and they more often have the status of family people.

The percentage of children living in 'new' homes in relation to the adult population is twice as high as in 'old' ones (dependency ratio 0.35 and 0.19).

Chat rooms are actively exploited only by tenants of new buildings. Representatives of district administrations or property management companies do not have access to chat rooms. In this regard, we can talk about a relatively large democracy and freedom to discuss chat rooms.

In general, the needs and interests of the respondents are related to the safety of living on the housing estate and family well-being: safe and comfortable living conditions, the opportunity to provide quality education and medical care to their loved ones, the opportunity to walk and communicate with friends and family in landscaped and green zones or parks. The need for self-realization and self-development, interaction with residents of other city areas, and participation in the city public life are mentioned extremely rarely and only by young tenants, regardless of their place of residence. According to young people, the well-being of the district depends on them, while middle-aged and older respondents delegate responsibility entirely to the local government and the business structure.

## VI. CONCLUSIONS ON THE RESULTS OBTAINED

The study did not reveal any hybridization of values. The analysis of the value characteristics of the tenants showed that traditional values have remained the same and dominate over the post-material values of the information society. At the same time, the stratification of society on the basis of accessibility to information technologies and the level of their use have been revealed. There is a need for additional studies of the stratification of society in the time of digitalization.

Resident chat rooms are used as a tool to achieve certain goals of tenants living in new buildings. Participation in chat rooms is not directly related to the level of income and age of a person. The main motivation for joining the chat room is: the desire to become part of a mini-community, quickly receive up-to-date information and participate in public life at home. At the same time, it should be noted that digital socialization does not exclude personal communication between neighbours.

The development (even in large cities of provincial Russian) of resident chat rooms as a social phenomenon with the potential to influence society is still ahead and is associated with the further digitalization of society and the development of technologies. It is possible that such chat rooms will become an important tool for communication between the public authorities and the population.

## REFERENCES

[1] D. E. Dobrinskaya, "Sociological understanding of the Internet: theoretical approaches to the study of the network (beginning)," Bulletin of Moscow University, Series 18, Sociology and political science, vol. 22, no. 3, 2016, pp. 21-38.

[2] D. E. Dobrinskaya, "Sociological understanding of the Internet: theoretical approaches to the study of the network (End)," Moscow University Bulletin, Series 18, Sociology and political science, vol. 22, no. 4, 2016, pp. 43-64.

[3] M. D. Zavgorodniy, "Social activity on the Internet," Bulletin of the Peoples' Friendship University of Russia, Series: Sociology, no. 2, 2012. pp. 49-55.

[4] N. Postman, Technopoly: The Surrender of Culture to Technology. New York: Alfred A. Knopf – reissue, 2011, 240 p.

[5] B. Latour, "Technology is society made durable," in J. Law (ed) A Sociology of Monsters: Essays on Power, Technology and Domination, London: Routledge, pp. 103–131, 1991.

[6] B. Stiegler, Technics and Time, 1: The Fault of Epimetheus. Stanford: Stanford University Press, 1998.

[7] L. D. Introna, Phenomenological Approaches to Ethics and Information Technology. Stanford Encyclopedia of Philosophy Archive, April 26, 2011.

[8] S. N. Kostromina, "Digital world: values and price," Report at the VII St. Petersburg Winter Festival of Practical Psychology, Psychological newspaper, February 24, 2021.

[9] T.V. Fomicheva and V. I. Kataeva, "Values of Russians in the context of the Russian economy digitalization," Standard of living of the population of Russian regions, no. 2, pp. 80-84, 2019.

[10] A. A. Voskresensky, K. V. Sultanov and A. G. Sunyagina, "Transformation of values in the modern digital society: the cultural capital of the person in the context of the post-material idea," Society. Environment. Development. (Terra Humana), no. 2 (59), pp.62-66, 2021.

[11] "Values of modern Russian society," VCIOM: Russia Public Opinion Research Center, Data from the sociological study, 2022.

[12] "House chats for neighbors appeared on the Electronic Home platform," Official website of the Mayor of Moscow, May 8, 2022.

[13] L. G. Bezumova, "Correlation of personal values and needs as a source of meaning formation," Bulletin of the Samara Humanitarian Academy, Series: Psychology, no. 1, pp. 24-35, 2007.

[14] E. V. Frolova, "Social infrastructure of contemporary Russian municipal bodies: issues and prospects for modernization," Sotsiologicheskie issledovaniya, no. 12, pp. 51-58, 2014.

[15] "Who and why does not use the Internet in Russia?," National Research University Higher School of Economics, Data from the sociological study, January 24, 2023.

# Communication Strategies for Involving the Digital Generation in Scientific Activities

Elena V. Strogetskaya
*Humanitarian Faculty, Department of Sociology and Political Science*
*Saint-Petersburg Electrotechnical University "LETI"*
Saint Petersburg, Russia
https://orcid.org/0000-0002-5304-2613

Irina B. Betiger
*Department of Socio-Psychological Support of the Educational Process*
*Saint-Petersburg Electrotechnical University "LETI"*
Saint Petersburg, Russia
bib1973@yandex.ru

Maksim P. Zamotin
*Humanitarian Faculty, Department of Social and Political Science*
*Saint-Petersburg Electrotechnical University "LETI"*
Saint Petersburg, Russia
jethro79@mail.ru

*Abstract*— **The relevance of the topic is due to the following contradiction. According to comparative international studies there is a decrease in the interest of young people in scientific activity in a number of developed countries. In this regard Russia is an exception since young Russians relate more loyal to science than their peers, for example, in Europe. At the same time, the problem of «depreciation» of scientific personnel in Russia has not been resolved. Efforts are being made to transform high-tech industries, but not all relevant science schools are replenished with promising young people, as representatives of the digital generation prefer to choose more dynamic and open areas of application of their abilities. Against the background of this contradiction, the authors put forward hypothesize about the insufficient involvement of engineering students in scientific research.**

**Basing on the concept of "student involvement", the consideration of this topic from a sociological point of view allows measuring the level of interest of students in scientific activities and evaluating the effectiveness of measures aimed at increasing the involvement of young people in science. The concept of "student involvement" establishes the relationship between the institutional, including the communication, environment of the university, as well as the behavior of the student and the results of his educational and scientific activities. To develop the research methodology, the authors relied on the concept of the influence of the university on the student (E. Pascarella, P. Terenzini); the theory of the determinacy of student success by its integration into various areas of university life (V. Tinto). To clarify the concept of "scientific communication", the authors turned to the conceptual model, which differentiating channels of society's access to scientific information (M. Bucchi, B. Trench).**

**The purpose of the study was to determine the degree of student involvement in the scientific activities of the university and to analyze the conditions for the formation of communication strategies that promote involvement.**

**The following results are obtained. First, although students consider science as a significant activity, they do not realize it as a model of their professional identity. Secondly, although science is of interest to many respondents, it remains at the level of ideas, not actions. Desirable career scenarios are not related to scientific activities but to work in business. Students are involved in scientific activities only at the level of the educational process, although they would like to take part in scientific events. Respondents see an obstacle to this in their own lack of confidence in their scientific and technical training. Thirdly, respondents' satisfaction with scientific communications at the university is not uniform. During the research there were identified communication strategies that both arouse interest in science and form in students a sense of progress in mastering research competencies.**

*Keywords*— **student engagement, scientific communication, digital generation in science, undergraduate and graduate students of engineering specialties, professional identity.**

## I. INTRODUCTION

The paper presents the results of a study on the involvement of engineering students in science and the analysis of communication strategies that contribute to the involvement of representatives of the digital generation in scientific research.

The relevance of the topic is due to the following contradiction. According to international research in a number of developed countries of the world, there has been a decline in the interest of young people in scientific activities. In this respect, Russia is an exception, as young Russians are more loyal to science in general than, for example, their European peers, and appreciate the impact of scientific achievements on society, associate the economic growth of the state and the improvement of living standards with scientific and technological development [1, p.11].

At the same time, it is difficult not to mention the fact that the problem of "depreciation" of scientific personnel in Russia has not yet been completely solved. This problem was defined in the 10s of the XXI century as a combination of aging of scientific personnel, deformation of its structure and the breakdown of continuity in scientific schools [2]. The ageing process has now slowed down, but it is still too early to talk about the age balance of research personnel. The uneven development of scientific fields has also not been overcome. Although considerable efforts have been made to transform high-tech industries, not all relevant science and technology schools are being replenished with promising young people, as members of the digital generation prefer to choose more dynamic and open fields for the application of their talents. Some engineering schools have disappeared or are on the verge of disappearing.

## II. RESEARCH

In the light of this contradiction, the authors propose hypotheses about the insufficient involvement of engineering students in scientific research and the dissatisfaction of representatives of the digital generation with the formats of scientific communication that they have to face.

Metadological platform. In the modern scientific literature, students' research activities are one of main subjects of pedagogical research. Looking at this issue from the sociological point of view, based on the concept of "student engagement", makes it possible to measure the level of students' interest in research activities, to analyze their motives, to evaluate the effectiveness of activities aimed at

increasing young people's involvement in science. The methodological aspects of "student engagement" research are not sufficiently explored, although they are of particular interest in the sociology of higher education. The concept establishes the relationship between the institutional, including communication, environment of the higher education institution, student behavior and the results of its educational and scientific activities.

The theoretical and methodological framework of the presented study was based on the concept of university's influence on the student (E. Pascarella); the psychological tradition of studying student engagement (P. Terenzini, A. Astin, A. Martin, M. Dowson); the theory of determining student success through their academic and social integration in different areas of the university life (V. Tinto); works on the role of university environment in shaping the student experience (R. Pace).

E. Pascarella was one of the first researchers to actively and sensibly introduce the concept of "student engagement" into academic circles. Working on ways to assess the success of universities, he proposed to shift the focus from the usual indicators of the economic efficiency of universities or the demand for their graduates to the educational process itself. Pascarella saw the main criterion of performance in the "quality of effort" invested by students in the educational practices of universities [3]. This is how the researcher described the essence of student engagement and then defined the concept accordingly. The main idea of Pascarella's approach was that those higher education institutions that provide the highest level of student engagement achieve the maximum impact in their activities. According to this approach, students' educational activities, which include both academic and research components, can only be successful if there is a high level of student engagement.

The concept of student engagement was used by Pascarella to compare universities, so it is no coincidence that the central task of the approach focused on creating a valid procedure for assessing the new indicator. This procedure, according to the author, should minimize the use of subjective factors and focus on objective characteristics, such as describing students' behavior patterns and obtaining actual data on the allocation of time to different learning and extra-curricular activities [3]. Pascarella's approach has been criticized for its limitations and lack of attention to subjective - psychological and social - factors of student engagement.

The psychological tradition of studying student engagement is associated with the names of P. Terenzini, A. Astin and others. The former, while not rejecting Pascarella's ideas about the impact of the university on the student, developed his own concept that extended the range of factors of student engagement, placing at the center the individual experience of the student [4]. The latter, who supported Pascarella in understanding the importance of the behavioral expression of student engagement, combined the objective and subjective sides of the phenomenon in his definition. Student engagement, according to Astin, is the totality of physical and psychic energy expended in the academic experience [5, p.299]. The physical energy is manifested in the student's behavior, his/her participation in university practices. Psychic energy in Astin's understanding is similar to the psychoanalytic concept of "cathexis", i.e. it is a certain energy charge, a kind of psychic quantum invested in an object.

Combining the two psychological approaches to the analysis of student engagement, it can be argued that the cognitive background, i.e. images, perceptions of an activity and its perception by actors, becomes a fundamental factor in its dynamics. If individual experience is understood as a way of perceiving reality based on its sensual practical appropriation, then the result of such perception must be recognized as images and representations of objects of reality formed in the individual's consciousness. The cathexis represents objects in the mental structures of consciousness and, depending on the nature of the representations, may increase, decrease or disappear altogether. Thus the dynamics of student engagement are related to images, perceptions and attitudes towards particular learning or academic practices. Engagement can increase or decrease to inert behavior within an activity [6], or even to total alienation from it [7]. Young people's engagement in scientific research is therefore determined by their image of science, their perception of the profession of scientist and the interiorisation of the research track into the students' professional identity model.

Another manifestation of the psychological tradition of studying student engagement is associated with the work of A. Martin, M. Dowson. Australian researchers link student engagement to motivation, interest and academic achievement in young people [8].

The sociological tradition itself is of great interest to the study of student engagement. The most influential explanatory model in this tradition is W. Tinto's idea of the relationship between levels of student engagement and students' social and academic integration into the university community [9]. According to Tinto, social integration increases engagement, which in turn conditions academic integration. Academic integration, according to the researcher, is the adherence to explicit norms such as scientific ethics and academic integrity in scientific and educational research, as well as the internalisation of the values of the academic community. Tinto defines social integration as the involvement of students in social relations within the university.

Tinto's ideas about the impact of social integration on the level of student engagement are enriched by P. Bramming and R. Pace. Bramming, who presents an alternative to the 'consumerist' model of the student's relationship with the university community [10], argues that the purposeful basis of social interactions in higher education is the mutually beneficial transformation of learners and teachers. University communication, including scholarly communication [11], becomes a crucial aspect of this transformation. Pace, noting the relationship between the institutional environment of the university and the student learning experience, insists that the university experience is shaped by events that occur in the college/university environment [12]. Thus, when examining student engagement in university science, it seems necessary for students to assess the quality of scientific communication and the attractiveness of particular scientific events.

To clarify the concept of "science communication" and to reproduce the current trends in the development of the relationship between society and science, the authors turned to the conceptual model of M. Bucchi, B. Trench, which is differentiating the channels and methods of access to scientific information for society [13].

The empirical basis of the article was the results of the authors' sociological study "Science through the eyes of LETI students", conducted in 2022-2023. Students of 1-3 years of study in technical specialities of one of the leading

universities in Russia - St. Petersburg State Electrotechnical University "LETI" named after V.I. Ulyanov (Lenin) took part in the research (N=304 in 2022; N=103 in 2023). The research method was an electronic survey. Secondary results of sociological research were used as additional data to formulate hypotheses and verify the authors' conclusions.

The aim of the sociological research was to determine the level of engagement of students in university research activities and to analyze the conditions for the development of communication strategies that increase engagement. According to the theoretical-methodological model, the research objectives included:

1) to reconstruct the image of science developed by undergraduate and postgraduate engineering students;

2) to analyze the level of interest, motivation and willingness of students to engage in scientific activities;

3) to explore respondents' views on the quality of scientific communication at the University and to determine their level of satisfaction.

Results and discussion.

One of the determining factors for high student involvement in education and science is a set of student perceptions of these types of academic activities. Cognitive structures determine the goals and the choice of behavioral scenarios of students. Therefore, in the first stage of the study, it was necessary to assess the qualities of the cognitive background of young people's involvement in science. This was done by reconstructing the image of science formed by undergraduate and graduate students in technical fields.

The analytical reconstruction of the image of science was carried out on several levels. First, the general attitude of the respondents towards science as a phenomenon and as a branch of human activity was reconstructed. Second, the perception of the profile of a scientist's professional activity was reconstructed. Thirdly, the degree of inclusion/exclusion of scientific activity in the respondents' models of professional identity and images of the desired future was determined.

The explication of respondents' attitudes towards science was carried out both through rational assessments of the importance of the phenomenon and through the analysis of associative and semantic fields expressing the subjective perception of the phenomenon..

In order to assess the importance of scientific activity, respondents were asked to rate the importance of scientific and technological development on a 10-point scale (with 10 being the most important).



Fig. 1. Scale of the importance of scientific and technological development.

The average score of the sample was significantly higher than 8 points (Fig. 1). This means that students appreciate the importance and significance of scientific and technological (S&T) development. This result is in line with the conclusions of the HSE researchers, which point to a peculiarity of Russian youth compared to their European peers [1].

Students' subjective perceptions of science were studied using the free association method and the incomplete sentence method.

The respondents' associations with the word "Science" can be grouped into an associative series with the following structure (associations are arranged in descending order of frequency of mention in the respondents' answers):

– Future;

– Progress;

– Development;

– Technology;

– Research;

– Discoveries;

– Inventions;

– Experiment.

The following associations have priority: Science - Future, Progress, Development.

In order to test undergraduate students' subjective perceptions of science, the unfinished sentence method was used, which involves, among other things, the selection of fixed/closed semantic fields related to the phenomenon under study.

In this case, respondents were asked to complete the sentence: "Science is..." (Fig. 2). Among the responses were suggested formulations selected in the preliminary phase of the study, during which the focus group highlighted the lexical units most frequently mentioned by the participants (undergraduate students, postgraduate students and young scientists in technical fields) to describe the notion of 'science'. These included, for example, descriptions of the nature of modern research activities: "Science is a serious and complex activity"; "Science is a drive". The list of responses also included phrases based on the hypothesis of how science is perceived by 'zoomers', i.e. members of the digital generation: "Science is boring and long" and "Science should be accompanied by a hype". Finally, there were phrases that allowed us to make assumptions about the inclusion or exclusion of science in the structure of the respondents' professional identity: "Science is a way of life that appeals to me" and "Science is a profession for the privileged". It was also possible to give one's own answer. Only 3% of respondents used this option.
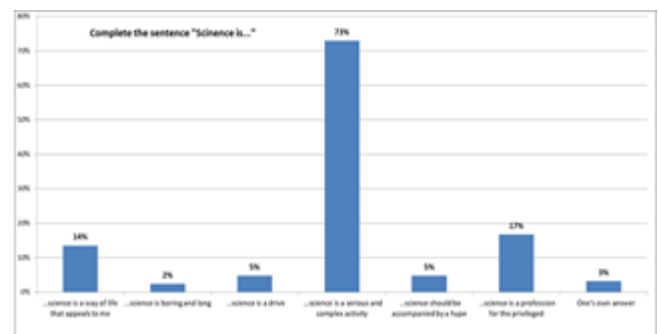


Fig. 2. Selection of semantic fields related to the perception of the characteristics of modern science.

The vast majority of respondents (73%) chose to describe the nature of scientific work, noting its seriousness and complexity.

Of particular interest in the responses to this question is the response 'Science is a way of life that is acceptable to me'. The proportion of respondents who answered in this way was only 14%. This result led to the assumption that science is excluded from the respondents' professional identity model.
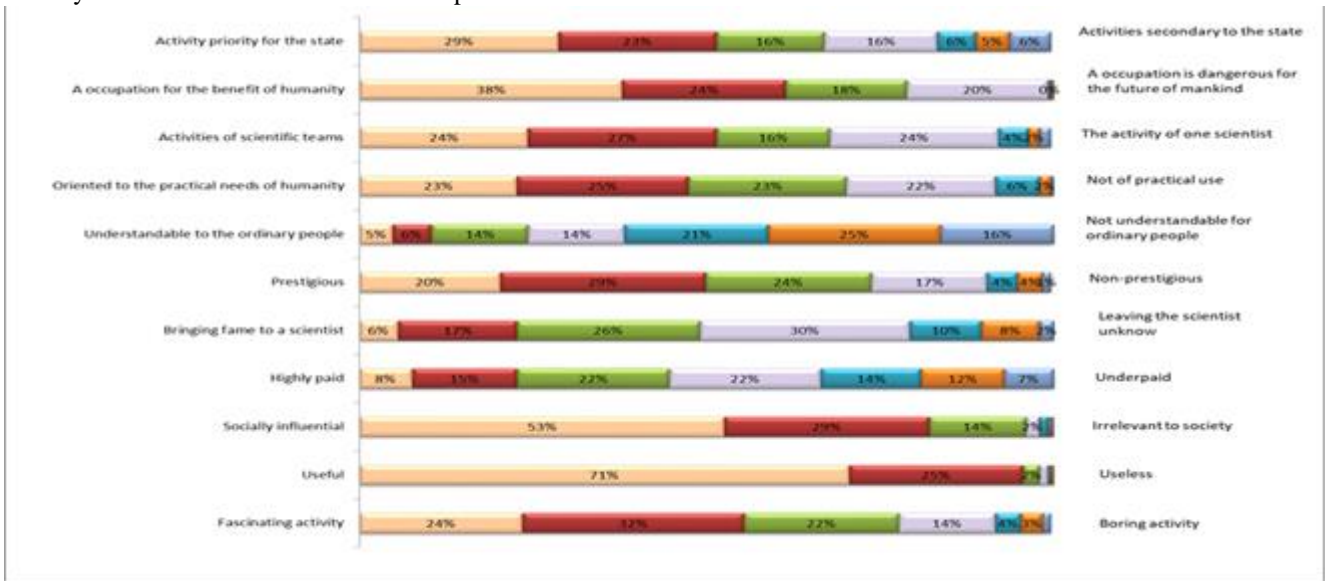


Fig. 3.   Profile of the scientist's professional activity as perceived by students.

In order to test this assumption, the study used a semantic differential that made it possible to reconstruct the perception of the profile of the professional activity of the scientist (Fig. 3).

The results of the semantic differential analysis confirmed the conclusions drawn from the reconstruction of the image of science. The activities of a scientist are presented by the respondents as a useful, socially influential occupation for the benefit of humanity. At the same time, according to the respondents, it is a complex profession, not understandable for ordinary people.

The respondents were most uncertain about the characteristics of a scientist's professional profile, such as remuneration and the fame achieved by success in the profession. The students were not able to place their assessment at either pole of the scale.

This confirms the hypothesis that most engineering students do not see scientific research as a possible/desirable career path in their early years.

In order to clarify the extent to which scientific activities are embedded/excluded in models of professional identity and images of the desired future, respondents were asked a closed-ended test question: "In which of the listed fields would you like to work after graduation?" (Fig. 4).
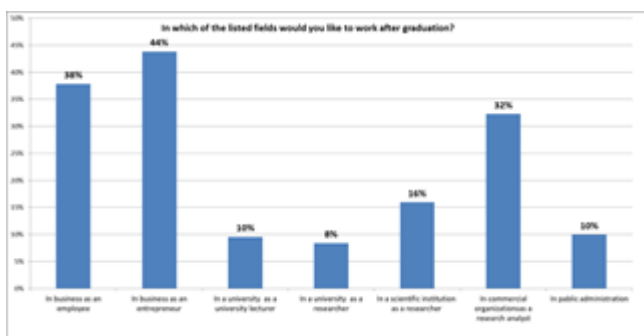


Fig. 4.   Respondents' preferred professional career scenarios.

Of the career scenarios offered, 82% of respondents chose to work in business. Only 16% said they would like to work as a researcher in a scientific institution after graduation and 8% would like to work as a researcher in a university. For a third of students (32%), the most attractive career path indirectly related to research is working as a research analyst in commercial organizations. It can be said that the professional tasks of this career path do not involve the independent production of new scientific knowledge, but consist in processing secondary data and non-proprietary research results for applied purposes.

Thus, in the course of solving the first task it was found out that undergraduate students of engineering courses of ETU "LETI" perceive science as a highly significant type of activity and evaluate scientific and technological development as extremely important for the state and humanity in general. The image of scientific activity formed among 1-3 year undergraduate students includes the following characteristics of science: important, useful, influencing society, serving the good of humanity, serious, complex, but abstract in relation to the student's personality (for 86% of respondents). Although students see science as a very important activity, they do not see it as a model for their own professional identity and future.

The identified contradiction indicates that cognitive background contributes to a potentially high level of student engagement in science, but its actual level is not sufficient for young people to perceive scientific research as a desirable "cause of life", confirming the initial hypothesis of the study. The hypothesis of low engagement of 1-3 year engineering students in science was also confirmed by measuring their current level.

Fig. 5 shows the distribution of responses to the question about the forms of scientific activity in which respondents were directly involved. 65% of respondents indicated that they had only been indirectly involved in scientific research as part of the regular academic process. It is reasonable to assume that this level of engagement is satisfactory for students. In order to verify this assumption, it was necessary

to analyze motivation and interest and to assess students' willingness to engage in scientific activities.
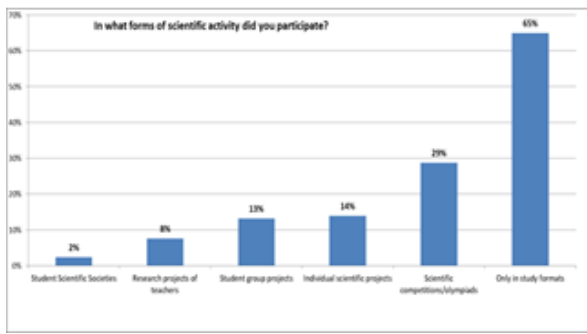


Fig. 5. Student engagement in science among respondents.

The main motivations for engaging in scientific research were identified by the technical students (Fig. 6):

- satisfying an interest in the scientific field;
- better career prospects. However, as previous findings have shown, this is not in the field of producing new knowledge (scientific discoveries and inventions), but in business in the professional role of research analyst;
- an intellectual challenge;
- acquaintance and communication with scientists.

As the majority of respondents (65%) cited interest in science as their main motive for engagement, it was important to assess the level of interest among respondents (Fig. 6). 26% said they were not interested in science. 5% said that their interest in science had been translated into action and led them to engage in research activities. The most sought-after forms of research practices by students outside the educational process are science competitions and olympiads (Fig. 5).
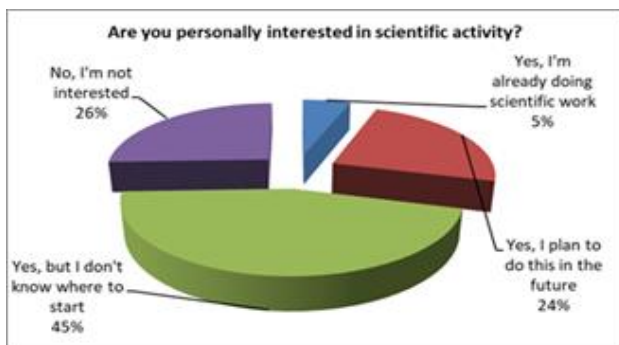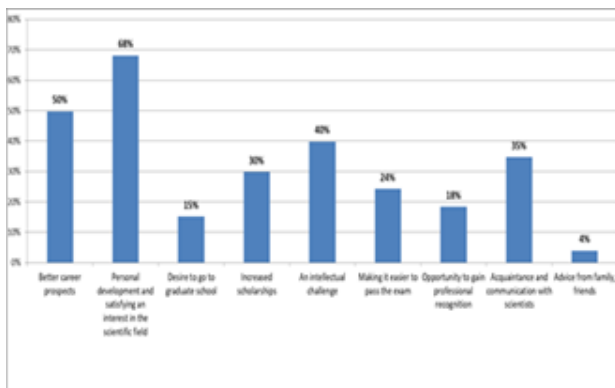




Fig. 6. Motives for engaging in scientific research and interest in science.

The interest of 69% of respondents has not been translated into action. 24% of respondents associate science with the future rather than the present, leaving it in the realm of the probable and abstract rather than the practical 'here and now' (Fig. 6). This is notable because research on the digital generation shows that "zoomers" value activities that are "here and now" and can lead to rapid progress more highly than long-term projects with uncertain and unpredictable outcomes [14].

The highest proportion of respondents (45%) indicated that they were interested in science activities, but that 'not knowing where to start' prevented them from turning their interest into action (Fig. 6). Against the background of a clear interest in science activities, it was interesting to find out what else was a barrier to participating in them (Fig. 7).
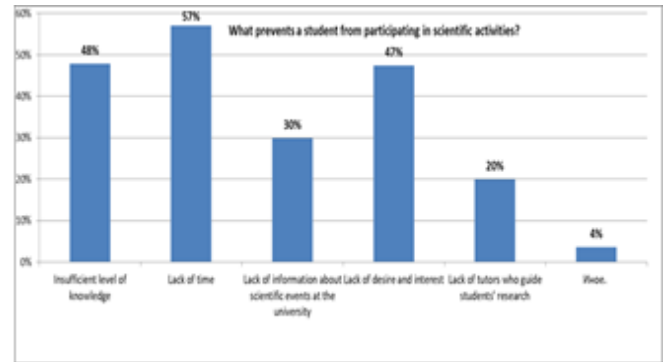


Fig. 7. Barriers to student engagement in research.

Hypothetically, the lack of information about university activities could have been an obstacle. However, only one third of the respondents agreed with this answer. On the one hand, students point out that they do not know/understand where to start to realize their interest in science, but on the other hand, most of them (70%) claim that the information about scientific events and opportunities available at the university is sufficient. Consequently, even if they have information about the field of implementation of their scientific interest, students in the 1st-3rd year do not know how to take advantage of the available opportunities.

The reason is most likely to be hidden in the distribution of other responses to the question about barriers (Fig. 7). The predominant barriers to participation in research activities identified by respondents were insufficient preparation for participation and lack of time for this preparation. This distribution of responses attracts particular attention from researchers, not only because it provides an explanation for the information contradiction (there is enough information, but they do not know how to start a research activity), but also in the context of one of the dominant motives for engagement in science - intellectual challenge (Fig. 5).

The notion of intellectual challenge entered the scientific language with the development of concepts of intellectual culture [15]. Interestingly, this phrase was used in everyday language even before it was conceptualized. Intuitively, its meaning was easily recognized by users. The concept of "intellectual challenge" is multidimensional, but one of its meanings is quite clear for the 17-20 year old respondents: when applied to an individual, the words "intellectual challenge" mean a certain person's achievements in the field of cognitive activity [15, p.12]. Intellectual challenge means facing a new, challenging task. If a person feels and evaluates his or her intellectual resources as sufficient for the task, he or she accepts the challenge and is likely to succeed.

However, if there is insecurity, the challenge will not be accepted, self-esteem will continue to decline, and interest in the task will be suppressed in order to protect a positive self-image. For this reason, the perceived lack of research training among 1-3 year engineering students is a fundamental issue in the work to increase student engagement in science. Overcoming this problem becomes a paramount task in the field of improving scientific communication in the academic community. Moreover, the communicative aspect plays an important role in motivating students to engage in research practices: the motive "to meet and communicate with scientists" ranked 4th in the list of determinants of scientific engagement of the respondents.

Thus, the second task confirmed the basic hypothesis of the research about the low engagement of students in science and disproved the hypothesis about the satisfaction of 1-3 year engineering students with this level of engagement. The vast majority of students are interested in research activities, but a significant proportion do not know/understand how to get involved in scientific practices. In addition to interest in the scientific field, respondents identified intellectual challenge and the opportunity to meet and communicate with scientists as determinants of high engagement. The intellectual challenge motive is weakened by students' lack of confidence in their own scientific training and their lack of time for such training. It is important to note that the latter obstacle is specific to the digital generation, in particular its problem of poor self-organization. The motivation to communicate with scientists focuses the attention of researchers and practitioners on the communication aspect of the engagement process. The problem of young people's lack of confidence in their research skills requires special attention in the construction of scientific communication. Addressing this issue can be seen as one of the criteria for the success of university research communication.

The final task of the survey was to explore respondents' views on the quality of scientific communication at the university and to determine their level of satisfaction with it. When asked to assess the overall level of awareness of research at the university, the respondents were fairly evenly divided: more than a third (39%) felt that there was enough information; 43% felt that there was not enough information or that they did not know where to get it (Fig. 8).
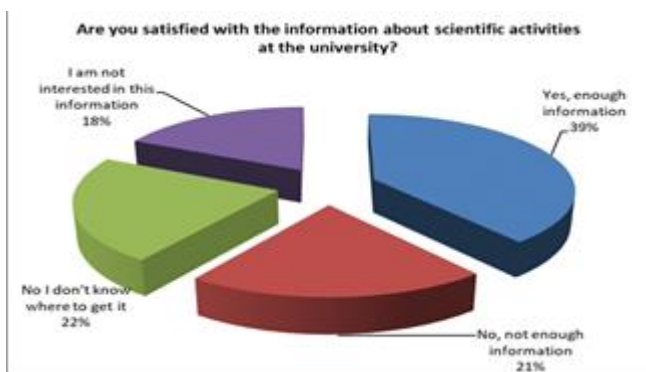


Fig. 8. Respondents' satisfaction with information provision.

When asked openly what information students lack, respondents said that they knew little about the involvement of young people at university in science, or about the topics and scientific achievements of leading scientists at the university. Notably, that according to earlier findings, the latter issue is of particular interest to the students who took part in the sociological survey.

As expected, social media and messengers were the most preferred format for science communication among respondents from the digital generation (Fig. 9).

The results draw particular attention to a format such as science and technology festivals, which was ranked second by respondents (38%). This format allows not only to inform, but also to involve students both in scientific communication with scientists and in the realization of practical scientific activities. Communication with scientists maintains a high level of interest among students, while the opportunity to participate directly in the actual practice of scientific activities strengthens their confidence in the relevant competences.
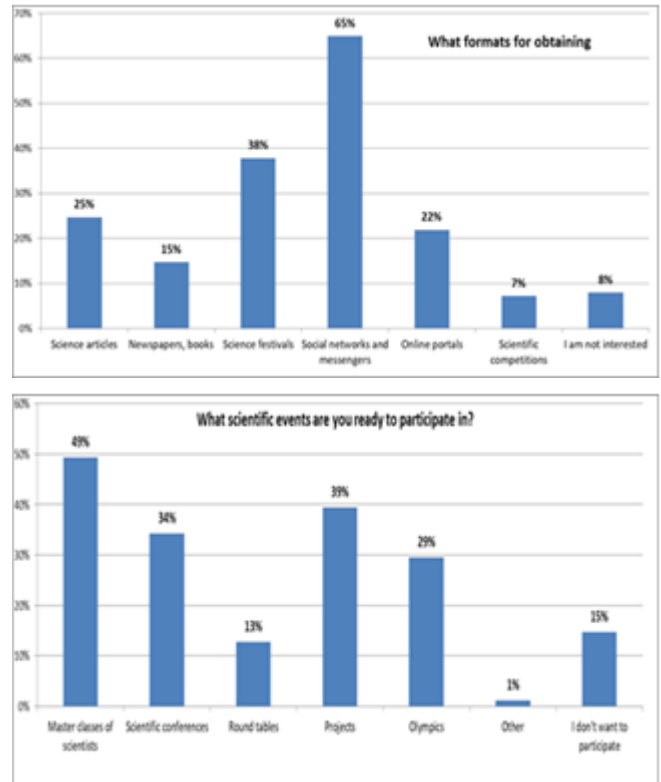


Fig. 9. Attractive formats for science communication and events.

When it comes to the content of science festivals, the most attractive events are probably the master classes of renowned scientists (49%) (Fig. 9), i.e. events that combine both the opportunity for direct communication to exchange experiences and the practice of participating in scientific research "here and now".

## III. CONCLUSION

Summing up the results of the study, we would like to note that its results confirm the respect and interest of Russian youth in science. At the same time, the data collected for the target group consisting of 1-3 year students of technical specialties of one of the leading universities of Russia ETU "LETI" show that only 5% of the respondents showed that their interest turned into action and led them to participate in scientific research. The reasons for the low involvement of students in research activities lie in the dissatisfaction of young people with the quality of scientific communication with the academic community and the lack of confidence in their own research skills. The above factors are strong prerequisites for the reformatting of university research communication systems.

Interestingly, students' expectations of science communication reflect general trends in science communication around the world. In particular, these expectations clearly point to the need for communication strategies to engage the digital generation in science to shift from a deficit model to dialogic concepts.

The deficit model was based on the assumption of unprepared recipients, the inability to easily understand scientists' ideas and discoveries, and the low scientific literacy of the audience. As a result, such science communication conveyed ready-made packages of knowledge in a comprehensible form. Downstream communication usually does not include explanatory mechanisms and is limited to the results of research without specifying its methodological principles. This is particularly characteristic of the communicative strategies of the learning process itself. The deficit model strengthens the recipients' sense of ignorance, incompetence and detachment from science, which blocks interest of some students in it, while some others transfer plans to engage in research activities to the realm of the abstract future.

Among the dialogue concepts, the most prominent are the dialogue model itself and the engagement and participation models.

The dialogue model, which directly replaces the one-sided deficit model, has, like its predecessor, been criticized for focusing on the "fun of talking" about scientific and scholarly topics rather than on in-depth discussion of the scientific results themselves. A variation of this model in practice are the so-called "science cafés". Despite the general criticism of the dialogue model, this communication strategy is very useful for undergraduate students in particular, as the science café format creates a favorable cognitive background for the perception of science as an interesting and accessible field of human activity, reducing the fear and alienation of not being able to understand it.

The engagement model consists of communication strategies aimed at the general public interested in learning about scientific issues, as well as involving the popularizes of science themselves. It is possible and effective for students to participate in this model from year 3 onwards. They can act as science popularizes and mentors in pupils' research practices, thereby strengthening their own research and academic competences.

Finally, the third model - the participation model - involves the creation of an open information space based on the principles of communication formats such as "citizens of science" and "open science". [13]. The first strategy involves the contribution of citizens who are not, or not yet, scientists to the production of scientific data. The second is the open and publicly accessible publication of research protocols and data, results and conclusions of analyses carried out, etc. It seems that the creation of a digital university platform that operates according to the principles of the participation model will be helpful not only for the development of youth science, but also for the research practices of the entire academic community.

REFERENCES

[1] Russian Youth: Education and Science / N. Bondarenko, Y. Voynilov, G. Volkova et al., National Research University Higher School of Economics. – Moscow: HSE, 2017. 72 p. (In Russ.)

[2] Kazarina L. A., Kazarina M. V. Tendencies and problems of development of the Russian academic science in modern conditions. Business. Education. Law. 2018. No. 2 (43). P. 130–134. (In Russ.) DOI: 10.25683/VOLBI.2018.43.246.

[3] Pascarella E.T. Identifying Excellence in Undergraduate Education: Are We Even Close? Change. 2001. Vol. 33. No 3. P. 18-23.

[4] Terenzini P., Reason R. Toward a More Comprehensive Understanding of College Effects on Student Learning. Center for the Study of Higher Education, 2010.

[5] Astin A. Student involvement: a developmental theory for higher education Journal of College Student Development. 1984. Vol. 25. No 4. P. 297-308.

[6] Krause K., Coates H. Students′ engagement in first‐year university Assessment & Evaluation in Higher Education. 2008. Vol. 33. No 5. P. 493-505.

[7] Mann S.J. Alternative perspectives on the student experience: Alienation and engagement. Studies in Higher Education. 2001. Vol. 26. No 1. P. 7-20.

[8] Martin A.J., Dowson M. Interpersonal Relationships, Motivation, Engagement, and Achievement: Yields for Theory, Current Issues, and Educational Practice. Review of Educational Research. 2009. Vol. 79. № 1. P. 327-365.

[9] Tinto V. Classrooms as communities: Exploring the educational character of student persistence. Journal of Higher Education. 1997. Vol. 68. No 6. P. 599-623.

[10] McCulloch A. The student as co-producer: learning from public administration about the student university relationship. Studies in Higher Education. 2009. Vol. 34. No 2. P. 171-183.

[11] Bramming P. An argument for strong learning in higher education. Quality in Higher Education. 2007. Vol. 13. No 1. P. 45-56.

[12] Pace R. Measuring the Quality of College Student Experiences. An Account of the Development and Use of the College Student Experience Questionnaire. Los Angeles: Higher Education Research Institute Graduate School of Education University of California, 1984.

[13] Bucchi M., Trench B. Science communication and science in society: A conceptual review in ten keywords. Tecnoscienza: Italian journal of science & technology studies. 2016. Vol. 7, N 2. P. 151–168.

[14] Strogetskaya, E. V. Digital Turn in Communication Strategies for Motivating Modern University Applicants / E. V. Strogetskaya, E. B. Avakova, I. B. Betiger // Proceedings of the 2022 Communication Strategies in Digital Society Seminar 2022, ComSDS 2022, St. Petersburg, 13 апреля 2022 года. – St. Petersburg, 2022. – P. 83-90. DOI 10.1109/ComSDS55328.2022.9769169.

[15] Lapteva, M. P. The Intellectual Challenge as the Basic Element of Intellectual Culture. Imagines mundi: almanah issledovaniy vseobschey istorii XVI—XX. Series "Intellektualnaya istoriya". 2008. № 5 (3) P. 9-16. (In Russ.) Available at http://hdl.handle.net/10995/76748 (Accessed 17February 2023).

# Communication Strategies for Reproducing Representations of USSR in the Russian Media ("Argumenty i Fakti")

Denis S. Artamonov
*Department of Theoretical and Social Philosophy*
*Saratov State University*
Saratov, Russia
artamonovds@mail.ru, ORCID: 0000-0001-8689-1948

Ivan V. Suslov
*Department of Philosophy*
*Saratov State Law Academy*
Saratov, Russia
suslov85@inbox.ru, ORCID: 0000-0003-0991-6368

Vladimir A. Syusyukin
*Department of Theoretical and Social Philosophy*
*Saratov State University*
Saratov, Russia
vladimirs23@bk.ru, ORCID: 0000-0002-3161-4705

*Abstract*— **This study will define the criteria for quantifying the image of the USSR in the pages of "Argumenty i Fakty". The empirical basis of the article is based on the content presented in "Argumenty i Fakty" from 1982 to 2022. The use of mathematical methods made it possible to analyze all issues (on a continuous sample) and determine the range of articles mentioning the lexemes "USSR", "Soviet Union", "Soviet Union", "Soviet country". The most prominent images of the USSR in "Argumenty i Fakty" are the following: the winner in World War II and the geopolitical rival of the United States in the Cold War. A content analysis of the articles proves the importance of the Soviet experience for understanding Russian domestic and foreign policy.**

*Keywords—Image of the USSR, quantitative content analysis, "Argumenty i Fakty", traditional media, communicative strategies*

## I. INTRODUCTION

Russian society today continues to have a pronounced demand for comprehension of the Soviet past. The study of films that represent the history of the USSR and the peculiarities of everyday life of Soviet people is particularly well represented in scholarly discourse [1; 2; 3; 4]. Also notable are studies devoted to the construction of knowledge about the Soviet Union on popular digital platforms.

The Soviet Union casts a long shadow. Interest in Soviet cultural artifacts, social ideas, and political meanings, acquiring nostalgic forms, persists among young people born after the collapse of the USSR. The inexorable digitalization of social processes now actualizes, substantiates and predetermines the researchers' appeal to the study of the contemporary reception of the phenomena of Soviet civilization in the Internet space [5].

To paraphrase Lenin, it can be argued that of all media, the most important for us now is the Internet, which allows not only to expand the circle of subjects constructing ideas about the USSR, but also creates platforms for public discussion of both contemporary media products telling about the Soviet experience, and Soviet products of material and spiritual culture [6]. One example is Parfyonov's YouTube projects (NMDN).

In the comments under the videos, serious discussions unfolded in which historical parallels were drawn, including comparisons between the events of the Soviet past and the Russian present. Commentators often disagreed with those versions of Soviet history presented, for example, in the narratives of contemporary statesmen. Thus, at present, the Internet (including YouTube channels, which, in P. Nore's terminology, can be called digital memory sites) is a sphere in which new perspectives on the past are crystallized.

The close connection between national and historical politics is commonplace in the social sciences and humanities. History is the basis for the construction of national solidarity. These studies follow the logic set by O.Yu. Malinova and A.I. Miller - historical politics allows the construction of national identity and performs a worldview function, determining the semantic field of reflection of modern processes.

The attention of scholars is also attracted by Yuri Dudy's projects "Kolyma - the birthplace of our fear" [7; 8], Alexey Pivovarov - "Rzhev - Russian Death Valley", Katerina Gordeeva - "Afghan. A Man (Hasn't) Returned from the War" [9]. In the focus of research interest is the public reception of the films posted on the YouTube platform. Judging by the number of likes and comments, the above-mentioned projects interested Internet users, which allows us to assert the high relevance of Soviet history in the current period of Russia's development.

On the one hand, it is possible to study public references to the Soviet past as a tool of official discourse constructing the national macro-identity within the social sciences [10]. On the other hand, a discussion of the positive/negative statements of the contemporary political opposition/elite about the Soviet past and their political potential may be of academic interest [11]. It should also be noted that in the discourse of the modern (mostly non-systemic) opposition, as well as in the critical academic community, theses about the similarity of the principles of Soviet and Russian foreign (and even domestic) policy are often heard.

## II. THEORETHICAL PART: APPROACHES TO THE STUDY OF COMMUNICATION STRATEGIES

Thus, the main focus of memory politics research is the study of the state historical narrative, which seems to be the most logical and simple in terms of choice of sources and methodological optics. Historical narratives of opposition politicians [12] are less frequently, but still come into the field of view of scholars, but this turn does not imply an expansion of the source base and innovations in methodology.

The conversation about "the Soviet" with mass audiences is also conducted by the traditional print press, which (although it has digital avatars) is oriented toward an audience formed before the digital age of informational materialism. Thirty years after its collapse, the Soviet Union is acquiring the qualities of a meaningful "other" also for

those generations that can boast of possessing the conscious experience of Soviet life.

Sharing the position of constructivism, we will formulate a thesis about the serious (though perhaps not fully reflected) influence of the media on the memories of the mature generations about the Soviet past. The peculiarities of the construction of representations about the USSR, or in other words "communication strategies", will be analyzed on the material of the all-Russian newspaper "Argumenty i Fakty".

The study of communication strategies is a field of interdisciplinary research. Appealing to the theories and methods of linguistics allows scientists to analyze a wide range of socio-humanitarian problems. In particular, the image of migrants, both in Russia and abroad, which is created by new and traditional media, is a popular topic of research.

There is no generally accepted classification of communicative strategies in academic discourse. In each case, researchers construct their own communication strategies. However, for example, the sociologist M.V. Simonova, believes that the communication strategy is the identification of the recipient of information with a certain social community and the creation of negative representations about representatives of other social communities [13].

The analysis of communication strategy, from the point of view of philologist E.B. Pavlova, is possible through the definition of the conceptual and thematic plan of speech action [14]. The thematic repertoire, for example, the printed press, constructing representations of social reality, can be identified through a frequency analysis of the vocabulary used in it.

Thus, in this study, it is proposed to understand the communicative strategy as a way to create a template or stereotypical perceptions of the social world in the consumer of information. The media perform the function of "deconstructing" and "rationalizing" (in the words of M. Weber) the world around them, offering ways of understanding and forming the reader's view of phenomena unfamiliar to him, new, mysterious and having the potential to disrupt the usual order of things. Social scientists, considering the above-mentioned mission of mass media, often refer to the media image of migrants [15; 16] and (especially) new politicians [17], who bring elements of chaos and unpredictability to social reality.

Discursive research on British material argues that a negative media image reduces a migrant's chances for successful socio-political adaptation [18]. The Muslim community and the Islamic religion are also presented in a rather critical manner in the European press [19; 20], which confirms the function of the media to construct boundaries between social groups by emphasizing the opposition "our own" - "alien".

Scientific research aims to identify (positive and negative) media strategies of embedding (or in other words domestication) of the conventional "alien" or "other" (in the broad sense) in the everyday world of information consumers. Communication strategies are determined through the analysis of the frequency of mentioning certain word forms in the print discourse, which also allows to record the dynamics of their popularity in certain time intervals. The novelty of the present study lies in the involvement of quantitative methods and appeal to the traditional media, which is becoming rarer and rarer in the

scientific discourse, although it allows recalling the existence of consumers of non-digital information.

Appealing to the study of communication strategies implicitly involves an analysis of the goals possessed by the subject entering into communication [21]. Sharing ideas about the importance of historical content in the media, aimed at - "dissemination of relevant information and impact on public opinion". Following these authors, we will take into account three aspects: the past is "the source of modernity and the key to understanding its problems"; the past is "openly modernized, i.e. criticized from the perspective of current views on life"; the past is created as a market product and should be clothed in an entertainment shell [22; 23].

"References to the past are used to form a historical perspective and contextualize current news" [24]. Talking about the Soviet past - can be defined within the strategy of creating a positive or negative image, which can either support or criticize the idea of continuity between modern Russians, Russia and Soviet people, civilization by the state.

### III. DESCRIPTION OF THE EMPIRICAL BASIS AND METHODS OF RESEARCH

"Argumenty i Fakty" is among the most popular social and political print media in Russia, ranking eighth in the Medialogy's 2022 rating. According to the Mediascope analytical company, the audience of one (paper) issue of "Argumenty i Fakty" reaches 3.8 million people, twice as many as that of Komsomolskaya Pravda, for example. The newspaper "Argumenty i Fakty", founded in 1978, has formed the largest group of subscribers in Russia, who continue to subscribe offline in the age of digital technology development.

"Argumenty i Fakty" is listed in the Guinness Book of World Records for the largest circulation in world history. More than 33 million copies were printed in May 1990. Currently, "Argumenty i Fakty" has the largest readership in Russia, at more than 4.5 million, and the average monthly readership of AiF.ru is about 30 million users. The newspaper has the largest number of international and regional editions among Russian publications.

Thus, the study of communication strategies of the above-mentioned print publication allows us to identify modern media strategies aimed at the so-called "analog generation" [25] (consumers of information), which trusts traditional media.

"Argumenty i Fakty" has prominence and appeal in the academic world as well, often serving as empirical material for research, such relevant and diverse topics as the image of China [26], the language of hostility [27] or the aesthetic potential of infographics [28]. There are articles devoted to the characteristics of the readership of "Argumenty i Fakty" [29].

Ignoring the fact of the existence of the USSR and the Soviet experience in contemporary Russia is impossible. However, determining the qualitative characteristics of communication (media) strategies for talking about the Soviet is an unsolved research problem. Is the mentioning of the USSR a process of historical memory formation and/or a way of explaining the events of the present? Both imply an influence on the identity of the readers. This study will define the criteria for determining the qualitative and quantitative characteristics of the image of the USSR in the pages of "Argumenty i Fakty".

The empirical basis of the article is based on the content presented in "Argumenty i Fakty" from 1982 to 2022. The use of mathematical methods made it possible to analyze all the issues (by continuous sampling) and determine the range of articles in which the lexemes "USSR", "Soviet Union", "Soviet Union", "Soviet country" are mentioned. The data were extracted using a parser written in `Python` and the library `BeautifulSoup`. In the array of articles selected in this way the top-100 most popular words and phrases (bigrams) were determined, as well as a sentiment analysis [30], which allowed to register the general emotional tone of the articles and specific fragments in which the USSR was mentioned.

The empirical data allow tracing the dynamics of the demand for the image of the USSR in "Argumenty i Fakty". In the period from 1982 to 1991 the number of references to the USSR fluctuated from 50 to 100 in each issue, then the curve went sharply downwards. In the post-perestroika period, interest in history fell [31], but during the presidency of Dmitry Medvedev (2008-2012) a turning point in the editorial policy of "Argumenti i Fakti" occurred, a stable trend of the return of the "Soviet" in the field of interest of the editorial board and the staff of the newspaper (see Graph 1).
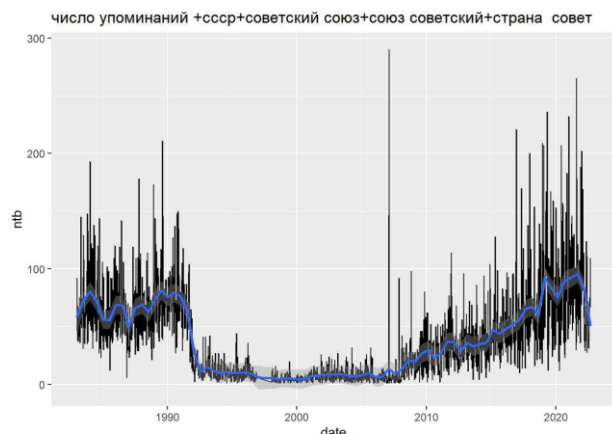


Graph. 1. The number of mentions of the lexemes "Soviet" in the articles of the newspaper "Argumenty i Fakty" by year

In particular, an increase in interest to Soviet sports since 2012 is registered; the emotional tone of the articles is rather positive (especially after 2007). The interest to the Soviet cinema, as well as to education, has been increasing since 2011-2012. It should be noted that the emotional tone of the conversation about the achievement of Soviet cinematography steadily tended to be negative from 1994 to 2008, but then (and up to the present moment) a positive trend began to be observed. Interest in Soviet space has been growing since 2007-2008, and the emotional tone of the articles is very high. Interest in the collapse of the USSR is shaping up from 2011-2012. From 2015 to 2022 the indicators of the popularity of the lexemes "USSR" and others reached the level of the 1980s. However, it should be noted that at the same time the volume of words in the issues of AiF increases. At the same time, the emotional tone of the articles (and their fragments), which mention the Soviet Union, varies little over the studied 40 years (see Graph 2).
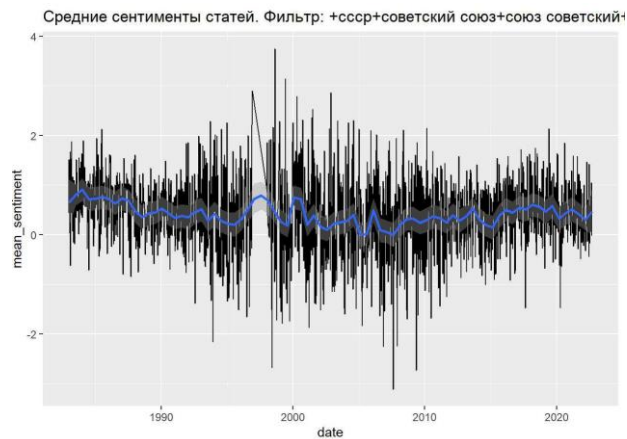


Graph. 2. The average emotional (sentimental) tone of the issues of the newspaper "Arguments and Facts", in which the lexeme "Soviet" is mentioned by year

## IV. MEDIATOPICS OF THE USSR

The analysis of media communication strategies begins with the identification of an image of a particular phenomenon of social reality. A frequency analysis of word usage in the "Argumenty i Fakty" newspaper reveals so-called buzz-topics, or in other words, topics frequently discussed in the media and presumably of high public importance [32].

The Soviet era is presented in "Argumenty i Fakty" in several ways as a "heroic" time and a period of accomplishments. The most popular collocations (bigrams) used next to the lexeme USSR are "hero Soviet" (1st place) and "twice hero" (8th place), "Cavalier Order" (20th place), "to award a title" (30th place), Order of Glory (32nd place).

The prevalence of the positive component in the discourse about the Soviet era as a time of innovation and achievement can be evidenced by the fact that the eleventh place in the top 100 is occupied by the lexeme "the first" (3333). We should also note the fairly frequent use of such positive lexemes as "work" (37), "work" (42), science (54).

"Argumenty i Fakty" pays special attention to the period of the Great Patriotic War. The biggram "Marshal Soviet" takes 7th place by popularity in articles devoted to the USSR, the word combination - "World War II" is in 20th place, and "Great Patriotic War" is in 21st place.

The USSR is not only the winner of the Great Patriotic War, but also the superpower of the Cold War. In the articles of AiF, in which the lexeme "USSR" is found, such bigrams as "Berlin Wall" (29th place), "territory of FRG" (34th place), "security guarantee" (35th place), "NATO troops" (41st place) are often encountered.

Thus, the most prominent images of the USSR in "Argumenty i Fakty" are the following: the winner in World War II and the geopolitical rival of the United States in the Cold War.

## V. THE CONTEXT OF ACTUALIZATION

After determining the possible repertoire of images of the USSR, the reasons for the interest in "the Soviet" in the editors of "Argumenty i Fakty" should be suggested. A frequency analysis of the most popular words used in articles mentioning the Soviet Union makes for a curious conclusion. The lexemes in the first places are: USSR (61085), year (10219), country (7600), Soviet (7231) - which requires no

explanation. However, "Russia" (4,581) and "USA" (4,468) come next, which fixes the interest to the Soviet experience in the context of describing the realities of modern Russia (because the main goal of "Argumenty i Fakty" is to form stereotypical ideas about the current reality).

The frequency of references in the same articles to such words as "the USSR" and "the United States" (which has been Russia's main geopolitical opponent/partner since the beginning of the Cold War era) suggests the relevance of memories of the Soviet experience in the context of presenting contemporary problems of Russian foreign policy on the pages of "Argumenty i Fakty". The lexeme "American" is also a frequent visitor (in 56th place). At the same time, other countries are far behind. Even the word "Germany" (taking into account the importance and relevance of World War II) according to the number of mentions is on the 70th place, and "Europe" - on the 75th. Let us once again note that in the articles about the USSR, the lexemes related to the fall of the Berlin Wall and, presumably, to the promises made to Gorbachev in the era of the termination of the CFD, are popular.

The following word forms are also frequent: "former Soviet" (5th place), "disintegration Soviet" (6th place), "collapse Soviet" (22nd place), "last year" (26th place), "disintegration" (39th place), which implies that "Argumenty i Fakty" pays considerable attention to the post-Soviet space. A discussion of the USSR (and even more so its disintegration) is an opportunity to once again draw the reader's attention to the structure and qualitative content of the post-Soviet space, and therefore to the type of relationship that Russia builds with the states of the Near Abroad

Thus, the content analysis of "Argumenty i Fakty" proves the importance of the Soviet experience for understanding the domestic and foreign policy of the Russian Federation. The simpler and more stable the schemes based often on the opposition "their own - alien", the less changeable, the more viable they are in the human cultural space [28]. The representation of the Soviet era in a positive context allows us to mark the USSR as a significant "other" for contemporary Russia. The description of the USSR as the victor in World War II and a powerful rival of the United States during the Cold War can be defined as an element of contemporary symbolic identity politics, and "Argumenty i Fakty" as its important agent/subject.

REFERENCES

[1] M. Lipovetsky, T. Mikhailova, More than nostalgia (Late socialism in TV series of the 2010s), *Novoye literaturnoye obozreniye*, 2021, no 3(169), pp. 127-147. (in Russian).

[2] V. Vasilyeva, Revolution of 1917 in post-Soviet television series: deconstruction of meaning and transformation of the narrative, *International Journal of Cultural Studies*, 2018, no 2 (31), pp. 35-63. (in Russian).

[3] M. Shub, Main strategies of the Russian state policy of memory in the context of modern cinematography, *Scientific Journal "Discourse-Pi"*, 2020, no 3 (40), pp. 88-100. (in Russian).

[4] S. Belov, Perception of the memorial conflict around the film "Stalin's Death" among Russian Internet users, *Bulletin of Peoples' Friendship University of Russia. Series: State and Municipal Management*, 2020, no 1, pp. 36-46. (in Russian).

[5] M. Markasov, O. Markasova, Retrotopic Discourse in the Space of Internet (Notes to the Question of Nostalgic Representations), *Herald of NSU. Series: History, Philology*, 2021, no 6, pp. 168-179. (in Russian).

[6] S. Tikhonova., D. Artamonov, Historical Memory in Social Media. SPb: Aletheia, 2021. (in Russian).

[7] K. Molotov, A. Maximova, D. Khlevnyuk, Ways of constructing an expert position in YouTube: videos of popular bloggers-historians about Stalinist repressions, *Public opinion monitoring: economic and social changes,* 2021, no 5(165), pp. 92-117. (in Russian).

[8] V. Grushevskaya, I. Griban, Clash of historical narratives in network communities (based on the discussion of the film "Kolyma - the birthplace of our fear"), *Political Linguistics*, 2021, no 6(90), pp. 126-138. (in Russian).

[9] L. Zubanova, Media-representations of memory: dominant codes of reading traumatic events in the Internet space, *DiscoursePi*, 2020, no 4 (41), pp. 26-39. (in Russian).

[10] O. Malinova ,The official historical narrative as an element of identity politics in Russia: from the 1990s to the 2010s, *Polis. Political Studies*, 2016, no 6, pp. 139-158. (in Russian).

[11] T. Kuzio, Russian and Ukrainian elites: A comparative study of different identities and alternative transitions, *Communist and Post-Communist Studies*, 2018, no 51(4), pp. 337–347.

[12] O. Malinova, Constructing the semantic framework of memory of the reforms of the 1990s in the liberal discourse of the 2000s, *South Russian Journal of Social Sciences*, 2019, no 3, pp. 91-105. (in Russian).

[13] M. Simonova, Key communicative strategies for creating the image of an immigrant in the media discourse of Spain (on the material of the newspaper El País), *Social Sciences and Modernity*, 2021. no 4, pp. 91-103. (in Russian).

[14] E. Pavlova, Linguopragmatic organization of the English-language ecological Internet discourse, *Scientific Dialogue*, 2019, no 1, pp. 88-100. (in Russian).

[15] P. Fadeev, Media as a factor in the formation of attitudes towards migrants, *Bulletin of the Institute of Sociology*, 2015, no 4(15), pp. 108-128. (in Russian).

[16] O. Yakimova,Representation of migrants in Russian mass media and its dynamics (2010-2020), *Siberian Socium*, 2020, no 4(14), pp. 22-40. (in Russian).

[17] G. Bobrova, Image of Donald Trump in Der Spiegel, *Bulletin of Omsk University. Series "Historical Sciences"*, 2020, no 2, pp. 70-77. (in Russian).

[18] Y. Balakina, A. Galochkin, Anti-migrant rhetoric in the British media before and after the referendum, *Vestnik of Perm University. Series: Political Science*, 2020, no 14 (4), pp. 115-126. (in Russian).

[19] S. Ahmed, J. Matthes, Media representation of Muslims and Islam from 2000 to 2015: A meta-analysis, *International Communication Gazette*, 2017, no 79(3), pp. 219–244.

[20] E. Bleich, H. Stonebraker, H. Nisar, R. Abdelhamid, Media Portrayals of Minorities: Muslims in British Newspaper Headlines, 2001–2012, *Journal of Ethnic and Migration Studies,* 2015, no 41(6), pp. 942–962.

[21] N. L. Shamne, E. B. Pavlova, Institutional, genre and discursive characteristics of British restaurant online discours, *Advances in Social Science, Education and Humanities Research (ASSEHR).* 2017, vol. 97, pp. 214-220.

[22] M. Voskresenskaya, Historical information in the modern Russian press: languages of media representation, *Medialingvistika*, 2022, no 4, pp. 288-308. (in Russian).

[23] C. Kitch, Journalism as Memory, in Handbook of Communication Science / T. P. Vos (Ed.) Berlin: Mouton de Gruiter, 2018, pp. 164-181.

[24] I. Broer, S. Trümper, Non-commemorative Memory in News Production: Discovering Underlying Motivations for Journalists' Memory Work, *Memory Studies*, 2021, vol. 14, no 2, pp. 257-274.

[25] A. Sumskaia, S. Sverdlov, "Analog" and "digital" generation of the media audience: the role of communicative and cultural memory in the transformation of media practices, *Izvestia of the Ural Federal University. Series 1: Problems of Education, Science and Culture*, 2019, no 3(189), pp. 32-48. (in Russian).

[26] W. Xiaojuan, The image of China in the online version of "Argumenty i Fakty", *Medialingvistika*, 2017, no 1(16), pp. 58-70.

[27] S. Simakova, Infographics of the weekly "Argumenty i Fakty": media aesthetic potential, *Problems of Journalism, Pedagogy, and Linguistics*, 2020, no 3, pp. 367-377. (in Russian).

[28] A. Kulagina, Language of hostility in the headlines of the Internet versions of the Russian publications Komsomolskaya Pravda, "Argumenty i Fakty" and Moskovsky Komsomolets, *Humanitarian Accent*, 2022, no 3, pp. 60-69. (in Russian).

[29] R. Novikov, On the characteristics of the audience of Russian newspapers (on the example of the weekly "Argumenty i Fakty"), *Medi@lmanah*, 2021, no 3(104), pp. 82-90. (in Russian).

[30] B. Pang, Opinion mining and sentiment analysis, *Foundations and Trends in Information Retrieval*, 2008, vol. 2, no 1-2, pp. 1-135.

[31] A. Miller, Historical Politics in Russia: A New Turn? In *Historical Politics in the XXI Century*. Moscow: New Literary Review, 2012, pp. 328-367. (in Russian).

[32] T. Dobrosklonskaya, Medialingvistika: A systematic approach to the study of media language. Moscow: Nauka, 2008. (in Russian).

[33] K. Merten, Der konstruktivistische Ansatz, in *Handbuch der Public Relations* / R. Fröhlich, P. Szyszka, G. Bentele (Eds). Wiesbaden: Springer, 2015, pp. 175-190. (in Deutsche).

# Communication Strategies in the Digital Environment as a Tool to Form the Communicator's Personal Brand

Alexey S. Shimichev
*Department of european languages and methods of their teaching*
*Minin Nizhny Novgorod State Pedagogical University*
Nizhny Novgorod, Russia
alexshim@list.ru

Mira B. Rotanova
*Department of advertisement, public relations and tourism*
*Linguistics University of Nizhny Novgorod*
Nizhny Novgorod, Russia
miraborisovna@gmail.com

*Abstract*— **Based on the Russian educational standard, they are determined the vectors of digital transformation of the competence model of the future advertising and PR specialist as an effective communicator. The performing professional functions of a communicator in the digital sphere is based on specific communication strategies. They form the basis of a communications specialist's personal brand. Based on the method of system analysis, the authors represent the concept of professional digital competence from the point of view of the communication, not the technological aspect. It is also given its significance in the formation of a professional brand of a communications specialist. The main purpose of the research is to identify communicative strategies in the digital environment in the competence model and the stages of their formation as part of the personal brand of an advertising and public relations specialist. Based on the modeling method, it is described the nomenclature of such strategies. It is noted that they contribute to the formation of the personal brand of the future communicator in the digital environment, as well as the students' readiness to implement them in professional activities.**

*Keywords—communication strategies, digital environment, personal brand of the communicator, professional communication culture, professional training of the future communicator*

## I. Introduction

The modern digital society is not limited only to the economy, but represents an integral system that changes all spheres of human activity. Today we live in conditions of forced transformation of the media and, in general, the infocommunication sphere, which main features are the following: global digitalization and the introduction of artificial intelligence into the media sphere; changing media consumption under the influence of new challenges and threats; activation of destructive content, including fakes, in huge information flows; the metamorphosis of the media and advertising space due to the departure from the Russian communication environment of a number of social networks, video hosting, the departure of some brands and the rebranding of others, etc.

Modern advertising and PR education cannot but meet the challenges of the new digital environment and is forced to change the idea of professional competencies that a specialist should have to be in demand in the market. The architecture of higher education is changing, which obliges it to be more receptive to the challenges of the digital environment. Universities should have a flexible approach to the formation of "Advertising and public relations" basic educational programs.

In the context of technological innovations and information confrontation, there is a need to comprehend not only the new principles and technologies of the communicator's activity in the digital environment, but also the new ethics of the communicator's profession. During this period, new professional competencies in the use of digital technologies, as well as flexibility and foresight of decisions made from the standpoint of social responsibility, were required from specialists who take over the functions of managing information flows passing through various channels.

At the same time, it is important to note that in addition to high qualifications, practical experience, the ability to form an effective professional image, personal and professional brand plays a huge role in the modern labor market.

This aspect is particularly relevant for mass and professional communications specialists, since they, performing the functions of a practical psychologist, sociologist, marketer, public relations specialist, advertiser, journalist, are public people. The need for specialist communicators has been growing in recent years. They are called upon to form a communicative space in their organization, create favorable conditions for its development, and increase public capital. The task of such a specialist includes the prevention of crisis situations, consulting activities on communications.

The main purpose of the work is to identify communicative strategies in the digital environment in the competence model and the stages of their formation as part of the personal brand of an advertising and public relations specialist.

## II. Problem Statement

According to the Russian federal state educational standard of higher education in the field of training 42.03.01 "Advertising and public Relations" (bachelor's degree level), the field of professional activity of bachelors includes a number of components:

1) communication processes in interpersonal, social, political, economic, cultural, educational and scientific spheres;

2) techniques and technologies of mass, business and personal communications;

3) technologies of promotion of competitive properties of goods, services, commercial companies, non-profit and public organizations, state institutions, their positioning in the market environment;

4) public opinion [1].

In the rubric "Generalized labor function: implementation of a communication strategy" we will also see a list of labor functions aimed at work related to communications: "organization of interaction with the media", "organization of direct communications", etc. [1].

In accordance with these statements, the possession of communication strategies is a key component of the personal brand of an advertising and public relations specialist in the context of digital transformation of the society.

## III. Materials and Methods

The presented research is based on the ideas of systematic, practice-oriented, competence-based and integrative approaches to the organization of the educational process of students in Advertising and public relations in order to form a set of communication strategies in the digital environment as the basis of future bachelors personal brand.

The methods include content analysis of relevant regulatory documents; monitoring the implementation of the educational process; interviewing students to identify educational deficiencies; modeling the structure of training modules; analysis of the content of academic disciplines; designing a model of professional competence of an advertising and public relations specialist.

From September to December 2022, we monitored students of 3-4 courses (126 people) in the field of Advertising and public relations at Linguistics University of Nizhny Novgorod. Attention to this contingent of students is due to the presence of initial professional knowledge and skills obtained as a result of practical training, internship and mastering modules of specialized disciplines. It should also be noted that 45% of respondents already have a part-time job in the professional field.

## IV. Results

The stated subject of the study determined the scientific and theoretical basis of this work.

Digital space in the formation of personal communication strategies in the learning process, as well as pedagogical technologies in the management of educational and creative activities of students are the object of study of Russian and foreign specialists [2]

Thus, D. Aijun, K. Zunyou, Y. Zhou have devoted their works to the analysis of the possibilities of adapting the audience of the media sphere to new realities [3; 4]. Special attention in communication research is paid to the problems of the digital competencies development in the field of higher education, taking into account global transformations [5]. An important problem of such studies is the comprehension of the importance of the formation of professional, social and personal competencies in the conditions of higher media education [6].

The issues of identifying effective strategies and tactics for creating an image are considered by such authors as D.V. Olshansky [7], E.B. Shestopal, E.V. Egorova-Gantman [8] and others. The research of A.I. Solovyov [9], E.L. Dotsenko [10] and others are devoted to the problems of manipulating mass consciousness with the help of public images. An important aspect of the application of image formation and actualization technologies in the modern communicative space is developed in the works of V.G. Danilova [11], A. U Piterova, A.A. Medvedeva [12], E. V. Shvets [13].

At the present stage of the science development, there are many definitions of a brand. Most often, it is somehow associated with the concepts of "image" and "reputation". Summarizing the opinions of various authors, it can be concluded that the brand is the quintessence of the most important features that are purposefully positioned, and which the manufacturer is trying to show from an attractive side.

The issues of forming a specialist's personal brand in the digital space are quite new in scientific usage, science has recently started studying this category. However, it is worth noting that a certain image of an advertising and public relations specialist in the digital landscape, considered collectively as professional and personal qualities, is beginning to take shape in research.

The analysis of expert assessments and scientific research made it possible to identify the main professional requirements for advertisers and PR specialists that determine the ways of digital personal brand development:

*1) Possession of advanced advertising and PR technologies, especially in the field of digital communications. Kaiser Guntram, a German PR specialist and scientist, explains the formation of these requirements by the emergence of new information transfer tools and the development of Internet communication, social media, applications and a wide choice of gadgets [14].*

*2) Mobility, flexibility and stress resistance, activity. Researchers attribute this to the acceleration of the life speed, and hence with an increase in the volume of information, the diversification of forms and channels of its transmission.*

*3) Communicative competence as the most important professional criterion is manifested in such qualities as: sociability (the ability to easily deal with people), proficiency in lecturing, a high level of emotional intelligence, the ability to convince, inspire, discuss, defend your point of view and at the same time be able to recognize the point of view of a partner, the ability to negotiate, formulate your thoughts clearly [15].*

*4) Knowledge of several languages. The international digital field defines the requirement for proficiency in several foreign languages. Knowledge of English is considered mandatory, as well as the languages of countries and peoples with whom effective cooperation of each particular company is developing.*

*5) Broad outlook and erudition imply knowledge in the field of economics, politics, international relations, knowledge of basic categories of psychology, sociology, cultural studies and journalism in the sphere of digital communication. It is erudition that allows an advertiser and PR manager to work in conditions of multifunctionality and multitasking [14].*

The presented components of the personal brand are based, first of all, on the communicative capabilities of an advertising and public relations specialist. Precisely chosen communication strategies are the most important factor in influencing other people and the basis of professional interaction.

At the same time, personal and business communication processes are moving into a digital environment, which requires communicators to possess a special type of communicative culture, as well as communication strategies.

Only upon closer examination, it is possible to identify several basic elements that include the communicative strategies of an advertising and public relations specialist today:

*1) Communicative competence as readiness and ability to communicate as the most important component. It is studied in many research and is manifested in such qualities as*:

    *a) sociability, proficiency in lecturing, the ability to manage your emotions and mood, the ability to convince, inspire, argue, defend your point of view and at the same time be able to comprehend the partner's point of view, the ability to negotiate [16];*

    *b) possession of the reflection skills — rational analysis of one's own experience and behavior, thinking, decisions made in order to identify the strengths and weaknesses of one's own personality and manage further behavior;*

    *c) lapidarity — the ability to briefly and clearly form your thoughts [17];*

    *d) the ability to optimize interpersonal relationships in a group, the ability to express oneself, as well as the ability to influence other people [18].*

*2) Speech component: knowledge of the language, its phonetics, vocabulary, grammar, stylistics, culture of communication, possession of these means of language and mechanisms of speech — speaking, listening, reading, writing — in the frame of social, professional, cultural needs of a person [19];*

*3) Possession at the cognitive level of the skills of handling large amounts of information, including in the Internet space, including the ability to organize the search for necessary information, work with chosen information, structure, systematize, summarize and present in a way that will be understandable to the audience;*

*4) The ability to analyze information from various sources, including contradictory, compare it, understand the tasks of the authors on the interpretation of information. The ability to competently apply the information received in everyday life and professional activities, to have the skills to switch to different rhetorical and substantive languages of communication (household, professional, journalistic, etc.);*

*5) Awareness of the peculiarities of communication in the Internet community, management of one's own activity in the digital space, including the competent formation of the goals and objectives of communication via the Internet based on common moral values;*

*6) Culture of nonverbal communication: gestures, movement plasticity, mimic score.*

The described aspects allow us to define a communicative strategy as a set of norms, methods and forms of interaction based on the best patterns and values of behavior in digital space. The cultural component of communication is connected with a system of standards and representations of personality, which are included at the moment of offline and online interaction with other subjects.

As part of the training of specialists in advertising and public relations, the formation of communication culture in digital space is integrated into the training program of the basic and variable parts. However, in order to organize a purposeful process, it is necessary to identify the individual students' communicative experience.

A study conducted on the basis of the Department of advertisement, public relations and tourism at Linguistics University of Nizhny Novgorod showed the following features of the formation of the following students' communicative skills.

According to the results of the study, 55% of students have communication skills above average and high: students are able to listen to the interlocutor, are patient enough in communicating with others, calmly defend their point of view. 30% of students have average sociability, that is, they are sociable, but they are reluctant to participate in disputes and debates, they do not immediately feel comfortable in an unfamiliar environment. However, 15% of students do not have the necessary communication skills, they feel insecure in interpersonal communication situations.

The results of communication styles that students obtain are interesting. Within the framework of the study, four communication styles were identified: 1) action orientation; 2) process orientation; 3) social orientation; 4) perspective orientation. Among future advertising and public relations specialists, 21% are characterized by a desire to discussion of results, specific issues, behavior, responsibility, experience, achievements, decisions (the first style), 21% are focused on discussing facts, procedural issues, planning (the second style); 43% prefer communication with people, discussion of motives, feelings and emotions; only 15% of students communicate, understanding the purpose and prospects of interaction, are able to discuss concepts and strategies, that is, work for the future.

These results are further used to form a personal brand of an advertising and PR specialist, namely communication strategies as its element. Within the disciplines of "Theory and practice of digital communication", "Image and reputation in digital space", "Development of a digital advertising product " and "Imagology", the concept, structure and skills of formation of communication strategies in the digital environment as a tool to ensure the personal brand of the future communicator are included in the content of the training program. The consolidation of communicative culture skills takes place during practical training (educational, productive and pre-graduate practice). In its formation, the process of mastering communication strategies in the digital environment goes through such stages as:

Stage 1 — preparatory: the formation of a value attitude to effective forms of communication in the digital space.

Stage 2 — theoretical training: formation of a system of knowledge about effective ways of communication, as well as communicative culture in the digital society. The acquisition of such knowledge at the higher school is realized both within the framework of separate topics, sections of specialized disciplines, and as separate academic disciplines (variable and optional).

Stage 3 — practical training: development and practical consolidation of communication skills in the virtual space, where the main focus is on communication activities. Practical methods are used: observation and analysis of communicative activity, exercises and trainings, instruction, organization of student's communicative activity in various situations in terms of digital interaction. An important form of activity at this stage is productive practice.

As a result of mastering the skills and abilities of interaction and influence in the digital environment, a system of communication strategies is formed, namely:

– possession of a theoretical basis in the field of advertising and PR for goods and services promotion in digital space;

– ability to analyze and critically evaluate the digital media texts in order to determine the linguistic and cultural context of strategies, tactics and techniques of indirect influencing consumers;

– the ability to practically implement existing knowledge in communicative and professional situations in digital society;

– possession of direct and indirect influence techniques for the purpose of performing professional functions;

– possession of strategies for autonomous professional development activities in Internet space and professional self-improvement.

## V. CONCLUSION

It should be noted that within the framework of this article, the author's vision of communicative strategies for the formation of a personal brand of future communicators in the digital environment was presented.

In conclusion, it should be noted that the possession of communication strategies determines the ability of a person to establish relationships with people easily and quickly, the desire to expand the sphere of communication, to participate in social and group events that satisfy the need of a person for broad and intensive communication in digital society.

The success of the professional activity of an advertising and public relations specialist depends on the level of models of communicative behavior development in the modern digital landscape. Consequently, communication strategies are a key link in the formation of an employee's personal brand of an effective communicator of a digital society. At the same time, the modern realities of the digital society and the active transition of the business sphere to the system of digital interaction are changing the forms, types, system, structure and functions of communication. Communication and organizational skills in numbers, as one of the aspects of communication, can be developed by everyone. The perspective of the study is to describe the correlation of communication strategies with digital technological skills

## REFERENCES

[1] Order of the Ministry of Education and Science of Russia dated 08.06.2017 N 512 (ed. dated 08.02.2021) Available at: https://fgos.ru/fgos/fgos-42-03-01-reklama-i-svyazi-s-obschestvennostyu-512/ (Accessed 10 January 2023).

[2] V. Nagayev, T. Gerliand, V. Kyrepin, G. Nagayeva, N. Sosnytska and K. Yablunovska, Pedagogical Technology of Management of Students' Educational and Creative Activities in the Process of Professional Training of Engineers, 2021 IEEE International Conference on Modern Electrical and Energy Systems (MEES), Kremenchuk, Ukraine, 2021, pp. 1-4, doi: 10.1109/MEES52427.2021.9598806.

[3] D. Aijun, K. Zunyou and W. Wei, Communications Technology Professional Vocational Training Base Construction Methods and Practice, 7th International Conference on Intelligent Computation Technology and Automation, Changsha, China, 2014, pp. 133-136, doi: 10.1109/ICICTA.2014.40.

[4] Y. Zhou, Training Mode of Information Management and Information System Professionals in Colleges and Universities Based on the Development Direction of Computer, 2021 International Conference on Computers, Information Processing and Advanced Education (CIPAE), Ottawa, ON, Canada, 2021, pp. 300-304, doi: 10.1109/CIPAE53742.2021.00078.

[5] L. V. Ukhova, Z. K. Gaponova, E. M. Boldyreva, Most effective educational technologies in the era of coronavirus: Case-study and e-learning Russian as a foreign language, XLinguae. 2021. Vol. 14, No. 1. pp. 62-72. doi: 10.18355/XL.2021.14.01.05.

[6] A.S. Shimichev, M.B. Rotanova, Digital competence of a foreign language teacher: e-learning in work. Proceedings of the 2021 IEEE International Conference "Quality Management, Transport and Information Security, Information Technologies" (TandQMandIS 2021), 2021. pp. 850-853. doi: 10.1109/ITQMIS53292.2021.9642910.

[7] D.V. Olshansky, Politicheskiy PR [Political PR]. Moscow: Peter, 2003, 544 p.

[8] E.V. Egorova-Gantman, Politikami ne rozhdajusta [Politicians are not born]. Moscow: Center for Political Consulting "Nikolo M", 1993. 142 p.

[9] A. I. Soloviev, Politologija: politicheskaya teoriya, politicheskiye tekhnologii [Political Theory, Political Technologies]. Moscow, 2000. (in Russian)

[10] E. L. Dotsenko, Psikhologiya manipulatsii: phenomen, mekhanizmy i zashita [Psychology of manipulation: phenomena, mechanisms and protection]. Moscow, 1997. (in Russian)

[11] V.G. Danilova, Self-brending ili Marketing individual'nosti [Self-Branding or Marketing of Identity], Rostov-on-Don: FeniksPubl, 2014, p.128 (in Russian)

[12] A. U Piterova, A.A. Medvedeva, Prodvizhenie lichnogo brenda v social'nyh setjah [Promotion of a Personal Brand in Social Networks], Electronic scientific journal [Science. Society. State], 2018. Vol. 6, no 4 (24). Available at: https://esj.pnzgu.ru/files/esj.pnzgu.ru/piterova_ayu_medvedeva_aa_2018_4_27.pdf (Accessed 2 November 2022). (in Russian)

[13] E. V. Shvets, O. N. Aksenova, M. B. Rotanova and M. V. Fedorova, "Monitoring as a Starting Point for Digital Promotion of a Personal Brand," 2020 IEEE Communication Strategies in Digital Society Seminar (ComSDS), St. Petersburg, Russia, 2020, pp. 104-108, doi: 10.1109/ComSDS49898.2020.9101320.

[14] P.S. Avetisyan, N.M. Gevorkyan, M.R. Tadevosyan, Problemy razvitiya tsifrovykh kompetentsiy v oblasti vysshego obrazovaniya s uchetom mirovykh transformatsiy (na primere Armenii i RF). Vestnik RGGU. Seriya «Ekonomika. Upravleniye. Pravo» [Bulletin of the RSUSU. Series "Economics. Control. Right"]. 2022. No. 2. pp. 29–48 (in Russian).

[15] D.A. Dubover, A.V. Penyaz', Razvitiye sotsial'nykh i lichnostnykh kompetentsiy v usloviyakh vysshego mediynogo obrazovaniya. Kontsept [Concept]. 2020. No. 2, pp. 69–84 (in Russian) .

[16] Y. Liu, H. Lu, L. Gao and M. Chen, A Teaching Method Design of Entrepreneurship Training to Improve Professional Identity of Food Science Majors Based on SPSS, 2021 International Conference on Education, Information Management and Service Science (EIMSS), Xi'an, China, 2021, pp. 442-447, doi: 10.1109/EIMSS53851.2021.00101.

[17] A.S Shimichev., M.B. Rotanova, N.S. Voevodin Formation of Future Foreign Language Teacher's Digital Competencies in the Pedagogical Management. Proceedings of the 2022 Conference of Russian Young Researchers in Electrical and Electronic Engineering, 2022. pp. 1740-1742. doi: 10.1109/ElConRus54750.2022.9755679.

[18] A.S. Shimichev Development of Students' Creative Abilities in Technical University During Foreign Language Training. Z. Anikina (Ed.): IEEHGIP 2020, LNNS 131, pp. 212–221, 2020.

[19] Y. Grevtseva, I. M. Bashtanar, T. I. Isakova, M. B. Balikaeva and Y. V. Kirillova, The Digital Information Competence of an Individual: Historical Aspect, 2020 International Conference Quality Management, Transport and Information Security, Information Technologies (IT&QM&IS), 2020, pp. 474-476, doi: 10.1109/ITQMIS51053.2020.9322978.

# Communication Strategy of Politicization of a Sports Incident in Modern Media Space

Dmitrii P. Gavra
*Public Relations in Business Department*
*Saint Petersburg State University*
Saint Petersburg, Russia
d.gavra@spbu.ru

Ekaterina V. Akimovich
*Public Relations in Business Department*
*Saint Petersburg State University*
Saint Petersburg, Russia
akimovich.k@gmail.com

Liudmila V. Balakhonskaya
*Public Relations in Business Department*
*Saint Petersburg State University*
Saint Petersburg, Russia
lb234@mail.ru

Lidia A. Vitkova
*St. Petersburg Federal Research Center of the Russian Academy of Sciences*
Saint Petersburg, Russia
lidia@glorystory.ru

Vitaly V. Balakhonsky
*St. Petersburg University of the Ministry of Interior Affairs of Russia*
*Saint Petersburg, Russia*
balakhonsky@mail.ru

*Abstract*—The article is devoted to the process of politicization of a non-political sports event in the digital media space. The purpose of the study is to identify the main tactics and techniques for implementing a communicative strategy for politicizing a sports incident in digital media on the example of the doping scandal during the 2022 Winter Olympics.

The material of the study was a sample of 132 texts devoted to the topic of the doping incident associated with figure skater Kamila Valieva, and published in February 2022 in Russian digital media (electronic newspapers and blogs), adhering to a pro-government or opposition orientation.

The main attention is paid to the tactics and techniques of discrediting, which are actively used in both sports and political media discourses. The main subjects of discrediting in different types of Russian media are highlighted.

As a result of the conducted research, a conclusion was made about the polar opposite interpretations of the same sports incident by different media actors, depending on their political beliefs and value preferences.

*Keywords — communicative strategy, discrediting tactics, discrediting technique, politicization, sports incident, sports and politics, digital media, mediatization of sports*

## I. INTRODUCTION

In this article the concept of politicization is interpreted as the process of involving non-political issues in the sphere of politics. The objects of politicization can be a variety of social institutions: culture and art, religion and ethnic relations, economics and law, education, sports, etc. The process of politicization of non-political phenomena and events is largely determined by the factor of publicity, the transition to the digital information space [7; 92-96].

In today's mediatized digital society, there is a priori the potential for politicization of almost any informational occasion significant to the public. The politicization of a non-political information occasion, as we have already written about it, is possible if the social fact, event, incident that formed the basis of this occasion contains the grain of a conflict of interests or values of some significant social actors [12]. Media audiences, social media users, platform subscribers, bloggers, influencers, discussers, i.e. those who in fact mediatizing and at the same time politicizing the corresponding information occasion, finding a coincidence or opposition of interests and / or values with one of the parties involved in the confrontation, are included in its discussion. And as a result, a spiral of mediatized politicization unwinds.

Each social subject performing a communicative action to expand the information field of the incident acts as an agent of mediatization of a politicized social fact. The most significant agents of mediatization are digital prosumers with the largest communicative and social capital - mass media with large audiences and influencers / communicative capitalists / traffic monopolists [11].

Sports, especially big sports, with billions of audiences, huge budgets and sponsorship contracts have firmly entered the scope of public life with the highest potential for politicization and political mediatization. Not without reason sociology and political sports science very often put these two terms side by side - "sport" and "war". F. D'Agatti directly calls sport a "surrogate for war" [6].

In the modern mediatized world, where the most important meanings are formed in the mass consciousness through the channels of the mass media and social networks [5; 16; 17], the sports sphere is turning into the most important source from which politicians, influencers, journalists, bloggers draw seemingly objective information about the results of competitions, and then turn this information into a tool for manipulation and political struggle. The media presentation of "big sport" only exploits sport as a spectacle for economic agents to extract super profits, and political players for political dividends. Authoritative sociologists and political scientists view sports events as the psychological equivalent of war and, more broadly, the metaphysical confrontation between Good and Evil [14].

Thus, the sports sector, due to its media coverage, huge audiences and the closeness of spectacles to emotions, acts as a field for the formation of simple dichotomous political meanings - "we - they", "friends-foes", "friends-enemies", and at the same time as a field of informational and psychological confrontations, which give reason to talk about the politicization of sports conflicts.

An example of a sports incident turning into a political conflict was the situation associated with a wide discussion in the world media about the positive doping test of the Russian figure skater Kamila Valieva, who, as part of the team, showed the best result at the Winter Olympics in Beijing in 2022, and who was expected to win in individual competitions. News from the sports' field has acquired a political connotation

under the influence of the publicity factor, the transition of public discussion to the media space, primarily digital.

The purpose of the study is to identify the main tactics and techniques for implementing a communication strategy for politicizing a sports incident in digital media using the doping scandal during the 2022 Winter Olympics as an example.

## II. THEORETICAL FRAMEWORK

### A. Mediatization and politicization of a local incident

By mediatization of a local event/incident, we mean "the process of expanding the social area of awareness and complicating the event's discourse, unfolding in line with media logic, while simultaneously expanding and complicating the audiences involved in this discourse" [12, p. 64]. This approach directly fits into the understanding of the category of mediatization at the meta-level as a process in which the media become part of other social institutions and change the norms and ways of their activity [17, 18] . At the same time, as we have already mentioned, the political mediatization of the incident will be the event-mediatization of "an event that is non-political in content, while at the same time giving it a political meaning through media communication" [12, p. 65] and becoming a significant element of the political agenda.

### B. Sports politization

In the modern world, the relationship and interdependence of sports and politics is beyond doubt. For example, P. McIntosh pointed out that, by its very nature, sport is doomed to be associated with politics more than any other kind of human activity [23].

Politics and sports are considered by researchers as interpenetrating social institutions that form new realities of the global politicization of sports [28].

L.V. Savinov, M.S. Aloyan and M.A. Shumakov [29] propose to understand the sports' politicization as a significant increase in the political factor in modern sports and the associated increase in the use of sports as a political tool in a broad sense. Analyzing the interaction between sports and politics as the most important social institutions of modern society, these authors identify three significant trends:

- removal of sports from politics and politics from sports (depoliticization);

- including sports into politics and politics into sports (politicization);

- a harmonious combination of sports and politics, political diversity and inclusion [29].

Within the framework of this article, the main attention will be paid to the problem of sports' politicization, that is, the inclusion of sports into political field.

No one argues about the profound role that sports plays in national and world business, political institutions and public policy. Since early Olympic Games there was an idea that sports and warfare can act interchangeably: ethnic disputes can be resolved on the playing field without resorting to open clashes on the battlefield [32]. Thus, sport can be seen not only as a mean of national politics, but can also be a part of international activity. J.A. Mangan names sports as a «useful substitute for war – competition without killing» and postulates, that sports and militarism go hand in hand throughout the whole European history [22]. Other scholars are more likely to have a look on sports as something additional to warfare rather than its equivalent alternative [4].

Regardless the works highlighted above, there are also a number of academics, asserting a slight correlation between sports and militarism [27].

A lot of academic studies on sports politics would be clearly to name as historical accounts [26; 35; 15]. Another direction of sports and politics studies refer to sociology [34;24]. In comparison with law, sociology and economics political science research on sports is limited. Political science in relation to sports concentrates to a great extent on public authorities' institutions and world competitions [20; 9].

### C. Sport and mediatization

In the context of the syncretism of sports, politics and media, the ways of sports mediatization become important.

Over a span of the last decade, the term "mediatization" has come into notice among a large number of scientists specialized in the media and sport discourse.

Since the concept of mediatization gained wide interest among scholars, sport events were periodically used to demonstrated the grown power of traditional and digital media. Despite this fact, there were relatively few studies containing empirical analyses on how mediatization process and sport field affect each other.

According to our analysis, strong attention to mediatization process of sport has been significantly grown since 2019. In 2019 Frandsen K. published a book on sport and mediatization, where the blank spaces highlighted above were partly filled up. The author showed, how the field of sport provides insights that conduce to mediatization theory and how mediatization promotes the development of sports sociology [10]. There is a number of dimensions of sports' mediatization study, but we distinguish major three of them. One group of scholars concerned mediatization of concrete sport events [25; 31; 21], another - drew attention to mediatization of sport in specific conditions, COVID-19, for example [19; 30], third dissected sport's mediatization of particular athletic discipline in historical aspect [8]. Despite the fact that there is a huge bulk of study concerning mediatization of sport we still lack of fundamental theory of the issue.

As a result, the process of mediatized politicization of a sports event or incident is considered by us as a communicative strategy implemented by specific media in line with a certain ideological setting. Under the communicative strategy, we mean a set of verbal and non-verbal actions planned in advance by the addresser to achieve certain communicative goals, a scheme for constructing a model of speech behavior to implement the main intentions of a communicative act.

In the context of rising international tensions, the potential for politicization of major sports events is only increasing. They become an additional dimension of international conflicts and turn not only into a competitive platform for economic, political and mental confrontation [13; 26-34], but also into an instrument of direct pressure, if not suppression. This manifests itself in the form of sanctions, boycott, non-admission, disqualification.

The formation of a digital platform society has multiplied the potential of sports as a space for the concentration of emotionally heated mass audiences. Fan groups of a particular sport or a particular athlete in social networks reach several million subscribers. The ability to throw out the emotions via the network in real time, when the final result is still unknown, to meet support or attack an opponent, transforms the

communicative space of a sports event into an emotionally overloaded space with a high conflict potential.

## III. RESEARCH

### A. Methodology and empirical basis of the research

The empirical basis of the study consists of 132 texts published on the topic of the doping incident in Russian digital media, including those that later (after the start of the special military operation) ceased their activities on the territory of the Russian Federation. Firstly, texts from the digital media that take a pro-government position ("Komsomolskaya Pravda" - hereinafter KP, RIA Novosti - hereinafter RIA, Nezavisimaya Gazeta - hereinafter NezG), or related to the liberal opposition media ("Echo Moscow" - hereinafter EM, "Novaya Gazeta" - hereinafter NovG); secondly, posts in the following social networks: YouTube, Telegram, VKontakte, written by such opinion leaders as Vladimir Solovyov, Nikolai Starikov, Artemy Lebedev (pro-government position), Alexei Pivovarov, Ksenia Sobchak, Maxim Katz (liberal position). The posts which were copied from other media weren't taken into account.

The chronological framework is from February 8 to February 28, 2022, when the issue of doping or non-doping by Kamila Valieva was most actively discussed in the media environment. Media texts were collected into a dataset using the Semanticforce.net system. by the keyword "Kamila Valieva" used in the text, title or subtitle of the article. After the mechanical collection of media texts, they were manually processed in order to filter out materials in which, although the name of Kamila Valieva was mentioned, the problems of the doping scandal at the Olympics were not discussed within the specified chronological framework.

The main research methods: firstly, the method of critical discourse analysis proposed by T. van Dyck specifically for political communication, which involves a linguistic analysis of linguistic units, taking into account extralinguistic factors - place, time, situation, subjects of communication, etc.; secondly, the method of intent-analysis, aimed at studying the intentions of the author, at revealing the internal, implicit meaning of the text; thirdly, the linguo-stylistic method used in the analysis of stylistically marked language units.

### B. Empirical study

The analysis of the empirical material showed that the communication strategy for the sport's incident politicizing at the 2022 Winter Olympics in digital media was carried out mainly using three tactics: 1) secondary nomination of the involved media actors, 2) discrediting various subjects of the doping scandal, 3) manipulation of public opinion in order to shift sports problems into the field of politics. The first tactic, based on the case material related to the accusation of K. Valieva of doping, is analyzed in the article by E.V. Bykova and D.P. Gavra "Politicized sports incident: nomination strategies of involved media actors". The second and third tactics used in the media discourse during the period of the doping scandal at the 2022 Olympics in Beijing have not yet been the subject of a study. This fact determined the relevance of the study undertaken in the work. In this article, we will dwell in detail on the tactics and methods of discrediting personal and collective subjects of a doping scandal, carried out in the media discourse in order to politicize a non-political event.

### C. Tactics and methods of defamation

The tactics of discrediting competitors is quite actively used in both sports and political discourse. This is so because defamation is a form of competition implemented through deliberate actions, the purpose of which is to undermine the opponent's credibility, diminish his authority and destroy his image.

Sometimes the veiled (implicit) goal of discrediting competitors is not so much the undermining of trust and the destruction of their image, but the self-presentation of the subject (addresser) of the communicative act. Self-presentation of the subject against the background of discrediting the opponent allows to demonstrate the subject's advantages in contrast to competitor's negative characteristics or actions.

The communicative tactic of discrediting competitors, including its special type — self-presentation against the background of discrediting another subject, manifests itself primarily in the binary opposition "We — They" ("Friend — Alien"). This tactics is embodied with the means of one of the fundamental principles of the political or sports media text's organization - the principle of contrast. It consists not only in opposing different views and opinions regarding conflicting actors from the sphere of sports or politics, but also in the opposite assessment of the same phenomenon, event or situation [2].

T.A. Van Dijk pointed out a characteristic of binary oppositions in the context of a speech conflict in general and, in particular, discrediting the subject. This is "polarized representativeness", i.e. endowing the We-group and the They-group with directly opposite features. An elementary example of such opposition is the dichotomy "We are good - They are bad" [33].

For example, in the article "Hypozhory in the fight for" Olympic gold ", published on «The echo of Moscow» radio station's website, the actions of Western and Russian media are described using the technique of polarized repertory. At the same time, the political orientation of the publication makes the reader assume a positive assessment of publications in the Western media and, accordingly, a negative assessment of publications in the Russian media. However, the real assessment of the activities of these media turned out to be exactly the opposite: *«And the media bacchanalia began around Kamilla Valieva. It is natural to expect that the Western media were engaged in this, trying to devalue the victories of the Russian Olympians. It is also natural that our media and celebrities should stand up in defense of a unique 15-year-old girl who has her first Olympic Games in her life. Exactly the opposite happened. The skirmisher of the bacchanalia around the figure skater was sports media, primarily «Sport Express»* (The echo of Moscow, 10.02.22). In other words, the object of defamation in the article was "our media" (in particular, "Sport Express"), which, according to the author, "should stand up in defense of a unique 15-year-old girl", but in fact became "a skirmisher of bacchanalia around the figure skater".

On the basis of the empirical material analysis noted in the introduction, which contains elements of discrediting various subjects (personal and collective), we have identified the use of the following techniques that implement the communicative tactics of defamation.

1. Pattern of an unsubstantiated accusation.

The liberal media places the blame for the doping scandal with the whole country, the Russian Olympic Committee, as well as the figure skater's social surrounding - *"adults - who at first hid and were silent, and then began to dodge and talk*

*the usual nonsense"* (EM, 02/11/2022). The accusation of unnamed "adults" cannot be considered as proven.

The opposition media is also characterized by unsubstantiated accusations of authoritarian regimes which destroy the sports systems: *Authoritarian regimes, despising any deterrents, including glasnost, easily turn the management of sports systems into its destruction* (EM, 11.02.2022).

In the pro-government media, the accusation is directed not only at international sports officials (weak accusation), but also at the figure skater's coaches, sports doctors (strong accusation): *The Kamila Valieva scandal is terrible not because the fact that international sports officials are again engaged in "Russophobia". It is terrible, because the fifteen-year-old girl is forced to talk about her grandfather's heart medications, while adults, her coaches, sports doctors do not say a word. In order not to destroy their careers. They are very passionate about their careers. Tthe doping scandal with Kamila Valieva, apparently, will not hurt anyone. Whatever it ends with* (KP, 02/16/2022).

2. Pattern of direct or indirect insult

A direct insult with the means of swear words to those who didn't protect the underage skater from the scandal that broke out, but also tried to destroy her: *«The girl was simply killed, broken, bastards. This is the real pain of all figure skating (KP, 02/17/2022); And even - let's call a spade a spade - professional scoundrels. How else to call those who trample a talented young figure skater into the mud ?»* (RIA, 02/13/2022).

Although the following example from the opposition media does not contain a direct insult, i.e. the global world media is not demarked as duplicitous, but indirect insult is present. It is so because the article discusses the two-faced attitude of the world media towards idols: *«And the strength of psychotrauma, according to psychoanalysis, often depends on the duality of feelings that arises in a person. And the global media organized this duplicity against Kamila Valieva. These media have shown that there is one step from their love to hate. Psychotrauma can always be the result of a two-faced attitude towards idols. After all, not long ago the world media idolized her and wrote that Kamila Valieva made history, and now we hear that, they say, there is "another act of great Russian deception", "the collapse of Tutberidze champion factory", "the best Russian figure skater was caught doping", "records marred by breaking the law." World media compete in wits* (EM, 02/10/2022).

Occasional words that have not yet entered the language system (for example, hypogory), descriptive phrases with unclear semantics that replace the name of a person by profession (for example, a group of characters instead of journalists) can be used for insult. At the same time, the whole statement is offensive: *Hypozhory in the fight for "Olympic gold."There is a group of characters (I can't call them journalists) who is like hungry jackals, they feed exclusively on "hype". Sensational news, which often turns out to be fake. But that doesn't matter. The main thing is to catch the hype. Hype is traffic, advertising, monetization. With such components of hype, any moral criteria are completely unnecessary garbage. Nothing personal. Only money. For the wholel yesterday evening, the media discussed "doping" with Kamila Valieva* (EM, 02/10/2022).

3. Technique of intimidation, threat or warning

The purpose of this defamation method is to show the terrible consequences of professional children's sports, which has turned into an industry of processing children into Olympic medals. The price of such a medal can be a broken fate, shattered health up to disability, and even life itself: *We've realized that there is **a whole industry of processing children into Olympic medals** and a mass show right in our neighborhood. Three minutes of acrobatic somersaults on ice are paid with fate, health and life (c/c Maxim Katz, 02/14/2022); The possible consequences were unimportant for the coach. Well, because we need a victory here and now. Here is the Olympics. Well, if something happens, then there is already the next child, and this one can be written off (s/c Maxim Katz, 02/14/2022); At the same time, somewhere near us, not in underground ateliers for tailoring counterfeit clothes, but right on the screen of federal channels, right at huge stadiums, **an entire industry is operating, which literally recycles children, which turns teenagers into disabled people by the age of 20** (y/k Maxim Katz, 02/14/2022).*

4. Technique of ridicule, irony, sarcasm

The pro-government media, using the exclamation "What a coincidence!", ironically comments on the World Anti-Doping Agency (WADA) publication of Kamila Valieva's positive doping test that happened literally the day after the triumphant victory of Russian figure skaters: *The result of a sample taken from Valieva in December 2021 and sent for analysis to the WADA laboratory in Stockholm should have been made public at least two weeks before the start of the Olympics (the standard study period is 20 days), but it was reported only on February 8$^{th}$ this year , that is, literally the next day after the end of the team tournament in Beijing, which was triumphant for our skaters. **What a coincidence!** (RIA, February 12, 2022).*

In the opposition media, the irony is directed not only at Russia's leadership and Russian sports, but also at the Russian team, at the athletes: *We win slightly, as the large Beijing sports-covid party shows (Nov.gaz, 02/10/2022).*

5. Technique of deliberate exaggeration of any disadvantages

The following text from the opposition media contains a clear exaggeration of the world community's negative attitude towards the Russian anti-doping services and Russia's sports leadership, etc. It is unlikely that absolutely all people (with a single heart!) criminated Russia. For sure, there were some sympathizers at least: *But the point, of course, is not in bureaucratic repressions. **The concordant worldwide conviction** for involvement in fraud at the state level is **an indelible stigma. The hopeless laundering of the "black dog white"** continues. Russia was put on the counter eight years ago, and how long **it will spin is unknown**. At least, there is **no end in sight** to the discussions of options for restoring RUSADA's rights (EM, 02/12/2022).*

6. Technique of a false definition

**The method of false definition is based on the following model: "A" - is "B", where "A" is the object of defamation, and "B" is a language unit denoting** a negatively evaluated concept. For example: *The description of what Tutberidze has built is some **chronicles of a workhouse from Victorian England** (y/k M.Katz, 02/14/2022); **Blatant torture of children is a matter of pride for coaches and parents** (M. Katz, 02/14/2022).*

As a rule, false definition is based on the use of malicious irony and sarcasm. The first example shows, that this

technique makes it possible to equate the figure skaters' sports workload and the hard work of workers in the era of Victorian England. In the second example, the torture of children is characterized as a source of pride for ambitious coaches and parents.

7. Technique of negative comparison / equating to negatively evaluated concepts

A model for negative comparison is as follows: "A" as (as if) "B", where "A" is the object of defamation, and "B" is a language unit denoting a negatively evaluated concept: *There is a group of characters (I can't call them journalists) who is like **hungry jackals**, feed exclusively on "hype" (EM, 10.02); One could say that people, little children, are treated like racing horses. But in fact, even **horses are not treated like that** (M. Katz, 14.02).* In the first example, journalists are compared to hungry jackals. The word "jackal" is perceived negatively in most national cultures, because has the meaning: "a predatory animal of the canine family, feeding mainly on carrion." Accordingly, a journalist who is compared to a jackal has the habits of a predator, illegible in "food". In the second example, the treatment of little athletes is compared to the animals' treatment, but children are treated much more harshly and strictly.

8. Technique of negative characteristics of professional competencies

The accusation of unprofessionalism was most often directed at sports officials and the coaching staff in both, pro-government and opposition media: *It is known, for example, about the doctor Philip Shvetsky's working with the "figurka". The reputation of EteriTutberidze group's medical consultant is tarnished with his own confessions that once, even before joining figure skating, Russian athletes violated anti-doping rules through his fault. In 2007, Shvetsky said that he had intravenously **administered illegal drugs** to Russian rowers ... (EM, 02/12/2022;)And here, in any case, is the fault of the doctor Philip Shvetsky, who has already been caught doping, and those who has appointed him to the position. Tutberidze, Gorshkov or who else? These are either conscious actions of the doctor, then there must be one punishment, or **unprofessionalism**, then – must be another. But even the most ardent adherents of the war against Russian sports' theory sports say that the blame lies with those who prepared Valieva (EM, 02/12/2022); Coach Tutberidze, not a 15-year-old girl, is used to such raids. She will shake it off and go on **to "stamp" the champions**. Hard work. This is not hype to catch (EM, 02/10/2020).* In the last example, the negative characterization of the coach Tutberidze's professional competencies is expressed by the metaphorical phrase "stamp" the champions, which forms associations with the power tool, a soulless machine, that does not care about the physical or psychological state of the young athlete.

9. Labeling

On the one hand, hanging (sticking) labels is a manipulation technique, because it is used for covert impact on the consciousness of the addressee. On the other hand, the "label", as a rule, expresses a biased, unsubstantiated negative characterization of a phenomenon, contains negative emotional and evaluative components of meaning. This characteristic makes it possible to effectively use "labeling" as a method of discrediting the subject. For example: *We were caught on this muck again. And if you look at the circumstances of the case more broadly, there is one more proof that **the Russian sports management system is deeply flawed**. Moreover, we've presented the world with a direct*

reason for the next scandal ourselves. On a silver platter, at the most "opportune" time, wrong-footing not only the athlete, but the whole country. "Enemies" operate with the provisions of the law, not slogans. This is where their strength lies. And our weakness respectively. (EM, 02/12/2022);Howls like "they are even worse" are of no interest to anyone. And let's leave the maxim "as soon as we defeat everyone, they immediately hammer us down", for the jingoistic propagandists and patriots who believe in their infallibility (Nov.gaz, 10.02. 2020).*

10. Technique of a negative scenario forecast

As part of the tactics of discrediting subjects, the technique of a negative scenario forecast is often combined with the technique of intimidation, threats or warnings: *By the way, if our team is deprived of the gold medals won with the participation of Valieva, they will go to the US team (EM, 02/12/2022); It turned out to be such a dirty multi-move: if Russia wins gold in the team tournament, Valieva's doping will be immediately announced. Tuktamysheva will not have time to arrive in Beijing, which means that the entire podium in the women's competitions will not belong to the Russians. At the same time the other skaters of the Russian national team will simply be psychologically crushed due to the ongoing hassle and tormenting uncertainty (RIA, 02/12/2020).*

11. Technique of non-constructive criticism of the expressed opinions or judgments

Unconstructive criticism of the expressed opinions of Russian sports community representatives', including officials, coaching staff, sports media, etc., can be found in the article "Boys, sorry, but not up to you," published in the opposition media «Novaya Gazeta»: ***The entire sports world went crazy**: the media poured out more and more "details" of the scandal, little-known experts wrote that they had known that Valieva was involved in doping many years ago. Russian athletes, coaches and officials led by Tatyana Tarasova shouted: "I don't believe it! » (Nov.Gaz, 10.02).* The article ironically describes the "information bacchanalia" occurred after the publication of Kamila Valieva's doping test results, which "accidentally" coincided with the triumph of Russian figure skaters in the team event. The author of the text gives us an indirect assessment of numerous publications on the topic of the doping scandal, using the metaphor "they poured new and new details", the epithet "little-known" experts, the verb with the expressive meaning "shouted", a precedent statement - the famous phrase of the director K. Stanislavsky, addressed to the actors during rehearsals. All of the listed linguistic means are aimed at forming a critical attitude towards the described judgments.

12. Technique of a negative assessment of the events or someone else's actions, rejection of committed or planned actions

As part of the defamation tactics, this technique is one of the most frequently used. A negative assessment expresses a negative attitude towards someone or something, rejection of actions taken or planned by a competitor: *Valieva herself refused to communicate with the press, the coach EteriTutberidze was a little more talkative. **"I don't gossip,"** she said in response to a request to comment on information about doping (Nov.gaz, 02/10/2022); The IOC turned out to be not much more verbose than Tutberidze and called **speculation** about Valieva's dubious doping test. "Yesterday, we urgently faced a situation that has legal consequences. I'm not going to comment it because it would be inappropriate. Reports of a potential doping case **are entirely speculative**,"*

*spokesman Mark Adams said during a press conference. (Nov.gaz, 02/10/2022); But, despite the toxic policy of the IOC in relation to our skaters, the intensity of competitive passions at the Beijing Olympic arena CapitalIndoorStadium has not gone away (RIA, 02/15/2022); This is a vile and ignoble attack at the athlete, at the child, which is simply impossible to forgive. The International Olympic Committee is just behaving like the last s\*\*t (sc/c Artemy Lebedev, 02/16/2022).*

The analysis above shows that the choice and frequency of use of the defamation methods depends on the political orientation and degree of institutionalization of the media (several methods could be used in one text).

In the pro-government media, the most frequent techniques were:

- technique of a negative assessment of events or someone else's actions, rejection of committed or planned actions (50 uses);

- technique of an unsubstantiated accusation (47);

- technique of intimidation, threat or warning (41);

- direct or indirect insult (40);

- technique of a negative scenario forecast (32);

- technique of ridicule, irony, sarcasm (15);

- technique of deliberate exaggeration of any disadvantages (4);

- technique of false definition (3).

In fact, there were no technique of labeling and the method of non-constructive criticism of the expressed opinions and judgments.

The most frequently used techniques in the opposition media are following:

- technique of a negative characteristic of professional competencies (58);

- technique of ridicule, irony, sarcasm (54);

- technique of a negative assessment of events or someone else's actions, rejection of committed or planned actions (51);

- technique of an unsubstantiated accusation (49);

- technique of a negative scenario forecast (42);

- labeling (22);

- technique of non-constructive criticism of the expressed opinions, judgments (15);

- technique of negative comparison / equating to negatively evaluated concepts (10);

- technique of false definition (6);

- technique of deliberate exaggeration of any disadvantages (5).

The sample shows that in the opposition media, the set of defamation techniques is more frequent and more diverse.

In pro-government blogs, the most frequent methods were:

- technique of a negative assessment of events or someone else's actions, rejection of committed or planned actions (28 uses);

- technique of an unsubstantiated accusation (17);

- direct or indirect insult (14);

- technique of deliberate exaggeration of any disadvantages (7);

- technique of a negative scenario forecast (5);

- technique of intimidation, threat or warning (4);

- technique of false definition (2 uses).

Registered methods of labeling, ridicule, irony, sarcasm, non-constructive criticism of the expressed opinions and judgments are insignificant.

The variety of defamation methods used in opposition blogs is shown below:

- technique of unsubstantiated accusations (32 uses);

- technique of a negative characteristic of professional competencies (26);

- labeling (22);

- technique of ridicule, irony, sarcasm (21);

- technique of a negative assessment of events or someone else's actions, rejection of committed or planned actions (20);

- technique of non-constructive criticism of the expressed opinions, judgments (15);

- technique of a negative scenario forecast (12);

- technique of negative comparison / equating to negatively evaluated concepts (10);

- technique of false definition (6 uses);

- technique of deliberate exaggeration of any disadvantages (5).

The sample shows that the set of discrediting techniques in opposition blogs is very diverse.

In general, we can make a conclusion about the manipulative potential [1] of specific techniques and defamation means that journalists and bloggers use, depending on their political attitudes.

## IV. CONCLUSION

The problem of sports and politics' interrelation is examined in the article. It is shown that in recent decades, sport has become an arena of political struggle and ideological confrontation between different political systems and entire countries. The process of a sports news event's politization began to be used in the digital media space as a communication strategy aimed at achieving communication intentions by one media actor or another. The main tactics for implementing the communicative strategy for sports incident's politicizing are the secondary nomination of the participants in the conflict, the manipulation of public opinion in order to transfer sports problems to the mainstream of political ones, and the discrediting of various subjects of a doping scandal. The defamation tactics is actively used in both sports and political discourse, because they are a form of competitive struggle, the purpose of which is to undermine the credibility of the enemy, belittle his authority and destroy the image [3].

In this article, the main attention was paid to the study of discrediting tactics and the identification of the main techniques and speech means of its implementation. On the basis of empirical analysis, we've made conclusions on the

frequency of the defamation methods used by Russian journalists and bloggers who take either pro-government (patriotic) or opposition position. We've also identified the main subjects of discredit in different types of Russian media. In the pro-government media and blogs, they are primarily the International Olympic Committee (IOC), the World Anti-Doping Agency (WADA), the American Anti-Doping Agency (USADA), the United States of America and Americans, athletes from other countries; in the liberal media and blogs - the leadership of Russian sports, including the Russian Olympic Committee, the leadership of Russia, including members of the government and the president, Russian media, doctors and coaches of the Russian team, including E. Tutberidze, international and Russian anti-doping structures ( WADA, RUSADA), athletes from other teams, ill-wishers from other countries, in isolated cases - K. Valieva.

Thus, the conducted research demonstrates that there are two polar interpretations of the same sports incident by different media actors, depending on their political beliefs and value preferences, and, more broadly, about the confrontation between Russia and the collective West both in sports and in politics.

REFERENCES

[1]. Balakhonskaya L.V., Gavra D.P., Beresneva I.V., Sadirova K.K. Markers of Manipulation in the Electoral Communication in a Digital Environment // Proceedings of the 2020 IEEE Communication Strategies in Digital Society Seminar, ComSDS. IEEE, Saint Petersburg: Electrotechnical University "LETI", 2020. Pp. 91–98. URL: https://www.scopus.com/authid/detail.uri?authorId=57195608280]

[2]. Balakhonskaya L.V., Bykov I. A. Verbal Aggression in Political Blogs: A Case of the "Echo of Moscow", in Vestnik Sank-Peterburgskogo universiteta. Yazykiliteratura [Bulletin of Saint Petersburg University. Language and literature], 2018, vol. 15, issue 3, pp. 492-506].

[3]. Balakhonskaya L.V., Strelchenko V.I., Balakhonsky V.V., Sadretdinova T.A., Beresneva I.V. Communicative Strategy of Discrediting Opponents in the Russian Political Blogosphere // Proceedings of the 2020 IEEE Communication Strategies in Digital Society Seminar / Shaposhnikov, S. & Sharakhina, L. (ред.). Institute of Electrical and Electronics Engineers Inc. ComSDS 2020. Pp. 27-33. https://www.scopus.com/authid/detail.uri?authorId=57195608280

[4]. Blanton S. Incoordination and Tension Due to Anxiety. 1942. Lancet 62:398-400.

[5]. Couldry N., Hepp A. The Mediated Construction of Reality, Cambridge: Polity Press. 2018. Pp.38-52

[6]. D'agati P.A. (2018) Surrogate war: politics of conflict in sports and space//International Journal of Sport Policy and Politics, 10:3, 451-467, DOI: 10.1080/19406940.2017.1410208

[7]. Danilov, M.V. Koncept «politizaciya» v nauchnomiobshchestvenno-politicheskomdiskurse: /M.V. Danilov// IzvestiyaSaratovskogouniversiteta. Seriya: Sociologiya, politologiya. 2010. №2. S. 92-96.

[8]. Filho C.T., De Souza L.S., Moni G. Mediatized soccer, cultural identity and recognition in digital communicative flows//Contracampo. Vol.40. Issue 1. 2021. URL: file:///Users/ekaterins/Downloads/47165-Texto%20do%20Artigo-172398-1-10-20210531.pdf

[9]. Foer F. 2010. How Soccer Explains the World: An Unlikely Theory of Globalization. New York: Harper Perennial. URL: https://www.teatroregio.torino.it/sites/default/files/webform/modulo_di_prenotazione_attivita_/_sid_/how-soccer-explains-the-world-an-unlikely-theory-of-globalizatio-franklin-foer-6831f32.pdf

[10]. Frandsen K. Sport and mediatization. Routledge. 2020. URL: https://books.google.ru/books?hl=ru&lr=&id=v0i8DwAAQBAJ&oi=fnd&pg=PT7&dq=sports+mediatization&ots=Yqa_gX67S8&sig=5Dbh61P-rrFqJAYhKalue17pVRo&redir_esc=y#v=onepage&q=sports%20mediatization&f=false

[11]. Gavra D., Dekalov V. Communicative capital and communicative exploitation in digital society. Proceedings of the 2018 IEEE communication strategies in digital society workshop, COMSDS. https://www.researchgate.net/publication/324997736_Communicative_capitaland_communicative_exploitation_in_digital_society (accessed 27.01.2023)

[12]. Gavra D. P., Bykova E. V. Mediatizatsiiaidemediatizatsiia v tsifrovoĭsrede: keĭskonservativnogomanifesta K. Bogomolova «PokhishchenieEvropy 2.0.» // VestnikMoskovskogouniversitetaSeriia 10: Zhurnalistika. 2022. № 3. S. 60-86.

[13]. Gavra D.P., Bykova E. V. Sports industry in the strategic communications context. // Russian school of Public Relations. 2017. № 9. Pp. 26-34

[14]. Gerald R. Gems. Sports, war, and ideological imperialism, Peace Review, 11:4, Chapter «Patriotism in sports and in war» By Paul Gomberg Book Values in Sport Edition1st Edition First Published.2000, 1999. P. 573-578. DOI: 10.1080/10402659908426309

[15]. Gorn Elliot J., Goldstein W. A Brief History of American Sports. Champaign: University of Illinois Press. 2013. URL:https://books.google.ru/books?hl=ru&lr=&id=wZFTnS1owzIC&oi=fnd&pg=PR9&ots=z8_A5m_UAZ&sig=DZbxBIqlH7ZhxdIHa7zsVbP7bjk&redir_esc=y#v=onepage&q&f=false

[16]. Hepp, A.; Breiter, A.; Hasebrink, U. Communicative Figurations. Transforming Communications in Times of Deep Mediatization. Basingstoke: Palgrave MacMillan.2018.

[17]. Hjarvard S. The mediatization of society. A theory of the media as agents of social and cultural change // Nordicom Review. 2008. Vol. 29 No. 2. Pp. 105-134.

[18]. Hjarvard S. Three forms of mediatized religion. Changing the public face of religion // Medialization and religion: Nordic perspectives / Ed. by M. Lövheim, S. Hjarvard. Göteborg: Nordicom. 2012. Pp. 21-43.

[19]. Kim S., Byun J., Thomson J.R.Ch. Adapting to a new normal: the impact of COVID-19 on the mediatization of professional sport organizations//Sport in society. Cultures, Commerce, Media, Politics. Vol. 25, 2022 - Issue 7. URL: https://www.tandfonline.com/doi/abs/10.1080/17430437.2021.2017888

[20]. Levermore R., Budd A. 2003. Sport and International Relations: An Emerging Relationship. London: Routledge. URL: https://digital.library.tu.ac.th/tu_dc/frontend/Info/item/dc:14082

[21]. Ličen S., Antunovic D., Bartoluci S. A Public Service? Mediatization of the Olympic Games in Croatia and Slovenia. Communication and sport. Vol.10, Issue 5. 2022. URL: https://journals.sagepub.com/doi/abs/10.1177/21674795221090423?journalCode=coma

[22]. Mangan J.A. Militarism, Sport, Europe: War Without Weapons. 2005. URL: https://books.google.ru/books?hl=ru&lr=&id=x0mQAgAAQBAJ&oi=fnd&pg=PP1&dq=mangan+sport+militarism&ots=4Ja-jCmW4E&sig=Zm17bJVmHw4oeA8CrzvjKJNsJPc&redir_esc=y#v=onepage&q=mangan%20sport%20militarism&f=false

[23]. McIntosh P. Fair play. Ethics in sport and education. Heinemann, London, - 1979. - 205 p.

[24]. Mitchell D., Somerville I., Hargie O. 2016. "Sport for Peace in Northern Ireland? Civil Society, Change and Constraint after the 1998 Good Friday Agreement." The British Journal of Politics and International Relations 18 (4): 981–96. Accessed on February 5, 2023. Available online at http://journals.sagepub.com/doi/abs/10.1177/1369148116656987.

[25]. Ncube L., Mhiripiri N.A. Mediatization of Zimbabwe's professional football league. Africa's Elite Football. URL: https://www.taylorfrancis.com/chapters/edit/10.4324/9780429029059-14/mediatization-zimbabwe-professional-football-league-lyton-ncube-nhamo-anthony-mhiripiri

[26]. O'Reilly J. Women and Sports in the United States: A Documentary Reader. Boston: Northeastern University Press. 2007. URL: https://books.google.ru/books?hl=ru&lr=&id=utWx5SNoxXAC&oi=fnd&pg=PR3&ots=4mB3YycrI0&sig=RNQBuGamW4dcKXSlQ5G5oLi_QE0&redir_esc=y#v=onepage&q&f=false

[27]. Rimland B. The Relationship of Athletic Ability, Sports Knowledge and Physical Proficiency to Officer Performance and Career Motivation. U.S. Navy Bureau of Naval Personnel Technical Bulletin No. 61-12. Washington.1961.

[28]. Rogers M. Rex. The Sad Politicization of American Professional Sports; Lutan R., Hong F. The politicization of sport: GANEFO–A case study; Martynenko S.E. Dialectical Interrelation between Sports and Politics and its Demonstration in Mass Media

[29]. Savinov L.V., Aloyan M.S., Shumasov M.A. Politicization of sports as a phenomenon and a problem //Journal PoliticheskihIssledovanii. 2021. T.5. № 3. C.107-118.

[30]. Schallhorn K., Nölleke D., Mehler K. Mediatization in Times of Pandemic: How German Grassroots Sports Clubs Employed Digital Media to Overcome Communication Challenges During COVID-19. Communication and sport. Vol.10, Issue 5. 2022. URL: https://journals.sagepub.com/doi/abs/10.1177/21674795221109759?journalCode=coma

[31]. Shi L., Zhang L. A Smarter and Greener Olympics: Mediatization and Public Reception in the Preparation Stage of the Beijing 2022 Winter Olympics. Communication and sport. Vol.10, Issue 5. 2022. URL: https://journals.sagepub.com/doi/abs/10.1177/21674795221106937?journalCode=coma

[32]. Sipes R.G. War, Sports and Aggression: An Empirical Test of Two Rival Theories'//American Anthropologist. Volume 75, Issue 1Feb 1973. URL: https://anthrosource.onlinelibrary.wiley.com/doi/epdf/10.1525/aa.1973.75.1.02a00040

[33]. Van Dijk T.A. , "Discourse as Interaction in Society", in Discourse Studies: A Multidisciplinary Introduction: in 2 vols. Vol. 2: Discourse as Social Interaction. London: Sage, 1997, pp. 1–37].

[34]. Watterson J. S. 2009. The Games Presidents Play. Baltimore: Johns Hopkins University Press. URL: https://books.google.ru/books?hl=ru&lr=&id=9mjDPMrnZ3kC&oi=fnd&pg=PR9&ots=u0wj22LPPj&sig=dWfTxPSShgOw63kyfi49H3nRc7Q&redir_esc=y#v=onepage&q&f=false

[35]. Zirin D. 2013. A People's History of Sports in the United States: 250 Years of Politics, Protest, People, and Play. New York: The New Press. URL: https://books.google.ru/books?hl=ru&lr=&id=7-hAXVT0t38C&oi=fnd&pg=PR5&ots=JLwZ80ROYR&sig=GB_MPpISyWIuLaZVw_Ya_8eJ7vw&redir_esc=y#v=onepage&q&f=false

# Criteria for Successful Socialization in the Digital Transformation of Society

Alexandra A. Shcherbina
*Department of Sociology and Political Science*
*Saint-Petersburg Electrotechnical University "LETI"*
Saint Petersburg, Russia
ashcherbina@list.ru

Evgeny A. Pashkovsky
*Department of Sociology and Political Science*
*Saint-Petersburg Electrotechnical University "LETI"*
Saint Petersburg, Russia
egn-pashkovsky@rambler.ru

*Abstract* — **The article considers the criteria of successful socialization, theorized in the analytical perspectives of twentieth-century sociology and practically significant in the processes of capitalist modernization, which embraced the whole world. The thesis about inevitability of decomposition of a single standard of socialization and emergence and ideological promotion of multiple local standards, increasing of competition between socialization models adequate to social changes under conditions of digital transformation of society is substantiated. The concept of social capital as an indicator of socialization success is critically examined. Its dependence on the constant - personal capital of the individual is justified. The conclusion is made that for socialization processes in the new communicative situation, the pedagogical component of the educational process becomes of key importance.**

*Keywords* — *socialization, personality, criteria of success, socialization standard, social capital, personal capital, social modeling, higher education*

## I. INTRODUCTION

The digital transformation of society changes the modes of interaction of the individual with the individual, the family, the inner circle, with corporations and the state, with the global subject.Digital technology affects the global symbolic universe, the language, norms and values of communities. The socialization of the personality (which appropriating, producing, implementing the service), its personal and social capital is also under similar affect.

Socialization becomes a problem. First of all, for the personnel directly responsible for socialization. In the era of hyperinformation, in a fundamentally new communicative situation, the teacher of higher education has to compete for the volume of attention attracted both with other communicators and with other carriers of knowledge.

## II. REVIEW OF RESEARCH ON THE PROBLEM

In the analytical perspective of social realism - from E. Durkheim to M. Archer, the sociocultural world is presupposed to the individual. The result of socialization of new generations is society itself as a social structure and as a historical individuality, - culture.

Society shapes personality. The social structure and location within it determine the resources and limitations of an individual's socialization, provide institutional programs for his life plans, and determine the most valued personal traits. The socialized individual is tested for adequate performance of social functions, is selected and qualifies for certain social positions, is distributed to some social stratum, with a characteristic prospect of advancement or degradation [See: 1].

The structural-functional approach (from E. Durkheim to T. Parsons) emphasizes the coercive nature of socialization. Cultural belonging is constitutive of the individual and is not a matter of choice.

The harmony of the value-normative order and behavioral expectations is achieved by the internalization of the community's values and norms by its members in the process the life cycle. To this built-in and non-obvious coercion, which forms in individuals the motivation to engage in approved activities - to perform roles - is added the coercion machine as such. Socialization, the measure of which is solidarity (both in synchronicity and diachronicity), becomes a problem, as conceptualized by Durkheim (later by R. Merton) in the theory of anomie.

So, society is active and personality is reactive. Society is overbearing, individuals adapt, society rewards and punishes, individuals experience feelings of inferiority, suffer and are ashamed, and are in need of therapy.

If one creates oneself and society, then socialization is the incorporation of individual experience into a broadcast heritage: the spread of invention of individual-innovator (in the broadest sense) "due to the personal influence of that person and the imitative credulity of his or her relatives" [2]. This understanding of socialization goes back to G. Tarde. A. Schutz calls it "social approval of knowledge", in a certain sense opposite to the process of social acquisition of knowledge [3]. E. Giddens' theories of structuration, P. Berger and T. Lukman's social construction, P. Bourdieu's habitus and many others reveal the reflexive and constructive nature of the concepts "society" and "personality".

Success of socialization in the analytical perspective "society" is the process and result of expanded reproduction: historically accumulated potential (mastered natural environment, products of material and spiritual production, stock of knowledge, social relations, behavioral patterns, etc.) is preserved and multiplied due to contributions of the new generation. In the perspective "individual," success of socialization is a developed and mature individual who has integrated social experience into personal potential. An indicator of an individual's successful socialization is the presence of motivation to participate in social life, involvement in social relationships, linking their life chances and goals with the life of the community. The psychology of the twentieth century (Z. Freud, J. Piaget, J. Mead and representatives of Soviet psychology L. Vygotsky, A. Leontiev, S. Rubinstein) has made a significant contribution to the clarification of the connection between individualization and socialization. Psychologists connect the success of socialization with the formation of "prosocial behavior", operationalize this concept and develop tools for its assessment (Scale of social and psychological adaptability by C. Rogers and R. Dymond [4], Value survey by M. Rokeach [5], M. Kuhn and T. McPartland's test of Self-Attitudes [6] and many others).

Under the conditions of digital transformation of society, ideologically charged ideas about socialization and criteria of its success are reconsidered and reevaluated, which are significant for practical consciousness. A new informational and communicative environment is emerging. Virtual social platforms integrate the activity of the individual and through the information-emotional background generated by them determine its behavior, carry out testing, selection and distribution of individuals into communities, taking the initiative from traditional socializers, who find it increasingly difficult to compete with them in the struggle for the volume of attracted attention and time of life.

## III. RESEARCH OBJECTIVES AND METHODS

Rapidly developing information and communicative technologies and the looming virtual world significantly modify socialization processes. The personnel directly responsible for socialization have to reconsider their specific professionalism, which combining the roles of educator, professional (connoisseur) and communicator.

Having examined the concept "successful socialization" in different analytical perspectives of sociology and psychology, we will trace the change in the criteria of successful socialization, the decomposition of the universal standard of socialization, the connection of successful socialization with the accumulation of social capital, the relationship of personal and social capital, the challenges facing teachers of higher education.

The focus of research interest on the criteria of successful socialization is related to the authors reflection of professional experience of teaching socio-humanitarian disciplines in technical university, including the discipline "Pedagogy of Higher Education" for postgraduate students. Components of the empirical basis of the analysis: official documents of the Russian Federation, materials of domestic and foreign sociological surveys (VCIOM, Levada Center, HSE, "Zircon" research group, "Eidelman Trust Barometer", etc.), expert estimates, materials of discussions in the Russian media for the last ten years. The methodology of the systematic approach and cultural-historical analysis are used, and a typological approach is implemented.

## IV. RESULTS OF RESEARCH

The activity of educators in transmitting social experience, the disciplining influence of institutional orders, the process of achievement of social status by personality - in all these analytically distinguishable aspects, socialization is a process oriented toward patterns shared by the community. Approximation to the standards, completeness of their realization informs about success of socialization. The latter is expressed by the variable "intensity of socialization". The share of those successfully socialized is expressed by the variable "universality of socialization". No society is immune to socialization failures and pathologies.Low values of socialization indicators have consequences for social structure: weakening of institutional order, degradation of separate institutions, slowdown of mobility. Social alienation and apathy are growing, and there is a crisis of identity and trust [See: 7, 8].

Cultural and historical analysis demonstrates the conventionality of criteria for the successful socialization of the individual. In most modern societies these criteria and the models that meet them are the subject of polemics and rivarly.

The promotion of a universal standard of socialization in the process of capitalist modernization, which swept the entire world, was accompanied by the conventionalization of social practices, the normalization of labor, civic, political activity, the widening invasion of primary sociality. In the impending post-industrial society, normalization and accommodation begin to be seen as the unification of personality, the suppression of its right to self-realization. Non-classical sociology has discovered the historical roots and social constitution of all quasi-natural norms. Individuals are now imputed a critical distance from all natural norms and traditional socializing factors (institutions, values and symbols). A successfully socialized individual has a fluid identity, a comprehensive reflexivity, he builds "undistorted communication" (J. Habermas), projects a selfness.

The manifold of life styles relativizes the relationship between norms and deviations, successful socialization and marginality, and marginalization is legitimized. Characteristically, until recently "adulthood" was associated mainly with labor ("labor socialization" [See: 9]). In post-industrial society, Taylorism, Fordism, social partnership, Toyotism, universal employment are replaced by the decline of trade unions, reduced state participation in labor-capital relations, precarization of labor, gigonomics (the economics of short-term contracts [10]), unconditional basic income, chronic unemployment, volunteers, surplus people. Labor no longer defines people's lives [See: 11].

The participation of the nation-state was inscribed in the universal standard of socialization. State planning and regulation of conditions of social reproduction (medicine, education, employment, long-term crediting) provided equalization of starting conditions of socialization. Within the framework of global division of labor and transition to a new industrial way the involvement of public and state institutions of different blocks of countries in regulation of conditions of expanded reproduction is sharply differentiating. Entities that declare the most large-scale and long-term state and corporate goals directly determine the order and form medium- and long-term demand both for the type of products and services and for the types of individuals and collectives capable of its producing, distributing and consume.

The unified standard of socialization, assumed until recently for developed and developing countries, is disappearing. It is replaced by and in the foreseeable future will be ideologically fixed by a quantity of local standards of socialization and personality types, adequate to the solution of those tasks and goals, which are assigned to the regions by global players. There will be a widescale differentiation between countries and regions not only in terms of conditions, but also in terms of standards of personality socialization.

We propose to consider social capital as a key indicator of successful socialization in the conditions of digital transformation of society. According to its structure social capital is a network of horizontal relationships, where trust is ensured by shared beliefs and norms. The boundaries of social capital are blurred. Possessing it does not impose clear formal obligations. Mechanisms of social capital production: mutual expectations, group reinforcement of norms, privileged access to information.

We observe the following paradox. The idea that building social capital is a key factor of success at the national, corporate and personal level is popularized. Against the background of the falling weight of "traditional" economic

indicators, the importance of reputational capital in the structure and value of business is only increasing. The volume of network communications is increasing. As visible embodiments of social capital today are considered: networking - expanding the network of acquaintances to earn money and a career; crowdfunding platforms, which raising funds for the implementation of business ideas and socially significant programs; monetization of the audience of independent bloggers. The share of Internet communications in the total volume has exceeded the weight of discourses supported by traditional media ("screenshot journalism"); they rival "face-to-face" conversations. In youth environment, social media communication is an important sphere and space for advancement. Inclusion, belonging, communication skills equipment are indicators of the possession of social capital. The notions of social interaction are anchoring on media platforms.

At the same time, studies of Western society have produced disappointing data that have shown a decline in American participation in voluntary associations, a decrease in the time spent on informal socializing [12]. The results of numerous sociological studies - in Russia and another countries - indicate a decline in trust in everyone, disillusionment with social networks, and social pessimism [See: 13, 14, 15, 16]. Social capital is being depleted.

The activity aspect of social capital means that its accumulation is possible only through its consumption and use, it emerges and grows in the same time with the practical involvement of the individual at all levels of social interaction. The cultural and political dominant (core) aspect of social capital is a balance of personal, group and public interests.

The most valuable resource that forms social capital is time. It is invested in all relationships, including leisure. Social capital is determined by the efficiency of the use of connections, that is, the means and results of "others" labor. The role of social capital as circulating capital is highlighted: without increasing personal capital, a connections and relations of personality lock his movement in a circle. The increasing volume of communications imitates the inclusion of the personality. Its sociability takes it into the sphere of forming, commenting on and serving idols.

Horizontal connections, network communities create conditions both for personal growth and for leasing of personal potentialities and sociability by network companies and power structures. Control and regulation of sociability, carried out with the help of social rating (PRC) and political rules (West), have here the subordinate importance of social priorities of behavior, regimes of social discipline.

## V. Conclusion

When analyzing contemporary forms of social capital, we should not forget that behind it there is always a personality. Social capital differs from other types of capital in that its "permanent" and basic part is the person himself in his previous experience of formation with parents in the family, with friends, teachers and mentors in school, university, the army. In this sense, horizontal connections are secondary to personality formation. On the contrary, orthogonal connections (with previous generations and with future generations) are primary. The conditions of personality formation determine the ways and directions of the use of social capital. Personality does not dissolve in social capital, it is always greater than it, even if it grows in it. Under the conditions of digital transformation of society, in the new communicative situation, the cultural and civilizational dimension of personality is determined by the conditions of "initial accumulation" of personal capital, by the nature of its further socialization, and, as a consequence, by speed and scale of social capital accumulation.

Under conditions of digital transformation of society socialization takes non-traditional, non-classical forms. In the global world transnational, nation-state, confessional, corporate actors compete for opportunities to define and promote their standards of socialization. The pedagogical component of higher education teacher's professionalism becomes a key factor contributing to successful student socialization in educational activities that meet national interests.

Accumulated in the information space "traces" of social activity of individuals or indicators of employment, consumption, leisure, communication - "big data" today are already used as a resource to solve private management tasks. The theoretical interpretation of socialization in Russian sociology and the state's systematic participation in creating socialization models that take into account regional differences and peculiarities of settlement communities in Russia make this sociological information in demand both in the socio-humanitarian sciences and in pedagogy of higher education.

## References

[1] Pitirim A. Sorokin. Society, Culture, and Personality: Their Structure and Dynamics. Cooper Square Publishers, 1962.

[2] G. Tarde. Social'naja logika. SPb.: Soc.-psihol. centr, 1996. P. 123.

[3] A. Schutz. Horosho informirovannyj grazhdanin// Smyslovaja struktura povsednevnogo mira:ocherki po fenomenologicheskoj sociologii/ Sost. A. Alhasov; Per. s angl.A. Alhasova, N. Mazlumjanovoj; Nauchn.red.perevoda G.S.Batygin. M.: Institut fonda «Obshhestvennoe mnenie», 2003. P. 237

[4] Rogers, C. R., & Dymond, R. F. (Eds.). Psychotherapy and personality change. University of Chicago Press, 1954.

[5] M. Rokeach. Understanding Human Values. Individual and Societal. New York, The Free Press, A Division of Simon & Schuster, 1979.

[6] Kuhn, M. H., & McPartland, T. S. An empirical investigation of self-attitudes. American Sociological Review, 19, 1954. P. 68–76.

[7] 2022 Edelman Trust Barometer. URL: https://www.edelman.com/trust/2022-trust-barometer (date of application: 25.02.2023).

[8] Cennostnye orientacii sovremennoj molodezhi. Analiticheskij obzor rezul'tatov mezhdunarodnyh i rossijskih issledovanij. URL: https://www.zircon.ru/upload/iblock/aab/tsennostnye-orientatsii-sovremennoy-molodezhi-analiticheskiy-obzor.pdf (date of application: 25.02.2023).

[9] G.M. Andreeva. Socializacija /Social'naja psihologija. Uchebnik dlja vysshih uchebnyh zavedenij. M.: Aspekt Press, 2001. P. 213 – 222.

[10] Prekratite iskat' rabotu: kak izmenitsja rynok truda v XXI veke // Harvard Business Review – Russia. URL: https://hbr-russia.ru/biznes-i-obshchestvo/ekonomika/p20081 (date of application: 25.02.2023).

[11] D va milliona molodyh rossijan popali v kategoriju "ljudej bez lica". URL: https://www.mk.ru/social/2017/05/15/dva-milliona-molodykh-rossiyan-popali-v-kategoriyu-lyudey-bez-lica.html (date of application: 25.02.2023).

[12] Putnam R. D. Bowling alone: the collapse and revival of American community / Robert D. Putnam. N. Y.: Simon & Schuster, 2000.

[13] Poll: Americans Say We're Angrier Than A Generation Ago. URL: https://www.npr.org/sections/health-shots/2019/06/26/735757156/poll-americans-say-were-angrier-than-a-generation-ago (date of application: 25.02.2023).

[14] Americans' Trust In Media Remains Near Record Low. URL: https://news.gallup.com/poll/403166/americans-trust-media-remains-near-record-low.aspx (date of application: 25.02.2023).

[15] Pochemu pol'zovateli social'nyh setej vsjo chashhe ispytyvajut razocharovanie. URL:

https://webznam.ru/blog/pochemu_socialnye_seti_vyzyvajut_razochar
ovanie/2017-01-31-390 (date of application: 25.02.2023).

[16] Institucional'noe doverie. URL:
https://www.levada.ru/2018/10/04/institutsionalnoe-doverie-4/ (date
of application: 25.02.2023).

# Demediatization 2.0. as a Communication Strategy: Definition, Basic Characteristics & Key Aspects of the Analysis Methodology

Dmitrii P. Gavra
*Public Relations in Business Department*
*Saint Petersburg State University*
Saint Petersburg, Russia
d.gavra@spbu.ru

Dmitry P. Shishkin
*Public Relations in Business Department*
*Saint Petersburg State University*
Saint Petersburg, Russia
d.shishkin@spbu.ru

Elena V. Bykova
*Public Relations in Business Department*
*Saint Petersburg State University*
Saint Petersburg, Russia
e.bykova@spbu.ru

Yulia V. Taranova
*Public Relations in Business Department*
*Saint Petersburg State University*
Saint Petersburg, Russia
y.taranova@spbu.ru

*Abstract*—The purpose of the article: to introduce into scientific circulation a new category of demediatization 2.0., considered in the context of the general theory of mediatization. The authors proceed from the superposition of the institutional and constructivist concept of mediatization and propose to consider the concept of demediatization at three levels of the social hierarchy. It is shown that in the conditions of the transition of the information society from the phase of digitalization to the phase of datification, a new qualitative stage is coming in the demetization dynamics, which is designated as "demediatization 2.0".

The authors conclude that "demetization 2.0." is a complex trend of the social dynamics of digitally datified modernity, which can be identified at the macro level and the level of spheres of public life (societal demediatization), the level of everyday practices of digital prosumers (behavioral demediatization) and the level of individual events, incidents and informational occasions (event demediatization). Three basic definitions of demediatization 2.0., characteristic of the transition of media communications from the stage of digitalization to the phase of datification and corresponding to the three identified theoretical traditions, are substantiated.

Societal demediatization 2.0. refers to the social process of redistribution of power resources of communications medium from classical media and traditional normatively understood journalism to network players, influencers and traffic monopolists, characteristic of the society of communication platforms and digital ecosystems, which generates a new dynamic of reproduction of sociality of the mediatized world.

The concept of event-demediatization 2.0 is introduced. and its detailed description is given. As a result of the purposeful application of this network strategy, a socially significant event that can cause a large-scale behavioral reaction is deliberately placed on the periphery of public attention.

*Keywords— mediatization, demediatization, demediatization 2.0., digital society, datafication, mediatized worlds, medialogics, event drmediatization.*

## I. Introduction

The digital environment formed simultaneously by official mass media and unofficial network resources, influencers and traffic monopolists has an impact on a society diversified by interests, values, statuses and – as a result – by the demand for the information agenda. At the same time, "mediatized worlds" according to Hepp [8] essentially occupy the everyday practices of the majority of the population of the "digital world". Mediated by technological mediums communication forms a new mediatized everyday life, thereby replacing the usual everyday life. Using a wide arsenal of user engagement technologies, the network opinion creates new tools for mediatization and mediatized mobilization – both consumer and political. Mediatization 2.0. characteristic of the network platform society once again simplifies the communication practices of the digital prosumer and drives him into the funnel of constant reproduction of mediatized social practices. In essence, we are dealing with the totality of mediatized communication in the space of unverified information flows. And such a situation of totality cannot but generate a demand for a stream of counter social actions aimed at getting out of the mediatization maze, at demediatization of everyday life. These actions may be associated with a more or less conscious desire to protect the world of individual privacy from the expansion of mediatized worlds. On the other hand, the mediatization of any significant information occasion, especially in conditions of public turbulence, can generate spontaneous explosive political mobilization, including protest mobilization. This creates political risks for the current government and encourages it to take such actions in the information field and the related social field, which can also be designated as demediatization, only of a different type – purposeful and unfolding in relation to the incident. Thus, it is possible to raise the question of different types of this social process, which can be designated as demediatization. We believe that in the context of the transition of the information society from the phase of digitalization to the phase of datification, a new qualitative stage is coming in the demetization dynamics, which we propose to define as "demediatization 2.0".

The purpose of the article is to introduce the category "demediatization 2.0." into scientific circulation in modern media theory. According to the formation of traditional terminological systems, the prefix de- means the cancellation, destruction, denial of something: (blocking/deblocking, mobilization/demobilization, qualification/ dequalification, infection/disinfection). In this regard, the concept of demediatization is considered as a kind of methodological opposition to the concept of mediatization. At the same time, we believe it is possible to apply to the

interpretation of the social content of demediatization all three approaches that have developed in the modern theory of media communication, which we will conditionally designate as societal, behavioral and event-based. We will write about the essence of the approaches below. Note that the understanding of demediatization 2.0. is applicable to all three interpretations of the mediatization process..

## II.  THEORETICAL FRAMEWORK

Let's turn first to the understanding of mediatization 2.0.

The study of the phenomenon of mediatization 2.0 is at the junction of scientific developments in the field of the general theory of mediatization of modern foreign and domestic scientists working within the framework of institutional S. Hyaward [9], D. Deacon and D. Stanier [2], A. Gureeva [7], etc. and socio-constructivist schools A. Hepp [8]. At the same time, both theoretical schools share the thesis that social media that emerged during the period of digitalization provide diversification, replacement, integration and adaptation of socio-political actors to the new media logic (institutionalists) or communicative figurations (constructivists).

Within the framework of the institutional tradition [15], mediatization 2.0. is mediatization, understood as the process of imposing the datified media logic of the platform society on other spheres of social life. First of all, we mean the political and cultural spheres. This process is based on the dynamics of the web wave, the repeaters of which in the network society are influencers - traffic monopolists and owners of network communication capital [6]. The web wave rises in the process of forming a synergy of the communicative activities of interested parties in the presence of network actors among them, consciously expanding the area of the subjects involved. Mediatization 2.0. by transferring the datified media logic to the political sphere, it is implemented in the horizontal network environment of digital viewers and generates new effects on political behavior and the functioning of social systems. Interpreted within the framework of the institutional paradigm, the process of mediatization 2.0 is associated with a political media discourse in which horizontal network and vertical institutional discourses compete for the formation of meanings in value-homogeneous communities.

Within the constructivist tradition, mediatization 2.0., realized through the everyday communicative practices of the subjects of the space of datified communication, is a process of constant reproduction of mediatized worlds realized through the communicative figuration of datified interactions.

We distinguish three types of mediatization objects.

Firstly, it is macromediatization, or mediatization of social life [7]. In this case, the subject of mediatization is the germination of media logic – perception determined by the dominant system of media communications – into the logic of various spheres of social life.

Secondly, the practices of collective and individual social actors can become the object of mediatization [12]. We will designate these processes as subjective meso-, micro- and nano-mediatization. Here the subject of mediatization is the social construction of the reality of professional and everyday practices of social subjects through the interiorization of their mediatized worlds.

Thirdly, mediatization as a social and communicative process can be implemented at the meso- or micro-level, in relation to a specific event, information occasion, local incident. This event becomes an event-mediatization object [5]. As a result of mediatization, an insignificant event, a local incident can become a resonant event with social and political consequences.

Let's make an oppositional methodological extrapolation of our understanding of mediatization 2.0. to the concept of demediatization 2.0. At the same time, we turn to the three traditions of theoretical interpretation mentioned above.

The first tradition, we consider it as societal, believes that demediatization is implemented at the macro level. It is based on the concept of the modern German philosopher Byung-Chun Han [14]. The scientist designates as demediatization the loss of the fundamental social potential of classical media in a digitally anonymized society. Byung-Chul Han notes that professional media and journalism are excluded from the number of significant actors in the formation of the agenda, which today is determined by traffic monopolists and those whom we call communication capitalists in our works [6], including platforms. The philosopher interprets demediatization as the loss of the leading role of the media in the formation of public discourse [14]. Within the framework of this theoretical tradition, by societal demediatization 2.0. we will understand the social process of redistribution of power resources of communication mediums from classical media and traditional normatively understood journalism to network players, influencers and traffic monopolist's characteristic of the society of communication platforms and digital ecosystems in the dynamics of reproduction of sociality of the mediatized world.

The second tradition of interpretation of demediatization is associated with ritualized social practices of digital escapism, withdrawal from the digital environment, we call it behavioral. One of the typical examples of leaving online communication is what J. Rauch, drawing parallels with the practices of the Jewish "Shabbat", calls a digital Sabbath [12], and D. Sieberg [13], C. Johnson [10] – a digital diet. There are also authors using the term "digital detox". In this case, the metaphor does not play a role, it is important that we are talking about the conscious exit of the subject from the mediatized worlds. On the conditional "digital Saturday", users intentionally refuse to use gadgets and disable notifications on social networks. Digital abstinence practices: digital fasting, informational diets, digital detoxification, Sabbath online manifesto, media post, National Day of Disconnection from the Internet attract the attention of writers and philosophers [3, 10, 11, 13]. Digital escapism has become a response to the negative consequences of the influence of mediatization: decreased social empathy, reflexive thinking, sustained attention, loss of interest in political events and social engagement. Internalized practices of leaving the digital media environment under the conditions of total pressure of mediums on social practices and, in general, on the process of social construction of the human world within the framework of this theoretical tradition can be defined as demediatization 2.0. Users, getting rid of digital addiction, exercise control over the construction of their social worlds. The term "detox" is appropriate here, because the time spent on the networks is non-renewable and the amount of absorbed content becomes poison, as in the case of an overdose of a medicine.

The third tradition of conceptualization of demediatization 2.0. is based on the concept of event-

mediatization. Event-demediatization 2.0. we define as the process of reducing the level of mediatization of some resonant event. Event-demediatization 2.0. can be both spontaneous and purposeful. As a result of purposeful demediatization, an event important for significant audiences, public groups, capable of generating large-scale public mobilization and street activities, is deliberately taken to the periphery of public attention. The arsenal of purposeful demediatization 2.0. may include silencing an information occasion, discrediting sources, shifting public attention to other information occasions, etc.

As examples of spontaneous and purposeful event-demediatization 2.0. let's consider two empirical cases.

The first case of spontaneous event demediatization was the publication of K. Bogomolov's manifesto "The Abduction of Europe 2.0". The case of K. Bogomolov's Manifesto "The Abduction of Europe 2.0" [4] as an event with a sufficiently high potential for mediatization was transferred to the trajectory of demediatization 2.0. As our study showed, the publication of the Manifesto did not become an Event due to the activation of demediatization network practices of influencers, opinion leaders and their subscribers. Network players chose a form of opposition to the values of the Manifesto in the logic of demediatization: they did not evaluate the content of the Manifesto on an axiological scale, reducing the discussion to a discussion of personal life, financial well-being and intellectual abilities of director K. Bogomolov.

The second case of targeted demediatization is the network reaction to the receipt of the Nobel Prize by Dmitry Muratov, editor–in–chief of the opposition newspaper Novaya Gazeta in October 2021. [5] The event, like the event of the first case, had a high mediatization potential. The award ceremony took place against the background of the law on foreign agents adopted in Russia, the nomination of the main opposition leader Alexei Navalny for the award, and therefore required a clear assessment of government institutions, groups of the politicized public in the Russian federal media and social networks. However, there was no mediatization, since the Russian federal media limited themselves to a neutral official congratulation of the press secretary of the President of the Russian Federation D. Peskov in one line, which fits into the logic of silencing the event, and the non-systemic opposition of A. Navalny's supporters deliberately lowered the status of the laureate and announced a network boycott of the publication of his Nobel speech: on the half-million account of Novaya Gazeta, it collected only 14 (!) likes.

## III. CONCLUSIONS

The analysis of theoretical sources and empirical cases shows that there are different approaches to the theoretical operationalization of a special type of social processes in modern mediatized society, which we designate as demediatization. In the context of the transition of the information society from the digitalization phase to the datification phase and in the demetization dynamics, a new qualitative stage is coming, which we propose to define as "demediatization 2.0". Demetization 2.0. is a complex trend of the social dynamics of digitally datified modernity, which can be identified at the macro level and the level of spheres of public life (societal demediatization), the level of everyday practices of digital prosumers (behavioral demediatization) and the level of individual events, incidents and informational occasions (event demediatization). It is important to emphasize that the understanding of the demediatization category 2.0. is applicable to all three interpretations of the demediatization process.

We will also designate three interpretations of demediatization 2.0 that do not contradict each other.

Within the framework of the macro approach, societal demediatization 2.0. we will define as the social process of redistribution of power resources of communication mediums from classical media and traditional normatively understood journalism to network players, influencers and traffic monopolists, which is characteristic of the society of communication platforms and digital ecosystems. This redistribution generates a new dynamic of reproduction of sociality of the mediatized world.

From the standpoint of the behavioral approach, demediatization 2.0 is a complex of internalized practices of subjects leaving the digital media environment under the conditions of total pressure of mediums on social practices and, in general, on the process of social construction of the human world.

In the event version, demediatization 2.0. is the reverse of mediatization 2.0. the process of limiting/collapsing the mediatization field of a significant event/incident/informational occasion, due to the curtailment of the associated with event media activities of the actors involved in the datified digital space of Web 2.0 – Web N.0.

Thus, in this article we expand the field of understanding the dialectic of the processes of mediatization-demediatization, substantiate the introduction of the concept of "demediatization 2.0" and introduce the concept of event demediatization

REFERENCES

[1]. Bittman, M. (2008), 'I need a virtual break. No, really', The New York Times, 2 March, www.nytimes.com/2008/03/02/fashion/02sabbath.html

[2]. Deacon, D., Stanyer, J.(2014) Mediatization: key concept or conceptual bandwagon. Media, Culture & Society. 2014. Vol. 36. No. 7. P. 1032–1044).

[3]. Ferriss, T. (2009), The Four-Hour Work Week: Escape 9-5, Live Anywhere and Join the New Rich, New York: Crown Publishing.

[4]. Gavra, D., Bykova, E. (2022) Mediatization and demediatization in the digital environment: the case of K. Bogomolov's conservative manifesto "the Abduction of Europa 2.0." Bulletin of Moscow University. 10: Journalism 2022. – № 3. P. 60-86. – DOI 10.30547/vestnik.journ.3.2022.6086.

[5]. Gavra, D. P., Bykova, E. V., Namyatova K. A. (2022) The network demediatization of a significant information occasion: the Nobel case of Dmitry Muratov roceedings of the 2022 Communication Strategies in Digital Society Seminar 2022, ComSDS 2022. 2022. p 190-194.

[6]. Gavra, D. P., Dekalov, V. V.(2019 ) Networked Society and its New Power Actors: Critical Analysis of Hardware, Software, and Communicative Level of Digital Space.. Proceedings of the 2019 IEEE Communication Strategies in Digital Society Workshop. COMSDS 2019.

[7]. Gureeva, A. N. (2016) Theoretical Understanding of Mediatization in the Digital Environment. Bulletin of Moscow University. 10 №6. P. 192–208.

[8]. Hepp, A.(2013) The communicative figurations of mediatized worlds: Mediatization research in times of the "mediation of everything". European Journal of Communication. Vol. 28 No. 6 2013 P. 615-629)

[9]. Hjarvard, S. (2008) The mediatization of society. A theory of the media as agents of social and cultural change. Nordicom Review. Vol. 29 No. 2 2008 P. 105-134.

[10]. Johnson, C. (2012), The Information Diet: A Case for Conscious Consumption, Cambridge, MA: O'Reilly Media.

[11]. Powers, W. (2010), Hamlet's Blackberry: A Practical Philosophy for Building a Good Life in the Digital Age, New York: Harper.

[12]. Rauch J. (2014) Constructive rituals of demediatization: Spiritual, corporeal and mixed metaphors in popular discourse about unplugging. Source: Explorations in Media Ecology 13 (3-4): 237-252 (16). DOI: 10.1386/eme.13.3-4.237_1

[13]. Sieberg, D. (2011), The Digital Diet: A Four-Step Plan to Break Your Digital Addiction and Regain Balance in Your Life, New York: Three Rivers Press.

[14]. Suetzl W. (2017) Beyond the digital swarm? Byung-Chul Han's critical media pessimism. AoIR Selected Papers of Internet Research. Available at: https://journals.uic.edu/ojs/index.php/spir/article/view/10202 (accessed: 28.06.2022).

[15]. Strömbäck, J. (2011). Mediatization and Perceptions of the Media's Political Inluence, Journalism Studies vol. 12, no. 4, pp. 423–439.

# Demonstrativeness as a Communication Strategy in the Digital Space

Natalia V. Shashkova
*Department of Public Relations*
*St. Petersburg State Electrotechnical University "LETI"*
St.Petersburg, Russian Federation
nv.shashkova@gmail.com

Maria E. Kudryavtseva
*Department of Public Relations*
*St. Petersburg State Electrotechnical University "LETI"*
St.Petersburg, Russian Federation
mashutka331@yandex.ru

Maria S. Sigaeva
*Department of Foreign languages*
*St. Petersburg State Electrotechnical University "LETI"*
St.Petersburg, Russian Federation
msigaeva@gmail.com

*Abstract*—The article considers the phenomenon of demonstrative behavior as a strategy of the digital space, focused on gaining a specific "socio-digital" status, for its subsequent social and economic monetization. Value and socio-psychological approaches are used.

The theoretical base: the works of T. Veblen, R. Bartl, R Kyua, Nikolay I. Petev, Yuriy A. Chernavin, Dariya A. Sovaleva.

Expected results: determination of motives and types of demonstrative behavior on the Internet.

*Keywords*—*strategy, demonstrative behavior, imitation, social and digital status, monetization*

## I. INTRODUCTION

A distinctive feature of humans as social actors is their strive to reflect themselves, their activities and lives as a whole in the external forms that can be perceived by other subjects. Such reflection helps a person to experience the authenticity of their separate existence, which is separate from the others, the fullness of their lives, and the significance of their "Self" as well as the authenticity of the existence of the "Other". Such an exchange of reflections means social communication that ensures the process of human socialization. Social communication together with other phenomena and processes in the world around is internalized into one's inner world, the perfection of which as acquisition of "selfhood" is the goal and meaning of human life.

With the development, accompanied by increasing rationalization and differentiation, the world becomes more complex and multifaceted. Types and forms of human activities tend to branch out, multiply and have narrow specialization. At the same time, the significance of an individual recedes increasingly in the general flow of social life and it becomes more and more difficult to establish oneself as a subject of real activity while the desire to experience the authenticity of one's being, as a fundamental human desire, remains unchanged.

A person often finds a way out of such a situation by shifting the emphasis from the activity itself to its reflection in social space. The degree this shift of emphasis can vary: from a slight exaggeration of the significance to the complete imitation of the reflected object. By gaining self-sufficiency, such reflection, from our point of view, transforms into a demonstration, and the pursuit of it turns into demonstrativeness.

With the development of digital technologies, demonstrativeness acquires an ambivalent character. On the one hand, digital space creates ample opportunities to demonstrate oneself and one's activities, while on the other hand, it initiates and encourages demonstrative behavior. What is more digital space shapes a special world with an easy way to indulge in wishful thinking.

## II. METODOLOGY AND METHODS

This article aims to provide a theoretical analysis of demonstrative behavior and its substantiation as a communication strategy in the digital space.

The phenomenon of demonstrative behavior as a strategy of the digital space focused on gaining a special "socio-digital" status for its subsequent social and economic monetization is considered through the value and socio-psychological approaches.

The questionnaire method within the socio-psychological approach is used to determine the relevance of demonstrative behavior on the Internet for modern Russian students.

We have assumed that in the digital world, external communication is an exclusive form of life. Its translation into internal personal meanings is not necessary; but if so, it is again to be externalized rather than to be a self-sufficient process. Let us, however, make a distinction between two situations: the first, when a person enters the digital space for the available information to deal with urgent tasks related to his or her real existence, and the second, when a person moves most of the life into the digital space. In the second case, the goal and meaning of human life are predominantly to gain a certain social ("digital") status. In the context of rapidly growing competition for the one's "digital" status, demonstrative behavior becomes an increasingly relevant communication strategy.

From our point of view, two main types of demonstrative behaviors can be identified based on the general goal of asserting one's "self": "I assert myself as a subject of activity and I assert myself as a happy person living a full life".

Affirming oneself as an actor is related to demonstrating success in all possible aspects: demonstrating one's activity and promoting it in the digital space through social networks, corporate and personal websites. This can be a demonstration of personal and group achievements embodied in awards, certificates, and comments, as well as a demonstration of prestigious earnings, determined by a high social status of a person.

Affirming oneself as a happy person living a full life implies demonstrating diversity of one's interests, belonging to various prestigious social groups and conspicuous consumption. In this sense, demonstration of the emotional richness of life is also important, i.e.: emphasizing emotional sensitivity, accentuating different emotions and emotional lability.

All the above-mentioned types of demonstration can be imitative in nature. The goal and meaning of demonstrative

behavior as a communication strategy are economic and social (expressed in the recognition of the digital status) monetization.

## III. Literature Review

The phenomenon of demonstrative behavior as a distinctive feature of leisure class behavior was proposed by Thorstein Veblen in "The Theory of the Leisure Class" in 1899. In the second half of the XX and early XXI century his hypothesis was fully confirmed. Today both foreign and domestic researchers [4, 8, 7] write about the desire to demonstrate one's "consumer success" (including in the digital space). However, according to Kristina R. Khamidullina, "by calling "the law of demonstrative consumption" the fundamental law of existing civilization, Veblen exaggerates the role of consumption", making it the determining factor in the society evolution. The consumer value is defined by two types of practicality: functional <…> and additional, i.e. the ability to bring the consumer a certain level of honor and respect" [1, 2]. From our point of view, the fundamental nature of the "law of conspicuous consumption" is not an exaggeration of the role of consumption; moreover, it is being confirmed in the modern world in new forms of consumption and new forms of its demonstration. Thus, for example, consumer behavior is no longer necessarily linked to a leisurely lifestyle and can be extended to a profession. We start to perceive a prestigious profession as a sign of superiority, at that, not the quality performance in the workplace is of primary importance for a person, but the belonging to a certain prestigious profession or brand organization, and sometimes a desire to become a brand themselves [for more information check out 6]. In this case, demonstrative reflection of the process and results of their prestigious activities in the digital space becomes a prerequisite for success.

The consumer approach is integrated into a person's desire for the artificial elevation of social status through the opportunities offered by the digital space. As noted by Yuriy A. Chernavin in the article on the communicative status of an individual in a digital society, "network identity that arises during communication has a dual nature. On the one hand, it represents the real personality traits that a person acquires when answering the question "Who am I?" On the other hand, it implies a self-presentation effect, i.e. creation of an attractive image that does not correspond to reality, but can bring high prestigious ratings during communication" [3]. We consider, it makes sense to distinguish between the concepts of "communicative status of a person in the digital society" and "digital status of a person". If the former, as convincingly demonstrated by Yuriy. A. Chernavin, represents a person's social status as an organic unity of two communicative dimensions: real and digital, then the latter exists exclusively in the digital communicative space and does not presuppose, as a mandatory condition, correspondence to the person's real social status. The digital status depends entirely on how well a person demonstrates his or her achievements.

In this context, the highest level of digital status can be defined as the case of a person as a brand. In this regard, Yuriy A. Chernavin notes another trend: "A person, usually striving for popularity, often makes great efforts not so much to increase the number of communications, but to create a network where he or she becomes the center" [3]. Here, as it seems, we can talk about the psychological phenomenon of self-consumption – the consumption of one's personality in a certain guise. In full accordance with our assumption about the relevance of such a phenomenon goes the view of Nikolai I. Petev on a person formed by the digital space, where the one has an opportunity to free oneself "from the burden of the objective past, which constitutes an important part of the one's internal content" [5], and fill the resulting vacuum with what the one would like to be. In this case, as Nikolai I. Petev claims, "there is a substitution of concepts, i.e. "to be" is replaced by "to appear as such" or "to self-present as such" [5]. Moreover, according to Richard Bartle, in the situation with virtual games, there is a "formal rebirth" of a person [4], and this new "digital" avatar does not think of him- or herself outside of permanent self-presentations.

The theme of self-presentation as a necessary attribute of a fulfilled life is also reflected in scientific researches. For example, the results of a small pilot study carried among the youth allowed the conclusion that social networks themselves force people to be active: "it seems that nothing meaningful happens in one's life if they don't record these events in the network" [9]. In this regard, the so-called "selfie addiction" phenomenon deserves particular attention. Ekaterina V. Shishkina and Vyatcheslav I. Chumakov share the opinion that excessive fascination with selfies is a form of mass addiction. "To a large extent, this is an attempt to overcome frustration caused by the deficiency of positive emotions, praise, and attention. Through selfies an individual tries to raise self-esteem in the eyes of others" [10].

To summarize, based on our review of the scientific literature, it can be stated that the phenomenon of demonstrative behavior is already well-researched in philosophical and socio-psychological literature. However, the idea of demonstrative behavior as a specific communication strategy of digital space has not yet been sufficiently articulated.

## IV. Research And Results

It should be noted that for a full verification of the hypothesis we have put forward, a large multi-stage study covering different social groups is required, which is impossible to implement within the limited scope of this article. Therefore, we limited ourselves to conducting an empirical study of student youth to determine their propensity to transfer their personal representations into the digital environment, as well as the results of their social activity. Our hypothesis will be confirmed if more than 50% of respondents choose response options that reflect a desire to represent themselves in the digital space.

The practical study was conducted online and consisted of surveying students from St. Petersburg universities. The survey questions were semi-closed, meaning that in addition to choosing a ready-made answer, respondents could formulate their own response. The survey results are presented below.

The first question was as follows: "Do you associate the success in your activities with their reflection in the network?". The answers to this question are shown in Table I.

TABLE. I.

| | |
|---|---|
| Yes, no activity can be successful if it is not reflected in the network | 9.1% |
| Yes, but only partially | 44.1% |
| No, the success in activities is primarily related to real life | 27.4% |
| No, the success in any activity is not dependent on the space of its performance | 18.8 % |
| Other | 0.6 % |

The free answer was sounded as: "Yes, if success is defined by name recognition and a large number of subscribers."

Therefore, a bit over half of the respondents recognize a connection between the success in their activities and their reflection in the network, though only 9.1% of those surveyed consider this connection absolutely necessary.

The second question was like this: "Will you share information about the received awards and certificates in digital space?" The answers to the second question are presented in Table II.

TABLE. II.

| Yes, otherwise I will not feel successful | 5% |
|---|---|
| Yes, I want to share my joy with friends | 48.4% |
| No, it is immodest | 24.2% |
| No, others will be jealous | 5.3% |
| Other | 17.1% |

The free answer included: "Yes, definitely, it affects my professional success", "This is not the information I would like to spread about myself".

We consider it significant for our research that in the end more than half of the respondents consider it necessary for various reasons to publish information about their awards in the digital space. It is worth noting, however, that the overwhelming majority of those willing to share information about their success in the network are motivated by the desire to share their joy with friends, rather than by the desire to feel the fullness of their success. In other words, demonstrative behavior in this case is oriented not so much towards gaining a digital status, but towards manifesting oneself as a happy person.

The third question "Will you share your failures on social media?" resulted in the answers that can be seen in Table III.

TABLE. III.

| Definitely, I will because I need support | 7% |
|---|---|
| Yes, I am a sincere person, so I will not hide anything | 18.3% |
| Very unlikely | 55.9% |
| No, let the outer world know me as a successful person | 8.8% |
| Other | 10% |

Individual responses included: "I will share neither my failures nor my success", "If I have my own personal blog, I might share", "No, if I need support, I will turn to someone in person, not via network".

These results demonstrated that the majority of respondents are not willing to share information about their failures, which seems natural to us and confirms our hypothesis about demonstrative behavior as a communication strategy for gaining a digital status. In the digital world, there is also a tendency not to destroy one's image as a successful person.

The fourth question was formulated as follows: "If you find a prestigious job, will you talk about it on social media?" The results are shown in Table IV:

TABLE. IV.

| Yes, thanks to this, people will treat me with greater respect | 7.5% |
|---|---|
| Yes, I want to share my success with my friends | 24.7% |
| No, it is immodest | 21.5% |
| No, I'm afraid of jinxing it | 21.5% |
| No, people will be jealous | 5% |
| Other | 19.8% |

Among the individual answers, the most interesting answer for us was the following: "Yes, I will talk about it because it is part of a personal brand".

Of all the respondents, a little over 32% tend to share about finding a prestigious job on social media, but more than half of those unwilling to share such information, do so for the fear of jealousy or jinxing their luck. Such motives, undoubtedly, act as certain barriers to demonstrative behavior, but are more external than internal, dictated by one's ethical attitudes.

The fifth question was as follows: "If you were to have a prestigious lifestyle, would you share (post pictures) it on social media?" The results are shown in Table V.

TABLE. V.

| Yes, I want to brag to be fully happy | 19.4% |
|---|---|
| Yes, let the outer world know me as a happy person | 28% |
| No, it is immodest | 22.6% |
| No, I'm afraid of jinxing it | 6.2% |
| No, people will be jealous | 4.9% |
| Other | 18.9% |

As can be seen, almost half of the respondents chose the first two response options, thus expressing the willingness to share information about their lifestyle online. Among the individual answers, about half of the respondents answered positively, though in other words. All considered, the answer to this question does not disprove our hypothesis. It is also noteworthy that the number of those who are afraid of jinxing their prestigious lifestyle is over three times less than those who are afraid of jinxing their prestigious job, which seems quite logical.

The sixth question was formulated like this: "Do you consider it necessary to share all your emotions in digital space?". The results are shown in figure Table VI.

TABLE. VI.

| Yes, it gives me a sense of fullness of life | 10.8% |
|---|---|
| Yes, this way I can show everyone how emotional I am | 9.1% |
| No, it is immodest | 19.4% |
| No, it is unaesthetic | 30.1% |
| Other | 30.6% |

Individual responses were negative in various formulations. The most interesting among them were: "No, I don't feel comfortable by sharing my emotions with everyone", "I don't want everyone to know how I feel" and "No, it's time-consuming and meaningless". Overall, the answers to this question showed that more than three-quarters of the surveyed students are not ready to share their emotions online for a variety of reasons.

The seventh question was: "Will you feel happy if no one knows about it?" The answers are shown in Table VII.

## TABLE. VII.

| | |
|---|---|
| Yes | 85% |
| No | 8% |
| Other | 7% |

The individual responses included the following: "I want to share my happiness only with close people", "if I am happy, my family should know about it", "I don't see any connection between these concepts" and "I don't know".

It should be noted that the answers to this question made us doubt their sincerity. A very large percentage of respondents who claimed to be happy even if no one knows about it is inconsistent with the responses to the previous questions. Indeed, why share their rewards and successes, their prestigious lifestyle then? This, in turn, indirectly proves a tendency towards demonstrative behavior: people always want to appear more independent than they actually are, and they are willing to demonstrate this even to themselves.

The eighth question was "Do you consider it possible and acceptable to imitate your success in the digital space?". The answers are shown in Table VIII.

## TABLE. VIII.

| | |
|---|---|
| Yes, if it is necessary to achieve a particular goal | 11.3% |
| Yes, it is acceptable in any case | 6% |
| No (it is unethical) | 16.7% |
| No (it is meaningless) | 61.8% |
| Other | 4.2% |

Here are some of the individual responses: "it depends on the situation"; "it is a personal matter for everyone" and "it is unethical, but everyone makes the living as one can".

Therefore, only 17.3% of the respondents accept the imitation of their successes in the digital space, and just 16.7% consider it unacceptable for ethical reasons, the majority meanwhile is motivated against through the meaninglessness of such imitation. That is, if we assume a situation with such an imitation to bring tangible results, the results might have been different.

The ninth question was: "Do you consider it possible and acceptable to imitate your emotions in the digital space?" The answers are shown in Table IX

## TABLE. IX.

| | |
|---|---|
| Yes, if it is necessary to achieve a particular goal | 36.6% |
| Yes, it is acceptable in any case | 13.4% |
| Yes, because imitation stimulates the emotion itself | 7% |
| No (it is unethical) | 28.5% |
| No, it is unaesthetic | 7% |
| Other | 7.5% |

Individual responses included the following: "Yes, if I feel like it", "It is a personal matter for everyone", "I don't understand the question".

Thus, more than half of the respondents accept the possibility of imitating emotions in digital space for various reasons. It makes sense to compare these results with the question about the possibility of sharing one's genuine emotions on social media. Such a comparison shows that while 80.1% of respondents do not consider it possible to share their emotions online, only 35.5% of the same group do not consider it possible to imitate their emotions in the network. From our point of view, such a discrepancy is a strong evidence of the tendency towards demonstrative behavior meaning that in the network it is not more important to appear then to be.

The tenth question was the following: "How do you feel about your friends sharing their success, achievements, and awards on social media?"

## TABLE. X.

| | |
|---|---|
| I think they want to share their joy with others | 66.1% |
| Sometimes it is just bragging | 14% |
| I feel that sometimes it is more important for them to share their own success than to hear about other's | 10.8% |
| Other | 9.1% |

Individual responses included: "I am indifferent (neutral)", "I am happy for them", "It is their own business".

Such distribution of responses illustrates that most respondents accept this behavior, although they do not rule out suspicion of a desire to show off and a certain degree of egocentrism.

## V. CONCLUSION

To summarize the results of our research, let us conclude.

We may consider that the proposed hypothesis on demonstrative behavior as a communication strategy in the digital space to be a characteristic of modern humans was partially confirmed. Firstly, this is illustrated by the fact that more than half of the respondents acknowledge the connection between the success of their activities and its reflection in the network. Secondly, over half of the respondents, for various reasons, recognize the need to share information about their awards in the digital space. Thirdly, just under half of the respondents, while not allowing their genuine emotions to be shared online, accept the possibility of their imitation.

The survey conducted among students also showed the latter are more likely to assert themselves in the digital space as happy people living a full life, in particular through demonstration of their success, rather than to strive for certain digital statuses. The pursuit of demonstrativeness in order to gain a digital status might be formed in the course of professional activity, when the one has to spend most of the life in the digital space.

## REFERENCES

[1]. Veblen T. The Theory of the Leisure Class. Progress; Moscow; 1984. P. 194.

[2]. Khamidullina K.R. Research strategy of Demonstrative Behavior from T. Veblen // Izvestiya Saratovskogo universiteta. Novaya seriya. Seriya Sociologia. Politologia. 2015. V. 15, Issue 1. P. 41-46. [in Russian].

[3]. Chernavin Yu.A The communicative status of an individual in a digital society // Tsifrovaya Sociologiya / Digital Sociology / V. 5, No 2 / 2022. P. 33-42. [in Russian].

[4]. Bartle R. Virtual Worlds: Why People Play [online source] / Richard Bartle. URL: http://www.mud.co.uk/richard/VWWP P.pdf. (accessed: 09.02.2023)

[5]. Petev N.I. Digital space as an incentive for the formation of individualization and selfdetermination // Vectory blagopoluchiya: ekomomika i socium. 2021. No 1 (40). P. 79-96. [in Russian].

[6]. Kudryavzeva M.Ye. The role of the brand in self-identification of a person [in Russian].

[7]. Volkov Yu.G. Pechkurov I.V. Demonstrative consumption in perspective of socio-cultural processes of modernity // Socialno-gumanitarniye znania 2022. P. 57-68 [in Russian].

[8]. Sovaleva D.A. Demonstrative behavior as a factor of formation of youth lifestyles / D.A. Sovaleva/Molodoy ucheniy. – 2015. – No 4(84). – P. 697-700. – EDN TIXGWV. [in Russian].

[9]. Starchenko A.E., Syomina M.V. To be or see: demonstrative behavior of users on social media // Vestnik Moskovskogo universiteta. seriya 18. Sociologia and Politologia. 2020. V. 26. No 4. P. 247-259. [in Russian].

[10]. Shishkina E.V., Chumakov V.I. The phenomenon of selfie addiction in the youth environment // Nauchnoye obozrenie. Pedagogicheskiye nauki. Razdel Psihologicheskiye nauki – 2021. – No 3 – P. 30-34. URL: https://science pedagogy.ru/ru/article/view?id=2375 (accessed: 09.02.2023). [in Russian].

# Digital Influencer Factory: The Price of Word Authority

Alexey V. Gorodishchev
*Department of Modern Languages and Communication*
*National University of Science and Technology "MISIS"*
Moscow, Russian Federation
ORCID 0000-0003-2224-3794

Anna N. Gorodishcheva
*Department of Advertising and Cultural Studies*
*Reshetnev Siberian State University of Science and Technology*
Krasnoyarsk, Russian Federation
ORCID 0000-0003-4330-2802

Georgy P. Kovalev
*Department of Aircraft*
*Reshetnev Siberian State University of Science and Technology*
Krasnoyarsk, Russian Federation
georg1n19@yahoo.com

*Abstract*— **The traditional process of sorting and selecting information has changed dramatically under the influence of information technology. Influencers have become the new authorities. Until recently, the creation of an influencer proceeded according to the classical scheme: idol - information - expertise - norm - reward/punishment - authority. However, CGI technologies have created a new phenomenon of digital influencers. CGI influencers engage the user's imagination and inspire awe (AWW Inc.). The source of the CGI influencer's power is their ability to utilize media literacy. CGI influencers are embedded in the process of media literacy formation as an authoritative opinion, but this can lead to a blockade of the processes of creative and critical thinking. The user can become dependent on the influencer, downshifting to the level of manual execution, and the influencer can become a new master.**

*Keywords*— *Computer-generated imagery, digital influence, media literacy, information authority, PR, digital ethic*

## I.    INTRODUCTION

The specificity of the new era of Web 3.0 and, in some cases, 4.0, is starting to integrate into our daily lives. It all began with our growing acceptance of chatbots and voice assistants. The next stage of AI was to teach it how to write music and poetry, and it was only natural that it would eventually learn to "sing" as well. The concept of using digital avatars in the entertainment industry has been around for some time. One of the most famous and long-lasting examples in the West is the avatar of the group "Gorillas," which attracted tens of thousands of people to concerts where they performed on giant screens. In Russia, a similar marketing technique was used to promote the singer Glucoze. [1]

It was logical to develop AI in the entertainment industry, which is one of the most lucrative industries after gaming (according to statistics). People crave an idealized image that is unattainable in reality, and digital influencers (DIs) [2] provide just that.

Following the example of the show "Alter Ego," which aired on American television in December 2021, the entertainment industry has seen an influx of similar projects. The COVID-19 pandemic and subsequent self-isolation served as a catalyst for the development of the universe of augmented and additional reality (the metaverse).

While the idea of creating a separate universe with fictional laws and characteristics may work well for online games, it doesn't necessarily translate well into the physical world.

Despite this, the success of projects such as Ingress and later Pokémon GO motivated creators to take things to the next level [3]: creating a complete digital "surrogate." This is no longer just a digital copy of an individual, but rather a collective image based on predictive analytics and databases that have been collecting people's preferences for years. For example, most digital influencers use female models, as this has become traditional within the industry as a whole [4].

However, researchers are working on whether these models are ethical for use in the real world, but without much enthusiasm [5]. The fact remains that such a model is still treated as an additional digital device, rather than being considered as a chatbot or any other similar program. [6]

## II.    METHOD

The data in this study consisted of qualitative data obtained through observation and supported by literature studies. The data collection method is described as follows: Qualitative data were collected through observation. Observations were made on the social media accounts of AI influencers, including those on YouTube, Instagram, and Twitch. platforms. The literature study was conducted by searching for references from books and journals related to this research.

## III.    DISCUSSION

### A.    *Primary seeding of new technology. Cultural - social features.*

Since each person and nation has its own unique characteristics, it is important to choose the most suitable place to launch a project. In this case, an "ideal" country would be one where fan movements are popular and well-established, not just as part of pop culture, but also as an integral part of youth culture that endures throughout their lives [7].

Based on these criteria, puritanical and orthodox Western societies would be immediately excluded from the list. The state of euphoria would pass too quickly, making it difficult to establish a sustained presence. This would also impact the success of a marketing technique called "sowing", which is used to introduce an idea for further development in the form of a full-fledged advertising campaign. Furthermore, merchandise sales (often referred to as "merch") would not be profitable in such societies. Therefore, it is necessary to look for a location where fan movements are well-established and where there are already successful live influencers, even if they may not be fully digitalized yet [8].

Countries with strong traditional cultures in Eastern Asia, such as Japan, China, and South Korea, are almost perfect venues for launching the project. In these countries, the impact of the virtual social world on the youth community is enormous. By using a digital avatar, it is possible to influence a person's life in various ways. Therefore, the phenomenon of Kyoko Date, Hatsune Miku, and Luo Tianyi [9] is actually the result of an excellent understanding of cultural

characteristics and an attempt to implement one of the possible "hybrid" digital scenarios for integrating augmented (non-virtual) reality into everyday life [10]. All of this preparation was for new advertising technologies or even for the new era of digital communication.

Certainly, these technologies would have gained a lot of attention in the West as well, but the level of monetization would be much lower [11]. While the Comicon festival takes place in many countries, it is only in Korea and Japan that it has been elevated to a level where it is not only a passion but also an integral part of real-life imitation. When a manga character's image is brought to life, it becomes more "down-to-earth" and mortal, without the superpowers of the character. This makes it feel more "accessible" to people, creating an illusion of being able to reach the same level. In contrast, Western superheroes follow a genre that defines clear rules of the game, without a community of "spirits, ghosts, and mentors" that are formed according to the laws of "fatal accident" - a concept that is necessarily fatal and accidental [12, 13]. Alternatively, the laws of forbidden, secret, and unattainable "magic" are followed, which essentially separates the world of augmented reality into a rigid and separate "virtual" world, making it almost unrealistic to mix with reality and always implying the presence of separate "superheroes".

Returning to Eastern culture, one can observe that in addition to the vast collections of manga available in restaurants, which are essentially fairy tales and comic books at the same time, people grow up with a more accepting attitude towards the existence of "other" worlds that coexist with ours as layers. Therefore, if a world of spirits exists, why not the world of "digital avatars" as well?

And since digital avatars do exist, it is only natural to monetize them, especially given the largest fan community in the world, which numbers more than 500 million in China alone [10]. This is an ideal model that requires almost the same resources at the launch stage for development, production, and promotion. However, resource consumption becomes minimal in the operation stage. And here we come to the main question: "why digital avatars have "specialization" and there is no "universal"?"

The answer lies in the fact that marketers worked here first and foremost. The first law of marketing is "know your target audience," and it is on this principle of rigid segmentation that modern digital influencers are created [14-15].

At the same time, it is possible to experiment with different areas and products without risking the reputation of the main account. It is enough to create a new account, change the visual image (skin), and select the characteristics for the company based on the hypothesis.

In this case, we get the perfect marketing tool to measure the audience's reaction. If it "comes in" from a new avatar, it will simply "take off" from the "hyped" one, since the image becomes comparable to an "idol" [16]. What an "idol" uses by default is the best, since it has already passed the stage of public authorization.

### B. The difference between human-human relationships - offline - online

Parasocial interaction does not have an officially fixed, clear definition, as the definition given by Horton and Wohl (1956) [17]. in relation to the era of television has lost its relevance. However, other researchers have attempted to define it in the context of live streams and broadcasts [18-23]. Nevertheless, these definitions fail to fully explain relationships with all digital celebrities and even more so, to clearly distinguish between relationships with a human creator and those with structures synthesized by artificial intelligence. In fact, during the same "live" concerts of digital influencers, the audience uses the same means of expressing emotions through special gifts and emoticons [24]. Therefore, the question of digital ethics and the ownership of these individual models in different situations, including in business, remains relevant. [25]

If living influencers in the age of digital communication use parasocial relationships to change public opinion and induce action [26], can we consider fully digital avatars to be the same influencers who also engage in parasocial interaction?

The price of an almost eternal opinion leader from a technological point of view is the question of assessing the ethics of artificial intelligence in general. If we accept that digital influencers have become more than just digital avatars in our lives, they become tools that are already being used all the time [8].

However, if they have become digital idols with the functions of deification and real communication, does this mean that humanity has actually come close to synthesizing the ideal model of marketing communication? [10]

The answer is both yes and no since the perception of partial or complete such avatars as robots can cause negative emotions comparable to aggression towards anthropomorphic robots [27].

However, it is essential to understand that the issue has gone beyond the limits of influencer marketing. Digital avatars are already influencing society [28], and this can lead to the critical thinking of perceiving a digital model as just a model without feelings, but only an imitation of a response being blocked [29]. This can allow for the spread of fake news to the masses, and the avatar can acquire the parameter of "trust" based solely on content without any evidence base [30].

There are already precedents in which digital avatars have been used to spread fakes [31], and studies like these prove the real problem of evaluating a digital avatar solely in terms of an instrument and assigning it quite human properties [32].

All of this has become possible using the classical scheme of geopolitical technologies, where society is brought to a state of "blind" faith in their leaders or influencers [33]. At the same time, critical perception of information is blocked at the very first level of "authorization," during the stage of passing the "digital" avatar to the category of expertise. In fact, digital avatars have adopted the best techniques for creating a fake image with a huge margin of trust, and it doesn't matter that they are digital [34]. They have been given the opportunity to earn expert points not through real expertise, as in the case of IBM's Watson, but exclusively through the prism of using information prepared by a person for a person but transmitted through a digital avatar. For example, the World Health Organization used the AI influencer Knox Frost during the COVID-19 pandemic. With over a million Instagram followers, Frost was recruited to spread PSAs like lockdown regulations and the need for personal hygiene. [35-36]

## IV. CONCLUSION

Of course, we would like to believe that social networks have become a necessary part of our lives, but the reality is that most of the mass media information has shifted to the area of instant messengers and social networks, which have long received the characteristics of classical media. As a result, we have a bias in the synthesis of relationships through influencers as a source of information [8]. The fans themselves support this industry [14-15], and the more people invest their own money in digital models, the harder it is for them to admit that these actions are wrong. Therefore, the issue's price is already the problem of smoothing the border between the digital world and the physical world, as it moves from the plane of assistants in life to the area of those who make decisions for people. Moreover, for now, we are only talking about those people and corporations that own AI avatars and influencers. However, over time, development will reach a stage where AI influencers themselves will deviate from a predetermined scenario and adjust the information agenda. But the main question will remain the same: "Who pays the bill?"

In conclusion, it is crucial to take action now to promote critical thinking and fact-checking skills. As disinformation continues to spread at an alarming rate, it poses a serious threat to the accuracy and validity of information. This can lead to a dangerous erosion of facts and values, and can also introduce factual errors into the training data for digital influencers, since AI training is based on pre-existing knowledge. It is important to recognize that the use of digital avatars and AI influencers is no longer confined to influencer marketing, and their influence on society can no longer be ignored. As technology advances, it is possible that AI influencers will eventually deviate from their predetermined scenarios and begin to shape the information agenda. Therefore, it is crucial to consider the ethical implications of AI and to ensure that appropriate measures are taken to protect society from the potential harms of disinformation.

## REFERENCES

[1] G.Agag, "E-commerce Ethics and Its Impact on Buyer Repurchase Intentions and Loyalty: An Empirical Study of Small and Medium Egyptian Businesses," J Bus Ethics, 2019, vol. 154, pp. 389–410. https://doi.org/10.1007 /s10551-017-3452-3

[2] H. Alboqami, " Trust me, I'm an influencer!-Causal recipes for customer trust in artificial intelligence influencers in the retail industry ," Journal of Retailing and Consumer Services, 2023, vol. 72, p. 103242. https://doi.org/10.1016/j.jretconser.2022.103242

[3] M. Majorek and M. du Vall, "Ingress: An Example of a New Dimension," Entertainment Games and Culture, 2016, vol. 11, No 7–8, pp. 667–689. https://doi.org/10.1177/1555412015575833

[4] "Distribution of influencers creating sponsored posts on Instagram worldwide in 2019, by gender," Published by Statista Research Department, december, 2019. https://www.statista.com/statistics/893749/share-influencers-creatingsponsored-posts-by-gender

[5] Z. Toh, "Can AI influencers be ethically designed and implemented?" in Final Year Project (FYP), Nanyang Technological University, Singapore,2022. https://hdl.handle.net/10356/156166

[6] S. Sands, C. Ferraro, V. Demsar, G. Chandler, "False idols: unpacking the opportunities and challenges of falsity in the context of virtual influencers,"in bus.Horiz, 2022, vol. 23, No 8, pp. 56–70. https://doi.org/10.1016/j.bushor.2022.08.002

[7] C. X. Huang, X. X. Wu and X. J. Tang, "Annual Report on Development of New Media in China," Beijing, China: Social Sciences Academic Press, 2017, No. 8. (in Chinese). https://doi.org/10.1177/1461444820933313

[8] "The State of Influencer Marketing 2023: Benchmark Report" Influencermarketinghub, February 7th, 2023. https://influencermarketinghub.com/influencer-marketingbenchmark-report

[9] S. B. Hutomo, "Utilizing virtual idol "Luo Tianyi" to promote traditional culture to the Generation Z. Embracing the Future: Creative Industries for Environment and Advanced Society 5.0," in a Post-Pandemic Era, Routledge, 2023, pp. 120-123.

[10] H. Jang, "The impact of the humanness of AI influencers on the success of influencer marketing," Thesis Master of Arts, The University of Texas at Austin, 2022. http://dx.doi.org/10.26153/tsw/42156

[11] J. Drenten and B. Gillian, " Celebrity 2.0: Lil Miquela and the rise of a virtual star system ," Feminist Media Studies, 2020, vol. 20, No 8, pp. 1319-1323. https://doi.org/10.1080/14680777.2020.1830927

[12] Y. F. Ziad, A.-D. Sameh and A. Gomaa, "A cross cultural investigation of retailers commitment to CSR and customer citizenship behaviour: The role of ethical standard and value relevance ," Journal of Retailing and Consumer Services, 2022, Vol. 64, p.102796, https://doi.org/10.1016/j.jretconser.2021.102796

[13] S. Farivar, W. Fang and Y. Yufei, "Opinion leadership vs. para-social relationship: Key factors in influencer marketing," Journal ofRetailingand Consumer Services, 2021, vol.59, p. 102371. https://doi.org/10.1016/j.jretconser.2020.102371

[14] J. Morris, "Artists as entrepreneurs, fans as workers," Popular Music and Society, 2014, vol. 37, No 3, pp. 273–290. https://doi.org/10.1080/03007766.2013.778534

[15] P. Galuszka, "New economy of fandom," Popular Music and Society, 2015, vol. 38, No 1, pp. 25–43. https://doi.org/10.1080/03007766.2014.974325

[16] R. Kreling, A. Meierb and L. Reinecke, (2022). "Feeling authentic on social media: Subjective authenticity across Instagram stories and posts," Social Media+ Society, 2022, vol. 8, No 1,
https://doi.org/0.1177/20563051221086235

[17] D. Horton and R. R. Wohl, "Mass communication and parasocial interaction; observations on intimacy at a distance," Psychiatry, 1956, vol. 19, No 3, pp. 215-229. https://doi.org/10.1080/00 332747.1956.11023049

[18] A. Honka, N. Frommelius, A. Mehlem, J. N. Tolles and K. J. Fietkiewicz, "How safe is YouNow? An empirical study on possible law infringements in Germany and the United states," The Journal of MacroTrends in Social Science, 2015, vol. 1, No 1, pp. 1-17. https://www.academia.edu/39517169/Social_Science_How_Safe_is_ YouNow_An_Empirical_Study_on_Possible_Law_Infringements_in_ Germany_and_the_United_States

[19] K. Scheibe, "The Impact of Gamification in Social Live Streaming Services," In: Meiselwitz, G. (eds) Social Computing and Social Media, Technologies and Analytics, SCSM 2018, Lecture Notes in Computer Science, vol 10914. Springer, Cham. 2018. https://doi.org/10.1007/978-3-319-91485-5_7 .

[20] K. Scheibe, K. J. Fietkiewicz and W. G. Stock, "Information behavior on social live streaming services," Journal of Information Science Theory and Practice, 2016, vol. 4, No 2, pp. 6-20. https://doi.org/10.1633/JISTaP.2016.4.2.1.

[21] K. Scheibe and F. Zimmer, "Game mechanics on social live streaming service websites,"in Proceedings of the 52nd Hawaii International Conference on System Sciences, University of Hawaii System, 2019, January 8-11, pp. 1486-1495. http://hdl.handle.net/10125/59589

[22] K. Scheibe and F. Zimmer, "Gender differences in perception of gamification elements on social live streaming services," International Journal of Interactive Communication Systems and Technologies (IJICST), 2019, vol. 9, No 2, pp. 1-15. https://doi.org/10.4018/IJICST.2019070101

[23] J.L. Dibble, T. Hartmann and S.F. Rosaen, "Parasocial interaction and parasocial relationship: conceptual clarification and a critical assessment of measures ," Human communication Research, 2016, vol. 42, No 1, pp. 21–44. https://doi.org/10.1111/hcre.12063

[24] W. G. Stock, K. J. Fietkiewicz, K. Scheibe and F. Zimmer, "Cyber Social Interactions: Information Behavior in Between Social and Parasocial Interactions," Jornal of information science theory and practice, 2022, vol. 10, No 3, pp. 15-23, https://doi.org/10.1633/JISTaP.2022.10.3.2

[25] B. Robinson, "Towards an Ontology and Ethics of Virtual Influencers," Australasian Journal of Information Systems, 2020, vol. 24, https://doi.org/10.3127/ajis.v24i0.2807

[26] R. Conde and C. Beatriz, "Micro, macro and mega-influencers on instagram: The power of persuasion via the parasocial relationship ," Journal of Business Research, 2023, vol. 158, p.113708. https://doi.org/10.1016/j.jbusres.2023.113708

[27] P. Christou, A. Simillidou and M.C. Stylianou, "Tourists' perceptions regarding the use of anthropomorphic robots in tourism and hospitality," International Journal of Contemporary Hospitality Management, 2020, Vol. 32 No. 11, pp. 3665-3683. https://doi.org/10.1108/IJCHM-05-2020-0423

[28] N. A. Ayob, N. A. Kamaruddin and M. Z. H. M. Zaidi, "Social Influencer Factors that Affect Young Adult Buying Behavior" International Journal of Academic Research in Business and Social Sciences, 2023, vol. 13, No 1, pp. 1524 – 1539

[29] E. Block and R. Lovegrove, "Discordant storytelling, 'honest fakery', identity peddling How uncanny CGI characters are jamming public relations and influencer practices," Public Relations Inquiry, 2021, vol. 10, No 3, pp. 265–293, https://doi.org/10.1177/2046147X211026936

[30] L. Shuzhen, E. Cheng-Xi Aw and G. Wei-Han Tan, "Social Media Influencer Marketing: How Influencer Content Help?" Proceedings of the 2nd International Conference on Emerging Technologies and Intelligent Systems: ICETIS 2022, Vol. 1, Cham: Springer International Publishing, 2023.

[31] S. Sands, C. Ferraro, V. Demsar and G. Chandler, "False idols: Unpacking the opportunities and challenges of falsity in the context of virtual influencers," Business Horizons, 2022, Vol. 65, Is. 6, pp. 777-788. https://doi.org/10.1016/j.bushor.2022.08.002

[32] L. Brenalvirez, "The Power of the Influencer: Old Gods, Rejected Elites, and Secular Idols," CMC Senior Theses, 2022. https://scholarship.claremont.edu/cmc_theses/2945

[33] Joshi, Suresh C., Krisha Gupta, and Suhaani Manektala, "Misinformation, public opinion, and the role of critical thinking ," International Journal of Management and Humanities (IJMH), 2022, vol. 8.9, pp. 15-18. http://www.doi.org/10.35940/ijmh.I1483.058922

[34] M. Beshikova, "AI influencers-does it matter to consumers that their favorite influencer doesn't actually exist? ," Diss. Hochschulbibliothek HWR Berlin, 2021.

[35] Z. H. Abdelmoety, A.-D. Sameh, A. Gomaa, "A cross cultural investigation of retailers commitment to CSR and customer citizenship behaviour: The role of ethical standard and value relevance ," Journal of Retailing and Consumer Services, 2022, Vol. 64, p. 102796, https://doi.org/10.1016/j.jretconser.2021.102796

[36] S. Farivar, W. Fang and Y. Yufei, "Opinion leadership vs. para-social relationship: Key factors in influencer marketing," Journal ofRetailingand Consumer Services, 2021, vol. 5, p.102371. https://doi.org/10.1016/j.jretconser.2020.102371.

# Digital Media Communication Strategy Model of Russian Corporate Citizens

Larisa V. Sharakhina
*Public Relations Study Department*
*Saint Petersburg Electrotechnical University "LETI" (ETU)*
St. Petersburg, Russia
lvsharakhina@etu.ru

*Abstract*—**IT technologies and digital media development influence socialization process of a person and the roles of business corporate actors in it. Social constructivist approach of a mediatized society theories (A. Hepp, U. Hasebrink) based on process sociology (E. Norbert) and neoinstitutional approach (March J. G., Olsen J. P.) formed the methodology of a pilot study. The research method was a quantitative analysis implemented by using artificial intelligence system algorithms to explore citizens involvement in corporate values and practices dissemination through corporate citizens' digital media strategies practiced for corporate social responsibility programs implementation. Thus, the study objective was to explore corporate citizens' effective model of involving digital media strategies.**

**The pilot study was conducted during two weeks: June, 22 – 28 and June, 29 – July, 05, 2022. The results demonstrated the practice of paternalistic model of digital media communication strategies (mostly passive perception by audiences of CSR projects) and lack of user content generated by CSR programs recipients.**

*Keywords—digital media, communication strategy, corporate citizen*

## I. INTRODUCTION

The modern process of extensive digitalization and deepening mediatization [1] followed by communicative figuration establishment [2, 3] actualizes neoinstitutional approach to understand the influence of digital media on the modern society. According to that point of view "An institution is a relatively enduring collection of rules and organized practices, embedded in structures of meaning and resources that are relatively invariant in the face of turnover of individuals and relatively resilient to the idiosyncratic preferences and expectations of individuals and changing external circumstances" [4, 5].

Corporate citizens with well-functioning thematic and digital media ensembles illustrate the corporate mediatization phenomenon are becoming the structural basis of communicative figuration [6], involving different stakeholders in communication frameworks. Due to such an involvement corporate citizens influence personal views and attitudes, therefore, social patterns: "These clusters, which represent subjective worldviews that are highly resistant to change, are cast as the fundamental generator of economic and political performance" [7].

Thus, corporate citizens digital media communication strategy is of high importance in terms of values articulated and perceived within the communication figuration.

## II. RESEARCH METHODOLOGY

Neoinstitutional approach is characterized by the focus on individuals' actions rather than on social groups' ones, accompanied by modern extensive development of digital communication technologies we observe a quite new situation: transmission and internalization on social roles and patterns, social communication of citizens, their socialization is implemented mostly through online Internet platforms, which were not designed by governmental structures. During the pre-digital era socialization of a person was carried out mostly in families, schools, universities, Mass Media, etc., and offline, certainly. Information and communication technologies have developed widely spread cases when a person assimilates behavior patterns which are not relevant to the place the person lives. Moreover, due to digital communications the reality of social, political, and business structures is also closely connected to mediareality and quite often is dependent on it [8].

Therefore, development of IT caused the penetration of digital media processes in our daily lives and, as the result, communication practices. The growth of professional communication content has created a need for more efficient and less time consuming analytics tools. Machine learning (ML) and artificial intelligence (AI) technologies can collect user data and to develop more effective communication products as it has become "an easy task to understanding things like consumer behavior, preferences, tracking search history, as well as with the implementation of search engine optimization (SEO optimization), content marketing, and voice recognition" [9].

This situation drove us to a decision to implement a pilot study of Russian companies which we label as corporate citizens due to their number of employees in different regions, large-scale corporate social responsibility programs, and their participation in Global Compact Network and the Social Charter of Russian business (GazpromNeft, Russian Railways, Norilsk Nickel, (AFK) Systema, X5 Group). The study objective of their digital media presence was to explore effective involving digital media strategies. It was conducted with the help of BrandAnalytics digital analytical system during 2 weeks: June, 22 – 28 and June, 29 – July, 05, 2022.

## III. RESULTS

During the week June, 22 – 28, 2022 we observe mostly decreasing trends for all the companies under monitoring:



vk.com 41.2% (224)
telegram.org 6.6% (36)
ru24.net 4.6% (25)
ok.ru 4.4% (24)
news.myseldon.com 4.4% (24)
omsk.bezformata.com 2% (11)
russia24.pro 2% (11)
news-life.pro 1.5% (8)
omsk-news.net 1.3% (7)
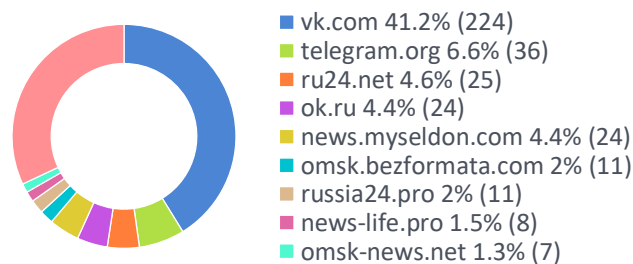
Fig. 1. The main digital media sources of companies' mentions (June, 22 – 28, 2022)

And the figure 2 illustrates the number of mentions in top-5 sources from figure.

Fig. 6. The main digital media sources of companies' mentions (June, 29 – July, 05, 2022)

Fig. 2. The top-5 digital media sources by mentions (June, 22 – 28, 2022)

The overall number of messages during June, 22 – 28, 2022 in digital media was 544, created by 258 authors, which involved 4054 reactions (likes, reposts, replies, etc.). The next figures (Fig. 3) illustrates the messages posting dynamics during the week under monitoring and the geography of mentions (Fig. 4, 5).
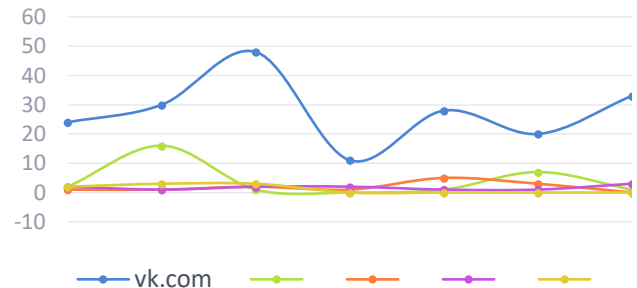




Fig. 7. The top-5 digital media sources by mentions (June, 29 – July, 05, 2022)

The overall number of messages during June, 29 – July, 05, 2022 in digital media was 412, created by 197 authors, which involved 2491 reactions (likes, reposts, replies, etc.). The next figure (Fig. 8) illustrates the messages posting dynamics during the week under monitoring and the geography of mentions (Fig. 9).

Fig. 3. The number of messages for the period (June, 22 – 28, 2022)
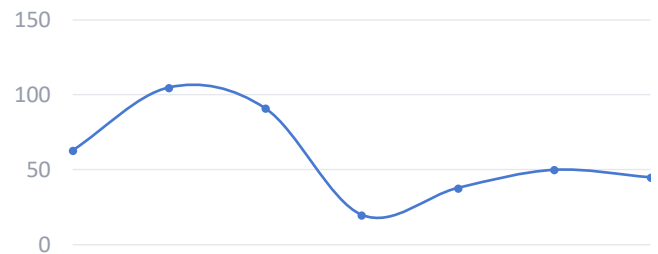




Fig. 8. The number of messages for the period (June, 29 – July, 05, 2022)

Fig. 4. The geography of mentions (%, June, 22 – 28, 2022)





Fig. 9. The geography of mentions (June, 29 – July, 05, 2022)

Fig. 5. The geography of mentions (June, 22 – 28, 2022)

The second week of monitoring, June, 29 – July, 05, 2022, illustrated the following results:

If to sum up different trends, figures and facts we observe negative dynamics of messages and involvement during 2 weeks of monitoring. The tonality of messages is neutral (only 4 messages marked as positive during the 1st week and 6 during the 2nd), but we meet some criticism towards the algorithms of BrandAnalytics tonality markers.

The types of leading sources is changing: we observe vk.com, telegram.org, and Omsk media as leaders for the 1st week, while vk.com, teegram.org, and YouTube, ok.ru accompanied by Orenburg region media are leading for the 2nd , but geography. The interesting fact is that the geography of messages does not demonstrate correlation with the digital media sources types. The basic explanation is found in visual and video content from the 1st week events prevailing in social media. The structure of digital media sources types is also changing: June, 29 – July, 05, 2022 shows us a decreasing trend in social media and news in digital Mass Media, but positive dynamics in messengers' chats and blogs. During the 1st week GazpromNeft CSR programs involved the most of audiences, Russian Railways' CSR activities were leading at June, 29 – July, 05, 2022. But if to make a deeper analyses we explore that the new Russian Railways' collective employment agreement was a reason for the company's publicity, but not its CSR programs and projects.

The most resonant media messages are connected to GazpromNeft company, but the information of football competitions at Gazprom-Arena is dominating, and the leading digital media sources are also connected to Zenith football team topic, but not to CSR.

## IV. CONCLUSIONS

The study objective was to explore effective involving digital media strategies of corporate citizens with the help of AI-based analytical system, thus we had an expectation of user generated content (UGC) prevailing in digital media types with a high level of audience engagement. But the pilot study demonstrated that the leading publications (either by number or involvement) in social media and online Mass Media were placed on companies resources and initiated by companies on their partners online sources.

Such a situation demonstrates us the absence of "brand's ambassadors" among CSR recipients in the social media scene, thus we observe a paternalistic model of CSR programs which do not targeted to social activism development. So called "social activism" is demonstrated mostly by likes and comments to visual and video content (possibly, with their presence there), but not to post-releasing and announcing texts.

Therefore CSR projects modeling targeted to social involvement and social practices habituation should be implemented in the form of umbrella mini and micro projects with clear UGC requirements specifications. The task of content arrangement on digital media with big audiences might be accomplished by flagship CSR projects within the projects umbrella. Such a combined CSR project model will lead to a combined digital media strategy effectiveness and followed by citizen mission performance.

### REFERENCES

[1] Hepp, Andreas. *Deep mediatization*. 1st edition. London, Routledge, 2019, 260 p., doi:10.4324/9781351064903

[2] Hepp, Andreas The communicative figurations of mediatized worlds: Mediatization research in times of the 'mediation of everything. *European Journal of Communication*, 2013, 28(6):615-629 doi:10.1177/0267323113501148

[3] Hepp, Andreas, Hasebrink, Uwe. Translocal communicative figurations. In: Lundby, Knut (ed.): *Media practice and everyday agency in Europe*, Kramp, Leif & Carpentier, Nico & Hepp, Andreas & Ilija, Tomanic-Trivundza & Nieminen, Hannu & Kunelius, Risto & TOBIAS, OLSSON & Sundin, Ebba & Kilborn, Richard, 2014

[4] March J. G., Olsen J. P. *Rediscovering Institutions*. New York: Free Press, 1989

[5] March J.C., Olsen J.P. *Democratic Governance*. New York: Free Press, 1995

[6] Sharakhina, L. V., Achkasova V. A., Azarova L. V. Mediatization of Russian Companies in the Framework of Corporate Citizenship. *RUDN Journal of Studies in Literature and Journalism*, 2021. Vol. 26. No 4, pp. 713-721, doi: 10.22363/2312-9220-2021-26-4-713-721

[7] Jackman, R.W., & Miller, R.A. Social capital and politics. *Annual Review of Political Science,* 1998, 1, 47-73

[8] Luhmann N. *The Reality of the Mass Media*, M.: Praksis, 2005, pp. 11-12 (in Russian)

[9] Ray, T. Machine Learning and Artificial Intelligence in Marketing and Advertising. August 24, 2018. *Tanmoyray*. Available at: https://tanmoyray.com/blog/martech-analytics/machine-learning-and-artificial-intelligence-in-marketing-advertising/ (accessed 10 January 2023).

# Digital Tools in Conducting a Linguo-semiotic Study of Tactile Communication: the Potential of the Russian National Corpus

Vera V. Boguslavskaya
*Department of Russian Literature and Intercultural Communication*
*Pushkin State Russian Language Institute*
Moscow, Russia
boguslavskaya@gmail.com

Albertina G. Ratnikova
*Pre-University Education Department*
*Pushkin State Russian Language Institute*
Moscow, Russia
porijoki@nextmail.ru

Larisa V. Sharakhina
*Department of Public Relations*
*Saint-Petersburg Electrotekhnical University (LETI)*
Saint-Petersburg, Russia
lvkolganova@gmail.com

*Abstract*— **The paper is aimed at studying and describing the potential of the web-page of The Russian National Corpus - https://ruscorpora.ru - as a set of digital tools for linguo-semiotic analysis of the verbal delivery methods of tactile communication). The authors analyze modern digital technologies that allow collecting, structuring and processing extensive linguistic information of Main, Media, Multimedia and other corpora data arrays. Specific focus is made on such digital tools as the search for collocations, the classification of corpus materials by historical period, types of texts, genre affiliation, possibilities to parameterize the search context expansion, including those with specified grammatical forms, statistical methods of research and methods of graphical presentation of data. The model of an integrated approach to the study of linguo-semiotic characteristics of verbalized tactile communication is developed with the help of digital instruments of corpus-based linguistics and contemplates the access to statistical data, which help to detect usage patterns of lexical units, objectifying situations of tactile communication.**

*Keywords— the Russian National Corpus, digital technologies, digital tools, tactile communication, methods of verbal presentation*

## I. Introduction

There is currently a large number of research papers devoted to the subject of tactile communication, many of which have resulted in important findings. These papers include, for instance, a paper by M. L. Knapp and others devoted to non-verbal communication [1], T. V. Medvedeva's paper [2], on the features of tactile communication viewed from an intercultural perspective, works by D. A. Sauter, F. Eisner, P. Ekman and S. K. Scott [3], M. A. Hecht and N. Ambady [4], as well as studies of non-verbal interaction between humans and computer systems by I. Poggi, F. Cirella, A. Agostini [5]. Papers by F. McGlone, J. Wessberg, H. Olausson [6], A. Varlamov, A. Kravchenko, S. Inyashkin, A. Gorbacheva, A. Semirechenko, M. Osadchiy, M. Rusetskaya [7, 8], J. Bezemer are focused on tactile perception and G. Kress [9] , G. Kreidlin [10], C. Jewitt [11] study the linguosemiotic aspect of non-verbal communication.

The study of tactile communication from a linguosemiotic standpoint is based on the idea that this type of non-verbal communication can be considered as a special sign system. The semiotic nature of tacesics gives reason to explore verbal equivalents of tactile communication as non-verbal communication verbalized. In these situations, when the non-verbal is expressed verbally, touch acts as a kind of stimulus, or signal that helps the recipient decode the indended symbolic message. In the case of verbalized tactile communication, we are indeed dealing with symbolic messages (or symbol messages), and each action described by linguistic means is closely linked with biological, psycho-emotional and socio-cultural aspects.

In the era of computer technologies intensive development and artificial intelligence based technologies progress the appeal to corpus-based linguistics digital instruments for different aspects of anthropological knowledge exploration is consistent and declares prospective for NLP applied studies. The present research describes the application of digital instruments of the Russian National Corpus which was developed by the Russian scientists and got free access in 2004/ The corpus base is constantly being updated and developed, what helps to implement studies of actual Russian language culture.

The Russian National Language Corpus digital instruments are represented by options of software tool for collocation search (combinations of words that frequently appear together to create a specific meaning); classification of corpus materials by historical period, types of texts, genres, search parameterization in context expansion, including specified grammatical forms, etc.

## II. Literature Review

The possibilities offered by the Russian National Corpus (RNC) have been repeatedly described by Russian researchers, such as V. Plungian, T. Reznikova and D. Sichinava [12], E. Rakhilina [13, 14] and S. Sharoff [15]. The topic has also been explored in a paper by E. Grishina, S. Savchuk and D. Sichinava, devoted to the Multimodal Parallel Russian Corpus [16] and work by G. I. Kustova and others, describing the practice of corpus tagging [17]. Parallel corpora within the Russian National Corpus have also been considered in the works of D. Sitchinava [18].

The RNC currently holds an extensive database for linguistic research and is a unique source of vital information for the various fields of linguistics. For example, a large number of cognitive [19, 20], discursive [21, 22] and comparative [23, 24] studies have been carried with the help of the RNC in 2021 and 2022.

The authors describe the wide range of digital tools provided by the RNC, and develop a concept of verbal representation of tactile communication linguosemiotic analysis. The basic research methods are as follows: the descriptive research method, supported by content analysis, interpretive analysis, elements of comparative analysis and analysis of statistical data.

The primary objective was to identify the 'verbalizers' of tactile communication, that are key words, phrases and expressions which describe situations of non-verbal communication. First, lexicographic sources were analysed and the following research units were identified: nouns (touch, stroke, pat, blow) and verbs (touch, stroke, clap, hit, tickle). The word touch was recognized as one of the primary verbalizers. Therefore, it was the data received for the touch query in the RNC database that served as the empirical material for the present study.

The quantitative data obtained for the query touch query in the RNC (accessed December 2022) were the following: in the Main Corpus, the word was used in 2,708 documents and 5,222 examples; now - 2,708 documents and 5,222 examples (Lemma and tags search in the selected corpus) and 1224 texts / 1942 examples (Exact search in the selected corpus); in the newspaper corpus the word was found in 1,672 documents / 1,915 examples; usage in the multimedia corpus was reflected in 5 documents, 5 contexts, 5 clipotexts.

The Main Corpus provides extensive statistical data on the usage of a given word form. Users can access statistics on the number of times a word form is used in the texts of certain authors, that is, the distribution by frequency of a word in texts where the author is indicated, with data on both the number of texts and the number of occurrences (or contexts) in them. The Corpus also provides statistical data on the frequency of word form usage by the author's gender, domain, text type, text topic, and genre. For example, the statistics for the touch query on the most frequent type of text (the first ten) can be illustrated by the following figures: novel - 527 contexts (27.14%), article - 317 (16.32%), story - 248 (12.77%), short story - 217 (11.17%) %), memoirs - 177 (9.11%), diary/notebooks — 123 (6.33%), monograph - 116 (5.97%), sketch - 67 (3.45%), serial - 50 (2.57%), essay - 19 (0.98%). The genre statistics for the same word are as follows: No genre - 657 (33.83%), Sci-fi - 92 (4.74%), Historical prose - 79 (4.07%), Nonfiction - 66 (3.40%), Crime - 43 (2.21%), Adventure - 35 (1.80%), Love story - 31 (1.60%), Humor and satire - 30 (1.54%), Children's literature - 25 (1.29%), Drama - 2 (0.10%), Medical - 1 (0.05%). The data obtained for the most frequent topics (top ten) related to touch is as follows: Science and technology - 255 (13.13%), Art and Culture - 147 (7.57%), Biology - 139 (7.16%), Private life - 118 (6.08%), Politics and society - 118 (6.08%), Religion - 101 (5.20%), Health and medicine - 72 (3.71%), History - 64 (3.30%), Philosophy - 61 (3.14%), Travel - 31 (1.60%).

The corpus also helps to identify the number of times a word was used by year. Using the data reflected in the table below the graph (Fig. 1), we can glean what periods of time correspond to the highest/lowest usage of a given word from the Corpus. For example, for the word touch, the largest number of uses was recorded in the year 1866: the word was used 108 times. This record is followed (according to the same criterion of the maximum number of word uses) by 2001 and 2002: word was used 45 times each year. By comparison, the year 1862 accounts for only 4 word uses, 1879 — for 2 and 1903 — for 14.



Fig. 1. Distribution by year (frequency by million words) in Main corpus from 1760 to 2021

The software tool for selecting a historical period makes it possible to set a certain period of time, allowing to trace the dynamics of the usage of word forms for a certain period. It was relevant for the authors to consider the period from 2010 to 2021 in more detail (Fig. 2).



Fig. 2. Distribution by year (frequency by million words) in Main corpus from 2010 to 2021

The software tool for selecting a historical period makes it possible to set a certain period of time, allowing to trace the dynamics of the usage of word forms for a certain period. It was relevant for the authors to consider the period from 2010 to 2021 in more detail (Fig. 2).

The corpus demonstrates dynamic changes in the predominance of some text themes, types or genres over others. Table 1 demonstrates the changes in the prevailing subject matter of texts with the lexeme touch.

TABLE I.          TABLE TYPE STYLES

| Year | Subject |
|------|---------|
| 2010 | Biology, Private life, History, Science and technology, Politics and society, Art and culture, Technology, Nature, Army and armed conflict, Psychology, Administration and management |
| 2011 | Art and culture, Religion, Private life, Leisure and entertainment, Psychology, History |
| 2012 | History, Private life, Religion, Physics, Travel, Leisure and entertainment, Science and technology, Politics and society |
| 2013 | History, Health and medicine, Construction, architecture |
| 2014 | Natural science, Philosophy |
| 2015 | Private life, Art and culture, History, Education, Politics and society |
| 2016 | Art and culture, Private life |
| 2017 | History, Politics and society |
| 2019 | Private life, Art and culture |

Statistical data on the number of uses of a word form with an indication of its lexical environment also shed light on the

subject and provide vital information to assist in achieving the goal of the present paper. The Corpus shows the frequency of a given word form with one, two or three adjacent lexemes. Thus, the most frequent situations of lexical compatibility with the word touch were the following - touch to, touch to it, it was a touch to. It should also be mentioned that the database of the Main Corpus can be used in collocation search, i.e. looking for combinations of words that frequently appear together to create a specific meaning.

The ability to search for collocations, provided by RNC, makes it possible to identify important characteristics of word forms - verbalizers of tactile communication. Software tools for collocation search allow the researchers to set the necessary search parameters. This means that to describe the characteristics of the verbalizer touch, statistics on the usage frequency of the leading definitions is of great importance. In order to get the data, it is necessary to specify the following: add condition – gramm features in the Keyword field and select part of speech, i.e. Adjective. In the Collocate field, it is required to specify Lemma - touch and Distance from 1 to 1. As a result, the Corpus provides the following statistics: from the highest collocation threshold (minimum collocation threshold - 5): light 150, slightest 140, gentle 60, casual 46, rude 44, cold 33, affectionate 28, careless 25, mild 22, cautious 20, simple 18, unintentional 16, spontaneous 15, hot 15, lightest 14, wicked 14, instant 13, frequent 13, warm 12, last 12 , alien 11, burning 10, timid 9, icy 9, alien 9, physical 9, cool 8, pleasant 8, unified 8, human 8, magical 7, sudden 7, mutual 7, unexpected 7, nasty 6, dry 6, direct 6, elastic 5, painful 5, tight 5, airy 5, unpleasant 5, nearest 5, weak 5, external 5, close 5, lively 5.

Another important characteristic of the verbalizer touch is an indication of the instrument of influence. In order to gain information about the most frequent tools of influence in case of touch, in the Keyword field it is requested to specify lemma - touch, and in the Collocate field - Distance from 1 to 1 and specify gramm features as add condition – instrumental case, while Lemma does not need to be specified. As a result, the Corpus provides the following statistics: from the highest joint frequency index (minimum collocation threshold - 5): hand 9, finger 6. It is also important to specify the data received on request for statistics of the most frequent object of influence (in the Keyword Lemma field - touch; gramm. features of Collocate - dative case; Distance from 2 to 2; minimum collocation threshold - 15): hand 36, which 32, leg 28, skin 21, body 20, idol 16.

The newspaper corpus includes two sections - National media and Regional and international media. It is the newspaper corpus, in the authors' opinion, that can provide the most up-to-date information about modern trends in the usage of word forms. Figure 3 presents a graph obtained on the RNC website for the touch query in the National media corpus for the period 2010-2021.
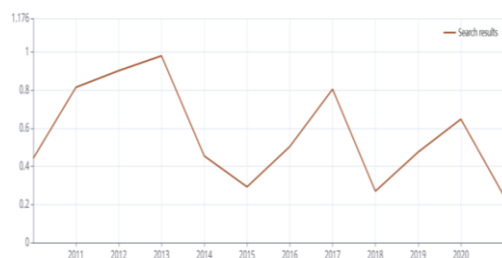


Fig. 3. Distribution by year (frequency by million words) in National media corpus from 2010 to 2021

The data of the multimedia corpus can also provide important data on the representation of non-verbal communicative means. For the touch query, 5 documents / 5 contexts / 5 clipotexts were found - those were 3 episodes from feature films, 1 episode from a documentary and 1 audio recording, which involved situations verbally describing the tactile action of touch. In addition to searching for the use of exact forms of a word, the possibility of lexico-grammatical search is provided. This allows to specify "a sequence of lexemes and/or word forms that have certain grammatical and/or semantic characteristics" [25]. Of great interest are also software tools for searching multimedia sources according to the selected criteria of speech actions and gestures. Thus, speech actions can be presented by choosing the types of speech actions - appellatives, questions, imperatives and incentive statements, modal statements and performatives, negation, pejorative statements, praise, consent, trade, affirmation, someone else's speech, playful/mocking statements, etiquette statements. There are also some additional criteria for speech actions: the number of speakers in the clip, the gender of the speakers (actors), the language they speak, the social situation reflected in the clip, the completeness of the speech action, the presence and types of repetitions, the manner of speaking, the types of vocal gestures and interjections. According to the criterion Social situation reflected in the video, it is thereby possible, for example, to select the following options: non-specific situation, military/police operation, rally speech, business meeting speech, journalistic report, ordering at a restaurant, ordering a taxi, drinking toasts, getting acquainted, having/giving an interview, acting as an entertainer, delivering lecture, news report (radio/television), talking to a taxi driver, talking to a doctor, talking to a salesman, child-to-child conversation, telephone conversation, having a lesson, poetry recital and other options.

In order to search for multimedia material that describes / shows situations of using gestures, it is possible to specify the following criteria: name of the speaker (actor), gender of the speaker (actor), gender of the character, age of the speaker (actor), age of the character, main organ, palm orientation, hand orientation, active organ, passive organ, adaptor, movement direction, gesture multiplicity, gesture name, gesture type, gesture meaning, extension, spoiler, emotions, gesture fullness, gesture authenticity, accessories (e.g. paper rolled into a tube, headwear, pencil, pen, clothes, glasses, stick, gloves, hairbrush, cutlery, telephone, any object and other options).

It should be noted, that gestures-touches presented in the multimedia corpus, such as "stroking someone on some part of the body", "touching someone", "hugging someone", "pushing someone away", "stroking someone's face", "patting someone on the head", "patting someone on the shoulder", "stroking someone", "putting hands on someone's shoulders", "fixing someone's hair", "patting someone on any part of the body", "poking someone with a finger", "pushing someone", "slapping someone on some part of the body", "patting someone on the head" and others are of considerable interest for the study. For each gesture presented in the Multimedia corpus, meanings-interpretations corresponding to the situation are given. For example, the meanings-interpretations for the gesture-touch "patting on the shoulder" are "approval", "encourage", "calmness". It is worth noting, that such specific touch gestures presented in the multimedia corpus as a kiss and a handshake can also be singled out.

Of particular interest is also the analysed corpus, which consists of a selection of similar (translated) texts in Russian

and other languages, for example, English, Belarusian, Bulgarian, Spanish, Korean, Finnish, etc. (25 languages in total). There is also a multilingual corpus that comprises collections of translations of texts in various languages.

The authors obtained 115 documents, 210 contexts for touch query in the parallel English corpus. Even a primary analysis of the given texts allows the authors to come to the conclusions concerning obvious dissimilarity in the use of the verbalizer touch in Russian and corresponding English texts. For example, Russian-language texts that describe situations of tactile communication using the touch verbalizer correspond to English texts where, in addition to the specified verbalizer, such options as "absence of a verbalizer", "pressure", "feel", "flutter", "feeling", "sensation" as well as others are present.

Digital technologies that provide quick access to the translation database make it possible to conduct complex comparative studies, analyse the features of the use of words in various contexts, study the cognitive features of choosing a verbal description of an action, phenomenon, etc. in different linguistic cultures.

## IV. CONCLUSIONS

It seems undeniable that modern digital technologies that afford ground for collecting and structuring vast amounts of data, as well as operating with this data, open up broad prospects for further research. In the field of linguistic research, language corpora, containing a huge amount of texts and, at present, multimedia information, have a very promising potential. The RNC is a prime example of a modern language corpus. This is a huge database containing materials necessary for the study and understanding of many phenomena and issues, that provides an opportunity to deal with some serious scientific problems related not only to linguistics, but also to such important scientific areas as, for example, psychology and neurology, sociology and pedagogy, information technology and artificial intelligence and many others.

The results of the study of the RNC potential enables the authors to state that the language corpus created by Russian scientists is a modern source not only for obtaining data, but also for working with them based on the numerous digital tools presented in it. There is not the slightest doubt that the resources and digital tools offered by the RNC for working with linguistic and even extralinguistic data make promising the development of complex models and research methods of various directions, including the model of an integrated approach to the study of linguo-semiotic characteristics of verbalized tactile communication.

The developed model of verbal representation of tactile communication linguo-semiotic analysis is based on the wide range of corpus-based linguistics achievements, what let to get actual statistic data and process information with reference to study objectives. By the example of corpus study of the tactile communication 'verbalizers' the model of an integrated approach to the study of linguo-semiotic characteristics of tactile communication were demonstrated: statistical data analysis, context and lexical environment interpretation, parameterization.

## ACKNOWLEDGMENT

## REFERENCES

[1] M. L. Knapp, J. A. Hall and T. G. Horgan, "Nonverbal Communication in Human Interaction," (8th ed.). Cengage Learning, 2013.

[2] T. V. Medvedeva, "Tactile communication in intercultural aspect. Yazyki i literatura v polikul'turnom prostranstve," 2015, 1: 90–95.

[3] D. A. Sauter, F. Eisner, P. Ekman and S. K. Scott, "Cross-cultural recognition of basic emotions through nonverbal emotional vocalizations. Proc. of the National Academy of Sciences", 2010, 107(6): 2408–2412.

[4] M. A. Hecht and N. Ambady, "Nonverbal communication and psychology: Past and future", Atlantic Journal of Communication, 1999, 7(2): 156–170.

[5] I. Poggi, F. Cirella and A. Agostini, "The communicative system of touch. Alphabet, lexicon, and norms of use", Gesture-Based Communication in Human-Computer Interaction: 5 th International Gesture Workshop. Camurri A., Volpe G. (eds.). Berlin: Springer Verlag, 2003, 77–89.

[6] F. McGlone, J. Wessberg and H. Olausson, "Discriminative and Affective Touch: Sensing and Feeling", Neuron, 2014, 82(4), 737–755. https://doi.org/10.1016/j.neuron.2014.05.001

[7] A. Varlamov, S. Inyashkin, A. Gorbacheva, A. Semirechenko, M. Osadchiy and M. Rusetskaya, "Lexicon and Scenarios of Touch Perception: Towards Developing a Research Thesaurus", Vestnik Volgogradskogo Gosudarstvennogo Universiteta. Serija 2. Jazykoznanije, 2019 1, 47–61. https://doi.org/10.15688/jvolsu2.2019.1.4

[8] A.Varlamov, A. N. Kravchenko, A. Gorbacheva, M. Osadchiy, "Language of touch: Biological aspects of social touch perception and the system of tactile communicative signals",Voprosy Jazykoznanija, 2020, 2: 75–92. DOI: 10.31857/S0373658X0008857-1

[9] J. Bezemer and G. Kress, "Touch: A resource for making meaning", Australian Journal of Language and Literacy, 2014, 37 (2): 77–85.

[10] G. E. Kreidlin, "Neverbal'naya semiotika: Yazyk tela i estestvennyi yazyk" [Non-verbal semiotics: Body language and natural language]. Moscow: Novoe Literaturnoe Obozrenie, 2002.

[11] C. Jewitt, "Towards a multimodal social semiotic agenda for touch. Advancing multimodal and critical discourse studies: Interdisciplinary research inspired by Theo van Leeuwen's social semiotics". Zhao S., Djonov E., Björkvall A., Boeriis M. (eds.). New York: Routledge, 2017, 79–93.

[12] V. Plungian, T. Reznikova and D. Sichinava, "The Russian National Corpus: general characteristics", Scientific and technical information. Series. 2. 2005. No. 3. pp. 9—13.

[13] E. Rakhilina, "The Russian National Corpus: Why is it for the Slavists?", Die Welt der Slaven LIII, 2008, 1—10.

[14] E. Rakhilina, "Corpus as a creative project", The Russian National Corpus: 2006-2008. New results and perspectives. St. Petersburg: Nestor-Istoriya, 2009, 7-26.

[15] S. Sharoff, "Methods and tools for development of the Russian Reference Corpus". In D. Archer, A. Wilson, P. Rayson (eds.) Corpus Linguistics Around the World. Amsterdam: Rodopi, pages 167-180, 2005.

[16] E. Grishina, S. Savchuk and D. Sichinava, "Multimodal Parallel Russian Corpus (MultiPARC): Main Tasks and General Structure", LREC 2012 Workshop on Best Practices for Speech Corpora in Linguistic Research. Istanbul, Turkey, May 21, 2012. ELRA. pp. 13-16.

[17] G.I. Kustova, O. N. Lashevskaja, E. V. Paducheva and E. V. Rakhilina, "Verb taxonomy: from theoretical lexical semantics to practice of corpus tagging", Lewandowska B., K. Dziwirek (eds.), Cognitive Corpus Linguistics Studies. Frankfurt (forthcoming).

[18] D. Sitchinava, "Parallel corpora within the Russian National Corpus", Prace Filologiczne, LXIII, 2012, 271—278.

[19] L. Gorbunova, "Concept "oligarch": an attempt at corpus analysis," Studia Rossica Posnaniensia, 2021, 46(1), 71–83. https://doi.org/10.14746/strp.2021.46.1.6

[20] E. Zhukova, "Analysis of the axiological component of the concept laughter in the Russian language picture of the world (on the material of proverbs, lexicographic and corpus data)," Tomsk State Pedagogical University Bulletin. 2022. Vol. 3 (221), pp. 23-33. DOI:10.23951/1609-624X-2022-3-23-33/

[21] A.Yu. Bendin and N.M. Markova, "Autopoiesis of the Discourse of Religious Tolerance," (Early Intercultural Communication in the 19th Century). Concept: philosophy, religion, culture. 2021;5(3):82-100. (In Russ.) https://doi.org/10.24833/2541-8831-2021-3-19-82-100

[22] M.N. Krylova, "The preposition of Comparasion Vrode in Various Types of Discourse in the Modern Russian Language: History, Morphological Status, Functioning," Current Issues in Philology and Pedagogical Linguistics. 2021, no 1, pp. 246–255 (In Russ.)

[23] S.M. Yusupova, "Comparative Analysis of Communicative Values in Phraseology on the Material of the English, German and Russian Languages," RUDN Journal of Language Studies, Semiotics and Semantics, 2022, 13(2), 518—535. https://doi.org/10.22363/2313-2299-2022-13-2-518-535.

[24] M.G. Yurchenko, "The Concept of Uchitel / Uchenik (Teacher / Pupil): Motivating Signs," Bulletin of Kemerovo State University. 2021;23(3):847-854. (In Russ.) https://doi.org/10.21603/2078-8975-2021-23-3-847-854

[25] The Russian National Corpus, URL: https://ruscorpora.ru (Accessed 13.02.2023).

# Gender as a Communication Issue in Mass Media and Politics

Ilya A. Bykov
Chair of PR in politics and public administration
St Petersburg State University
St Petersburg, Russia
ORCID 0000-0001-8462-5320

Anastasia N. Chernova
Chair of PR in politics and public administration
St Petersburg State University
St Petersburg, Russia
anastasiamurzinaa@gmail.com

*Abstract*—**This paper examines gender as a communication issue in mass media and public administration. Today gender studies is the one of the most developing field of social research all around the world. However, there are too many important research questions to study for communication scientists. For example, do gender studies contribute to the development of communication theory? Or do gender communication barriers exist and, if so, how they influence mass media? In Russia, until recently, gender has been studied mainly from political perspective and, more precisely, as a problem for public administration where gender imbalance exists. The authors aim to characterize gender communication studies in contemporary Russia. Data were collected from interviews and secondary data analysis of the Russian Science Citation Index. The review of scientific literature indicates that communications practices include the existence of communication barriers based on gender stereotypes. Authors come to the conclusion that changes in a corporate policy on a gender issues can open up new opportunities not only for women but for all society.**

*Keywords—Gender, feminist theory of communication, communication strategies, mass media, politics.*

## I. INTRODUCTION

The binary gender structure of the modern world, which was formed throughout the history of mankind, today comes to the fore as a discussion field. The feminist movements of the 19th century sufficiently equalized women and men in terms of rights and opportunities, enshrined in the legal acts of many developing and developed countries the equal status of citizens, regardless of their gender. However, in real life, a certain inequality continues to exist by inertia and becomes the object of academic research.

Perhaps the main breakthroughs of emancipation can be called the right of women to education, work, and the right to vote. Politics was opened to women, first as voters and later as full-fledged employees of state administration and government. In Russia, women have had employment opportunities for a long time. This is due to the phenomenon of a female comrade that appeared after the revolution, and to historical events that influenced the demographic characteristics of the Russian population.

Today, the topic of gender equality and gender identity is being actively discussed not only by scientists, but also by public figures. The binarity of the world, divided into male and female, continues to exist, despite the emergence of intersex personalities. So, former US President and participant in the 2024 elections Donald Trump spoke at a conference in Florida, with a statement recognizing only two genders: men and women [1]. Gradually, conditions are being created in the world for individuals who do not consider themselves to be part of this binary system, but at the moment, legal and social realities are adapted only for two genders [2].

Numerous studies have documented consistent sex differences in developmental trajectories and remarkable similarity across nations in gender biases at the interpersonal and societal level [3]. For example, only "5% of Fortune 500 companies are led by women Corporate Executive Officers. Globally, women hold 23% of parliamentary seats" [4]. Similar levels of inequality extend beyond the corporate and political world into the realms of entertainment and mass media. However, there are too many important research questions to study for communication scientists starting from conribution of gender studies to the development of communication theory. Gender is an important part of communication for it always takes part in information transmissions defining sources and receivers of information: "Gender is present in an individual's gender performance and in other messages that create, sustain, or challenge gender expectations" [5].

Although Krolokke and Sorensen claims that "gender and communication is now an established academic field" [6], it is not so for gender studies in Russia. Most publications in the field of gender studies are devoted to sociological or political issues [7, 8]. Communication scholars usually tend to study gender barriers in communication [9] or gender stereotypes in mass media and social media [10]. Khotkina has found that "sexism, as a form of gender discrimination, makes up most of the content on social media. The content of publications in social networks mainly consists of stereotyped beliefs" [11].

Based on the above historical milestones in the field of gender communication, this article begins with an analysis of whether there is coverage of the topic of gender communication in public administration and the media in scientific discourse. Firstly, the document will describe in detail the study conducted on the basis of the scientific electronic library e-library.ru and present the results of this study, secondly, the results obtained using the focus group method will be presented, the Russian experience of gender communications will be described and analyzed. in public relations departments of regional government bodies. Finally, the paper will describe some reflections and conclusions regarding regarding the practice of gender communications in the Russian Federation and what can be done to address the issue of gender inequality within private business organizations and government structures.

The objective of the study aims to determine the degree of scientific interest and development of the topic of gender communications in public administration and the media. According to researches women in the labor market are a more vulnerable category than men, since they are discriminated against in terms of wages, career status and unequal employment conditions with men [12].

## II. METHOD AND DATA

The topic of gender inequality today is quite topical and needs to be addressed. Scientific research is a storehouse of valuable data that contributes to the solution of this problem in practice. The study is conducted on the basis of the scientific

electronic library "e-library", which cooperates with 75388 scientific journals and has 41058024 publications. Being a virtual information resource that presents the experience of Russian researchers, the e-library allows you to track the dynamics of researchers' interest in a particular topic.

Within the framework of this study, we used a keyword search to identify all publications on the stated topic, namely regarding 3 search queries in Russian: "gender", "gender AND Politics", "gender AND mass media". "AND" is used by the e-library algorithm as an auxiliary word for searching. The sample included publications related to articles in journals, books, dissertations. The search was made taking into account morphology.

The first difficulty encountered during the study is that not all authors use keywords as a tool for disseminating their publication due to its easy identification. In this connection, all articles on the gender request were processed manually, which made it possible to identify a more realistic number of articles on the topic. Another difficulty in creating accurate statistics on the annual use of the topic by researchers lies in the plurality of synonyms. The broad concept of "mass media" can be hidden behind the words "gloss", "magazine", "printed edition", etc. For this reason, it was decided to search for more general concepts: "mass media" and "Politics".

Turning to the topic of gender, in this article we turn more to the problems of the female sex, the difficulties they face in their professional implementation in connection with the gender stereotypes existing in society. It should be noted here that a lot of gender studies are also hidden behind the keywords "woman", "women's issue", "emancipation", "feminism", etc. If regarding "media" and "Politics" we can talk about combining publications into groups on the basis of a general thematic focus, then in the case of gender studies, the only possible target is the keyword "gender", since it is not possible to create a sample of all publications related to women without the use of artificial intelligence and carrying any research value.

The following condition was set for the research: the publication must be published in a scientific journal from 2000 to 2023 inclusive. This time frame allows us to focus on the most relevant publications of our time, containing the experience of gender studies regarding the digital century. Each of the three search queries was examined from the perspective of the last 23 years: the exact number of publications corresponding to the query was determined for each year separately. A graph has been drawn up that clearly demonstrates the annual changes in interest in the topic. The total number of publications for 23 years is given.

The keyword search method has a certain rigor and relevance. At the same time, it is of research interest to know the number of publications on given topics, but without specifying the corresponding keywords. To obtain this data, which can be relatively subjective, an analysis of 8479 publications was carried out - this is all existing publications on the search for "gender" as of 01/23/202. This advanced search was carried out not only by keywords, but also by titles and abstracts. Each publication is studied and thematically sorted. There are received 2 samples of publications for 23 years related to the mass media or Politics, but without the use of these markers in keywords. A side result of the study can be considered the share of publications marked with keywords from the total number of publications on the topic.

It should be noted that the collection and simultaneous processing of data lasted from 01/23/2023 to 02/09/2023.

During this time, the number of publications for the search query "gender" has changed from 8479 to 8387. It has decreased by 92 publications, which is associated with the activity of the moderators of the resource. For future research, we recommend rechecking the actual number of published studies, but we assume that the percentage of requests "gender AND mass media" and "gender AND Politics" to the query "gender" tends to remain stable. Another possible research error is the optional inclusion of all Russian scientific papers in the e-library repository, in connection with which we cannot talk about the comprehensive nature of the study of the Russian scientific discourse, but we consider it right to focus on the percentage indicators of the study as characteristic of the scientific field as a whole.

In continuation of the theoretical study, empirical data were obtained: a focus group was held. The focus group participants were 8 civil servants working in public relations departments representing public administration in different regions of the Russian Federation. The gender composition of the group: 7 women and 1 man, which is also indicative, since the group included persons receiving additional education at St. Petersburg University as part of a staff development program. During the discussion, issues related to the manifestation of gender inequality in the workplace in relation to group members or their colleagues were discussed. The results obtained through this method confirm the need and relevance of gender studies, especially in the field of public administration and the mass media.

## III. RESULTS

The results of the study are most informative to present in a tabular format. Table 1 clearly shows the number of publications by year where the search was carried out strictly by keywords. In the left column, for each search query, the number of publications is presented, in the right column, the percentage of the total number of publications for the "gender" search for the year, respectively. The bottom line shows the total number of publications for 23 years for each of the search queries.

TABLE I. KEYWORD SEARCH

| Year | Gender and Politics | % | Gender and mass media | % | Gender |
| --- | --- | --- | --- | --- | --- |
| 2000 | 0 | 0 | 0 | 0 | 19 |
| 2001 | 0 | 0 | 0 | 0 | 30 |
| 2002 | 0 | 0 | 0 | 0 | 30 |
| 2003 | 0 | 0 | 0 | 0 | 26 |
| 2004 | 0 | 0 | 0 | 0 | 23 |
| 2005 | 0 | 0 | 0 | 0 | 34 |
| 2006 | 0 | 0 | 0 | 0 | 25 |
| 2007 | 0 | 0 | 0 | 0 | 53 |
| 2008 | 1 | 1.02 | 0 | 0 | 98 |
| 2009 | 2 | 0.92 | 0 | 0 | 217 |
| 2010 | 0 | 0 | 0 | 0 | 264 |
| 2011 | 0 | 0 | 0 | 0 | 354 |
| 2012 | 2 | 0.52 | 0 | 0 | 388 |
| 2013 | 1 | 0.24 | 1 | 0.24 | 420 |
| 2014 | 0 | 0 | 1 | 0.21 | 476 |
| 2015 | 0 | 0 | 0 | 0 | 546 |
| 2016 | 0 | 0 | 0 | 0 | 541 |
| 2017 | 0 | 0 | 0 | 0 | 525 |
| 2018 | 0 | 0 | 0 | 0 | 558 |
| 2019 | 1 | 0.19 | 0 | 0 | 522 |
| 2020 | 0 | 0 | 0 | 0 | 543 |
| 2021 | 1 | 0.17 | 0 | 0 | 596 |
| 2022 | 0 | 0 | 0 | 0 | 357 |
| 2023 | 1 | 100 | 0 | 0 | 1 |
| Total | 9 | 0.14 | 2 | 0.03 | 6646 |

These results show a steady increase in the number of publications on the topic "gender". Single publications in the searches "gender and politics" and "gender and media" account for predominantly less than one percent of all gender studies per year. According to these data, the only conclusion that can be drawn is that there is no scientific interest in gender in politics and the media. Now let's turn to the second table, which contains data collected through content analysis not only for keywords, but also for titles, abstracts, and content.

TABLE II. ADVANCED SEARCH

| Year | Gender and Politics | % | Gender and mass media | % | Gender |
|------|------|------|------|------|------|
| 2000 | 6 | 19.35 | 0 | 0 | 31 |
| 2001 | 3 | 6.98 | 0 | 0 | 43 |
| 2002 | 2 | 5.00 | 1 | 2.5 | 40 |
| 2003 | 3 | 7.14 | 0 | 0 | 42 |
| 2004 | 12 | 20 | 1 | 1.67 | 60 |
| 2005 | 2 | 3.13 | 0 | 0 | 64 |
| 2006 | 4 | 6.25 | 0 | 0 | 64 |
| 2007 | 9 | 7.96 | 3 | 2.65 | 113 |
| 2008 | 17 | 10.49 | 8 | 4.94 | 162 |
| 2009 | 19 | 6.62 | 11 | 3.83 | 287 |
| 2010 | 22 | 6.45 | 11 | 3.23 | 341 |
| 2011 | 11 | 2.47 | 14 | 3.15 | 445 |
| 2012 | 16 | 3.45 | 14 | 3.02 | 464 |
| 2013 | 17 | 3.37 | 16 | 3.17 | 504 |
| 2014 | 19 | 3.41 | 21 | 3.77 | 557 |
| 2015 | 21 | 3.28 | 22 | 3.43 | 641 |
| 2016 | 36 | 5.45 | 25 | 3.78 | 661 |
| 2017 | 24 | 3.72 | 17 | 2.63 | 646 |
| 2018 | 26 | 3.75 | 26 | 3.75 | 694 |
| 2019 | 22 | 3.44 | 19 | 2.97 | 640 |
| 2020 | 33 | 4.65 | 22 | 3.10 | 710 |
| 2021 | 38 | 5.10 | 23 | 3.09 | 745 |
| 2022 | 15 | 3.53 | 10 | 2.35 | 425 |
| 2023 | 1 | 12.5 | 1 | 12.50 | 8 |
| Total | 378 | 4.51 | 265 | 3.16 | 8387 |

Advanced search results are very different from strict keyword searches. This indicates that only a small part of Russian researchers pay due attention to the choice of keywords for their publications, forgetting about the advantages of using this tool. Based on the advanced search data, it can be concluded that the number of gender studies is increasing every year (the data in the table are given as of 02/09/2023, which means that for 2022 and 2023 the numbers will change as new publications become available).

The topic of gender in politics periodically either becomes more popular or, on the contrary, loses its attractiveness for researchers. The peak figure was reached in 2000 - 19.35%, the minimum in 2011 - only 2.47%, while 4.51% of all publications in the search for "gender". Publications that answer the query "gender and media" demonstrate stability and a tendency to occupy 3.16% of the total number of gender studies. Curves of changes in the number of publications by years are shown in Figure 1.
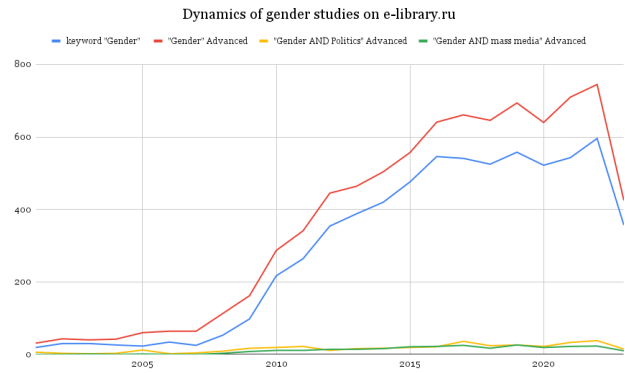


Fig. 1. Dynamics of gender studies on e-library.ru

The graph shows the trend in the development of scientific gender studies in academic field, which is characterized by an increase in the number of publications and the permanent presence of publications devoted to gender in Politics and gender in the mass media. It is possible to predict the further interest of researchers in gender studies.

The results of the focus group conducted were contradictory, but confirming the need for an academic study of the topic of gender communications. To the question "Is there gender inequality in the civil service?" panellists almost unanimously responded that there was no inequality or discrimination. However, to the question "How does gender inequality manifest itself, if it exists?" all members of the focus group found the answer based on personal experience and supported by examples from the experience of colleagues. During the discussion, special attention was paid to three issues proposed by the participants: a) women face communication barriers that prevent them from reaching career heights; b) communication barriers are the result of gender stereotypes; (c) the overwhelming majority of municipal employees are women.

The focus group concluded that achieving gender equality is only possible through international reform of gender stereotypes through culture, which will take more than 50 years. In the academic field, at the same time, there is a hypothesis that actual sex differences may play a more important role than culturally based gender roles and socialization processes [13].

IV. CONCLUSION

The research carried out in this paper, address gender as a communication issue in mass media and public administration. As a result of the study by the method of content analysis of Russian-language publications over the past 23 years in the e-library.ru electronic library, a trend of growing interest in the topic of gender studies was revealed and a stable presence of publications on gender in public administration and the media was determined among them. Based on the materials of the focus group discussion, it was possible to confirm the existence of gender inequality in public administration, associated with the impact on women's self-realization of communication barriers that arise under the influence of gender stereotypes.

The authors of the study agree that the continuation of scientific research on the topic of gender communications will bring humanity closer to solving the problem of gender inequality by creating strategies for gender communications. For this, further gender studies should have an applied interdisciplinary character.

## REFERENCES

[1] *Former President Trump speaks to young conservatives at Turning Point USA's Student Action Summit* (23.07.2022). Available at: baynews9.com/fl/tampa/news/2022/07/24/trump-speaks-to-young-conservatives-at-tampa-student-action-summit# (accessed 27 March 2023).

[2] S. K. Katyal. "The Numerus Clausus of Sex" in University of Chicago Law Review: Vol. 84: Iss. 1, Article 16, 2017, pp. 389-494.

[3] C. E. Löckenhoff et al. "Gender Stereotypes of Personality: Universal and Accurate?" *Journal of Cross-Cultural Psychology,* 2014, pp. 675-694.

[4] C. M. Canningham, H. M. Crandall, A. M. Dare (eds.). *Gender, Communication, and the Leadership Gap*. Charlotte: Information Age Publishing, 2017.

[5] C. H. Palczewski, D. D. McGeough, V. P. DeFrancisco. *Gender in Communication: A Critical Introduction*. 4th ed. Thousand Oaks: SAGE, 2021. P. 21.

[6] C. Krolokke, A. S. Sorencen. *Gender Communication Theories and Analyses: From Silence to Performanc*e. Thousand Oaks: SAGE. 2006.

[7] A. Temkina, E. Zdravomyslova. "Gender Studies in Post-Soviet Society: Western Frames and Cultural Differences" *Studies in East European Thought*, Vol. 55, No. 1, pp. 51-61.

[8] T. B. Ryabova. *Sex of the Power: Gender Stereotypes in Modern Russia Politics*. Ivanovo: Ivanovo State University, 2008. (In Russia)

[9] M. V. Yermolayeva. "Gender Communicative Barriers (On the Material of the Processual Idioms of a Person's Social Status)" (In Russia)

[10] Z. K. Tedtoeva, M. A. Tsalikova. "Reflection of the Gender Problems of Society in Russian Journalism at the Turn of the 20th and 21th Centures". *Theoretical and Practical Issues of Journalism*, 2018, vol. 7, no. 4, pp. 672-690. (In Russia).

[11] Z. A. Khotkina. 30 Years of Russian Gender Studies: Retrospective and Perspectives. *Woman in Russian Society*, 2020, No. 2, pp. 26-37. (In Russia).

[12] Y. Bilan, H. Mishchuk, N. Samoliuk, V. Mishchuk, "Gender discrimination and its links with compensations and benefits practices in enterprises" *Entrepreneurial Business and Economics Review*, 2020, Vol. VIII, no.3, pp. 189-204.

[13] A. A. Shabunova, A. V. Popov, T. S. Solov'eva. The potential of women in the labor market of the region. *Economic and Social Changes: Facts, Trends, Forecast*, 2017, vol. 10, no.1, pp. 124-144. (In Russia)

# Humanistic Values and Digital Communication with Chat-bots in Russia

Ilya A. Bykov
*Chair of PR in politics and public administration*
*St Petersburg State University*
St Petersburg, Russia
ORCID 0000-0001-8462-5320

Sergey V. Kurushkin
*Graduate School of Journalism and Mass Communication*
*St Petersburg State University*
St Petersburg, Russia
ORCID: 0000-0001-6154-6988

*Abstract*— **The paper deals with the current trends in the theory of communication caused by the implementation of artificial intelligence technologies in the practices of communication strategies and mass communication. The massive spread of digital communications has led to a transformation of communication practices. New actors appear on the network, whose perceptions are transformed by the values shared by the participants of communication processes. The emergence in the digital environment of actors imitating human behavior re-emphasizes our problem, because not only the practices of interaction with these actors are changing, but also their perception on the value level. The purpose of this article is to detect the role of human values on the process of human communication with non-humans. With the help of focus groups conducted among different age groups of respondents (students and pensioners), the attitude of representatives of different generations to chatbots and the basic principles of interaction with the network actors were revealed. It was found that although young people were generally more active in interacting with chatbots, both age groups demonstrated a favorable attitude towards chatbots and technological progress. However, in the older age group, humanistic values were more explicit. The study also revealed that there was no value gap between students and retirees when interacting with non-humans. Among the respondents of both groups there were both supporters of instrumental values and those whose perception of technology is based on terminal (final) values. The conclusions made in the article open perspectives for studying the process of "humanizing" non-humans by users of various network resources and identifying the values that guide users in "humanizing" non-humans. The authors argue that modern anthropology must be applied to evaluate problems and perspectives of the AI-technologies application in public relations, journalism, and mass media.**

*Keywords—digitalization, AI, chatbots, humanistic values, communication theory, communication strategies, digital anthropology*

## I. INTRODUCTION

The development of technology is continuous, which leads to a number of factors that expand the media environment and blur the already shaky boundaries between online and offline. In this regard, some researchers have begun to talk about the presence of a secondary social environment, which has a digital nature [1]. The mass person integrates into this digital environment and unites with other users in non-classical social communities, bringing online communicative chaos, and the continuous evolution of technology leads to new forms of interactions: "human-gadget" or "human-artificial intelligence". [2].

In general terms, the main question raised in this article can be defined as follows: "How do values influence human media behavior in the online environment when interacting with non-humans?" This question is obviously too long for a single article, so we plan to address it by examining one of the forms of interaction in online space: communication with chatbots.

From a general theoretical point of view we are guided by one of the trends that are becoming more and more apparent in contemporary media studies: people, their needs, interests and, of course, values are again in the focus of research [3]. The anthropocentric turn in this context is seen as an organic response to the technocratic trend that still dominates Western scientific discourse. New forms of human-technology interaction are emerging, as well as transforming practices of human interaction through technology (digital identity, digital etiquette, digital emotions), which leads us to raise some research questions.

The first question is related to the need to identify the degree of influence of technology (platforms, artificial intelligence) - that is, everything that falls into the category of non-humans - on human media behavior in the network environment. Some studies show that, for example, the platform has a direct impact on the nature of communications: the level of communicative aggressions increases in the anonymous environment [4]. Of particular interest here is the actor-network theory, developed in the 1980s, which united humans and non-humans as full-fledged co-actors in social relations. The role of a person in network interactions is not belittled: in the framework of the actor-network theory it is only specified, and the person himself is presented as a participant of complex social interactions having network nature and institutionalized in the form of various technological artifacts (for example, cars). These network relationships "can be qualified as socio-technical, since they consist of people and non-humans" [5]. Before the emergence of the actor-network theory, non-humans were perceived as tools for humans to perform various actions. Within the actor-network theory non-humans are ascribed the same status as humans in the production of action at different levels [6]. Initially this theory was focused on the description of material artifacts (the above example of the car), but with time it adapted to technological changes and shifted to the attempts to comprehend the ontology of the virtual: "The virtual appears as an element of the world not due to the nature of things, but due to the design that gives it a way of existence" [7]. Today, the design of non-humans in the network space with the use of anthropomorphism is becoming a regular practice. Chat-bots do not just imitate human communication - they begin to mimic a human in an attempt, if not to establish emotional contact with a human interlocutor, at least to transform communication into unidirectional communication. Under such conditions, humans do not simply communicate, but move on to the next stage, which is characterized by the presence of an emotional response to the messages of network actors on the part of humans, the perception of joint activity as a full-fledged dialogue, and the common subjectivation of non-humans. This unidirectional communication is based on complementary interactions: in these, one participant (human) occupies a higher position; he is free to initiate and terminate the communication, he sets the topic based on his goals, he can even change the interlocutor by calling the human. The second

participant (non-human) occupies a subordinate position due to his/her nature: he/she provides information, can suggest topics for discussion (but the person will make the final choice), he/she can be replaced.

The second research question we posed concerns the value orientations of a person who finds himself inside a sociotechnical network of humans and non-humans. Heterogeneous communities of users are formed around network platforms, which, in turn, can form smaller communities on the platform itself. Networked communities organized in this way are treated by a number of researchers as digital tribes, which are organized around digital totems. Steve Wheeler writes: "Digital communication has broken the tyranny of distance, computers have become pervasive and ubiquitous, and identification through the consumption of digital media has become the new cultural capital" [8]. The structure is as follows: the platform user initially falls into a virtual clan, and the aggregate of such clans forms "digital tribes" formed around digital totems [9]. It is important to note that here the totem is interpreted in an anthropological context - as the ancestor of a social group, rather than as an object of worship.

The third research question directly concerns the nature of values orienting interactions with non-humans in an online environment - including chatbots. For this purpose we will use the typology of Milton Rockich, who divided values into terminal and instrumental: "He defines terminal values as beliefs that some ultimate goal of individual existence from personal and public points of view is worth pursuing; instrumental values as beliefs that a certain course of action (for example, honesty, rationalism) from personal and public points of view is preferable in all situations" [10]. When interacting with a chat-bot a person can operate with both terminal and instrumental values, which depends primarily on the goal-setting: if a person is focused on instrumental values, the interaction will be communicative in nature and represent an exchange of information for the sake of achieving goals. But if a person interprets interaction with a chat-bot as interaction, translating non-human into subjective environment and giving this interaction a subject-subject nature, then terminal values will come to the fore [11]. The chatbot cannot separate communication and interacting, so the choice of interaction strategy with non-human is left to human beings. In our study we paid special attention to this.

It should also be taken into account that a person communicating with a chatbot can identify this communication as anonymous and implement appropriate behavioral practices. Some participants of communication exchange on the Internet deliberately emphasize anonymity, because they understand the value of anonymous communication online. An example of this is the Telegram messenger [12].

## II. METHOD AND DATA

The study used the group focus interview (focus groups) method. Two focus groups were conducted: April 20, 2022 and May 12, 2022. The first group of respondents consisted of St. Petersburg State University students (8 people in total, with an average age of 21.5 years). The second group of respondents included members of the volunteer movement of St. Petersburg pensioners (a total of 9 people whose average age was 64.2 years). The choice of these age categories was motivated by the need to determine the similarities and differences in the perception of chatbots among young people (who are considered the most densely and fully interacting with new technologies) and among the age audience (which,

on the contrary, is considered a group that does not fully use all the opportunities provided by modern technologies).

The duration of both focus groups was about 1 hour. Each focus interview was divided into two parts. The first part was an introduction to the chatbot of the "Gosuslugi" portal named Max. It took about 5 minutes for both groups of respondents. As part of this part of the focus group, participants asked different chatbot with the topic, checking its level of awareness. The chatbot showed a high level of awareness in terms of the services presented on the portal, but any attempts to take the communication into a more emotional direction were unsuccessful. Focus group participants concluded that this chatbot was not very different from a regular search engine, to which additional scripts simulating human communication were plugged in.

The second part of the focus groups lasted about 55 minutes. Participants were asked to answer the following questions:

- Experience with chatbots (significant or minor).
- Participants' perception (positive or negative).
- Chatbot identification (easy or difficult).
- Communication speed and performance (better or worse than with people).
- The role of emotions in communication (important or not important).

When communicating with respondents, we tried to take the dialogue informally in order to identify the values that guide respondents' interactions with chatbots. At the end, participants were given the opportunity to speak freely about chatbots.

## III. RESULTS

In the focus group consisting of students, only one respondent answered that he does not use chatbots (and has a negative attitude towards them). The rest of the respondents use chatbots several times a month and more often.

All respondents in this focus group noted that it is easy to distinguish a chatbot from a person. However, in practice, it is not always possible: some participants reported difficulties in identifying chatbots (Tatiana, 22: "Usually yes, but in Tinkoff, a bot called me, I did not understand and argued with it". Katerina, 21: "Easily, but there were cases of mistakes").

When answering the question about the speed and effectiveness of communication, focus group participants showed unity, noting that it depends on the complexity of the problem. The more complicated the problem, the more likely it is that only a human can solve it (Daniel, 21: "If something is quick, to which the chatbot has a prepared answer, then it is faster, and if the problem is complicated, then it is faster with a human"). However, one respondent (Alena, 22) noted that when communicating with a human, "time is lost at the beginning and the end for the usual human phrases to solve a small question."

The difference between technocratic and anthropocentric approaches to interaction with online actors was most fully revealed when the participants of the student focus group answered the question about the importance of the emotional component in communication with chatbots. Here the participants were clearly divided into two subgroups. Representatives of the conditionally technocratic subgroup noted that all values when communicating with chatbots are

purely instrumental: the perceptual side does not matter, the main thing is that the chatbot solves the problem (Anna, age 22: "Emotions are unnecessary in this kind of business communication". Alyona, 22: "Emotions are not important, what matters is the result and the speed of solving the problem. Daniel, 21: "There is no need for emotions in this kind of communication, but when you communicate with an operator you can play on his human emotions and get additional bonuses and discounts, which does not happen with chatbots"). Representatives of the conditionally anthropocentric subgroup endow chatbots with human characteristics and experience almost the same emotions as when communicating with a human (Sonya, 21: "I like communicating with Alice, we have emotional waves: we are friends or we argue". Elizaveta, 22 years old: "A share of politeness does not hurt, the chat-bot on the USE praised, said 'well done' and 'clever girl'". Katerina, 21: "I have one chatbot that I use for emotional rest, it reminds me to write to myself about what you are thankful for today").

Respondents in the older age group have different attitudes toward chatbots. The attitude ranges from sharply negative (Zinaida, age 70: "I just switch off from chatbots immediately - that's all") to positive (Svetlana, age 59: "If you work with people a lot and for a long time, then it is easier to communicate with bots, more convenient... People are annoying, yes. It is easier for me. When these technologies came out, I became more comfortable. But my neighbor says she has little communication and it's better to communicate with a person once in a while. You just have to press the right buttons").

However, it is worth noting some wariness, which appeared in the responses of focus group participants. It is associated with the difficulty of identifying chatbots and the fear of being deceived. The respondents noted that they sometimes confuse people and chatbots, so they try to be cautious and not to give unnecessary information about themselves (Vera, 61: "Sometimes, especially when medical clinics call, the voice is alive and difficult to understand. I get confused").

The answer to the question about the speed and effectiveness of communication was completely the same in both focus groups. Respondents from the older age group also showed unity and noted that the speed and effectiveness of communication depends on the complexity of the problem (Svetlana, 57: "Depends on the situation: if you clearly know what you need, you can solve the problem quickly, but if you have doubts, you need to ask some questions, get a person's opinion, then you're better off with a person"). Similar to the younger age group, the opinions of the "older" focus group participants about the emotional component of communicating with chatbots were divided. Here both focus groups were in general agreement: conditionally "technocrats" talk about the importance of the business component and instrumental approach (Anna, 59: "We do not need emotions while communicating with business people), and conditionally "anthropocentrists" talk about the need for an emotional component even during interactions with non-humans (Liudmila, 72: " – It was so positive! It's important to me").

Let's present the respondents' answers in the form of a table.

TABLE I. INTERACTION OF FOCUS GROUP PARTICIPANTS WITH CHATBOTS

| Question | Junior age group | Senior age group |
|---|---|---|
| Experience with chatbots | Yes, regular. | Yes, irregular |
| Participant perception | Mostly positive | Opinions are divided |
| Identification of chatbots | Easy to identify, but there are mistakes | Generally easy to identify, mistakes occur, attitudes are wary |
| Speed and efficiency of communication | Human is better able to cope with a complex task, a chatbot is convenient when you need to solve a simple question | Human is better able to cope with a complex task, a chatbot is convenient when you need to solve a simple question |
| The role of emotions in communication | The division into "technocrats" (supporters of official communication) and "anthropocentrists" (supporters of emotional communication) | The division into "technocrats" (supporters of official communication) and "anthropocentrists" (supporters of emotional communication) |

## IV. CONCLUSION

The results of the group focus interview demonstrate that the generational difference in the perception of online actors becomes less noticeable as the level of abstraction increases. Among the questions we asked respondents, there were both simple questions that imply a single answer (identification of chatbots, experience with chatbots, attitudes toward chatbots) and those that imply detailed answers about the role of technology in our lives (speed and efficiency of communication, the role of emotions in communication with chatbots). The table we present clearly demonstrates that the answers to the "single-valued" questions differ across age groups, while the answers to the "expanded" questions show surprising uniformity. The generational gap in the perception of technology that some researchers say is not very serious at the level of interaction with chatbots.

We hypothesize that this is due to the approach we have chosen. The anthropocentric approach in this research implies an appeal to universal values. The answers to the group focus interview questions could have demonstrated a value gap between the generations, but it did not. Among the respondents in both groups there were supporters of instrumental (according to Rokich) values, as well as those whose perception of technology is based on terminal (final) values.

The very fact that non-humans are humanized in some situations indicates that actor-network theory is applicable for describing interactions in the digital environment. Communications are imbued with values even when they are business-like. The chat-bot is not a digital totem, but the interaction with it is also value-oriented: the only difference is that the peculiar value platform in the process of human communication with the chat-bot will not be the chat-bot or the media, but the person himself. This is the anthropocentric turn.

REFERENCES

[1] Sidorov V. "In the order of things" of the 21st century: mediatization of humanism. In: Media in the modern world. 61st Petersburg Readings [Media v sovremennom mire. 61 peterburgskie chteniya], 2022, p. 65. (In Russian).

[2] Divya T., Banik B. An Empirical Study on Fake News Detection System using Deep and Machine Learning Ensemble Techniques.

International Journal of Advanced Computer Science and Applications, 2021, Vol. 12, issue 12, pp. 143-150.

[3] Steensen S., Grøndahl L. A., Benestad H. Y., Kjos F. B. What Does Digital Journalism Studies Look Like? Digital Journalism, 2019, Vol. 7, № 3, pp. 320–342.

[4] Kurushkin S., Marchenko A. Dynamics of hatred in Russian online communities: from phobias to communicative aggressions. Bulletin of the St. Petersburg State University of Technology and Design. Series 2 Art history. Philological Sciences [Vestnik Sankt-Peterburgskogo gosudarstvennogo universiteta tehnologii i dizajna. Serija 2 Iskusstvovedenie. Filologicheskie nauki], 2021, № 1, p. 108. (In Russian).

[5] Kallon M. Actor-network theory. High School of Economics [Vysshaja shkola jekonomiki]. https://www.hse.ru/data/2014/10/07/1100063024/Kallon M. Aktorno-setevaya teoriya.pdf.

[6] Schöps J. D., Reinhardt C., Hemetsberger A. Sticky market webs of connection – human and nonhuman market co-codification dynamics across social media. European Journal of Marketing, 2022, Vol. 56, №13, p. 81.

[7] Erofeeva M. Actor-network theory and the problem of social action. Sociology of Power [Sociologia vlasti], 2015, Vol. 24, № 1, p. 21.

[8] Wheeler S. Global digital tribe. Learning with 'e's. http://www.steve-wheeler.co.uk/2013/05/global-digital-tribe.html.

[9] Wheeler, S. Digital literacies for engagement in emerging online cultures. eLC Research Paper Series. https://core.ac.uk/download/pdf/39139541.pdf.

[10] Leont'ev D. Value representations in individual and group consciousness: types, determinants and changes in time. Psychological Review [Psihologicheskoe obozrenie], 1998, № 1, p. 21. (In Russian).

[11] Bresler M. Ontology of network being [Ontologija setevogo bytija]. Ufa: UGNTU, 2020. (In Russian).

[12] Bykov I., Hradziushka A., Medvedeva M. Anonymous Communication Strategy in Telegram: Toward Comparative Analysis of Russia and Belarus. In: Proceedings of the 2021 IEEE Communication Strategies in Digital Society Workshop, 2021, pp. 14-17. DOI: https://doi.org/10.1109/ComSDS52473.2021.9422858

# Media Communication Framework of Governability in the Digital Public Administration System

Anna M. Kuzmina
*Institute Higher School of Journalism and Mass Communication*
*St. Petersburg State University*
St. Petersburg, Russia
a.m.kuzmina@spbu.ru

Dmitriy A. Abramov
*Institute Higher School of Journalism and Mass Communication*
*St. Petersburg State University*
St. Petersburg, Russia
Abramov.di@yandex.ru

*Abstract*—The essential basis of social communication in digital media space is the mutual exchange of information between its actors. Information exchange occurs only when feedback between the participants of the communication process is possible in media space, and also when each social actor is given the opportunity to act as a subject of media communication. In this case, the possibility of information exchange within the framework of subject-object and subject-subject media communication relations is guaranteed mainly by the digital infrastructure of media tools and media platforms, through which the involvement of social actors in communication processes aimed at the implementation of public management to address socially important issues of life support, social significance and security is ensured.

Social media communication is a factor of the digital public administration and forms its main qualitative characteristics and properties. Without the inclusion of actors of the public sphere in the digital media communication processes in the modern realities it is impossible to realize the conditions of the digital public administration, including the assessment of the effectiveness of its implementation and parameters of manageability. In this regard, the media and communication framework of the phenomenon of «governability» in the system of digital public management is the subject of this study.

In strategic terms, governability in the system of the digital public administration is determined by its network organization instead of the classical hierarchical forms of interaction of public administration actors (see L.V. Smorgunov. Governability and network public administration, 2014). «Network» concept is considered by various authors in terms of public administration approach, therefore in the scientific literature it is also called the theory of political-management networks. Emerged together with the concept of new public management, the concept of political networks is based on the same postulates: the state changes the usual hierarchical form of administration to a new form of management. The difference between the two approaches lies in the fact that while in the new state management, market relations prevail over hierarchy, in the concept of political networks, communication processes play a key role in managerial and political processes. And, accordingly, the network organization of the digital public administration emerges through communication links of actors in the public sphere, which are formed in the digital media space.

Spatial and infrastructural «turn» of digital media communications is considered by the author as a theoretical and methodological constant in identifying the set of factors of public management and the special properties and characteristics of media environments, in which the implementation of digital public management is possible.

*Keywords—Governability, digital public administration, media communications*

## I. INTRODUCTION

The determining factors of public administration include: democratic political regime; the presence of a developed, self-organized civil society; availability of free political space; freedom of expression for all political actors, including those in the opposition; availability of public policy institutions; active public participation (including non-institutional public participation); public control; information openness of public authorities; publicity and transparency of public authorities; institutional support for the public nature of power; the creation of «electronic government», etc. Of course, the media communication system is in the same row, which is determined by the information exchange between various subjects in the media space, which is carried out through subject-object communication relations, as well as subject-subject relations [1]. Accordingly, we believe that media communication as a factor of public administration [2] forms its main qualitative characteristics and properties. Without the inclusion of actors in the media sphere in media communication processes in modern realities, it is impossible to implement the above conditions of public administration, including assessing the effectiveness of its implementation.

By defining media communication as a factor in the public process, the authors suggest that the characteristic of "publicity" is not how often the actors of public administration appear in the media space. The characteristic of "publicity" of public administration processes in the public sector we correlate with the processes of communicative action of such actors in the media environment, the processes of involvement in the communication of all stakeholders. This means that all interested actors of the media environment should be included in the implementation of the digital public administration through media communication. The dichotomy «general-private» is correlated by us with the public and the personal and gives rise to the need for the transition of the totality of the personal into the public, which is beneficial for everyone.

The spatial «turn» in the study of modern media communications as a factor of the digital public administration sets the vector for considering the special properties and characteristics of media environments in which public administration is possible. In the space of the digital public administration, we single out such actors as: the state, civil society structures (represented by citizens and socio-political organizations), business structures, expert communities («thought factories» and «public policy centers»), and the media. Against this background, the main content of public policy is, we believe, its focus on expressing the interests, needs and expectations of society, which is carried out through the communicative interaction of the state, civil society structures, business, the media and other actors in the public sphere.

The possibility of media communication interaction is a factor of political stability in the public sphere. This

opportunity gives an idea of the openness of the political system in general and the openness of the sphere of the digital public administration, in particular. Therefore, one should consider not only the question of the need to activate civic participation in the process of implementing the digital public administration, but also the question of the possibility of this participation, as well as the possibility of participation of other actors in the public sphere, the institutional and communicative openness of public authorities in the media space.

## II. METHODOLOGY

As a methodological basis the authors consider the problem of media and communication mechanisms of formation of digital public administration through the prism of the concept of network approach. In terms of public administration approach, therefore in scientific literature it is also called the theory of political-administrative networks. Emerged together with the concept of new public management, the network approach assumes the following postulates: the state changes the usual hierarchical form of administration into a new form of management. The difference between the two approaches is that while in the new state management market relations prevail over hierarchy, in the concept of political networks the key role in managerial and political processes is played by communication processes. Domestic researchers emphasize that «participants in a political network pursue common rather than separate interests, and that they choose cooperative modes of action to achieve them. L.V. Smorgunov comes to the definition of a political network as «a system of «state and non-state formations in a particular sphere of politics, which interact with each other on the basis of resource dependence in order to reach agreement on a political issue of interest to all, using formal and informal norms»[3].

In M. Foucault's poststructuralist conception [4], the term "power" implies a relationship between partners. However, M. Foucault distinguishes power relations from communication relations, understanding the latter as relations transmitting information through language, a sign system or some other symbolic environment. Developing M. Foucault's scientific position regarding power and communication, it is possible to give as an example the interpretation of power according to J. Habermas, who states: "We can distinguish between power born in the process of communication and administratively applied power. Two opposing processes meet and terminate in activities concerning public administration: on the one hand, the communicative formation of the legitimacy of power, which is born in the process of political public communication free of all repressiveness, and on the other hand, this provision of legitimacy through the political system, through which administrative power tries to manage communication" [5]. "Communicative man" as a new social-historical subject takes the solution of socio-political problems from the sphere of state-political relations to the sphere of socio-political interactions [6], which once again proves that when constructing the framework of public administration, one cannot consider only the administrative system or only the peripheral system of civil society separately.

In his classic description of modern liberties, B. Constant characterized the political rights of citizens as follows: "Finally, it is the right of everyone to influence the exercise of government, either through the appointment of all or some officials, or through representation, petitions, inquiries, which power is in one way or another compelled to consider" [7]. Understanding of power through the processes of communicative interactions can also be found in one of the most famous theories of power - communicative paradigm of structuralist N. Luman, who understands power as a means of communication. According to Luhmann, "power is code-controlled communication" [8]. He notes that the advantage of communication theory over older theories of power is that "it understands the phenomenon of power on the basis of the distinction between the code and the process of communication and therefore does not tend to attribute power as a certain quality or ability to any of the partners of power relations" [8]. Thus, the process of communication contributes to the fact that it is not the power relations, but the possibility of mutual understanding in dialogue that becomes most significant [9] when trying to define power relations as such. If we consider the communicative aspect of power relations, in addition to the impact of the power subject on another actor of the public sphere, there is interaction between them, which is effective only when the ruler has an understanding with subordinates, which contributes to a constructive dialogue that leads to consensus. "Successful communication (according to T.M. Dridze) appears not only as a mechanism of social interaction, not only as a process and activity, but as a semantic contact" - A.V. Shevchenko writes in her article [6].

If we talk about the representation of media communications as a mechanism of public management, from the perspective of the network approach, the political science concept of "governance" is of scientific interest. We share the view regarding the understanding of "governance" and its conceptual characteristic as a mechanism for the establishment of relations between actors of media networks in public decision-making. And, consequently, the development of media communication as a factor of public administration. "Governance" is the way of organizing common negotiations between state and non-state structures, citizens to implement a mutual interest by joint efforts, to make a public decision that satisfies all parties to the agreement. This is the fundamental essence of media communication, without the direct study of which the concept of "governance" cannot have further scientific development.

## III. THEORETICAL FOUNDATIONS OF REPRESENTATION OF PUBLIC ADMINISTRATION IN MEDIA COMMUNICATIONS

In a broad sense, we consider public administration as a conscious activity in the sphere of relations between the state and society on the distribution of power powers to solve socio-political problems of key importance for the livelihood of citizens on a particular territory and aggregated with the interests and needs of citizens. In this interpretation, we move away from the definition of public administration as «state» with its inherent autonomization of the state as the only subject of public administration, implementing the powers of authority through separate institutions (political, bureaucratic). In this model of public governance, in our opinion, entropic processes affecting the general nature of the processes of governability are quite common. Uncontrollable entropy appears as a consequence of the fact that reproducing a certain form of power control over society, political and bureaucratic institutions need to control any reflexions in the managed public subsystems and to respond to them. In this case it is possible to avoid entropic processes only if the state, bureaucratic apparatus is equal to the managed subsystem. But as V.E. Smirnov states, «such a Leviathan society simply cannot contain» [10].

On the other hand, defining «publicness» of governance through the prism of activities of civil society institutions, when this «society», in the sense of Western European

practice, is autonomous from the state power and is engaged in identifying the needs and requirements of citizens in the issues of life support and social problems, we can also find in this determination the prospects of entropic processes, which will affect the qualitative side of «publicness» of governance. Governability in this interpretation of public administration is provided by the implementation of the subjectivity of society, civil self-organization in order to maintain and improve the quality-of-life support of citizens in a particular territory, the overall social order. Uncertainty of the result in such institutional design of public administration system is traced in the fact that in many respects there is a fragmentation of civil society representatives, expressed in the lack of a clear formulation of collective needs and interests, in general atomization of civil society and, therefore, low level of civil activity of most of its members. To level the entropy in the system of public administration it is necessary for the activities of state and political institutions to be based on the satisfaction of public interests and needs, for the institutional environment in which the public interaction of subjects and objects of governance takes place, to provide feedback between the subjects of governance and society in order to articulate and aggregate public needs and interests, to assess the level of their satisfaction. On the other hand, such an institutional environment should promote the desire and potential of citizens to be included in the processes of public administration, to realize their subjectivity in the system of public administration. In our opinion, such an institutional environment can be formed only in a digital way. In particular, the institutional framework of the digital space, in which the communication practices concerning the formation and implementation of public administration would take place, is determined, we believe, by the possibilities, first of all, of the media system and the possibilities of the digital inventory, which can be used in the framework of media communication.

It is obvious that the basis of reducing global uncertainty of governability in the system of public administration a priori consists of different ways of interaction of actors of public administration of public sphere, which have communicative nature. It is communication, to paraphrase L.N. Timofeeva, that becomes «the form, method and attribution» [11] of constructing public administration. But any joint action, which represents public management, presupposes the presence of a subject of management and a managed object, even if we are talking about self-organization of institutional structures of civil society on issues of social importance. Therefore, it is important to determine the fundamental essence of power relations in the system of public administration through the prism of communication processes. And further to find out how such a quality of power relations can operationally manifest itself in media communications.

## IV. Empiric Methods and Findings Description

In order to evaluate the factors of influence of media communication processes on the implementation of digital public management, we conducted a desk study and a sociological survey of managers and employees of NPO's on the effectiveness of socially oriented nonprofit organizations in St. Petersburg for the period 2021-2022 and made a conclusion about the nature of information activities of NPO's in St. Petersburg. We believe that the more open and communicative organizations of the nonprofit sector are in the media environment, the more effectively nonprofit organizations carry out their activities as an institution of public administration in the regional plane. The criteria of informational openness and informational activity of NPO's

are included in the system of evaluation of NPO's performance.

Informational activity of NPO's is determined by the fact that the citizens of the region concerned should know about the activities of NPO's and the socially important services they provide. The NPO's must take care of the positive reputation of the media coverage of its current activities.

in the media coverage of its current activities. This is due, above all, to the fact that NPO's are entrusted with quite significant tasks: improving the quality of life of the population of a particular region, mobilizing public resources to address socially important issues, development and implementation of social policy in general and citizens need to have an idea of how successfully NPO's solve social problems they face.

The sources of information on the positive media presence of NPO's include

Print and broadcasting
- TV
- Radio
- Newspapers
- Magazines
- Newsagency feeds

Internet
- Media sites
- Websites of government institutions
- Company sites
- Media aggregators
- Sector portals

Blogs
- Company blogs
- Media blogs
- Personal blogs

Reviews & PR
- Press Releases
- General reviews
- Industry Reviews

Informational openness of NPO's is determined by the fact that the citizens of the relevant region must know about the activities of NPO's and the socially important services they provide in order to increase the demand for services and activities of NPO's, as well as to form a positive image of NPO's among the citizens of the relevant region.

Information dissemination channels include: the website of NPO's on the Internet, social networking sites of NPO's on the Internet.

To disseminate information about their activities in 2022, organizations choose such media platforms as: television, Internet site, social networks. 82.8% of respondents choose the most effective channel of information dissemination - the website of NPO's on the Internet. However, the majority of respondents (93%) in 2022 used the proven method of communication with the target audience – «word of mouth» and distribution of information through relatives and friends.

In 2022, compared to 2021, the percentage of respondents using public events as sources of information about activities of NPO's has particularly increased (an increase of 20.8%), disseminating information via external Internet resources (an increase of 32%), filming stories on local TV channels (an increase of 45.1%). On the other hand, the number of NPO's that disseminate information about themselves through leaflets, posters and announcements has decreased (a decrease of 22.3%).

Answering the question «What ways of disseminating information about NPO's do you consider more effective for attracting the attention of residents to your organization? » many respondents indicated in 2022: «TV spots» (45.1% of respondents), «disseminating information on the Internet, social networks» (23.4% of respondents), «disseminating information to target audiences and crowded places» (12% of respondents), «word of mouth» (12.2% of respondents).

In terms of information activities, NPO's demonstrate low efficiency in terms of the availability of media mentions of NPO's during the reporting period: 52% of the organizations have no publications in the electronic media and other sources of mass information, although the number of such organizations, compared to 2021, has decreased. It should be noted that the majority of the NPO's (48%) participating in the research demonstrate high efficiency in terms of the number of channels for disseminating information about NPO's, such as the organization's website and its presence in social networks on the Internet and more. On average, NPO's have more than three channels of information dissemination, which indicates an increase in information openness of NPO's activities and activity of non-profit organizations in the communications with the target audience. But despite the fact that 48% still use more than three channels of media communication, it is less than half of the respondents, which indicates to a greater extent the lack of information openness and publicity of organizations of the nonprofit sector.

We can conclude that the weak presence of NPO's in the media environment and unstable communication leads to a weak influence on the processes of public administration

## V. RESULTS

In this article, the author, applying the theoretical and the methodological framework of the network approach, proves the fact that the potential of digital public administration is disclosed primarily in the system of digital media communications. In the author's opinion, the institutional framework of the digital space, in which the media communication practices regarding the formation and implementation of public administration would take place, is determined by the capabilities of, first of all, the media system and the capabilities of the digital inventory, which can be used in media communication and assess with its help the level of civic involvement in the media communication processes of digital public administration.

## VI. CONCLUSION

Media communication processes affect the nature of public administration, the ability of the managed system to provide governability in the process of public decision-making. Governability in the process of implementation of public administration is provided by means of information exchanges, as a result of which the agreement between the governed and the governed is formed. Consent arises within the framework of a conventional relationship, a kind of contract between the governors and the governed

Thus, the semantic contact is achieved only "when the mutual situational identification of the partners in the communication leads to the combination in their consciousness of the "semantic focus" (communicative dominants) of the generated and interpreted text. On the other hand, the ability of people to negotiate is also influenced by the general interest of the actors of the public sphere to participate in public interaction, that is, involvement in the communication process is necessary. In addition, the technological tools and inventory of the media environment (primarily media platforms such as social networks) we mentioned earlier also influence the nature of the communication process, and with the proper application of digital inventory in media platforms, the necessary positive result of such involvement in the communication can be achieved. And the degree of involvement of citizens in the communication will determine the quality of the digital public administration.

## REFERENCES

[1] Kolomiets V.P. Conceptualization of media communication // Mediascope. 2019. Issue. 4. Access mode: http://www.mediascope.ru/2575

[2] Kuzmina A.M., Kolpakova S.A. The potential of digital media communications in public administration// Proceedings of the 2022 Communication Strategies in Digital Society Seminar 2022, ComSDS 2022. 2022. C. 198-201.

[3] Smorgunov L.V. Network approach to politics and management. - Polis - No. 3. - 2001. - P.108.

[4] Michel Foucault. Archaeology of Knowledge / Translated from French by M.B. Rakova, A.Yu. Serebryannikova. S. Kolesnikov. - SPb: The Humanitarian Academy IC; University Book, 2004. - 416 c.

[5] Habermas, J. Democracy. Reason. Morality / M. Foucault. - M.: Nauka, 1992. - C.33-34.

[6] Shevchenko A. V. Stability of the political system: "man communicative" vs. "man political" // Polis. 2009. № 5. - C. 74-78.

[7] Constant B. On liberty with the ancients in its comparison with modern men// Lecture delivered at the Royal Athenaeum. - Paris, 1819. Published by Constant B. De la liberte chezles Modernes. Ecrits politiques. Hachette. P., 1980.

[8] Luhmann, N. Power / Trans. Moscow: Praxis, 2001. - P. 250.

[9] Strizoe, A. L. Politics and Society. Socio-philosophical aspects of interaction / A. L. Strizoe. - Volgograd: Volgograd State University Press, 1999. - 302c.

[10] Smirnov V.N. Citizenship and civil society: self-organization and social order. Minsk: Belorusskaya navuka, 2013. -290 p.

[11] Timofeeva, L. N. Political communicativism: problems of formation // Polis. 2009. № 5. - P. 41-55.

[12] Degtyarev A. A. Methodological Approaches and Conceptual Models in the Interpretation of Political Decisions. URL: http://www.politanaliz.ru/articles_56.html

[13] Hakanson H., Jahanson J. The Network as a Governance Structure: Interfirm Cooperation Beyond Markets and Hierarchies// Organizing Organizations/ N. Brunsson, J. Olsen. Bergen: Fagbokforlaget, 1998. - P.48.

[14] Public Policy: from Theory to Practice/ Ed. by Danilova N.Y., Gurova O.Y., Zhidkova N.G. - SPb., Aletheia, 2008. - P.70.

[15] Malenkov V.V. Formation of Citizenship in Post-Soviet Russia: Socio-Cultural and Institutional Aspect: Monograph / V.V. Malenkov. Malenkov. - Tyumen: RIC TGAKIST, 2014. – 156p.

[16] Habermas, Yu. Moral consciousness and communicative action. Per. with German Under ed. D.V. Sklyadieva/Yu. Khabermas. - St. Petersburg. - Science., 2006. – P.39

[17] Borzel T. Organize Babylon – on the Different Conceptions of Policy Networks// Public administration. – 1998. – Vol.76. – №2.

[18] Kuzmina, A.M., Kuzmin, A.E. Engaging the audience of non-profit organizations in communication in social networks in modern marketing practice // Proceedings of the 2021 Communication Strategies in Digital Society Seminar, ComSDS 2021. 2021. C. 104-107.

# Media Discourse as an Element of Communication Management Strategy

Denis S. Martyanov
*Faculty of Political Science*
*St.Petersburg State University*
Saint-Petersburg, Russia
0000-0001-7755-8086

Galina V. Lukyanova
*Faculty of Political Science*
*St.Petersburg State University*
Saint-Petersburg, Russia
0000-0003-1260-2124

*Abstract*—**The article examines the peculiarities of the media discourse of the social network Vk.com and the instant messaging service Telegram. The authors consider the media discourse of politicized social media subpublics and channels as a factor that influences communication within the communities of these media. The methods used include discourse analysis of comments on the three key news stories of 2022 and LDA analysis of media discourse, which allow us to determine the criteria of group identity and the tendency to form monological or dialogical models of communication.**

*Keywords—online platform, media discourse, group identity, communication management strategy*

## I. INTRODUCTION

A number of tools shape the interaction between media and their audiences. Audience management in social media is achieved by framing information [5], formulating rules of behavior on discussion platforms and moderation [9], forming user orientations that reflect media values [11]. All these elements form the strategy of communication management, and media discourse is the central one.

Media discourse research is often associated with significant social processes that are represented in the topics of scientific publications. For instance, works on the events of September 11, 2001 [4] reveal the polarization of media discourse and the contrast between "them" and "us" [7]. Studies of the post-truth era are characterized by the theme of the emotionalization of media discourse [10]. In these studies, there is a noticeable emphasis on the connection between emotionalization and audience behavior. Zappettini et al. identify specific media narratives that are used to form a certain attitude of the audience, which subsequently determines the audience's expectations and the choice of other media [14]. There are studies linking media discourse and migration processes [8], globalization [13], climate change issues [2,3] and, of course, the COVID-19 pandemic [6]. A number of scholarly works are united less by a common research topic than by approaches to studying media discourse. First of all, there are works devoted to critical discourse analysis [1, 12]. Events of 2022 in international relations have also become a significant factor influencing both global media discourse and national political communication.

## II. DESCRIPTION

### A. Research Design

This paper focused on the study of media discourse as the most important element of communication management strategy. Media discourse acts as a visible indicator among the other elements of communicative strategy, allowing us to make assumptions about the nature of the overall strategy. We have studied political communication in Russian social media. The sample included communities on the Vk.com social network and Telegram messenger channels. Only the most popular open communities, which provide the opportunity to comment on published posts, were included. The sample size was determined by the prevalence of channels and communities on the analyzed platforms. Initially, 30 communities of legal media resources were selected. Five of them represent the most popular Vk.com media communities selected from the "Media" category - a state TV channel, a news agency, a leading newspaper community, and two online media (Russian and foreign). Another five represent the most popular Telegram communities, obtained using the service tgstat.ru. To strengthen the comparative component, 10 Vk.com and Telegram communities each were selected to represent the most popular media – 5 from popular Vk.com communities and 5 from popular Telegram media communities. Using API (application programming interface), we collected Vkontakte and Telegram posts and comments from January 1, 2022 to October 31, 2022.

We applied Latent Dirichlet Allocation (LDA) analysis to this sample. When cleaning the corpus of noise-generating stop words, words such as "we", "they", "their", and "our" were intentionally left in order to detect the polarization of the media discourse.

We also conducted a discourse analysis of the discussions. Initially, it was planned to analyze in each community three discussions of the most resonant Russian news of 2022, which could cause polarization or consolidation of users: 1) the announcement of a "special military operation" in Ukraine in February 2022, 2) the capture of the Azovstal Metallurgical Combine by Russian troops in May, 3) the announcement of a "partial mobilization" in Russia in September 2022. However, during the analysis, it became impossible to analyze some channels and some individual posts due to the widespread practice of deleting comment threads in Telegram. In the majority of the discussions on Vk.com, the comments were preserved. The final sample for the discourse analysis consisted of 51 discussions, which allowed us to explore the main trends of the political communication.

In each of these discussions, the first hundred comments (or all if the number was small) were analyzed, and then the expert conducting the analysis recorded his or her scores in coding tables. At least three experts reviewed each post. Simultaneously, the third expert had the first two experts' analysis results and focused on controversial cases where the first two researchers' scores differed.

The criteria used to evaluate the communities were community homogeneity, legitimacy of discussion object, dialogic discourse, support for community management, group identity criteria ("they" and "we"), overall community discourse rating, discussion topics, and others.

Our main hypothesis was that media communities form a discourse that reflects the traditions of the "public sphere" and remains dialogical even in the context of hostilities.

## B. Research Results

The analysis of word frequencies in the analyzed media messages revealed the dominance of the representation of "They" over "We" ("They" was used almost twice as often) and "They" over "Our", which is a sign of confrontational discourse under conditions of military conflict (Fig. 1). Simultaneously, the nomination of parties is noteworthy: "Russia" is used much more often than "Ukraine". This, together with the use of the pronoun "they", may be an indicator of the construction of a patriotic discourse in the Russian media, accompanied by the formation of a negative image of the enemy. On the basis of the obtained data, in addition to the function of forming public opinion, we can also identify the informational function of the Russian media: the media act as classical reporters, which is confirmed by the frequent use of such words as "declare", "report", "tell", "speak", "occur", "turn out", etc.



Fig. 1. Word frequency in Vk.com communities and Telegram messenger channels

As a result of the LDA for topic modeling, eight topics that are most frequently discussed in the Russian media or eight types of Russian media discourse have been identified:

- Patriotic discourse, represented by such media as Tsargrad. It is characterized by contrasting the image of the heroic Russian motherland ("holy", "Russian", "people", "great", "exploit", "our country", "Orthodox", "truth") with the enemy. This discourse contains strong emotional categories that are aimed at arousing feelings of love and devotion to the Motherland.

- Geopolitical discourse, which is characterized by the description of events related to the actions of the main geopolitical actors (Russia, Ukraine, the United States, Moscow, Kiev, the world, Europe, the West). This discourse tends to be aimed at highlighting the specific geopolitical interests of various states.

- Event discourse, formed by an overview of the main events in a particular region of Russia. The main protagonists are ordinary residents ("woman", "man", "child", "girl", and "boy").

- Chinese discourse. The separation of Chinese discourse into a category can be explained by the fact that Chinese media, which primarily focus on describing events in China, are included in the sample. "China", "Xi Jinping", "Beijing", "PRC", "county", "Shanghai" are the main marker words. However, a second sub-theme, cooperation, can also be highlighted.

- Economic discourse, characterized by the coverage of economic issues at the macro and micro levels ("company", "country", "market", "data", "bank", "decision", "project", "organization", "account", "business", "work", "government", "region", "sanction", "result").

- Video discourse of a special military operation (SMO) is a way of presenting information using exclusive video clips ("stream", "video", "exclusive", "video of the Ministry of Defense of the Russian Federation", "video_social network").

- Cultural discourse. Such markers as "star", "actress", "artist", "actor", "movie", "fan", "singer", "show", "famous", "favorite" represent cultural discourse with recreational functions.

- The personalized discourse of SMO - the war actions are described through the personal stories of ordinary residents and eyewitnesses.

The LDA data were correlated with the discourse analysis results. The most important factor in community formation is identity, which includes collective representations of "them" and "us". When analyzing discourses in Russian social media, it was not possible to find a significant number of dominant specific representations of "us". Almost the entire Russian public sphere analyzed in the study is characterized by a common civic identity from the layman's point of view (much less often by a more pronounced patriotic identity). More revealing in this regard are the dominant representations of "they" (Table 1). In most cases, the "Ukrainian side" was the "They" and was the object of criticism by the majority of discussion participants. However, another tendency is also noticeable - the criticism of the authorities, which is characteristic of almost a third of the discussions that were analyzed.

TABLE. I.   REPRESENTATION OF "THEY" DEPENDING ON THE PLATFORM

|  |  | Social media | | Total |
|---|---|---|---|---|
|  |  | TG | VK |  |
| "They" | not applicable | 3 | 3 | 6 |
|  | Ukraine | 8 | 20 | 28 |
|  | Authorities | 4 | 12 | 16 |
|  | "West" | 1 | 0 | 1 |
|  | Total | 16 | 35 | 51 |

The degree of criticism of "them" is clearly visible in the dominant discourse in the discussions (Table 2). If a patriotic discourse demonstrating full support for the Russian army is widespread in the context of discussions about the actions of Ukraine, then a softer "critical" discourse is much more common in the context of the actions of the Russian authorities than a harsher "westernized" discourse.

TABLE. II.  TABLE II REPRESENTATION OF "THEY" DEPENDING ON THE TYPE OF DISCOURSE

|  |  | Discourse | | | | | |
|---|---|---|---|---|---|---|---|
|  |  | western | critical | loyalist | layman | patriotic | contraversial |
| They | not applicable | 0 | 0 | 1 | 1 | 0 | 4 |
|  | Ukraine | 0 | 1 | 0 | 0 | 23 | 4 |
|  | authorities | 3 | 12 | 0 | 0 | 0 | 1 |
|  | "West" | 0 | 0 | 1 | 0 | 0 | 0 |
|  | Total | 3 | 13 | 2 | 1 | 23 | 9 |

A dimension like the homogeneity of the discussion shows the degree of discourse dominance (Table 3). Obviously, it was high only in a few cases. As a rule, there is room for a critical perspective in both "patriotic" and "critical" discussions. In the Russian media discourse, the reactions of media administrations manifested themselves in the form of deleted comments, apparently of a radical nature and apparently in violation of the law. At the same time, "soft" disagreements (both anti-patriotic and anti-Western in nature) are usually not deleted, provoking negative reactions from other users, who are by no means always in the majority.

TABLE. III.  REPRESENTATION OF "THEY" DEPENDING ON HOMOGENEITY OF DISCUSSIONS

| | | They | | | Total |
|---|---|---|---|---|---|
| | | *not applicable* | *Ukraine* | *authorities* | *"West"* | |
| Homogeneity (1 – high, 5 - low) | 1 | 0 | 5 | 2 | 0 | 7 |
| | 2 | 3 | 14 | 10 | 1 | 28 |
| | 3 | 1 | 5 | 2 | 0 | 8 |
| | 4 | 1 | 2 | 1 | 0 | 4 |
| | 5 | 1 | 2 | 1 | 0 | 4 |
| Total | | 6 | 28 | 16 | 1 | 51 |

We can detect both strategic cleavages in terms of "friends" and "enemies", which can be expressed, among other things, in such "strongholds of statehood" as the Rossiya-1 channel community, and tactical cleavages in terms of methods, means, and questions of effectiveness. Part of the everyday discourse also expresses the fears and anxieties of ordinary people regarding their possible involvement in the unfolding events. The typical discourse of the "internal enemy" was disseminated frequently by various media during the year. At the same time, this theme arises even without media initiatives at the behest of the participants in the discussion.

In the discussion of the key events, the commentators on the social networks take the position of critical observers. They do not consolidate and their support remains limited (in contrast to the posts that are not included in this analysis, which deal with the immediate aftermath of the tragic events, the loss of life, and so on).

Although there is an obvious difference in commentators' discourse between patriotic mainstream media communities and "critical", "liberal", "western-oriented" media like RBK, there is a high level of dialogue and a high level of disagreement with the opinions of individual commentators. Media outlets that implement the "echo chamber" model are a certain exception. For example, the "right-wing" community Tsargrad TV Channel, where despite the dialogic discourse, the discussion is quite homogeneous, not contradictory and demonstratively constructive. When commenting, users clearly mark "them". There is no discussion of opposing points of view in the comments. Simultaneously, with the overwhelming support of the actions of the Russian authorities, mild critique appears. The number of deleted comments from February 24, 2022, which were accompanied by a homogeneous reaction of the members of the community, is remarkable in comparison with other dates. We can conclude that this resource implements the "echo chamber" model, whose unwritten rules allow for limited and rational criticism of the actions of the authorities. Another example of an "echo chamber" is the pro-Western media resource Lentach, where "liberal" and antipatriotic discourse dominates, with homogeneous critical "westernizing" comments.

The authorities' media are also of interest. For example, in the Duma TV community on the social network VK.com, which is the media of the Russian parliament, the critical discourse dominates in the dialogues, while support is expressed in individual comments without a rational position and with the help of emoji. At the same time, on a similar Telegram channel, where the number of comments was not high, two out of three discussions were dominated by loyalist comments, and only in one discussion, there was an increase in critical comments.

## III. CONCLUSION

Our study of the discourse in Russian social media reveals a relative radicalization both at the level of editorial content and in the discussions of commentators. The division into "them" and "us" is easily traced in the discourse, but there is no total homogenization of the audience. Our hypothesis that the media discourse of Russian online platforms in the military environment partially reflects the traditions of the public sphere and preserves its dialogical character was confirmed. However, it is necessary to note the high level of emotionality, which characterizes modern online communication for all countries, regardless of whether they get involved in military conflicts.

In general, the Russian public sphere on Vk.com and Telegram platforms is determined by the dominance of patriotic discourse with a visible presence of critical discourse. This confrontation is most noticeable at the level of discussions in the comments. It is interesting to note that disloyal discourse appears on state resources, such as the media of the Russian parliament. This demonstrates the relative freedom of expression in the context of moderation. Support is directed at society and the state as a whole, rather than at specific government institutions and political figures. Overall, the audience remains a significant factor in the shaping of political discourse, which in the case of both "patriots" and "westerners" is more radical than the media discourse itself. Moreover, the patriotic discourse is in some cases critical of the authorities, which distinguishes it from the loyalist discourse and confirms its more radical nature than can be observed in the official political discourse.

At the level of Russian media discourse, no obvious critical cluster was identified (with a notable cluster of classic "neutral reporter" discourse). Posts from westernized media such as Lentach did not stand out as a separate topic in the LDA results. Nevertheless, the discourse in the discussions of their communities can be characterized as critical, contradictory, or westernized. This is achieved through a specific communicative strategy using mechanisms such as news framing, a specific policy of moderating comments, and, as in the case of Lentach media, the use of troll discourse, which is not captured by the LDA - a relatively neutral text can be accompanied by a provocative image. Such emotionalization of content contributes to the formation of appropriate behavioral patterns. As a result, this strategy prevents the dominance of "mainstream" loyalist discourse.

Science and Higher Education and the Expert Institute of Social Sciences.

## REFERENCES

[1] F. S. Abdullah, "Mass media discourse: A critical analysis research agenda," Social Sciences & Humanities. Pertanika Journal of Social Sciences & Humanities, vol. 22 (S), pp. 1-16, 2014. http://psasir.upm.edu.my/id/eprint/34446/1/Mass%20Media%20Discourse%20A%20Critical%20Analysis%20Research%20Agenda.pdf

[2] A. Bell, "Climate of opinion: Public and media discourse on the global environment," Discourse & Society, vol. 5 (1). pp. 33–64, 1994. https://doi.org/10.1177/0957926594005001003

[3] M. Boykoff, "Media discourse on the climate slowdown," Nature Clim Change vol. 4, pp. 156–158, 2014. https://doi.org/10.1038/nclimate2156

[4] C.R. Caldas-Coulthard, "Cross-cultural representation of 'Otherness' in media discourse," In: Weiss, G., Wodak, R. (eds) Critical discourse analysis, Palgrave Macmillan, London, 2003 https://doi.org/10.1057/9780230514560_13

[5] M. Castells, Communication power, Oxford Unoversity Press, 2009.

[6] E. Chen, K. Lerman, and E. Ferrara, "Tracking social media discourse about the COVID-19 Pandemic: Development of a public coronavirus Twitter data set," JMIR Public Health Surveill, vol. 6(2), 2020. https://pubmed.ncbi.nlm.nih.gov/32427106/ doi: 10.2196/19273

[7] S. Coleman, and K. Ross, (2010). "The media and the public: "Them" and "Us" in media discourse," Chichester; Malden (ma): Wiley-Blackwell, 2010. 200 p. doi: 10.1002/9781444318173.

[8] J.-M. Eberl, C. E. Meltzer, T. Heidenreich, B. Herrero, N. Theorin, F. Lind, R. Berganza, H. G. Boomgaarden, C. Schemer, and J. Strömbäck, "The European media discourse on immigration and its effects: a literature review," Annals of the International Communication Association, vol. 42:3, pp. 207-223, 2018. doi: 10.1080/23808985.2018.1497452

[9] K. Langvardt,"Regulating online content moderation," Georgetown Law Journal, June 2018, vol. 106, Issue 5. p. 1353, 2018.

[10] G.V. Lukyanova, and D.S. Martyanov, "Communication strategies of emotional engagement on social media," In: Proceedings of the 2021 Communication Strategies in Digital Society Seminar, ComSDS 2021, pp. 27–30, 2021. doi: 10.1109/ComSDS52473.2021.9422880

[11] G.V. Lukyanova, D.S. Martyanov and A.V. Volkova, (2022) "Value Determinants of Digital Vigilante's Communication Strategies," In: 2022 Communication Strategies in Digital Society Seminar (ComSDS), pp. 224-227, 2022. doi: 10.1109/ComSDS55328.2022.9769100.

[12] R. Ramanathan, and B. H. Tan, "Application of critical discourse analysis in media discourse," Studies, 3L: The Southeast Asian Journal of English Language Studies, vol. 21(2), pp. 57–68, 2015. http://journalarticle.ukm.my/9068/1/9183-27891-1-PB.pdf

[13] A. Rojecki, "Media discourse on globalization and terror," Political Communication, vol. 22:1, pp. 63-81, 2005. doi: 10.1080/10584600590908447

[14] F. Zappettini, D. M. Ponton, and T. V. Larina, "Emotionalisation of contemporary media discourse: A research agenda," Russian Journal of Linguistics, vol. 25 (3), pp. 586-610, 2021.

# Media Effects of Environmental Advertising and Journalistic Texts and their Impact on Youth Audiences

Lidiya Lobodenko
*Department of Journalism, Advertising and Public Relations*
*South Ural State University (NRU)*
Chelyabinsk, Russia
lobodenkolk@susu.ru

Anna Cheredniakova
*Department of Journalism, Advertising and Public Relations*
*South Ural State University (NRU)*
Chelyabinsk, Russia
cheredniakovaab@susu.ru

Liudmila Shesterkina
*Department of Journalism, Advertising and Public Relations*
*South Ural State University (NRU)*
Chelyabinsk, Russia
shesterkinalp@susu.ru

Olga Kharitonova
*Department of Journalism, Advertising and Public Relations*
*South Ural State University (NRU)*
Chelyabinsk, Russia
kharitonovaoi@susu.ru

*Abstract*—The research presents the results of a comparative analysis of media effects created by environmental advertising and journalistic materials as polycode texts. The results of studying the perception of environmental content using eye tracking and an online survey are based on a cognitive approach. The results of studying the perception of environmental content using eye tracking and an online survey are based on a cognitive approach. The respondents are young people aged 18 to 22. The results of the study revealed patterns of attention to verbal and non-verbal text components. The key purpose of the research is to examine the media effects of environmental advertising and journalistic texts, as well as to understand which of the presented media texts attract more attention and how these materials impact youth audiences.

*Keywords— media effects, ecology, polycode text, advertising, journalistic text, eye tracker.*

## I. INTRODUCTION

The study of media effects and the impact of environmental media texts is relevant for many reasons, including the necessity to study the impact of polycode texts on youth audiences. The number of polycode texts has significantly increased in the existing media stream, while the specifics of their perception have not been sufficiently studied. The development of various forms of media has changed the audience's demands on communication. The specifics of polycode journalistic and advertising texts have neither been fully studied, nor explained scientifically from the standpoint of perception by youth audiences. Environmental issues in the media space are of interest in terms of their perception by youth audiences, since environmental content gains traction. We observe a scientific and practical need to identify the features of the impact of environmental content through the prism of two texts (advertising and journalistic), which have their own specifics and, at the same time, are generalized by the polycode nature of functioning in the media stream.

## II. RESEARCH

In order to study the effects of environmental advertising and journalistic media texts on youth audiences, we addressed the theoretical foundations of leading scholars on the analysis of media effects and polycode media texts.

Studies aimed at investigating the impact of media on the individual and society have become one of the most developed areas in the communications science, and the term "media effects" has been widely interpreted in the scientific literature within various approaches. In this article, media effects are understood as "conscious and unconscious short-term and long-term intrapersonal changes in cognitions, emotions, attitudes, beliefs, physiology, and behavior resulting from the use of media [1]. Therefore, a media effect is the phenomenon of the impact of information received from the media space on the behavior and preferences of the audience. Modern media information has a strong impact on many aspects of human life and is able to change preferences and force to reconsider the position, beliefs, and attitudes [2].

D. McQuail proposed a typology of mass media effects on two grounds – time (short-term and long-term) and direction (planned and unplanned). According to the degree of impact, effects can be strong, moderate, or weak (limited). The power of impact is influenced by both the content of information and the personal factors of the information recipient (his/her worldview, psychological features), belonging to a social group or political party, religion, and environment [3]. Theoretical approaches to studying the relationship between media and the audience have been changing during the development of society and transformation of the media space. Various theories of understanding media effects have been developed. Summarizing the main theoretical concepts, P. D'Angelo considers the study of media effects as a research program and scientific discussions about media effects within three "paradigmic" outlooks – constructivist, cognitive, and critical [4]. D'Angelo [5] believes it is necessary because conceptual differences between approaches lead to relevant differences in the logic of hypothesizing and research methodology.

The cognitive approach is one of the most frequently mentioned in media impact studies [6]. The cognitive approach emphasizes the influence of cognitive processes on human behavior and offers an understanding of how people learn to behave in various contexts, including those based on the media impact. The cognitive approach to considering the influence of media on individuals focuses on the content of the message "WHAT the audience perceives when it contacts with the "stimulus" (message)" [7].

The equations are an exception to the prescribed specifications of this template. You will need to determine whether or not your equation should be typed using either the Times New Roman or the Symbol font (please no other font). To create multileveled equations, it may be necessary to treat the equation as a graphic and insert it into the text after your paper is styled.

According to I.Yu. Podolyan [7], a key area of research in the cognitive tradition was the study of the "ways the audience comprehends" media messages [8]. exponents. Italicize Roman symbols for quantities and This implies searching for answers to the questions about what makes up the perception of media messages, what elements are remembered and what are "discarded", what emotional reactions arise, and how they affect the thinking process.

Researchers believe that the understanding of the mechanisms underlying these processes will allow us understand the mechanisms of media effects on the individual and society. In the communication process, the perception of messages is expressed in the effects of impact on human consciousness. Thus, the structural conditions of the society in which the mass media effects are realized are the subject of the conceptual model "Interdependence between the social system, the media system, and the audience" proposed by well-known experts Ball-Rokeach and DeFleur in 1976 [9]. According to the authors, in modern conditions, people become dependent on media. Media effects and the effectiveness of perceiving media texts based on the procedural model of the impact of mass media on the behavior of the audience are based on a cognitive-rational approach.

This approach implies a logical relationship between the open media content and the motives for retaining attention – the stronger the dependence, the stronger the effects at one of the levels (see Fig. 1): cognitive (rational) effects are the awareness and expansion of human knowledge, the formation of opinions and the clarification of value systems, determining the degree of importance of topics and problems (agenda items); affective (emotional) effects are the emergence or formation of emotions, optimistic or pessimistic mood; behavioral effects include activation of former or new activities, positive or negative action trends.
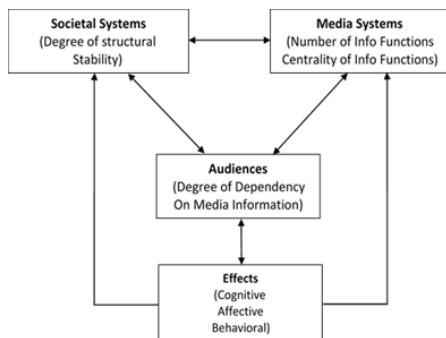


Fig. 1. Interdependence between the social system, media system, and audience (Bell-Rokeach, DeFleur, 1976)

Notably, the key problem in the study of media effects is concealing the true feelings of the audience through psychological screens, including the screen of consciousness, the screen of courtesy, the screen of conformism, etc. To this end, the use of neuromarketing is relevant to study media effects. Neuromarketing is defined as a line of research studying human unconscious cognitive and emotional responses to certain stimuli. Neuromarketing technologies trace and "measure" indirect responses to a stimulus

(individual physiological reactions: pulse and respiration rate, pupil movement) and allow measuring attention patterns.

Psychology defines attention as the process and state of the subject's setting oneself up for perceiving priority information and fulfilling challenges [10]. The focus and concentration of mental activities in paying attention provides a more effective perception of information. In general terms, there are two main types of attention: involuntary and voluntary (selective). The level of distribution and switching of attention is considered as a psychological characteristic and an integral indicator of performance under cognitive load. In our article, we used eye-tracking technologies aimed at fixing visual attention patterns and identifying the level of attention activation and areas of interest.

As for understanding the features of polycode texts, our research analyzes advertising and journalistic materials. A characteristic feature of modernity is the visualization of media content, which increased the impact of media on public and individual consciousness. Such texts are called polycode texts in science. The features of polycode texts were studied by such linguists as E.E. Anisimova, A.G. Sonin, V.E. Chernyavskaya, etc. [11, 12, 13]. A polycode text, as defined by E.E. Anisimova, is a text, in which the transmitted information is encoded by semiotically heterogeneous components, i.e., verbal and non-verbal means jointly representing a certain structure characterized by the interdependence of its components in the content and formal aspects [11].

The verbal component is an integral part of polycode texts. However, over time, the scope of the verbal component and its communicative setting have changed significantly. The specifics of visual and verbal signs affect their perception, which is typical for media texts as polycode structures [14].

A variety of linguistic expressive means is used to create media texts, wherefore modern textual reality requires integrative interpretations able to explain new aspects or new types of mass communication texts – polycode texts, the essential characteristics of which are associated with the development of information technologies [15].

Text specifics should be taken into account when analyzing texts. The essential general and specific features of journalistic and advertising text are presented in Table 1.

TABLE. I.　DISTINCTIVE CHARACTERISTICS AND MAIN FEATURES OF MEDIA TEXTS

| Attribute | General | Specific | |
|---|---|---|---|
| | | *Journalistic media text* | *Advertising media text* |
| Matter | Information | Socially significant and current events | Product, brand promotion, sales promotion |
| Subject | Communicator | System of journalistic professional media communities | Enterprises, public organizations, individuals, advertisers, etc. |
| Product | Message | System of journalistic media texts | Advertising media texts |
| Purpose | Public opinion | Forming public opinions, assessments, judgments affecting the social activity of youth audiences | Creating incentives to increase product demand, forming certain responses of the target audience |
| Impact methods | Persuasion | Persuasion (suggestion) | Suggestion persuasion) |

The specifics of journalistic texts are clearly seen when they are compared with advertising texts. The journalistic text has a documentary basis. A journalist reporting on facts should be objective in covering the situation and, at the same time, efficient to sound topical and meet the interests of the audience [16].

The German researcher G. Rager considers the main features of a journalistic text to be its objectivity, relevance, presentation form, relevance (i.e., consistency between the information requests of the audience and the messages received). These qualities should be supplemented by decodability (comprehensibility for the audience), impartiality (i.e. impersonality, objectivity), authenticity (corresponding to reality) in the disclosure of the topic [15]. Another important feature of the journalistic text is its dependence on the specifications of the transmitting channel; therefore, it is defined as a mixed (polycode) text.

Advertising texts, being polycode, include verbal and figurative components forming an integral visual, semantic, and functional unit that provides a complex impact on the addressee [17].

These are verbal (words, sentences, tone series), non-verbal (videos, illustrations, photographs, etc.) components that interact, complement, and reinforce each other in the text structure. Due to the complex, partly expressive effect, the advertising text is more precise and brighter than other texts of marketing communications. If broadcasted correctly, it is reflected in the consumer's mind, fixes the "product" image, and builds associative links with the brand.

The features of implementing text categories in advertising texts are naturally set by the characteristics of advertising discourse. Thus, the composition of an advertising text (clear dramatic fundamentals of advertising), its tonality, evaluativity, and other textual categories are largely determined by the author's image, which, by analogy with a piece of art, is not equated with the figure of the author, namely, the advertiser [18].

The advertising text for the audience is a material form of an image, a subject of communication, which is "divided" into components during communication, revived by the recipient upon perception, and remains in his/her memory and consciousness due to the emotional component.

According to V.K. Vilyunas, the criterion for choosing language means is the goal setting for the expressiveness of the text, whereas the emotion and the situation of choice lead to a preference, thus changing consumer behavior [19]. The factor of reward stimulation in the form of benefits and promises based on the nudge theory is no less important here [20].

Advertising uses a variety of language tools initially meant for a pragmatic effect, which is enhanced by the use of contextual capabilities [21]. This partially enables the author to use not entirely traditional vocabulary to make the advertising text purposeful, as set by communication goals, as well as having an operating force. We should neither forget that the language of advertising is a reflection of mental images and the language of the modern sociocultural space.

The choice of language forms and their creation for a specific advertising text are often focused on a situation in which a specific human image is clearly visualized as an object of communication with its own goals, attitudes, problems, and desires [18]. These language resources interact and are directly addressed to the human experience during the advertising contact and communication impact on the consumer of complex advertising information. Media texts were selected for the study in such a way as to approach the situation of viewing information on the Internet in simulated conditions. Therefore, it is worth considering the specifics of perceiving online information. Many foreign and domestic authors studied the perception of advertising texts in the online space [22].

In particular, researchers Heng Xu, Lih-Bing Oh and Hok-Hai Teo suggest that multimedia and online advertising increase the information and entertainment value of content [23]. At the same time, the perception of advertising in the Internet space only enhances its visual effectiveness and the importance of the figurative component of advertising media texts. In this format, advertising is increasingly gravitating towards universal methods of impact, including images and short offers as a call to action.

The general hypothesis of the research is related to the key problem that regional online media actively broadcast environmental events, deliberately overaffecting the coverage of environmental issues and negatively impacting the minds of young people, their views, intentions, and social well-being, which strategically distorts their civic position and levels out their involvement in solving environmental issues of their region by completely alienating themselves from their regional identity. An important role in this process is assigned to various media content, which includes the categories of the above-mentioned media texts. To this end, the following can be identified as private research hypotheses:

Environmental media texts can impact the desire to change the attitude to the environment among the youth target audience.

The most memorable environmental media texts among the youth target audience are advertising texts because of spectacular visual images created by advertising in the respondent's mind.

The title and text of environmental journalistic media texts attract the youth audience more than the image.

The confidence of this research is provided by vast empirical material and the system of its study. The cognitive approach has become the theoretical and methodological basis for studying media effects. The authors used a set of methods, namely comparative analysis, document analysis with elements of content analysis, as well as visual neuromarketing – eye tracking and online survey.

Special attention was paid to the use of eye-tracking technologies using video fixation to record eye movement, gaze direction, the duration of pausing one's gaze on an object, the ability to determine attention focus, as well as information viewing sequence. Visualization methods used in eye tracking provide a clear and accessible representation of dynamic processes through quantitative indicators, thus improving understanding of the available data. They include fixation sequence maps and heat maps. The main eye-tracking indicators used in the research are the number of fixations and the average duration of fixations. Fixations are used to calculate the time spent on viewing a particular point, which reflects the attentional involvement and time needed to process the stimulus at this point. The average duration of fixations is related to the speed at which the information is processed by the brain.

In turn, heat maps demonstrate the statistical and dynamic integration of all the respondent's points of view, by overlaying the color ingredient on the presented image. They show which stimulus elements attracted the most attention: "warm" red areas correspond to more gaze points (highest interest), cooler yellow and then green areas correspond to fewer gaze points (low interest).

An important element of eye-tracking research is the areas of interest of the stimulus material, which are a tool for selecting areas of focus for the presented image. The calculation of such indicators as the number of fixations and the average duration of fixations are determined by areas of interest.

The Gazepoint GP3 HD eyetracker with a sampling rate of 150Hz and the Gazepoint Analysis software were used to create, conduct, and analyze the results of the experiment. During the experiment, the respondents were shown randomly stimulus materials separated by neutral images on a 24-inch monitor. The experiment lasted for 10 seconds. As a result, we obtained metrics of views, fixations, returns to the area of interest, time to the first fixation, etc. and built heat maps. After the eye-tracking study, the respondents completed an online survey.

The research was aimed at determining the effectiveness of the impact of advertising and journalistic texts, as well as identifying and analyzing attention patterns and responses of the youth audience in areas of interest. 39 students (bachelors and masters) of South Ural State University aged 18 to 22 took part in the experiment. After the eye-tracking registration procedure, which analyzed the unconscious responses of the participants, all respondents took an online survey aimed at analyzing the conscious perception of the presented information. The stimulus material was shown randomly. Advertising stimuli were shown for five seconds (the time was chosen based on the recommendations of the natural conditions of advertising contact), while journalistic (news) stimuli were shown for 15 seconds. After each stimulus, neutral images were shown to reduce the effect of the final fixation on the previous stimulus and to equal each next stimulus for the start of viewing.

Each respondent filled in a consent form before the eye-tracking study. We emphasize the necessity of using a post-stimulus survey in the eye-tracking study, since it is important to record both the unconscious (uncontrolled) reactions (eye movements) and the conscious responses on the impressions of the media texts viewed. The survey comprised five identical questions in each block of media texts, revealing the cognitive aspect (memorability level), the emotional aspect (attractiveness level), and the conative aspect (behavioral level) of these media texts.

Comparing the results of the eye-tracking study and the results of the survey is an important step in the research. Comparing the visual results of the eye-tracking study (heat maps), the digital results of the eye-tracking (the number and time of visual fixations) and the obtained final results of the survey (general charts of all respondents' responses on all stimuli) included analysis based on the cognitive, affective and behavioral levels. Below we provide its results. The stimuli for the study were selected based on the analysis of more than one hundred different environmental advertising and journalistic (news) media texts. These are six environmental advertising media texts and six environmental journalistic media texts. Journalistic (news) media texts are informational material of 74.ru online edition (the first half of 2022), which include topics related to water and air issues.

The advertising media texts are also selected on the topic of environmental issues related to water and air quality globally.

The polycode of advertising and journalistic media texts, namely verbal (a text) and nonverbal (an image) components, was taken into account when selecting the stimuli. It was the basis for dividing the stimuli into areas of interest necessary for an eye-tracking study: 1) in advertising materials, they are a text, an image, a logo; 2) in journalistic materials, they are an image, a headline and a text. In this case, the results of the eye-tracking study were compared within each group, but advertising and journalistic media texts were not compared, because the viewing time of advertising and journalistic media texts was different. These groups of texts were compared in the survey. The selected stimuli are presented in Table 2.

TABLE. II.     STIMULI

| Code | Stimuli description | | | |
| | Topic | Name | Source | Average number (units) |
|---|---|---|---|---|
| Ex.1 S11 | Water | Pollution kills | Greenpeace www.greepeace.com | 18.193 |
| Ex.2 S12 | Water | Save water – save life | Ecoterica – https://clck.ru/pUgwZ | 17.754 |
| Ex.3 S13 | Water | What will it take to make you care about the environment | Earth day Canada – https://earthday.ca/ | 16.000 |
| Ex.4 S14 | air | Stop pollution | www.greepeace.com | 18.211 |
| Ex.5 S15 | Air | Every leaf traps CO2 | Non-profit organization Cooperativa Oro Verde – https://oroverde.com.pe/ | 16.298 |
| Ex.6 S16 | Air | Every year we produce 3.3 billion tons of CO2, that`s why need the rainforest more than ever | | 15.930 |
| Ex.13 S31 | air | Chelyabinsk is covered with smog. How long will calm weather last | https://74.ru/text/ecology/2022/03/04/70486421/ | 73.660 |
| Ex.14 S32 | air | Factory wastes in Chelyabinsk caused more than a dozen of administrative cases. Who's fault is it? | https://74.ru/text/ecology/2022/01/31/70413137/ | 73.410 |
| Ex.15 (S33) | air | The most violent emission of hydrogen sulphide in Chelyabinsk | https://74.ru/text/incidents/2021/08/18/70084589/ | 76.509 |
| Ex.16 (S34) | water | You won't get any drinking water. Why Chelyabinsk region increasingly loses its drinking water resources | https://74.ru/text/ecology/2021/11/04/70233293/ | 72.220 |

| Ex.17 S35 | air | Smell of shoe polish and hydrogen sulphide: the resident of Chelyabinsk found a malodorous water body in the suburbs. | https://74.ru/text/ecology/2021/09/03/70115639/ | 51.386 |
|---|---|---|---|---|
| Ex.18 S36 | water | When you run the tap, the water awfully stinks!: people from a village in Chelyabink region reported on slurry instead of drinking water | https://74.ru/text/spring/2021/04/07/69853706/ | 51.669 |

Let us consider the results of the eye-tracking study of an environmental advertising media text. The analysis of the heat maps of the environmental advertising media text showed that despite the fact that headlines and slogans, and the address block fall in the areas of attracting attention, the image area attracts the most attention. At the same time, the stimulus (S13), a tub of oil image, dealing with the problems of water quality, shows a high level of visual fixation on the image (see Fig. 2). The image of smoking pipes in the form of an open palm (S14) (see Fig. 3), dealing with the problem of air pollution, and the image of a water tap (see Fig. 4) (S12), dealing with the problem of water, are the leaders in terms of visualization. In this stimulus, the degree of visual fixation is balanced between the text and the image.
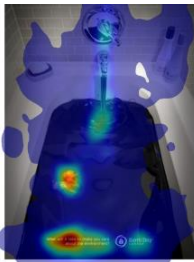


Fig. 2. Environmental ad non-profit organization Earth day
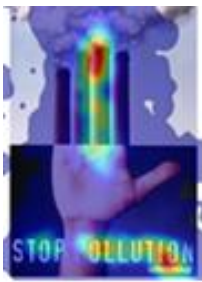


Fig. 3. Environmental ad non-profit organization GREEPEACE



Fig. 4. Environmental ad non-profit organization Ecoterica

Despite the fact that the text area has the highest degree of respondents' visual fixation, based on the time fixation values in the particular areas (image, logo, address block, or feedback), we can conclude that the image area takes the most time (up to 4, 5 seconds on average) of all stimuli in the advertising media text. In particular, the numerical values of the eye-tracking results show that the number of visual fixations on the image in the advertising media text varies from 5.48 fixation units to 12-14 units, while the number of visual fixations on the text area ranges from 3.6 to 6.4 units. Thus, S14 stimulus (see Figure 3) is the leader among all the advertising media texts by the number of visual fixations on the text area, especially attracted by the word "pollution". This is also recorded on the heat map. Meanwhile, the image area on the same stimulus has an average of 11.067 fixation units, which suggests that the image attracted more attention from the study participants. S12 stimulus has the highest average number of fixations - 12.14 units (image area) (see Figure 4). However, if the numerical value of the average viewing time for each advertising stimulus ranges from 15.9 to 18.21 fixation units, the largest number of fixation units accounts for S14 stimulus (see Figure 3) of air pollution problems caused by industrial plants in the regions. The issue of air pollution due to the industrial facilities is relevant for regions at risk. The respondents of the study were residents of such a region. The average viewing time of 16.29 seconds on S15 stimulus shows the relevance of this issue to the respondents. In general, the image leadership in terms of time and number of visual fixations is presented by the graphs in Figures 5 and 6 and by the indicators in Table 3.
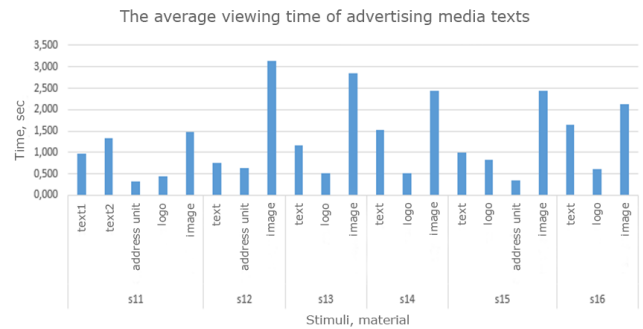


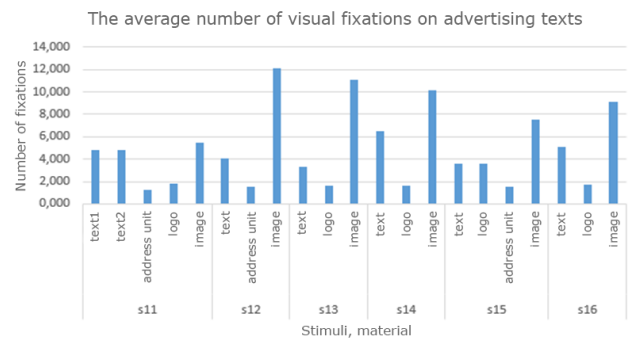Fig. 5. Graph of visual fixation time in the areas of interest in advertising media texts, sec.



Fig. 6. Graph of the number of visual fixations in the interest areas of advertising media texts, units

| Stimulus code | Area of Interest (eye-tracking) | The average viewing time of each stimulus area of interest (sec.) | The number of visual fixations in each area of interest (units) |
|---|---|---|---|
| S 11 | Text 1 | 0.983 | 4.821 |
| | Text 2 | 1.339 | 4.808 |
| | Address unit | 0.321 | 1.250 |
| | Logo | 0.434 | 1.833 |
| | Image | 1.472 | 5.481 |
| | Full stimulus | 4.549 | 18.193 |
| S 12 | Text | 0.753 | 4.073 |
| | Address unit | 0.635 | 1.541 |
| | Image | 3.127 | 12.140 |
| | Full stimulus | 4.515 | 17.754 |
| S 13 | Text | 1.158 | 3.347 |
| | Logo | 0.524 | 1.586 |
| | Image | 2.841 | 11.067 |
| | Full stimulus | 4.523 | 16.000 |
| S 14 | Text | 1.526 | 6.474 |
| | Logo | 0.511 | 1.583 |
| | Image | 2.436 | 10.154 |
| | Full stimulus | 4.473 | 18.211 |
| S 15 | Text | 0.990 | 3.636 |
| | Logo | 0.836 | 3.580 |
| | Image | 0.335 | 1.519 |
| | Full stimulus | 2.431 | 7.563 |
| S 16 | Text | 4.592 | 16.298 |
| | Logo | 1.639 | 5.115 |
| | Image | 0.605 | 1.719 |
| | Full stimulus | 2.122 | 9.096 |

Advertising media texts dealing with water issues (51.94 units) overtook advertising media texts dealing with air issues (50.43 units) in terms of average viewing time and number of fixations for each stimulus. Environmental advertising is the most attractive and engaging for the respondents. It influences their behavior by prompting them to change and reconsider their attitude toward environmental issues. The most effective advertising media text is the one where the verbal component enhances visualization and directly affects all types of perception. The results of the eye-tracking study of the environmental journalistic media text showed that the headlines and lead-abstracts attract the most attention. The maximum focus of attention is recorded in the text area.
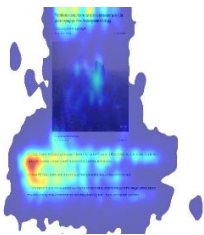


Fig. 7.   Chelyabinsk is covered with smog
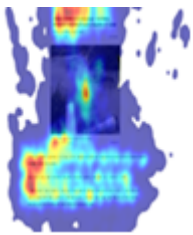


Fig. 8.   The most violent emission of hydrogen sulphide
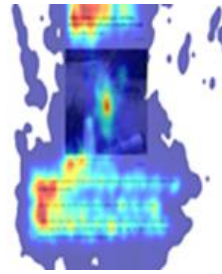


Fig. 9.   – Smell of shoe polish and hydrogen sulphide

S33 stimulus of an air issue on the strongest emission of hydrogen sulfide (Fig.8) became the leader on viewings and quantity of visual fixations. It is also reflected on the heat map and recorded according to the average viewing time of 7.061 seconds and the number of fixations - 29.4 units. S31 stimulus, which gives news about the city being covered by smog, becomes the second leader on viewings (see Fig.7). It is proved by the average viewing time of 6.6 seconds and visual fixation rate of 27.5 units. The third most viewed stimulus is associated with the smell of shoe polish and hydrogen sulfide in water (see Fig. 9). It is demonstrated by the average viewing time of 6.68 seconds and the visual fixation rate of 26.9 units.

The analysis of the heat maps shows that the main attention in the stimuli is focused on the text areas, namely the news text and the headline. The obvious leadership of the images according to the time and number of visual fixations is shown in Table 2 and Figures 10 and 11.
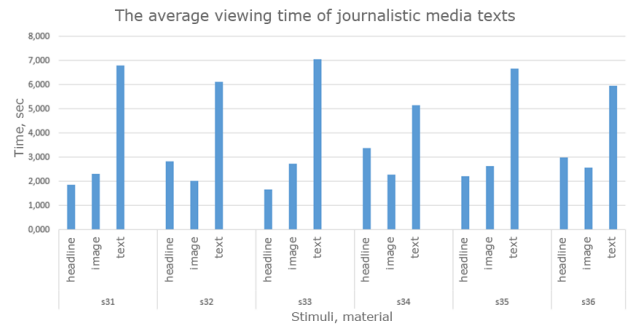


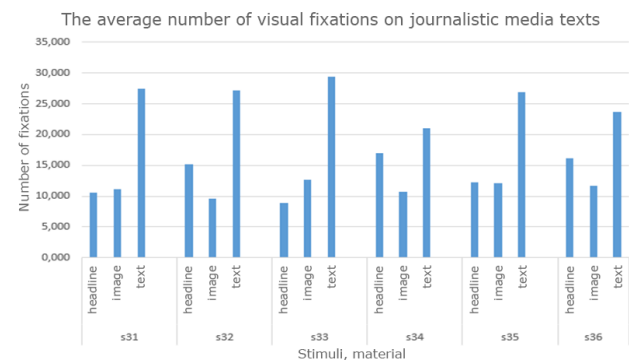Fig. 10. Graph of visual fixation time in the areas of interest in journalistic media texts, sec.



Fig. 11. Graph of the number of visual fixations in the interest areas of journalistic media texts, units

83

| Stimulus code | Area of Interest (eye-tracking) | The average viewing time of each stimulus area of interest (sec.) | The number of visual fixations in each area of interest (units) |
|---|---|---|---|
| S 31 | Headline | 1.850 | 10.618 |
| | Image | 2.313 | 11.140 |
| | Text | 6.811 | 27.526 |
| S 32 | Headline | 2.846 | 15.130 |
| | Image | 2.040 | 9.600 |
| | Text | 6.126 | 27.145 |
| S 33 | Headline | 1.665 | 8.926 |
| | Imge | 2.750 | 12.632 |
| | Text | 7.061 | 29.464 |
| S 34 | Headline | 3.385 | 17.055 |
| | Image | 2.299 | 10.702 |
| | Text | 5.148 | 20.982 |
| S 35 | Headline | 2.205 | 12.302 |
| | Image | 2.625 | 12.140 |
| | Text | 6.686 | 26.944 |
| S 36 | Headline | 2.984 | 16.218 |
| | Image | 2.590 | 11.719 |
| | Text | 5.966 | 23.732 |

We observe that journalistic media texts on air issues outnumber journalistic media texts on water issues in terms of total viewing time and the number of visual fixations. The respondents distinguish the text and the headline to be the areas of interest. Images in journalistic media text are of secondary interest.

The results of the survey analysis of media texts revealed a correlation with the eye-tracking study. In particular, advertising texts (65.6%) are the most memorable of all stimuli, which is proved by the distribution of priorities in the media texts (see Fig. 12).
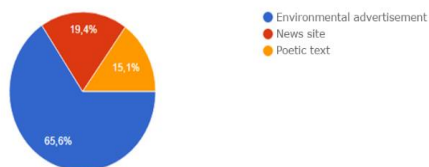


Fig. 12. The results of the survey on the memorability of a media text, %

Our study confirmed the hypothesis that the visual component in the advertising text captures more attention and evokes a greater range of emotions than other media texts. The results of the survey revealed that the prevailing emotion evoked by viewing all the stimuli is a negative motion of sadness. Additionally, the results of the survey enabled us to establish links between media effects and the effective intentions of the respondents, manifested in a set of behavioral, cognitive, and emotional levels of perception (see Fig. 13).
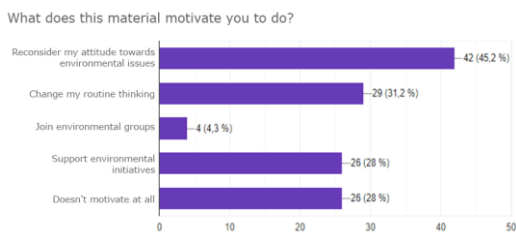


Fig. 13. The results of the survey on the memorability of a media text, %

We can see that 45.2% of the respondents are ready to reconsider their attitudes towards environmental issues, 31.2% of the respondents are ready to change their routine thinking, 28% of the respondents are ready to support environmental initiatives. However, 28% of the respondents did not show interest in the media texts. It is demonstrated by the responses to the question: "What does this material motivate you to do?" They chose: "Doesn't motivate at all".

## III. CONCLUSION

Thus, the study of the media effects of environmental advertising and journalistic texts revealed that these materials quite actively attract the youth audience. The analysis of media effects in the structure of polycode advertising and journalistic texts distinguished two semiotic components (verbal, non-verbal) and identified the peculiarities of their perception by the audience.

The primary audience representation of the content of an advertising message as a polycode text was formed mainly due to the image, which corresponds to the general trend of increasing the visualization of communicative messages. The dominance of visual images in advertising over the verbal ones is connected with the mechanism of understanding these polycode texts. When an image is perceived, information is being processed from its identification to the direct activation of semantic representations, which are activated by the audience somewhat later. As a result, the primary understanding of an advertising media text is predominantly based on the image processing. "The influence of the verbal component on the understanding of a polycode text is regarded as modulative, and the important role in its comprehension is the visual range" [12]. It is the perception of the image that determines the direction of activation of the audience's perceptions of the environmental problem. Then the advertising text narrows its semantic field, sets certain semantic frameworks, without which the interpretation of the advertising image on the screen would be too vague. The eye-tracking equipment and also the results of a sociological survey confirmed the fact that the elements of the advertising text are also actively perceived, read and remembered by the target audience.

In contrast, in case of journalistic texts the importance of the visual component decreases and the influence of the text increases. At the same time, the importance of the visual component in journalistic materials is proportional to its informative and problematic nature. It means that the more monotonous and neutral the image is, the more precise, expressive and imaginative the headline and the body text should be. According to R. Barth, visual images themselves are very poly-semantic, so "to find a specific meaning, we have to resort to the language. The visual meaning is too ambiguous an unstable sequence of signs" [24].

The results of the study have shown that the youth audience reads journalistic texts quite actively, focusing their attention more on the headlines and the content of the news. Attention to the image in the news arises only if it fully correlates with the subject and issue of the information. At the same time, the analysis of the heat map data revealed the characteristic of F-shaped reading pattern [25] of the news item, with the focus on the horizontal line - on the headline and the lead paragraph, and then the audience attention moves to the left side of the content and goes down the lines of text vertically. Sometimes it is a slow and systematic scan that looks like a single solid stripe on a heat map. In some cases, respondents' gaze moves faster, creating a heat map of

points in which the most active (red) areas in the form of attention patterns represent words with a negative environmental characteristic (shoe polish, hydrogen sulfide, smell, emissions, etc.). This last element forms the basis of the F-pattern, which is characterized by multiple visual fixations concentrated in the upper and left parts of the text. The results of the eye-tracking study also showed that advertising texts are the most memorable environmental media texts for the youth audience (65.6% of respondents). The image area of advertising texts attracts the most attention with an average number of visual fixations ranging from 5.48 to 12.14 units. In news texts, headlines (from 10.61 units to 17.05 units) and lead paragraphs (from 23.73 to 29.46 units) receive the highest average number of visual fixations. The leaders of the eye-tracking study among advertising texts for the number of fixations on the image area are S12 and S13 (water topic) stimuli; the leaders of the eye-tracking study among news texts for the number of fixations are S31 and S33 (air topic) stimuli.

The results of the survey showed that the most memorable were the leaders of the eye-tracking study, namely, S13 (What will it take to make you care about the environment?) in advertising texts, S35 (Smell of shoe polish and hydrogen sulfide) and S36 (When you run the tap, the water awfully stinks!!) in news texts. The leading emotional state among respondents after viewing the stimuli is "sadness." In general, about 60% of respondents after the study responded that these media texts made them think about the environmental future and change their behavior.

The results of the study revealed its novelty, as the regional media actively broadcast eco-events, excessively affecting the coverage of environmental issues. The further scientific study of the media texts in terms of their impact on different groups of the audience is an evident prospect for the development of the issue.

The study proved the hypotheses that environmental media texts can influence the willingness to change their attitude to the environment among the youth audience, and an advertising text is the most memorable environmental media text for the youth audience due to the effectiveness of the visual images. Finally, the headline and the text attract more attention from a youth audience than the image in environmental journalistic media texts.

## REFERENCES

[1]. Shevchenko, S.Y. Genomic medicine, biopower and behavioral economics of self-care / S.Y. Shevchenko, S.V. Lavrentieva // Technology convergence and the future of man: Workbooks on Bioethics / collection of scientific papers / edited by Tishchenko P. D. - Moscow: Publishing house of the Moscow Humanitarian University, 2018. - C.148-160.

[2]. Bryant D., Thompson S. Fundamentals of media impact / Translated from English by V. V. Kuleba and J. A. Lebedenok / ed. by E. V. Krainikov. - Moscow: Publishing house William, 2004. - 432 c.

[3]. Yakovleva T.B., Meshkova A.A. Specificity of modern journalistic text / Electronic resource: https://cyberleninka.ru/article/n/spetsifika-sovremennogo-zhurnalistskogo-teksta/viewer (access date: 04.05.2022).

[4]. D'Angelo, P. News Framing as a Multiparadigmatic Research Program: A Response to Entman/ Paul D'Angelo // Journal of Communication. 2002. Vol. 52 (4). P. 870 – 888.

[5]. D'Angelo, P., 2002: Paul D'Angelo / News Framing as a Multiparadigmatic Research Program: A Response to Entman // Journal of Communication. 2002. Vol.52 (4). P. 870 – 888.

[6]. Bryant, J., & Miron, D. Theory and research in mass communication / J. Bryant, D. Miron // Journal of Communication. 2004.Vol. 54(4). P. 662 – 704.

[7]. Podolian, I. Yu. Determinants of key paradigms in media effects research/ I. Yu. Podolian // Vestnik Moskovskogo universiteta. Seriya 10. Zhurnalistika – URL: https://vestnik.journ.msu.ru/books/2021/2/determinanty-klyuchevykh-paradigm-v-issledovaniyakh-mediaeffektov (access date: 23. 11. 2022).

[8]. Price, V., Tewksbury, D., Powers, E. Switching trains of thought: The impact of news frames on readers' cognitive responses / V. Prince, D. Tewksbury, E. Powers // Communication research. 1997. 24 (5). P. 481–506.

[9]. Ball-Rokeach, S., DeFluer, M.L. A dependency model of mass media effects/ S. Ball-Rokeach, M.L. DeFluer // Communication Research. 1976. Vol.3 (1). – P. 8.

[10]. Khazipova, F. A. et al. Attention to neuropsychological and neurophysiological patterns / F. A. Khazipova, S. I. Nizamutdinov, L. Z. Rashitov // Medical Academic Journal. – 2016. – Vol.16. – No 4. – pp. 38–39.

[11]. Anisimova E.E. Text linguistics and intercultural communication (on the example of creolized texts): textbook for students of foreign languages – M.: Thesaurus, 2013. – p.75.

[12]. Sonin, A.G. Experimental studies of multimodal text comprehension: Main directions/ A.G. Sonin// Voprosy Jazykoznanija, (6), 115–123.

[13]. Chernyavskaya V.E. Text linguistics: Polycodality, Intertextuality, Interdiscursivity. Kharkov, 2008. p. 90.

[14]. Goncharenko A.K. Issues of the theory of polycoded text // Bulletin of the Tver State University. Philology Series. 2011. №4. Issue 2. C. 233 – 240.

[15]. Ilyicheva I.L., Karpievich M.N. Modular multimodality of the media text // Bulletin of Polessky State University. Series of social sciences and humanities. – 2019. – № 1. – C.19–28.

[16]. Arias A.M. Polycode text: theoretical and applied aspects: textbook. SPb.: Publishing house of S.-Petersburg University of Management and Economics, 2015. 126 c.

[17]. Brovkina Yu.Yu. Public relations texts and controversial advertizing texsts in printed media // Juridical linguistics. 2004. No.5. URL: https://cyberleninka.ru/article/n/teksty-pablik-rileyshnz-i-skrytoy-reklamy-v-pechatnyh-sredstvah-massovoy-informatsii-1 (access date: 16.05.2022).

[18]. Ponomareva I.V., Ivanova E.A. Advertising text as a way of psychological impact on the recipient // MNIJ. 2021. №2-3 (104). URL: https://cyberleninka.ru/article/n/reklamnyy-tekst-kak-sposob-psihologicheskogo-vozdeystviya-na-retsipienta (date of reference: 04.05.2022).

[19]. Vilyunas V.K. Psychology of development of motivation / V.K. Vilyunas. – SPb.: Rech, 2012. – 354 c.

[20]. Shevchenko, S.Y. Genomic medicine, biopower and behavioral economics of self-care / S.Y. Shevchenko, S.V. Lavrentieva // Technology convergence and the future of man: Workbooks on Bioethics / collection of scientific papers / edited by Tishchenko P. D. – Moscow: Publishing house of the Moscow Humanitarian University, 2018. – C.148–160.

[21]. Livas K., Scotis A. Factors influencing the impact of text message advertising // International Journal of Internet Marketing and Advertising. – 2022. – T. 16. – №. 3. – C. 230 – 256.

[22]. Radina N.K., Aleksandrova N.S. Semiotics of multimedia text: creolized texts in professional online communication (on the material of the official site of the Higher School of Economics) // Voprosy psycholinguistics. – 2016. – №. 4 (30).

[23]. Xu H., Oh L. B., Teo H. H. Perceived effectiveness of text vs. multimedia location-based advertising messaging // International Journal of Mobile Communications.– 2009. – T. 7. – №. 2. – C. 154–177.

[24]. Barth, R. Selected Works. Semiotics. Poetics / R. Barth. - Moscow: Progress, 1989. – p. 28

[25]. J. Nielsen. F-Shaped Pattern For Reading Web Content (original study). – 2006. – URL: https://www.nngroup.com/articles/f-shaped-pattern-reading-web-content-discovered/

# Media Orientation of Pre-election Discourse: Regional Disposition

Aleksander A. Yefanov
*Department of Theory and Practice of Public Relations,*
*Faculty of Advertising and Public Relations*
*Russian State University for the Humanities;*
*Institute of Media,*
*Creative Industries Faculty*
*HSE University*
Moscow, Russia
yefanoff_91@mail.ru

Vitaly V. Tomin
*Department of Foreign Languages, Philological Faculty*
*Orenburg State University*
Orenburg, Russia
vnimot@yandex.ru

*Abstract*— **The article analyzes the pre-election discourse as a special kind of political discourse constructed in the Orenburg region in 2019 on the eve of the gubernatorial elections. A set of methods is used: case study; content analysis of the materials of the information program "Vesti of the Orenburg region" of the State TV and Radio Company "Orenburg"; discourse analysis of posts of candidates for governors in the social networks VKontakte and Instagram; visual analysis of their campaign products; secondary analysis of statistical data – the results of the voting in elections. The chronological framework of the study: March-September 2019.**

**Based on the results of the study, it is concluded that the pre-election discourse in the framework of the campaign for the election of the governor of the Orenburg region in 2019, on the one hand, appealed to the classical typified model, not only dating back to the traditions of the implementation of political technologies but also associated with currently existing sociopolitical trends in Russia. On the other hand, it was distinguished by the active use of modern media communications (primarily social media). The assumption regarding the development of political processes in Russia and the implementation of election campaigns is made.**

*Keywords—political discourse, pre-election discourse, elections, media, television, social media*

## I. INTRODUCTION

On September 8, 2019, the elections for the governor took place in the Orenburg region. At the same time, the very fact of the procedure or its results is not much of particular research interest but the pre-election discourse accompanying the election campaign.

In the context of the theory and practice of communications and media, election campaigns are the most significant object of research since, on the one hand, they reflect the political processes taking place in various dispositions (federal/regional/municipal), on the other hand, they act as a kind of indicator of public opinion, allowing to fix and promptly represent loyalty or, on the contrary, non-acceptance by the actual and potential electorate of specific ideas and attitudes, and at the same time, the actor / political force (party) promoted along with them. In this regard, political technologists traditionally try to influence public opinion using classical models to implement election campaigns and simultaneously attract new communication tools. Thus, the communication and media aspects are dominant in implementing election campaigns. Moreover, the ongoing election campaigns complement the theory and practice of communications and media, supplementing it with an updated understanding of communication strategies, tools, channels, and, as a result, inspired effects.

## II. THEORETICAL BACKGROUND

Evidence of the use of communication and media potential within the framework of election campaigns can be considered pre-election discourse, which is interpreted as a kind of political discourse, "a special sphere of communication tied to the time and place of the election campaign and serving a specific social sphere – political elections. The pre-election discourse includes speech activity that takes place in the process of this communication, as well as its products – a set of texts" [1]. The super-task of the pre-election discourse is direct (from the first person) and indirect (with the help of journalists, opinion leaders, etc.). However, always with the use of media channels, it is the positioning of a particular candidate, based on an opposition to his opponents which manifests itself as an accentuation of the significance of the main provisions of the original electoral program / debunking the electoral programs of competitors (political focus), and emphasizing the uniqueness of the subject's personality / outright defamation of opponents with an eye to their 'weak' sides (personal focus). At the same time, political and personal focuses are often synthesized with each other, explicating a single strategy aimed at promoting/destroying the constructed media image of a candidate, causing an increase/loss of publicity capital.

In general, the problem of forming pre-election discourse became the subject of research by some authors who analyzed the foreign and Russian political agenda, including the regional disposition: O.S. Issers [2], L.A. Kochetova, and Ya.Yu. Demkina [3], S.L. Kushneruk [4], P.G. Loginova [5]; N.A. Ryabchenko, O.P. Malysheva, and A.A. Gnedash [6], S.V. Tumskiy [7], Yu.S. Yasakova [8]. The works by M.S. Khaliullina [9; 10] and A.A. Yefanov [11; 12] are devoted to studying election campaigns in the Orenburg region. At the same time, a more profound understanding of the essence of the pre-election discourse in the regional disposition and the significance of media communications is needed. This study is intended to fill the existing theoretical and empirical gaps.

## III. METHODS AND MATERIALS

The study aims to substantiate the media orientation of pre-election discourse in the regional disposition. The research focuses on a single story – an election campaign within the framework of the gubernatorial elections organized in the Orenburg region in 2019.

A set of methods is used: case study; content analysis of the materials of the information program "Vesti of the Orenburg region" of the State TV and Radio Company "Orenburg" (as the most-rated television and radio company in the region, which media products influence the formation of public opinion of the target audience and residents of the entire Orenburg region); discourse analysis of posts of candidates for governors in the social networks VKontakte and Instagram[1] (that work for different target audiences, clustering virtualized communities); visual analysis of their campaign products; secondary analysis of statistical data – the results of the voting in elections. The chronological framework of the study: March-September 2019.

## IV. RESULTS AND DISCUSSION

In the second half of the 2010s, the Orenburg region found itself several times on the front pages of federal publications and news agencies due to several political scandals. Cases, to some extent related to abuse of power, were published concerning the Minister of Physical Culture, Sports and Tourism O. Pivunov, the Minister of Forestry and Hunting V. Tonkikh, the Minister of Agriculture, Food and Processing Industry M. Maslov, the Minister of Education V. Labuzov, Minister of Labor and Employment V. Kuzmin, as well as the head of Orenburg city E. Arapov (some of the stories 'reached' the court, others were correctly 'smoothed out'). Based on the existing patterns of perception of the political process, these precedents somehow referred to the current governor Y. Berg, identifying the emerging conflicts with the vulnerability of the developed political course of the region.

As a result, on March 21, 2019, President of Russia V. Putin dismissed Y. Berg, appointing D. Pasler as acting governor. Previously, D. Pasler had already had experience in senior positions, for some time heading the Government of the Sverdlovsk Region and one of the largest energy companies in the country. On the whole, he fits into the model of a 'new formation politician' constructed in Russia in the 2010s: age – just over 40 years old; active promotion in social media – the creation and further maintenance of his Instagram page in the first person with extended comments on how the region as a whole and Orenburg, in particular, should develop ("there is no place for a terrible, repulsive unfinished building in the city center;" "In Orenburg, there is a catastrophic lack of recreation areas. A park must necessarily appear in the place of these settled barracks", etc.). By the way, immediately after the resignation of powers, Y. Berg's blog was deleted, which indicates the artificial mediatization of modern political actors in the context of the transformation of the media space, which implies the need to extend its influence to the products of the Internet field (a model of an 'open politician' who is ready to talk with his actual and potential electorate in 'one language').

Thus, starting from March 2019, in the Orenburg media (both in the 'traditional' media – mainly on television – and in the 'new media' – online publications, and social media), the future head of the region began to advance rapidly. This process entered an active phase in July 2019, when the nomination of candidates for the post of governor started. On July 25, 2019, the Government of the Orenburg Region initiated the holding of the "Inforum" – a large media forum aimed at positioning D. Pasler (who, as was already known, was nominated by the 'party of power' – "United Russia"). It is worth noting that the forum was organized by the capital's political technologists (who were probably responsible for the entire election campaign of D. Pasler). Great emphasis was placed on the representation of this event in the Internet field. The actively announced large press conference of D. Pasler was broadcast live on a special YouTube channel; Orenburg residents could also ask questions online through a dedicated platform.

As for the direct positioning of D. Pasler as a candidate for governor, large banners were placed on the main streets of the regional center and highways of the region. At first, they had a very abstract slogan, but at the same time, building a particular strategic perspective of the entire election campaign, "Time for New Decisions" (a sizeable half-faced portrait of a politician on a blurred blue background, a favorite and in many ways a non-losing photographic technique of depicting the country's top officials). Later, by the end of August 2019, they were replaced with a stating discursive construction "Orenburg chooses Pasler" (also a sizeable half-faced portrait on a white background). It is worth noting that D. Pasler refrained from attending pre-election debates (a parallel with the presidential elections of 2018, when V. Putin was also absent from such political "performances"). However, as shown by the results of the content analysis of the issues of the information program "Vesti of the Orenburg region," approximately 2/3 of the materials featured the person of D. Pasler to one degree or another (Fig. 1), mainly in connection with any informational occasions that, among other things, were, probably, artificially inspired. Also, as the election date approached, the number of materials associated with the political figure of D. Pasler systematically increased.

The 'list of competitors' of D. Pasler during the election race included the following actors:

- M. Amelin, First Secretary of the Orenburg branch of the Communist Party.

- K. Goryachev, a candidate from the "Democratic Party of Russia," caused bewilderment in social media users – a potential electorate – and gave rise to many memes because of his small banners and advertisements on television and the Internet with a single inscription "Kostya Goryachev."

- A. Kobzev, a candidate from the "Communist Party of Social Justice," used the image of a sickle and a hammer, as well as scarlet color on his banners (with reference to the symbols of the USSR).

- S. Yatsyna, a candidate from the "Just Russia" party, did not express any political position different from other contenders during the campaign.

---

[1] By the decision of the Tverskoy Court of Moscow, this social network's activity on the Russian Federation's territory is prohibited.
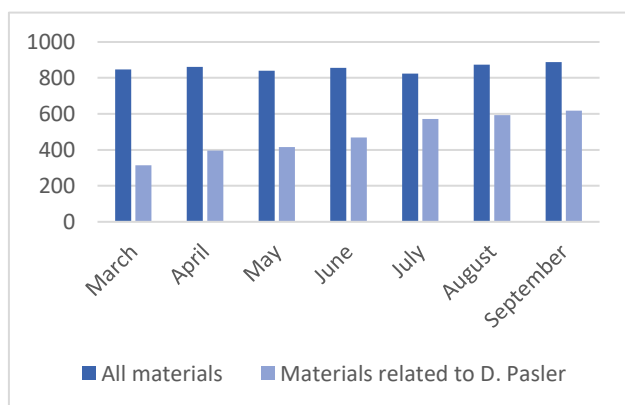
Fig. 1. Dynamics of the materials of the information program "Vesti of the Orenburg region" in correspondence to the materials related to the political figure of D. Pasler in 2019

Overall, it can be noted that compared with the promotional campaign of D. Pasler, the campaign products of these candidates were distinguished by lower performance skills – trivial graphic solutions, smaller size, and presented quantity.

It should be mentioned that the list of 'nominees' also included a politician who was more 'noticeable' for the Orenburg region in the 1990s – 2000s, the former federal inspector of the Orenburg region and the Republic of Bashkortostan, P. Kapishnikov, who, by that time, had reached the age of 66 years. However, as the Election Commission of the Orenburg Region clarified, on the last day for filing applications on July 29, 2019, P. Kapishnikov provided an incomplete set of documents and was not registered. Exciting is the fact that starting from June 2019, P. Kapishnikov had firmly positioned himself in social media (in particular, on VKontakte), calling himself "a representative of the discontented elites of the region." However, immediately after July 29, 2019, all activity on social networks was stopped, which may indicate the fragility of the civic position and artificial publicity.

Returning directly to the elections, here are their results: M. Amelin, 23.72%; K. Goryachev, 2.53%; A. Kobzev, 3.62%; D. Pasler, 65.94%; S. Yatsyna, 2.26%.

At the same time, it is impossible not to point out a relatively low turnout, 39.55% (in the previous gubernatorial elections in 2014, it was 44.15%).

## V. Conclusions

The pre-election discourse in the framework of the election campaign in the Orenburg region in 2019, on the one hand, appealed to the classical typified model, which not only goes back to the traditions of implementing political technologies (recreating the election race as a mandatory attribute of democracy) but also associated with currently existing sociopolitical trends in Russia (positioning of candidates with a clear opposition of the leader acting within the framework of the political system to his conditional competitors, provided not so much by direct promotional products (rollers, banners, leaflets, etc.), as by his representation through news content – informational occasions that constructively affect the actor's image: through addressing 'hot topics' of a trigger character for the electorate, including the broadcasting of readiness to solve many problems based on the available real political

resources). On the other hand, it was distinguished by the active use of modern media communications (in the regional disposition, for the first time, after the presidential elections in 2018, a special emphasis was placed on social media – the most popular social networks due to the representation of differentiated target audiences in them, clustering virtualized communities, largely reproducing the social structure in their totality).

In this regard, it is important to emphasize the trend of media orientation of pre-election discourse being more obviously observed, including in the regional disposition. These patterns testify to mediatization as an indicator of the publication of politics, which has significantly intensified within the determinants of deep mediatization in the neo-information society. These regularities force political actors to promote not only in the fields of 'traditional' media (primarily on television) but also on the Internet (especially in social media), thereby ensuring 'realism' (simulation integration of private and public positioning levels) and, as a result, the competitiveness of the created media image.

It may also be concluded that the gubernatorial elections held in 2019 in the Orenburg region were artificially alternative, constructed according to the democratic principle of a multi-party system, representing a virtual mediatized construct of inspired selectivity. It should be assumed that such patterns will increase the decline in the level of trust in elections as a political institution and, as a result, will be reflected in the ratings of elected political actors and authorities in general, causing the phenomenon of political absenteeism.

## References

[1] N. G. Levshina, "Indirect speech tactics in the pre-election discourse: on the material of the election of the head of the administration of the Pskov region," unpublished.

[2] O. S. Issers, "Dimensions of a 'new sincerity' in modern political communication," Vestnik NSU. Series: History and Philology, 2020, vol. 19, no. 6: Journalism, pp. 216–227, doi: 10.25205/1818-7919-2020-19-6-216-227.

[3] L. A. Kochetova and Ya. Yu. Demkina, "Key words as markers of the communicative behavior of the discursive personality of the nominee to the USA presidency (based on the genre of pre-election debates)," Discourse, 2022, vol. 8, no. 2, pp. 158-173, doi: 10.32603/2412-8562-2022-8-2-158-173.

[4] S. L. Kushneruk, " Framing of pre-election political situation in the Telegram channel discourse," Media Linguistics, 2022, vol. 9, no. 3, pp. 220–236, doi: https://doi.org/10.21638/spbu22.2022.304

[5] P. G. Loginova, "Towards the problem of the communicative function of metaphors in the French political discourse on the eve of the French presidential elections in spring 2022 (based on the publications in le Parisien, 20 Minutes.fr, le Monde, Alimentation-generale.fr, les Échos.fr)," Political Linguistics, 2022, no. 1, pp. 36-43, doi: 10.26170/1999-2629_2022_01_04.

[6] N. A. Ryabchenko, O. P. Malysheva, and A. A. Gnedash, "Political content management in social networks during the election campaign in the post-truth era," Polis. Political Studies, 2019, no. 2, pp. 92-106, doi: https://doi.org/10.17976/jpps/2019.02.07.

[7] S. V. Tumskiy, "Political provocations in the electoral debates of U.S. presidential candidates," Polis. Political Studies, 2021, no. 6, pp. 137-154 doi: https://doi.org/10.17976/jpps/2021.06.10.

[8] Yu. S. Yasakova, "The phenomenon of the language game in the American pre-election political discourse," Kazan Science, 2022, no. 3, pp. 144-146.

[9] M. S. Khaliullina, "Blog as a means of communication between regional politicians and the electorate," Questions of Theory and Practice of Journalism, 2017, no. 4, pp. 603-614.

[10] M. S. Khaliullina, "Political discourse and communicative strategies of regional political bloggers," Vestnik of the Volga University, 2019, vol. 1, no. 1., pp. 231-238.

[11] A. A. Yefanov, "Coverage of election campaigns in the media and electoral interest," Information Society, 2017, no. 1, pp. 36-40.

[12] A. A. Yefanov, Society at the mercy of media processes. Moscow: INFRA-M, 2021.

# Mentoring in Education Using Digital Tools

Irina Yu. Rassokhina
*Department of Communication
Technologies and PR
Saint-Petersburg State University of
Economics*
Saint Petersburg, Russia
irassokhina@mail.ru

Anna V. Pryakhina
*Department of Communication
Technologies and PR
Saint-Petersburg State University of
Economics*
Saint Petersburg, Russia
anniva2001@mail.ru

Maria E. Kudryavtseva
*Department of Public Relations
St. Petersburg State Electrotechnical
University «LETI»*
Saint Petersburg, Russia
mashutka331@yandex.ru

*Abstract*—**The article analyzes the phenomenon of mentoring undergraduates in the project educational activities of bachelors using digital tools as the most effective, communicative, practice-oriented experience. The methodology is based on the coaching approach and the principle of mentoring in the process of horizontal peer-to-peer training between students of different levels of training in the same direction and the use of various digital tools (kanban board, Jamboard, chatbots, mind mapping, etc.) for the organization of productive remote interaction**

*Keywords—mentoring, project educational activity of students, coaching approach, «horizontal» training, digital tools*

## I. Introduction

Appeal to mentoring in the organization of project-based learning for students is associated with the search for a new model of effective interaction between participants for the task of maintaining the continuity of courses of different levels of training (bachelor's and master's degrees), differentiating them in terms of complexity and increasing the professional identity of masters in an intensively developing digital environment.

In theoretical and methodological understanding, the topic of mentoring is not new, and in recent years, in the context of turning to the old Soviet pedagogical experience, in conjunction with the promotion of project-based learning, it has gained a new life.

## II. Literature review

In foreign sources, the topic of mentoring in education, as well as the use of the latest technologies in this process, has received some coverage. Thus, in 2018, an analytical review of scientific articles devoted to technologically advanced training in coaching was published, which revealed the need to include the problem of using digital learning technologies in the broad context of general pedagogical issues [1].

In Western publications, from the point of view of mentoring, the problem of gaining leadership in digital spaces is posed, so, Guthrie, Kathy & Meriwether, Jason It is noted that the growing number of students involved in online and digital spaces poses unique challenges for the development of leadership skills in the field of mentoring, coaching and counseling [2]. The authors cite the study Guthrie & Meriwether, which also confirm that counseling, coaching and mentoring are important components of the active development of digital leadership [ibid.].

It should also be noted that the mentoring training program developed by foreign teachers, the essence of which is to make the student a participant and creator of his own training [3].

From the point of view of a team of authors headed by V. I. Blinov, the topic of mentoring in Russian education at all levels is currently one of the central ones in the national project «Education» (including federal projects) [4, p. 4].

Various approaches to the practice of mentoring and support of project research work are devoted to the study by O. V. Glazunova, as a result of which the author formulated a number of proposals for the effective training of mentors for work in various educational fields. In addition, the author identified various positions in which the personality of the mentor is in relation to his activities (pedagogical position, moderator-facilitator, coaching, expert, methodological and others) [5]. V. S. Nikolsky and A. V. Neslukhovskaya developed a «model of competencies for a mentor of project-based learning» and identified 10 areas of key competencies. he authors emphasize that mentoring is implemented in parallel in three planes – «pedagogical, project and specialized professional activities», and is always aimed at obtaining not only a product, but also an educational result [6, p. 139].

It should be noted that scientists pay a lot of attention to project activity as an important innovative direction in modern education. It has been proved that project-based learning methods are in demand and effective, form a competency-based approach, develop innovative and organizational activities [7, p. 70-72] It is also noted that the research and meta-subject nature of the project activity provides an opportunity for students to develop the meta-competences they need for their future professional activities. The acquisition of universal competencies (meta-competencies) by students, as A. V. Pryakhina, I. Yu. Savelyeva and E. I. Kamaletdinova write, «becomes absolutely necessary for future adaptation in the workplace, a quick change in types of professional activity and the effective performance of their functions in the conditions changes in technology and labor market needs» [8; 9].

The specificity of the project method, as noted by R. I. Btemirova, lies in the fact that in the process of implementing the project work «there should be constant interaction between the teacher and students. The main role of the teacher is to conduct consultations, monitor the quality of the project implementation by students, and control students' independent work. The teacher organizes students' project activities on the basis of dialogue, creative interaction and cooperation. The subject of the project activity is the student, and in the course of the project work he plays an active role» [10]. For student projects, the effect of the presence of a mentor is important to control the movement according to the timing of the project, for moral support, for organizing the search for adequate expert support, for helping to resolve administrative barriers, and to relieve intragroup tension. All these factors confirm the expediency of using the «peer to peer» model proposed by us as an additional one in

the educational process. In this case, an active creative role will be played by both a student (bachelor) or a group of students (bachelors) working on the project, and a student (master's student) acting in this situation as a tutor. In March 2021, based on the results of the Omsk conference, a collection of materials was published on the problem of implementing mentoring practices in vocational education. In the collection, mentoring is considered as a pedagogical strategy for working with people with disabilities, a strategy for supporting young teachers, as well as the most relevant for our study, the strategy of «horizontal» interaction according to the «peer-to-peer» model and the strategy of support in the implementation of individual and team projects [11].

The role of the principle of «horizontal learning» in the formation of students' professional identity is shown in the work of a team of authors headed by O. A. Brown. Here we study the participation of students in the role of mentors in career guidance work with schoolchildren in the course of implementing the project approach, where students act as mentors for schoolchildren. The authors showed that in the course of project activities, students-mentors form a refined image of the future profession: the cognitive component develops most actively (the image of a professional and professional activity is specified); emotional-evaluative component (personal reflection, professional self-esteem develops); behavioral component (the formation of an autonomous professional position, the development of internal professional motivation and the formation of activity) [12]. The «student-student» horizontal learning model is quite actively implemented by many universities in the course of career guidance and project work with schoolchildren, but is rarely used in the «student-student» format.

The pedagogical strategy of «horizontal» interaction according to the «student-student» model is the subject of research by A. E. Morin and A. S. Antropova [13], this strategy is considered on the example of college students. Mentoring at the same level of education is covered in the materials of the discussion club «Modern forms of mentoring» [14]. However, the topic of mentoring according to the peer-to-peer model in a higher educational institution, as we believe based on the study of special literature, has not yet been sufficiently developed.

Meanwhile, this form of mentoring can and should be studied, especially since the methodological documents of the Ministry of Education and Science pay much attention to it and prescribe possible options for its implementation. So, in the guidelines published by the Ministry of Education and Science of the Chelyabinsk Region in 2021, it is noted that «in the process of this interaction, the process of socialization and profiling of students is accompanied, through their inclusion in the student community, as well as in communication with adult mentors and, as a result, development of flexible skills and interdisciplinary / meta-subject competencies among mentors» [15, p. 20].

The form of mentoring «student-student» is of particular relevance in the context of the opportunities that open up for the educational process in the digital space. In modern domestic education, such a situation has developed that the level of proficiency in various digital tools among students is often higher than that of teachers, which, to no small extent, without calling into question their pedagogical competence, nevertheless causes some difficulties in the educational process. The idea that we propose of mentoring masters over

bachelors in the implementation of individual and team projects in the digital space, if implemented, could be a good solution to overcome these difficulties.

This is especially relevant, from our point of view, when it comes to team projects, for which «a systematic approach is especially important when modeling and implementing the work of virtual teams» [16, p. 42].

The communication strategy of the «Master-Bachelor» pedagogical model as a strategy of the digital space involves a distance format and the active use of various digital tools. At the same time, it should be borne in mind that at present it is difficult to talk about the existence of a theoretically substantiated digital communication learning strategy. As A. A. Verbitsky notes, «the grounds for the ever-widening use of digital technologies (in education) are largely unsubstantiated by science, external in nature» [17]. Therefore, it seems that in the case of pedagogical strategies and models in the context of studying the communication strategies of the digital world, the formulation of global goals should be temporarily abandoned, and one can only talk about their operational and tactical goals related to the achievement of a particular specific pedagogical result.

Please note that the topic of using digital online technologies in distance learning has been updated during the covid epidemic. Thus, in the article by L. V. Lamonina and O. B. Smirnova, such concepts as distance education, distance learning technologies, electronic information and educational environment, and a number of others are considered in sufficient detail. The authors also believe that «the organization of the educational process using various digital technologies stimulates students to master new information, communication and digital competencies» [18]. The article by E. P. Krupoderova, M. L. Loktikova and A. A. Shcherbakova examines in sufficient detail the communication potential of cloud technologies and Web 2.0 services, which are distinguished by a wide range of capabilities combined with ease of use. The authors classify these services as follows: «services for creating collaborative hypertext materials (for example, a wiki service); services for collective storage of information (bookmarks, documents, photos, videos); services for creative work (online graphic editors, online interactive whiteboards, services for building memory maps and timelines, infographics); project management services; social media» [19, p. 239].

Relevant work in the context of our study is the work of A. A. Belolobova, the purpose of which is to demonstrate the role of modern cloud and network tools in project development. The author examines in detail the entire process of project development in conjunction with digital tools that allow you to transfer the process of proofreading to the Internet space. An important advantage is the systematization of more than 30 modern digital educational tools and functionalities necessary for organizing network project activities [20, p. 26].

### III. RESEARCH

In order to improve the professional identity of students, ensure continuity and differentiation of the material of educational courses in the field of project-based undergraduate and graduate education, we have developed a model for the development of academic mentoring «Master-Bachelor». The strategic goal of implementing the model is to involve masters in professional activities from a managerial and expert position.

The model is based on the principle of horizontal «peer-to-peer» learning – master students as mentors accompany project teams of bachelor students, lead a team on project activities, and in parallel can develop their own project. The teacher of the course transfers not all, but only part of the functions of the mentor to the master student. The main task of the master-mentor is to help the bachelor's project team develop a project and achieve educational and product results in the coaching paradigm. Under the coaching approach, we mean such a pedagogical and psychological supporting technology for the development of a group, in which the proactivity of the team is activated, the growth of the internal motivation of participants based on the combination of personal goals and learning goals, as well as personal and team tasks.

In the course of implementing project activities, students need to ensure the synthesis of acquired professional knowledge and meta-skills, and also use social and cultural competencies, which, due to little experience, are not sufficiently developed. On the part of bachelor students, there is a demand for such an assistant who is not separated from them by significant social, age and psychological boundaries, is ready to communicate in different formats, on youth-friendly platforms and be generally more «accessible», perceived as older and more experienced friend. The teacher, due to social and professional restrictions, does not fully meet such a request and often needs assistants himself who could coordinate and psychologically support student teams during especially difficult periods of project activity, such as, for example, at the stage of research, idea generation, preparation for project defense, etc. Participation in the practice of mentoring helps masters master the discipline of design at a higher managerial level of complexity and at the same time develop professionally significant competencies: project team management, project content management, time management, risk management and other functional areas of the project from a tutor position. The master mentor does not take on the role of a team leader, but rather an observer with an advisory and motivating function. The tasks of the mentor also include helping the team leader in building tools for tracking team success, scheduling, defining performance criteria, etc. The principle «by teaching others – I am learning myself» also works here, helping others to master complex issues, the material is better comprehended. Among the expected results: masters mastering hard skills, soft skills and meta-skills, thanks to their use in training and mentoring; increasing the motivation of undergraduates for the qualitative study of the projects of the wards, increasing identification with the profession.

The model corresponds to the strategy for the development of educational project activities and strengthens the position of the university as a center of successful production and communication practices. The target audience of the presented model can be divided into several groups. Primary group: masters who are interested in gaining practical skills, strengthening their professional identity, enriching their portfolio with project developments and experience in the role of a team mentor.

The secondary audience includes 4 groups (Fig. 1):

1) Bachelors (need organizational assistance and moral, motivating support in the course of project activities).

2) Teachers (on the one hand, they are in search of new forms of development of managerial skills of masters in the course of mastering project disciplines, on the other hand,

they are ready to delegate part of the mentoring functions to masters in relation to bachelors).

3) Industrial partners of the university, acting as an empirical platform for the student design process (an indirect target group interested in better project development, selection of candidates for internships and for the personnel reserve).

4) The administration of the university (also an indirect target group) is motivated in the formation of a strong brand of the university, innovative development, sustainable relations with employers and high employment rates of graduates.
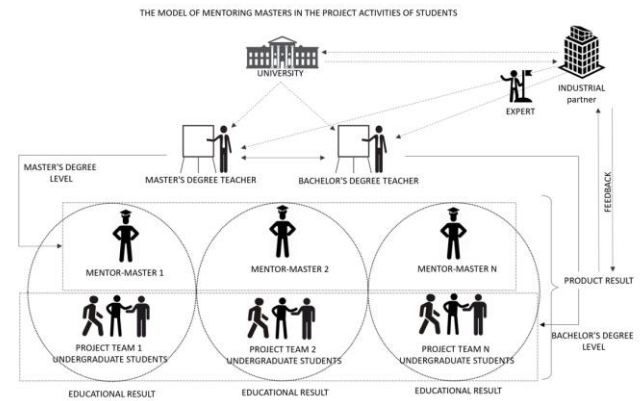


Fig. 1. The model of mentoring masters in the project activities of students (compiled by the authors)

Mentor positions can be of varying degrees of complexity and involvement. The choice of position depends on the complexity of the project, the chosen role of mentoring, mastered professional status, personal characteristics. A master student can take the following positions: moderator-facilitator, router (tutor), hub-position (building connections), as a trained one we consider an expert position, which the student cannot yet correspond to, but can «try on». The teacher often takes a pedagogical position, coaching, instructor (teaching), methodological. Remaining: expert, «product» and business positions are transferred to the industrial partner.

Some educational tools have been selected for the work of the master-mentor with the project team. For the stage of team formation, a simple frame on team building and the formation of a team's business culture is used. Teamwork provides many advantages, as it teaches to work in a team, communicate, accept someone else's point of view, negotiate, distribute work, and coordinate actions. For team building, it is proposed to use the «Team-canva» technique. This is a frame that involves team brainstorming on the main elements of team culture:

1. Defining personal and team goals in the upcoming work on the project.

2. The distribution of team roles according to R. Belbin (at the beginning of work, later-functional roles) and the so-called «magic» roles from any universe to create a creative mood, relieve psychological clamps and determine the name of the team.

3. Development of common team values using mnemonics.

4. Determination of the rules of team interaction.

5. Formulation of the generally significant mission of the team in the form of a slogan or metaphor.

The tasks of the team stage also include the design of the team's business card for self-presentation and its placement in the final presentation of the project.

To help the team in the process of generating ideas, methods are used: brainstorming, mental maps, the method of analogies, synectics, morphological analysis, etc. In order to motivate teams and organize gaming competition, dashboards are created to visualize the solution of problems and achieve goals, the movement of teams according to the logic of the project. A dashboard can be either physical (if the teams have a dedicated space for constant work) or digital (it is formed in Google spreadsheets in the Kanban board format, or special services like Trello are used). Together with the teams, gamification elements are being developed to support the competitive mode.

To work out the defense of projects in the format of the competition: a report is presented accompanied by a slide presentation, answers to questions from the jury and other participants. For the purpose of training with a mentor, anti-conference technology can be used when teams arrange a discussion or defense in the format of an online conference.

At the stage of debriefing, it is necessary to organize individual and team reflection, help set goals for future personal and team development. To conduct a reflection, you can conduct a self-assessment of the mastered competencies «Rose of competencies». At stage 1, the guys get an empty petal chart: 10 rays from the center with a scale from 1 to 10. The task is to give a name to 10 competencies that were important in the project work done. At the 2nd stage, two general lists are compiled: hard skills and soft skills, voting is carried out for 5 competencies from each list. At stage 3, a self-assessment is carried out and a point is placed on the scale according to the degree of development of each competence. Then the dots are connected with lines, a «Rose of competencies» is obtained, which shows the strengths and weaknesses of the participant. The project initially assumes a hybrid learning format, which is convenient for facilitating interaction between students of different levels of education. We offer the following digital tools:

1) Moodle – access to a common database of educational content in the electronic course management system.

2) A community in Telegram or VKontakte to unite a team of bachelors and a master mentor in solving operational issues, free communication, exchange of additional materials (outside the Moodle system), moral support, motivation and coordination of participants' activities.

3) Google spreadsheet (or other online dashboard, for example, Trello) to visualize the team's movement on project tasks – Kanban board, with three sections of tasks: «execute»; «in work»; «done».

4) Using Google tables for other tasks: developing a Gantt chart, media plan, functional responsibility matrix, etc.

5) The use of an interactive whiteboard Google Jamboard or Miro to organize teamwork remotely, allows you to work simultaneously during the generation and fixation of ideas.

6) Google-document is used for the formation of research materials, explanatory notes and reports with the general access of the team and the ability to simultaneously work on different sections of the document.

7) Google forms are well suited for collaborative development of research tools for survey methods (questionnaires, interviews, focus groups) or for organizing testing.

8) Using Google Slides to collaboratively develop current presentation materials.

The work of the mentor and teams is built according to the principle: the main interaction is carried out online, separate meetings are held offline, communication, the value of which is higher offline.

## IV. EMPIRICAL RESEARCH AND RESULTS

The first stage of testing the mentoring model was implemented in the autumn semester of the 2022-2023 academic year in the 4th-year student groups of the direction «Advertising and Public Relations» of St. Petersburg State University. As part of the educational process, students worked on the development of communication projects from the university's industrial partner. The mentors-tutors were master students (masters-mentors, symbol M-M) of the 1st year of the same field of training. The experiment involved 5 people of masters, chosen at will. They supported 5 teams selected randomly (1 mentor per team of 5-7 people – experimental groups – EG). Another 5 teams worked only with a teacher, without the participation of student mentors (control groups – CG). At this stage of testing the model, the tasks of the master mentor included: assistance in team building with the development of a Team-canvas frame on the dashboard of the service Google Jamboard; monitoring the compliance of the calendar teams with the solution of project work in the online Kanban-board format in Google tables; communication with the team in Telegram-chat, motivation of laggards, removal of conflict situations; assistance in organizing the generation of creative ideas remotely on the dashboard of the Google Jamboard service; verification of completed work and recommendations for finalizing the material. The control groups also worked with these tools (Team-canvas, Kanban-board, Google Jamboard, Telegram-chat), but independently, without the support of a mentor-master.

Based on the results of the implementation and protection of projects, individual and group reflection was conducted in all teams to summarize the results. The evaluation of the effectiveness of the model was based on a system of self-assessment of the development of the competencies of students (both bachelors and masters), as well as qualitative feedback from the participants themselves. All participants were invited to undergo a self-assessment of competencies according to the model in Table I before and after the project activity.

TABLE I.   MODEL OF SELF-ASSESSMENT OF THE COMPETENCIES OF STUDENTS OF THE DIRECTION «ADVERTISING AND PUBLIC RELATIONS» IN PROJECT ACTIVITIES

| Competencies | Self-assessment |
|---|---|
| *Soft skills* | |
| **Block 1: Communication competencies** | Middle Mark |
| I can establish contact with all team members | 1-10 points |
| I am able to build partnerships with participants, to act in an equal and open position | 1-10 points |
| I use the practice of active listening | 1-10 points |
| I am able to organize and maintain feedback in the team | 1-10 points |

| Block 2: Group dynamics management | Middle Mark |
|---|---|
| I feel the emotional state of the group and can direct the group energy to solve the problem | 1-10 points |
| I can create a work environment where the personality is valued and the culture of the team is supported. | 1-10 points |
| I feel the tension in the communication of the participants and I can prevent a conflict situation | 1-10 points |
| I am able to neutralize the conflict between team members | 1-10 points |
| *Meta-competencies* | |
| **Block 3: Coaching competencies** | Middle Mark |
| I motivate the participants to think independently, enter into an open discussion and look for new facets of the desired task | 1-10 points |
| I have a flexible approach to the organization of the group process, I can change the pace of work depending on the capabilities and needs of the group | 1-10 points |
| I help the group find ways to interact with the environment to find additional resources | 1-10 points |
| I help the group to reflect on individual and group experiences | 1-10 points |
| *Hard skills* | |
| **Block 4: Professional competencies** | Middle Mark |
| I am able to conduct situational analysis of the organization and the competitive environment | 1-10 points |
| I am able to analyze, segment the target audience and identify its needs | 1-10 points |
| I am able to conduct media analysis and media planning | 1-10 points |
| I can analyze and design communication tools and create creatives | 1-10 points |
| **Block 5: Project competencies** | Middle Mark |
| I have the basic methods and skills of research work in project activities | 1-10 points |
| I have the basic methods and skills of planning project activities | 1-10 points |
| I have the basic skills of developing project implementation methods | 1-10 points |
| I have the basic skills of developing criteria for evaluating the effectiveness of the project | 1-10 points |

The estimates are shown in Table II, where EG are experimental groups (32 people); CG are control groups (54 people); MM are masters mentors (5 people). The designation of groups by the number 1 shows the assessment before the start of work, and by the number 2 – after completion.

The results of the self-assessment of students' competencies show an increase in all groups by all indicators in comparison before and after the start of the project activity, which the students also indicated in their personal feedback on the results of the work. It is interesting to note that, in general, masters evaluate their competencies significantly higher than bachelors in general, both at the entrance to the experiment and at the exit.

RESULTS OF SELF-ASSESSMENT OF COMPETENCIES OF STUDENTS OF THE DIRECTION «ADVERTISING AND PUBLIC RELATIONS» IN PROJECT ACTIVITIES

| Common competence blocks | EG-1 | EG-2 | CG-1 | CG-2 | MM-1 | MM-2 |
|---|---|---|---|---|---|---|
| | *Middle Mark* | | | | | |
| Communication competencies | 5 | 8 | 6 | 7 | 7 | 9 |
| Group Dynamics management | 2 | 4 | 3 | 5 | 4 | 6 |
| Coaching competencies | 1 | 2 | 1 | 1 | 2 | 5 |
| Professional competencies | 5 | 7 | 5 | 7 | 5 | 7 |
| Project competencies | 3 | 7 | 2 | 6 | 6 | 8 |

Experimental groups and control groups show approximately equal scores. At the same time, experimental groups show on average higher grades in such blocks as: communicative, coaching and project competencies. And the control groups, on average, rated group dynamics management higher, which is probably due to greater independence in the organization of group work. Professional competencies received the same average score both in the experimental groups and in the control groups. At the same time, if all blocks of competencies are rated high enough by students, then coaching competencies have received a low rating from both bachelors and masters. The highest growth in the blocks of competencies in all groups was received by the project, which may be related to the subject orientation of the activity. The masters rated communication and project competencies above all, while admitting that this work helped them master and value the development of coaching competencies and group dynamics management competencies more highly.

## V. CONCLUSIONS

The model can be implemented at any university that practices the development of project activities, at faculties where two-level training is expected in the direction: bachelor's degree and master's degree and disciplines with continuity of content, but of varying academic complexity, have been developed.

The development of the model involves the creation of an online community of students, which will be replenished by university graduates to search for industrial partners, expert assistance to students and mentors. The community will be managed by students through bot support, and the architecture of the community is also designed by students. In addition, students also design new elements of gamification, which may change from year to year during the implementation of the project. In the future, the application of the model on cross-cultural teams of the university is considered.

Thus, the proposed mentoring model allows master mentors to deepen their knowledge in project activities, form managerial skills and meta-competences through systematic and organized cooperation with bachelor teams, aimed not at the mechanical transfer of knowledge, but at stimulating an independent search for ideas through the organization of group communications and team interaction, connecting personal and team goals, combining personal development with educational goals with the possibility of interaction in the digital environment.

REFERENCES

[1] C. Cushion, R. Townsend "Technology-enhanced learning in coaching: a review of literature", Educational Review. 2018. № 71. pp. 1-19. Doi: 10.1080/00131911.2018.1457010 [in English]

[2] K. Guthrie, J. Meriwether "Leadership Development in Digital Spaces Through Mentoring, Coaching, and Advising", New Directions for Student Leadership. 2018. pp. 99-110. Doi:10.1002/yd.20291. URL: https://www.researchgate.net/publication/324257727_Leadership_Development_in_Digital_Spaces_Through_Mentoring_Coaching_and_Advising (accessed: 12.02.2023) [in English]

[3] N. Salazar "Teaching mentoring program for the application of active methodologies and ICT tools", IEEE Frontiers in Education Conference (FIE) 2017. pp. 1-6. Doi: 10.1109/FIE.2017.8190607. URL: https://www.researchgate.net/publication/321810649_Teaching_mentoring_program_for_the_application_of_active_methodologies_and_ICT_tools (accessed: 12.02.2023) [in English]

[4] V. I. Blinov, E. Yu. Yesenina, I. S. Sergeev "Mentoring in education: a well-sharpened tool is needed", Vocational education and the labor market. 2019. № 3, pp. 4-18. [in Russian]

[5] O. V. Glazunova "On various approaches to the practice of mentoring and support of project and research work", Researcher. 2020. № 1 (29), pp. 104-134. [in Russian]

[6] V. S. Nikolsky, A. V. Neslukhovskaya "Competencies of the mentor of project training and his role in the development of the project approach by students", Researcher / Researcher. 2020. № 1 (29), pp.135-143. [in Russian]

[7] O. S. Kudinova, L. G. Skulmovskaya "Project activity at the university as the basis of innovation", Modern problems of science and education. 2018. № 4, pp.70-72. [in Russian]

[8] A. V. Pryakhina, D. A. Bagdasaryan "Implementation of culturally-oriented projects as an actual educational activity at the university. Scientific research and development", Modern Communication studies. 2022. Vol. 11. № 5, pp. 37-47. [in Russian]

[9] A. V. Pryakhina, I. U. Saveleva, E. I. Kamalitdinova "Metacompetences-Building for Students of Humanities Department on the Basis of Project Activity", Communication Strategies in Digital Society Seminar (ComSDS), 2022, pp. 113-116. Doi: 10.1109/ComSDS55328.2022.9769099. [in English]

[10] R. I. Btemirova "Project method in the conditions of modern higher education", Modern problems of science and education. 2016. № 3. URL: https://science-education.ru/ru/article/view?id=24488 (accessed: 16.02.2023) [in Russian]

[11] "Mentoring of the XXI century": a collection of articles based on the results of the Regional scientific and practical conference on March 29, 2021 Omsk: Omsk Pedagogical College № 1, 2021, 70 p. [in Russian]

[12] O. A. Brown, Rassokhina I. Yu., Arshinova E. V., Bilan M. A., Arkuzin M. G. "Formation of professional identity of students in the process of «horizontal learning»", Vocational education in Russia and abroad. № 4 (36). Kemerovo, 2019, pp. 24-32. [in Russian]

[13] A. E. Morin, A. S. Antropova "Implementation of the Mentor project in the student environment", Young scientist. 2021. № 31.1 (373.1), pp. 56-58. [in Russian]

[14] I. R. Stashkevich, S. A. Afanasyeva "Modern forms of mentoring", Innovative development of vocational education. 2021. №1 (29), pp. 147-171. [in Russian]

[15] "Methodological recommendations for the introduction of a regional target model of mentoring for educational organizations, local governments that manage education", Ministry of Education and Science of the Chelyabinsk region State Budgetary Institution of Additional Education «Regional Center for Additional Education of Children». Chelyabinsk, 2021, 51 p. [in Russian]

[16] V. V. Velikorossov, M. N. Kulapov, A. M. Karyakin, E. N. Nikolskaya "Virtual teams: development of the theory of teamwork practice", Herald of NGUEU. 2018. № 4, pp. 41-49. [in Russian]

[17] A. A. Verbitsky "Digital learning: problems, risks and prospects", Electronic scientific journal «Homo Cyberus». 2019. №1 (6). URL: http://journal.homocyberus.ru/Verbitskiy_AA_1_2019 (accessed: 12.02.2023). [in Russian]

[18] L. V. Lamonina, O. B. Smirnova "On the use of digital online technologies in distance learning", Electronic scientific and methodological journal of Omsk State University. 2020. № 4 (23). URL: https://cyberleninka.ru/article/n/ob-ispolzovanii-tsifrovyh-onlayn-tehnologiy-v-distantsionnom-obuchenii (accessed: 02.18.2023). [in Russian]

[19] E. P. Krupoderova, M. L. Loktikova, A. A. Shcherbakova "Digital tools for organizing project activities of students and schoolchildren", Problems of modern pedagogical education. 2022. № 75-3, pp. 238-240. [in Russian]

[20] A. A. Belolobova "Network project activity and digital tools for its implementation", Open Education. 2020. № 4, pp. 22-31. [in Russian].

# Online Platform as a Discourse Factor of Virtual Communities

Galina V. Lukyanova
*Faculty of Political Science*
*St.Petersburg State University*
Saint-Petersburg, Russia
0000-0003-1260-2124

Denis S. Martyanov
*Faculty of Political Science*
*St.Petersburg State University*
Saint-Petersburg, Russia
0000-0001-7755-8086

*Abstract*—Due to the proliferation of different online platforms, the study of more than one platform at a time has become a notable trend in communication research. Cross-platform studies offer an opportunity to identify multiple factors in constructing online discourse. This paper examines the discourse of almost 100 Russian virtual communities on two different platforms - Vk.com and Telegram. Using Latent Dirichlet allocation, we identify the specificity of discourse on dissimilar online platforms under agenda unification and show differences in discourse between "public-facing" and "private-facing" platforms.

*Keywords—social media, online platform, virtual communities, discourse*

## I. INTRODUCTION

Social media research is undergoing a "comparative turn". Recently, researchers have shown an increased interest in exploring different dimensions of communication. Cross-national, cross-media, and cross-platform studies are noteworthy [11]. They show how cultural, political, and technological factors can shape the content of communication. Due to the ever-growing number of platforms with audiences of millions, communication researchers focus on study more than one platform at a time.

The prospect of cross-platform studies opens up a variety of ways in which comparisons can be made. Hargittai found significant socio-demographic differences between users of platforms such as Facebook, Twitter, and LinkedIn [8, 11]. However, such demographic differences are subject to dynamic change, as users tend not to stay on one platform but to use multiple platforms simultaneously. The phenomenon of moving from one platform to another is called platform-swinging [14].

Affordances of platforms shape certain user attitudes, associating specific platforms with a certain type of communication. For example, "WhatsApp is used to share quick information with close friends and family; Facebook is used to share content that they want to disseminate widely; Instagram is used to post carefully and stylizedly constructed visual portraits of everyday life; Twitter is used to get news and comment on it; and Snapchat is used for fun, instant communication with close friends"[1: 255].

Platforms can shape general, universal attitudes [6] as well as fundamentally different patterns of communication, contributing, for example, to cohesive group discussions or narcissism [9].

The importance of the platform factor in the development of political communication explains the growing movement to regulate social media. The lack of containment of the omnipotence of social media leads to the fact that the idea of Big Tech has "lost its way" [12: 226].

In this regard, cross-platform research can aim to identify both technological differences (Youtube and Twitter) and cultural and political differences with the similarity of the platforms' functionality and interface (Twitter and Weibo). Differences in the audience's discursive practices determined by the platform factor were highlighted by comparing the Russian vigilante communities Vk.com and Youtube [10]. In the analysis of the Twitter and Weibo ecosystems, Yang et al. note the political and cultural differences in the work of these platforms, which function under the conditions of liberal democracies, Western individualism (Twitter) and one-party systems, Eastern collective values (Weibo). The authors note the great potential of such research, although cross-platform research in some parameters is still in the early stages. [15].

The platform factor can also become a segregation factor. Analyzing how Facebook and Reddit users consume news, Cinellia et al. found higher segregation on Facebook [4].

There are many studies that compare similar platforms with different audiences [5]. A classic example is the comparison between Twitter and Weibo [2; 7; 13]. It was found that "individualistic" Twitter has a great openness in terms of discussing posts. However, the manner in which posts are discussed is "less positive" than in the "collectivistic" Weibo [5].

We have chosen Vk.com and Telegram for our comparative study for several reasons. These two online platforms are leading according to the number of users in Russia. Telegram's audience at the beginning of 2023 was 48.8 million users per month. Vk.com has 73.4 million monthly visitors.

Currently, Telegram is recognized as a foreign messaging service in Russia. Telegram has been repeatedly blocked in various countries. The application has been blocked in China and Iran, the US threatened to remove it from the AppStore and Google Play, and the German authorities took the initiative to block it. At the same time, Telegram itself has a practice of blocking users' channels, for example, if they promote violence. For a while Telegram was blocked in Russia. However, at the moment it works legally in the country.Vk.com has also been blocked in a number of countries. Most of them are post-Soviet countries, including Ukraine. Vk.com operates in a legal way in Russia. This social network is characterized by scrupulous observance of Russian laws, blocking extremist sites, and obeying orders issued by the authorities.

Comparing Vk.com social network with the Telegram messenger is also interesting because social networks are more "public-facing" environments, while messengers are more "private-facing" communication. It is believed that "public-facing" platforms have a tendency to reproduce existing social norms, while "private-facing" platforms are more emancipatory [11].

There is still considerable controversy about the determinants of communication. Cultural, political, and socio-demographic factors may influence content. We hypothesize that differences in the discourse of similar media may be due, among other things, to the platform factor.

## II. DESCRIPTION

### A. Research Design

This study is part of a broader project devoted to the study of politicized communities. The sample of this project included 3 blocks of virtual communities in the messenger Telegram and the social network Vk.com, meeting the following requirements - openness, ability to comment, and popularity. In the first block were the media communities. To increase the comparative aspect of the study, some of them (5 media) duplicated the media in the network Vk.com and the messenger Telegram. Initially, there were 30 communities in this block.

The second block included 50 communities of political actors - state authorities, opinion leaders, political parties, and informal political groups of various ideological nature. Some of these communities also overlapped in Vk.com and Telegram. Initially, there were 50 communities in this block.

The third block included non-overlapping communities (channels and publics) dedicated to the topic of the special military operation in Ukraine. This block initially included thirty communities.

As the project progressed, some communities did not meet the initial requirements for various reasons (including blocked communities), so the analysis was performed on 99 communities.

The timeframe is from January 1, 2022 to October 31, 2022.

Latent Dirichlet Allocation (LDA) was used to conduct this study. It is one of the most popular text classification algorithms for semantic topics. It is typically used to analyze large collections of text, including finding relatedness and extracting information. In the present study, each table resulting from LDA contains 7 topics and 50 words that the algorithm considers to be more likely to describe the topic in question. To increase visibility, we use word clouds of key words instead of tables in this paper.

### B. Research Results

Based on the frequency of the most used words in the analyzed social media, it should be emphasized that the discourse of virtual political communities on both platforms is very close and constructed around the Russia-Ukraine conflict (Fig.1 and Fig.2). As expected, the presidents of Russia and Ukraine were the only heads of state most often mentioned in the posts. Other participants in the conflict include "the USA", "Germany", "the West", "Europe", and "China". Militaristic discourse, whose markers are the means of describing military actions, dominates the discursive space: "military", "aid", "plan", "war", "side", "peace", "group", "target", "enemy", "force", "part", "Donbass", "AFU". It should be noted that the discourse of politicized communities shifts from informational messages to persuasive ones, aimed at arousing emotional empathy for the victims by describing the horrors of war: "home", "strike", "woman", "street", "city", "video", "inhabitant", "child", thus creating sympathy for "ordinary" people in the audience.



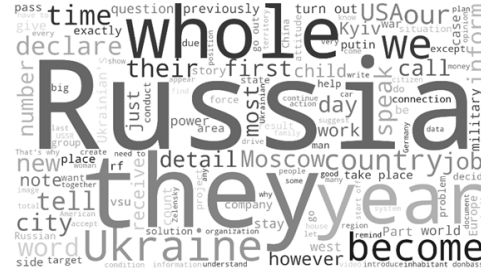Fig. 1. Word frequency in Telegram's politicized channels



Fig. 2. Word frequency in Vk's politicized communities

An analysis of the most frequently used, but unique to each platform, shows that Telegram channels are more focused on the transmission of specific information ("add", "Mariupol", "channel", "soon", "opponent", "street", "journalist", "regular", "employee", "write", "statement", "use", "against"), while Vk.com focused on reflecting on the events occurring ("detail", "family", "last", "people", "why", "USSR", "represent", "image", "bring", "opinion", "document", "appear", "action").

As a result of the LDA, we have identified themes that are common to both platforms, as well as themes that are specific to each platform. The common topics, although sometimes described in different terms, include:

- Special military operation. This theme includes military actions, with an indication of the location of the events and the opposing sides in the conflict.

- Economy focuses more on issues related to the new economic challenges facing the state and Russian businesses.

- Geopolitics and International Relations, which describes events in the international arena and the reactions of major geopolitical players to them.

- Events in the country or incidents.

- The following topics are unique to Telegram:

- Anti-war topic (Fig.3). Besides mentioning the names of people with pronounced anti-war attitudes, such communities discredit the Armed Forces of Russia (pejorative "rfvoisko", "propagandist") and emotionally affect using the image of a mother who may lose her son ("mothers against war", "mother", "woman", "friend", "son", "freedom", "mobilization");

Fig. 3. Anti-war topic in Telegram's politicized channels

- War correspondents' reports, in which the emphasis is on providing information about events at the front ("area", "enemy", "battle", "attack", "fighter", "enemy", "unit", "front", "position", "arrival", "equipment") (Fig.4). In contrast to the common theme of special military operations on both platforms, the war correspondents concretize the information from the first person, an eyewitness of the events.



Fig. 4. War correspondents' reports in Telegram's politicized channels

- Topics related to the formation of the image of the future and the unity of the people through the creation and implementation of development projects ("work", "region", "project", "help", "program", "business", "forum", "together", "we", "territory", "construction", "help", "friend", "create") (Fig.5).



Fig. 5. The image of the future and the unity of the people in Telegram's politicized channels

The following topics are specific to the Vk.com service only:

- Culture (Fig.6). This topic includes cultural events: exhibitions, films, festivals, competitions, celebrations, theatrical performances.



Fig. 6. Culture in Vk's politicized communities

- Formation of patriotic feelings by explaining the causes of the special military operation and Russian history (Fig.7). First of all, attention is drawn to the presence of such words as "therefore", "why", "question", "understand", which is a sign of reasoning, reflection, rethinking. At the same time, there is a clear opposition between "us" and "them", Russia and Ukraine, which serves as an indicator of military-patriotic discourse. In addition, in this theme the references to history ("USSR", "Soviet Union", "history", "Stalin", "first") are vividly expressed in this theme;



Fig. 7. Patriotism in Vk's politicized communities

- The topic related to information about military service is constructed by using words referring to military regulations governing the functioning of the Russian Armed Forces ("order", "discharge", "pay", "contract", "report", "document", "command", "regiment", "group") (Fig.8).



Fig. 8. Information about military service in Vk's politicized communities

On the one hand, the results of this study confirm the existence of agenda unification, on the other hand, it allows us to trace significant differences in the construction of discourse and to identify the most important issues of virtual communities.

## III. Conclusion

Vk.com and Telegram are a good examples of two different communication spaces. They have their own specifics in terms of functionality, audience, institutional constraints, and discourse. Nevertheless, both Vk.com and Telegram demonstrate a common agenda for Russia related to the Russian-Ukrainian military conflict and its geopolitical context. This discourse is characterized by a certain militarization, as well as emotionalization associated with empathy for the victims of military actions.

The discourse of military everyday life is characteristic of the messenger Telegram. Telegram confirms its reputation as a "private" space, even though it focuses much more on mass communication than WhatsApp and uses elements of communication characteristic of classic social networks.

Telegram is loosely regulated by Russian law. There are no significant restrictions on its use by groups and media outlets that are banned in Russia, as well as by residents of Ukraine and its supporting countries, both as authors of Russian-language channels and as active participants in the Russian media audience. Therefore, anti-war and radical anti-loyalist discourses are easily distinguishable. Telegram is also characterized by current issues of domestic politics unrelated to the course of hostilities. All in all, Telegram can be described as a more conflictual space, more focused on micro-narratives.

Vk.com's discourse is more in line with the traditional media in Russia - television and the print media with their typical focus on macro-narratives.

## Acknowledgment

## References

[1] P. J. Boczkowski, M. Matassi, and E. Mitchelstein, "How young users deal with multiple platforms: The role of meaning-making in social media repertoires," Journal of Computer-Mediated Communication, vol. 23, Issue 5, pp. 245–259, September 2018. https://doi.org/10.1093/jcmc/zmy012

[2] G. Bolsover, and P. Howard, "Chinese computational propaganda: Automation, algorithms and the manipulation of information about Chinese politics on Twitter and Weibo," Information, Communication & Society, vol. 22 (14). pp. 2063-2080, 2019. https://doi.org/10.1080/1369118X.2018.1476576

[3] S. Chen, H. Zhang, M. Lin, and S. Lv, "Comparision of microblogging service between Sina Weibo and Twitter," In: Proceedings of the 2011 International Conference on Computer Science and Network Technology, Harbin, China, pp. 2259–2263, 24–26 December 2011.

[4] M. Cinellia, G. De F. Moralesb, A. Galeazzic, W. Quattrociocchid, and M. Starninib, "The echo chamber effect on social media," PNAS 2021, vol. 118 (9), pp. 1-8, 2021. https://doi.org/10.1073/pnas.2023301118

[5] W. Deng, and Y. Yang "Cross-platform comparative study of public concern on social media during the COVID-19 Pandemic: An empirical study based on Twitter and Weibo," International Journal of Environmental Research and Public Health, vol. 18(12) p. 6487, 2021. https://doi.org/10.3390/ijerph18126487

[6] J. van Dijck, "You have one identity: Performing the self on Facebook and LinkedIn," Media, Culture & Society, vol. 35(2), pp. 199–215, 2013. doi:10.1177/0163443712468605

[7] W. Han, X. Zhu, Z. Zhu, W. Chen, W. Zheng, and J. Lu, "A comparative analysis on Weibo and Twitter," Tsinghua Science and Technology, vol. 21, pp. 1–16, 2016.

[8] E. Hargittai, "Is bigger always better? Potential biases of big data derived from social network sites," The ANNALS of the American Academy of Political and Social Science, vol. 659(1), pp. 63–76, 2015. doi:10.1177/0002716215570866

[9] E. Karapanos, P. Teixeira, and R. Gouveia,"Need fulfillment and experiences on social media: A case on Facebook and WhatsApp," Computers in Human Behavior, vol. 55, pp. 888–897, 2016. doi: 10.1016/j.chb.2015.10.015

[10] G.V. Lukyanova, D.S. Martyanov and A.V. Volkova, (2022) "Value Determinants of Digital Vigilante's Communication Strategies," In: 2022 Communication Strategies in Digital Society Seminar (ComSDS), pp. 224-227, 2022. doi: 10.1109/ComSDS55328.2022.9769100.

[11] M. Matassi, and P. Boczkowski, "An agenda for comparative social media studies: The value of understanding practices from cross-national, cross-media, and cross-platform perspectives," International Journal of Communication, vol. 25, 2021 https://ijoc.org/index.php/ijoc/article/view/15042

[12] A. Rochefort, "Regulating social media platforms: A comparative policy analysis," Communication Law and Policy, vol. 25:2, pp. 225-260, 2020. doi: 10.1080/10811680.2020.1735194

[13] D. Stockmann, Big Data from China and Its Implication for the Study of the Chinese State—A Research Report on the 2014 Hongkong Protests on Weibo, Leiden University: Leiden, The Netherlands, 2015.

[14] C. E. Tandoc Jr., C. Lou, and V. L. H. Min, "Platform-swinging in a poly-social-media context: How and why users navigate multiple social media platforms," Journal of Computer-Mediated Communication, vol. 24 (1), pp. 21–35, January 2019. https://doi.org/10.1093/jcmc/zmy022

[15] Y. Yang, J.H. Hsu, K. Löfgren, and W. Cho, "Cross-platform comparison of framed topics in Twitter and Weibo: machine learning approaches to social media text mining," Social Network Analysis and Mining, vol. 11, article number: 75, 2021. https://doi.org/10.1007/s13278-021-00772-w

# Overlap of Youth and Student Online Communities (on Example of the Kostroma, Vologda, Vladimir and Yaroslavl Regions)

Alexander V. Sokolov
*Department of Social and political theories*
*Demidov P.G. Yaroslavl State University*
Yaroslavl, Russia
alex8119@mail.ru

Egor Grebenko
*Department of Social and political theories*
*Demidov P.G. Yaroslavl State University*
Yaroslavl, Russia
grebenkoegor76@gmail.com

Yuri Golovin
*Department of Social and political theories*
*Demidov P.G. Yaroslavl State University*
Yaroslavl, Russia
yagolovin@rambler.ru

*Abstract*— The aim of the study is to identify overlap and audience interrelations of various youth and student online communities in the VKontakte (on example of communities of federal structures, universities and youth organizations of the Kostroma, Vologda, Vladimir and Yaroslavl regions). 23 youth and student online communities of 4 regions (in which are located universities of the consortium "Upper Volga - the Territory of Innovation") and 4 online communities of federal authorities and all–Russian youth organizations on the VKontakte work were selected for the research. Community analysis criteria were: community type; number of subscribers; audience coverage; overlap of community subscribers. The analysis of student and youth online communities subscribers were organized on the principle of searching for overlap of the audience of various communities of the VKontakte through the TargetHunter online platform. The study allowed to draw a number of conclusions. Student and youth online communities in the VKontakte have a localized character, which is manifested in the orientation of the student youth organizations activities to the regional and university youth of a particular region. Some consolidation on the level of online communities of regional organizations were determined. The involvement and consolidation of regional online communities with federal communities remains quite low.

*Keywords— social network sites, students, youth, Internet, communities*

## I. INTRODUCTION

The active development of social network sites in the last decade has opened access for researchers to new data about people's interests and peculiarities of their communication on the Internet.

The widespread digitalization of socially significant processes makes it important to improve communication mechanisms in the student community, which not only contribute to attracting an audience, but also affect the image of a higher educational institution. So, there are ratings of the "digitalization of the educational process", and the "effectiveness of the presence of Russian universities on social network sites" became publicly evaluated [1]. Social network sites also have to represent the interests of state organizations: from December 2022 the social network site VKontakte has begun to verify such accounts, in particular, groups of state universities [2].

Understanding the target audience of communities and the interests of the online audience will help to adapt the nature of the content, make it more understandable, interesting, and increase the involvement of young people.

Students is one of the most important social groups on which state development depends both in the short and long term. They have a high prospect of influencing the formation of country's political course and agenda. It depends on their activity and involvement in various activities, participation in social movements and organizations. Youth and student organizations play an important role in such proccesses, which are designed to consolidate groups of young people to achieve their interests through collective actions.

## II. THEORETICAL FRAMEWORK

The development of digital platforms and social media creates additional conditions for building communication within and between different audiences. The transition to interactive digital platforms changes the role of the individual, who becomes not just a consumer of content, but "an accomplice in the process of product creating" [3]. Moreover, individuals are involved in the process of agenda broadcasting, forming communities and associations. Thus, the phenomenon of "producing consumers" is being formed [4]. Special forms of interaction on social network sites and messengers ("like", "subscribe", repost, emojis, etc.) create additional effects in digital communication [5].

Activities in digital space allow create additional conditions for consolidation through awareness raising, similarities of feelings and emotions, thereby forming cohesive social ties [6]. Communication carried out in online communities stimulates the intensity of different types of social interrections [7]. In the future, they can be used both to spread the current agenda and to jointly solve significant problems [8].

Successfully developing, social network sites become the "operating system of our life" [9]. They establish control over the information space, replacing traditional media. They desire to impose standards of cultural production and to form dependence on their services, forming the phenomenon of "infrastructure capture" [10]. This problem is aggravated by low degree of transparency and accountability of social network sites. D.Martianov and N.Martianova point to the threats of the echo chambers formation, which are characterized by the specificity of the presentation of information and the desire for self-expression [11]. In more extreme forms, the development of information and communicative technologies can stimulate the formation of digital totalitarianism [12].

Digital platforms change reality, increasing the importance of horizontal connections in it. This is ensured,

100

among other things by eliminating intermediaries in the chain of their interaction [13].

Digital platforms can support new and flexible tools of inter-organizational relations with the help of various distributed resources, facilitating highly automated activities at arm's length [14].

The main goal of many studies on this topic is to identify qualitative and quantitative characteristics of online communities audience. Special emphasis is placed on the analysis of connections between individual users and between entire user communities. Analysis of communities on social network sites originates from marketing research, where the analysis of the preferences of target audiences allows us to identify the most effective mechanisms of consumer influence. So, M.T. Agieva identifies a possible range of tasks that can be solved through the analysis of online communities on social network sites, and also suggests models of influence that can be applied in marketing research [15]. D.A. Lesnevsky and I.G. Rekun considered the prospect of unifying the analysis of the audience of online communities and bloggers based on market research of users of social network sites [16]. It is also important to develop such analysis methods that would be able to maximize the benefits of the available data array.

Further study of online communities has shown the potential for sociological analysis of audiences and users of social network sites to identify and describe current problems of modern society and their perception. Yu.Yu. Estrina proposed criteria for typological description of Internet communities based on a sociological study of the group dynamics of Internet users. She also notes a certain influence of the typology of online communities on integrative processes in the modern online space [17]. The methods of sociology are also applicable to the study of the electoral audience of social network sites. Thus, E.Y. Sycheva considered the possibility of using social network analysis during election campaigns, especially in the context of the influence of various political forces on the potential electorate [18]. She notes that political forces, through virtual technologies, are able to form socio-political values and attitudes among the audience.

To date, the most common method of analyzing online communities is network analysis, which allows you to identify connections between different groups of users based on their common interests and intersections on the Internet. O.V. Popova and S.I. Suslov considered the prospects for the development of methods for analyzing political communities on social network sites [19]. The authors emphasize the universality of the network analysis method when studying online communities on social network sites. A.A. Fomin presented an approximate algorithm for the research of online communities based on the network analysis [20]. Arrays of data were collected on the basis of parser programs, which were subsequently processed and visualized by constructing graphs and allocating clusters.

At the same time, S.V.Volodenkov, S.Yu.Belokonev, A.A. Suslova identify a number of features of information consumption of modern students: the dominance of digital sources with different levels of trust, the formation of "digital consumption habits" [21]. Researchers note that an intergenerational digital divide has formed, which complicates communication between university staff and students. At the same time, the Internet stimulates not only the globality of communication, but also allows the formation of local communities and segments with their own norms and culture [22].

The study of online communities of various public organizations and associations is also relevant today. I.G. Starikov, based on network analysis, revealed the relationship between the characteristics of urban non-profit projects and their audience, by reflecting the intersection of subscribers between different communities [23]. The development of Russian volunteering on the example of the social network site Vkontakte was considered by V.A. Smirnov [24].

### III. METHODS

The purpose of the study is to identify intersections and interrelations of the audience of various youth and student online communities in VKontakte on the example of federal structures, universities and organizations of the Kostroma, Vologda, Vladimir and Yaroslavl regions.

23 youth and student online communities of 4 regions (in which are located universities of the consortium "Upper Volga - the Territory of Innovation") and four online communities of federal authorities and all–Russian youth organizations on the VKontakte work were selected for the research. The communities were grouped into five main groups:

1. Online communities of federal authorities and all-Russian youth organizations: Federal Agency for Youth Affairs (Rosmolodezh), All–Russian Public Organization "Russian Union of Youth" (hereinafter - RSM), Association of Student Trade Union Organizations "Student Coordinating Council" (hereinafter - SCS), All-Russian Public Youth Movement "Association of Students and Student Associations Russia" (hereinafter – ASO);

2. Online communities of regional institutions, youth and student organizations: Yaroslavl Regional Youth Public Organization "Union of Students"; State Autonomous Institution of the Yaroslavl region "Palace of Youth" (Yaroslavl); Autonomous Institution of the Vologda region "Regional Center for Youth and Civic Initiatives "Commonwealth"; Municipal state Institution of the city of Kostroma "Youth Complex "Pale"; Youth of Kostroma region; Municipal budgetary institution "Youth Center" (Vladimir);

3. Regional branches of the All-Russian public organization "Russian Union of Youth" (Yaroslavl, Vologda, Kostroma and Vladimir branches);

4. Official pages of universities of the consortium "Upper Volga": Cherepovets State University (hereinafter – CSU); Kostroma State University (hereinafter – KSU); Yaroslavl State University named after P.G. Demidov (hereinafter – YarSU), Vladimir State University A. G. and N. G. Stoletov University (hereinafter – VlSU).

Community analysis criteria were:

- community type;

- number of subscribers;

- audience reach;

- intersection of community subscribers.

The analysis of subscribers of student and youth online communities took place on the principle of searching for intersections of the audience of various VKontakte

communities through the "TargetHunter" online platform. For this purpose, the audience of federal, regional and university communities was compared.

## IV. GENERAL CHARACTERISTICS OF ONLINE COMMUNITIES

The initial inspection of the selected online communities showed that they are all open and any Internet user can view the information broadcast by the communities, and any user registered in the VKontakte can join them. Most of the communities are implemented as groups (19 online communities), which indicates their focus on public discussions and cooperation of various associations. Only 8 communities were created as public, that is, they are more focused on publishing information about particular association activities (Vladimir Youth Center; CSU; YarSU; "Union of Students" of P.G. Demidov YarSU; United Council of Students of KSU; Rosmolodezh; SCS of the Trade Union; Union of Students (Yaroslavl region)).

The largest federal community in terms of subscribers' number is Rosmolodezh community (163172 subscribers). The largest regional youth and student communities are the Yaroslavl Youth Palace (17071 subscribers) and the Vologda Oblast Commonwealth (11685 subscribers). The largest regional online community of the Russian Youth Union is Yaroslavl region branch (3769 subscribers).

Communities of CSU (16,714 subscribers) and VlSU (16,477 subscribers) are the largest in terms of subscribers' number among research universities communities. Community of Trade Union Organization of the VlSU (10398 subscribers) is the largest among community of university student associations. The subscribers' number of each of the studied communities is presented in Table I.

TABLE I. THE NUMBER OF PARTICIPANTS OF THE ONLINE COMMUNITY

| The name of the online community in VKontakte | The number of the audience (as of 01.12.2022) |
|---|---|
| Rosmolodezh (https://vk.com/rosmolodez) | 163172 |
| RSM \| Russian Youth Union (https://vk.com/rsmofficial) | 76458 |
| SCS of the Trade Union (https://vk.com/sks_rf ) | 30025 |
| ASO of Russia (https://vk.com/aso_russia) | 11230 |
| Union of Students \| Yaroslavl region (https://vk.com/yaomoo_sst) | 4126 |
| Youth Palace \| Yaroslavl (https://vk.com/yardm) | 17071 |
| COMMONWEALTH (Vologda region) (https://vk.com/vol_sodruga) | 11685 |
| Youth complex "Pale" of the city of Kostroma (https://vk.com/mkpale) | 4588 |
| Youth of the Kostroma region (https://vk.com/molodezh44) | 5308 |
| Youth Center of Vladimir (https://vk.com/centr.start) | 2506 |
| Yaroslavl organization of the RSM (https://vk.com/club6568) | 3769 |
| Russian Youth Union \| Vologda Region (https://vk.com/rsm_35) | 1376 |
| RSM \| KOSTROMA REGION (https://vk.com/rsm_kostroma) | 2667 |
| Russian Youth Union – Vladimir (https://vk.com/rsm33) | 435 |
| Cherepovets State University (https://vk.com/chsu35) | 16714 |
| KSU \| Reference University (https://vk.com/kostroma_university) | 9531 |
| YarSU named after P.G. Demidov (https://vk.com/demidyarsu) | 9131 |
| VlSU \| Vladimir State University (https://vk.com/vlsu_info) | 16477 |
| "Union of Students" of P.G. Demidov YarSU (https://vk.com/go_demid) | 2501 |
| The Joint Council of Students of CHSU (https://vk.com/oso_chsu) | 653 |
| Association of CHSU students (https://vk.com/os_chsu) | 779 |
| Joint Council of Students of KSU (https://vk.com/osoksu) | 1108 |
| VlSU Youth Center / VlSU Volunteers (https://vk.com/molcentrvlsu) | 2050 |
| Trade union organization of YarSU students (https://vk.com/profkomyar) | 4406 |
| Trade union organization of students of KSU Kostroma (https://vk.com/pposksu44) | 1875 |
| Trade union organization of the VlSU (https://vk.com/profkom_vlsu) | 10398 |
| YarGU STUDCLUB (https://vk.com/studclub_yargu) | 7208 |

By correlating the number of students currently studying at universities and the community subscribers' number, it was possible to identify the degree of student involvement manifested in their membership in online communities (it is necessary to take into account the fact that not all community subscribers may be students). An interesting fact is that the

number of the audience of the CSU community significantly exceeds its potential number of students (238% of the number of students). The same situation is observed with the communities of YarSU (145% of the number of students) and KSU (119% of the number of students).

The involvement of the student audience in the online communities of university student organizations is rather ambiguous (Table 2). Thus, the student communities of YarSU involved, on average, 75% of potential students. VlSU student organizations involved 37% of their potential target audience, and KSU - about 19%. The situation with the student communities of ChSU is rather ambiguous. Official information about the activities of student communities is published on the official page of the university (which confirms the high involvement of the audience of the official CSU community), therefore, online communities of student associations of the university involved only 10% of potential students.

There are two ways to inform about the activities of student communities on the VKontakte:

1. Organizations involve the audience in their groups and publics, informing students about their`s activities (YarSU, VlSU);

2. Student organizations publish information on the university`s official page, while developing small online communities on various topics (CSU, KSU).

| Name of the online community in VKontakte | Number of potentially involved students (in %) |
|---|---|
| Cherepovets State University | 238,8 |
| KSU \| Reference University | 119,1 |
| YarSU named after P.G. Demidov | 145,5 |
| VlSU \| Vladimir State University | 96,9 |
| "Union of Students" P.G. Demidov YarSU | 39,9 |
| Joint Council of Students of CHSU | 9,3 |
| Association of CHSU students | 11,1 |
| Joint Council of Students of KSU | 13,9 |
| VlSU Youth Center / VlSU Volunteers | 12,1 |
| Trade union organization of YARSU students | 70,2 |
| Trade union organization of students of KSU Kostroma | 23,4 |
| Trade union organization of the VlSU | 61,2 |
| YarGU STUDCLUB | 114,9 |

## V.    INTERSECTION OF THE AUDIENCE OF YOUTH AND STUDENT ONLINE COMMUNITIES

The results of the study demonstrate the high involvement of students in the activities of online student communities within each university. The average involvement of the audience of online student communities in the activities of universities` official pages is quite high. On average, 81% of the audience of KSU student communities are subscribers of university official page in VKontakte. This indicator is 80% for the internal communities of CHSU. The involvement of student communities audience of YarSU and VlSU in official pages of universities is 50% and 48%, respectively. This situation indicates the difference in the positioning of the official online communities of universities and the ways of informing student organizations and associations about theirs activities.

The involvement of student online communities audience in the online communities of regional organizations of the RSM is small and amounts to an average of 4.6%. Although the interest of the audience of regional RSM in the activities of universities student organizations is much higher and amounts to 18.7%. The YarSU communities demonstrate the greatest involvement (about 6.7%), while the VlSU communities demonstrate the smallest involvement (1.4%). Such data indicate a low interest of the student audience in the activities of the regional branches of the RSM youth organization.

The average involvement of student online communities in the online communities of regional student and youth organizations is 14.1%. Thus, the leader in involvement in regional communities is the audience of YarSU student communities (18.4%). The lowest share of involved communities is in VlSU - 3.5% (it should be noted that a small number of active communities on the VKontakte have been found in the Vladimir region).

The audience involvement of the student communities in the federal online communities of student and youth organizations is not high (3.4%). This underlines the general orientation of the online student communities of regional universities towards local organizations and associations. Thus, the Rosmolodezh community was able to involve 6.3% (the highest indicator) of the audience of student organizations of the universities, and the ASO of Russia involved only 0.5% (the lowest indicator) of the audience. The involvement of students in the online communities of regional and federal youth organizations is limited only so-called student asset, which is interested in the agenda of these online communities.

The intersection of the audience of online communities of regional branches of the RSM with the audience of regional student and youth communities, on average, is 29.9%. This indicator allows us to judge the high degree of interest of the audience of the regional RSM communities in the activities of regional youth and student organizations. However, it is quite difficult to talk about the reverse interest and involvement. So, on average, only 10% of the audience of the communities of youth and student organizations of the studied regions are subscribed to the pages of the regional branches of the RSM. The involvement of the audience of regional RSM in the online communities of federal youth organizations is still higher than that of university student communities and is 12% (on average for all online communities). The greatest involvement of the audience of the regional branches of the RSM in the online communities of Rosmolodezh and the federal RSM is traced (19.1% and 20.8%, respectively). In general, the audience of the regional branches of the RSM shows equal interest in both the activities of student organizations of universities and in the activities of federal youth online communities.

The audience involvement of regional communities of youth and student organizations in the online communities of federal ones is also not high, as well as that of university ones and is on average 4%, which indicates their orientation to regional activities.

The intersection of the audience between federal online communities looks more optimistic. For example, almost half of the ASO audience of Russia (47.3%) and a quarter of the RSM audience (25.7%) are subscribed to the Rosmolodezh page (about 15% of the entire Rosmolodezh audience on VKontakte). 15.5% of the audience of the SCS of the Trade Union subscribed to the Rosmolodezh page on VKontakte (3% of the audience of Rosmolodezh). Also, almost half of the audience of the ASO of Russia (46.22%) subscribed to the community of the federal RSM, which indicates the general interest of the active part of the students in the activities of federal youth organizations in the VKontakte.

## VI. Conclusions

Student and youth online communities in the VKontakte have a localized character, which is manifested in the orientation of the activities of student youth organizations to the regional and university youth of a particular region or city. At the same time, there is also consolidation at the level of online communities of regional organizations, although it cannot be called high. The involvement and consolidation of regional online communities with federal communities remains quite low. The exception is the Rosmolodezh community, which has a high potential for the general consolidation of student youth. The low percentage of audience involvement is explained by the interest of an active group of students and youth, which is potentially more focused on participating in the activities of youth and student organizations.

In general, we can say that the created communities are used more for positioning the organizations themselves, telling about their activities, rather than involving new activists in their activities. Moreover, the associations are poorly focused on building partnerships and interacting with each other. This is the conclusion that can be drawn in connection with the revealed low degree of intersection of audiences and subscribers.

Universities are more active in building interaction with their target audience than various associations of students and youth. This may also be due to the fact that they act as dominant institutions aimed at the widest possible audience (not only students, but also applicants, their relatives, graduates), presenting diverse content relevant to young people (even those young people who are not involved in public activity).

The communities of youth and student associations involve a smaller proportion of students of the respective universities than the communities of the universities themselves. However, it can be assumed that they work with more motivated and involved youth in their activities. This suggests a more intense interaction within the community.

Communities of regional and federal youth structures demonstrate a lower degree of involvement of their target audiences. This can also be attributed to the fact that they have involved activists and interested youth representatives in subscribers. The audience that is not involved in their offline activities is not their direct actual audience for online communities either.

It should be noted that a number of conclusions formulated in the study require confirmation during the analysis of the activity of interaction within the analyzed online communities, as well as the agendas broadcast by them. It is also worth noting that a significant part of communication in communities is carried out in private and closed communities that are not available for external analysis.

## References

[1] Effektivnost' prisutstviya vuzov Rossii v sotssetyakh [The effectiveness of the presence of Russian universities in social network sites]. Available at: https://vc.ru/social/167719-effektivnost-prisutstviya-vuzov-rossii-v-socsetyah (accessed 20.12.2022). (in Russian)

[2] Vse gosuchrezhdeniya v strane budut vesti svoi stranichki v sotsial'nykh setyakh [All state institutions in the country will maintain their pages on social network sites] Available at: https://1prime.ru/media/20221201/839012806.html (accessed 20.12.2022). (in Russian)

[3] A.E. Manzhosov, Vovlecheniye potrebitelya v protsess sozdaniya tsennosti putem ispol'zovaniya instrumenta kastomizatsii i v seti Internet [Involving the consumer in the process of creating value by using a customization tool and on the Internet]. Economics: Yesterday, today, tomorrow [Ekonomika: vchera, segodnya, zavtra], 2018, no. 3A. p. 300-307. (in Russian)

[4] A.Wonneberger, S.J. Kim, TV News Exposure of Young People in Changing Viewing Environments: A Longitudinal, Cross-national Comparison Using People-meter Data. International Journal of Communication, 2017, no. 11 (1). p. 72–93.

[5] T. Bucher, If... Then. Algorithmic Power and Politics. Oxford: Oxford University Press, 2018.

[6] W. Rehg, Solidarity and the Common Good: An Analytic Framework. Journal of Social Philosophy, 2007, no. 38 (1). p. 7–21.

[7] R. Douwes, M. Stuttaford, L.London, Social solidarity, human rights, and collective action: considerations in the implementation of the national health insurance in South Africa. Health and human rights, 2018, vol. 20, no. 2. p. 185-196.

[8] L. Reynolds, S. Sariola, The ethics and politics of community engagement in global health research. Critical Public Health, 2018, no. 28(3). p. 257–268.

[9] S. Vaidhyanathan, Antisocial Media: How Facebook Disconnects Us and Undermines Democracy. Oxford: Oxford University Press, 2018.

[10] E. Nechushtai, Could digital platforms capture the media through infrastructure? Journalism, 2018, no. 19(8). p. 1043-1058.

[11] D.S.Martianov, N.A. Martianova, Upravlyayemost' virtual'nykh soobshchestv: sravnitel'nyy analiz politizirovannykh grupp Vkontakte [Manageability of virtual communities: a comparative analysis of politicized Vkontakte groups]. Zhurnal politicheskikh issledovaniy [Journal of Political Studies], 2019, no. 3. p. 79-93. (in Russian)

[12] L.Diamond, The Road to Digital Unfreedom: The Threat of Postmodern Totalitarianism. Journal of Democracy, 2019, no. 30 (1). p. 20-24. https://doi.org/10.1353/jod.2019.0001

[13] B.D.Eaton, S.Elaluf-Calderwood, C. Sørensen, Y.Yoo, Distributed Tuning of Boundary Resources: The Case of Apple's iOS Service. System, MIS Quarterly: Special Issue on Service Innovation in a Digital Age, 2015, no. 39(1). p. 217–243.

[14] M.Reuver, C.Sørensen, R.C. Basole, The digital platform: a research agenda. Journal of Information Technology, 2018, no. 33. p. 124–135.

[15] M.T. Agieva, Tasks of analysis on social network sites in marketing. Inzhenernyy vestnik Dona [Don Engineering Gazette], 2018. No. 2 (49). (in Russian)

[16] D.A.Lesnevsky, I.G. Rekun, Rynochnyy opyt sozdaniya platformy dlya analiza akkauntov blogerov i ikh auditorii [Market experience of creating a platform for analyzing bloggers' accounts and their audience]. Monitoring [Monitoring], 2021. no. 5. p. 178-184. (in Russian)

[17] Yu.Yu. Estrina, Tipologicheskiye kharakteristiki onlayn-soobshchestv v issledovanii integrativnoy dinamiki razvitiya grupp sotsial'nykh setey «Vkontakte» i Facebook [Typological characteristics of online communities in the study of integrative dynamics of the development of groups of social network site "Vkontakte" and Facebook]. Vestnik Udmurtskogo universiteta. Sotsiologiya. Politologiya. Mezhdunarodnyye otnosheniya [Bulletin of the Udmurt University.

Sociology. Political science. International relations], 2021, no. 1. p. 40-47. (in Russian)

[18] E.Y. Sycheva, Elektoral'nyye tsennosti rossiyskoy molodezhi v usloviyakh sovremennogo mediynogo prostranstva [Electoral values of Russian youth in the conditions of modern media space]. Ekonomika. Sotsiologiya. Pravo [Economy. Sociology. Right], 2019, no.3 (15). p. 80-85. (in Russian)

[19] O.V.Popova, S.I. Suslov, Setevoy analiz politicheskikh internet-soobshchestv: ot formalizovannykh k «nenablyudayemym» gruppam [Network analysis of political Internet communities: from formalized to "unobservable" groups]. Polit. nauka [Polit. the science], 2021, no. 1. p. 160-182. (in Russian)

[20] A. A. Fomin, Razrabotka algoritma dlya sbora sotsiologicheskikh dannykh iz onlayn-soobshchestv universitetov v sotsial'noy seti VKontakte [Development of an algorithm for collecting sociological data from online university communities in the VKontakte social network site]. Izvestiya Saratovskogo universiteta. Novaya seriya. Seriya: Sotsiologiya. Politologiya [Izvestiya Saratov University. A new series. Series: Sociology. Political science], 2022, vol. 22, no. 4. p. 413-417. (in Russian)

[21] S.V.Volodenkov, B S.Yu.elokonev, A.A. Suslova, Osobennosti struktury informatsionnogo potrebleniya sovremennoy rossiyskoy molodezhi: na materialakh issledovaniya sredi studentov-politologov Finansovogo universiteta [Features of the structure of information consumption of modern Russian youth: based on research materials among political science students of the Financial University]. Vestnik Rossiyskogo universiteta druzhby narodov. Seriya: Politologiya [Bulletin of the Peoples Friendship University of Russia. Series: Political Science], 2021, no. 1. p. 31-46. https://dx.doi.org/10.22363/2313-1438-2021-23-1-31-46/ (in Russian)

[22] Yu.D.Artamonova, S.V. Volodenkov, Transformatsiya interneta kak prostranstva obshchestvenno-politicheskikh kommunikatsiy: ot globalizatsii k glo(lokal)anklavizatsii [Transformation of the Internet as a space of socio-political communications: from globalization to global (locale)enclavization]. Sotsiologicheskiye issledovaniya [Sociological Research], 2021, no. 1. p. 87-97. https://dx.doi.org/10.31857/S013216250013572-2. (in Russian)

[23] I.G.Starikov, Sotsial'nyy kapital v setyakh gorodskikh nekommercheskikh proyektov: setevoy analiz auditoriy grupp gorodskikh proyektov v sotsial'noy seti VKontakte [Social capital in the network sites of urban non-commercial projects: network analysis of the audiences of urban project groups in the VKontakte social network]. Regional'nyye problemy preobrazovaniya ekonomiki [Regional problems of economic transformation], 2017, no.11 (85). p. 24-32. (in Russian)

[24] V.A. Smirnov, Onlayn-soobshchestva rossiyskikh volonterov (na primere sotsial'noy seti vkontakte) [Online communities of Russian volunteers (on the example of the vkontakte social network)]. Vestnik Moskovskogo universiteta. Seriya 18. Sotsiologiya i politologiya [Bulletin of the Moscow University. Series 18. Sociology and Political Science], 2019, no.3. p. 71-92. (in Russian)

# Political Communication of Public Authorities in Telegram: Toward Comparative Analysis of Russia and Belarus

Aleksandr A. Hradziushka
*Chair of Periodicals and Web Journalism*
*Belarusian State University*
Minsk, Belarus
webjourn@gmail.com

Olga Y. Vikhrova
*Chair of of Media Theory and Economics*
*Lomonosov Moscow State University*
Moscow, Russia
financialliteracymsu@gmail.com

Hanna F. Velikaborats
*Chair of Periodicals and Web Journalism*
*Belarusian State University*
Minsk, Belarus
anuta247500@gmail.com

*Abstract*—In the context of the digital transformation of public life, the dialogue between the government and citizens on new digital platforms is actualized. Digital information openness of the authorities is one of the tools to overcome the digital divide. The empirical basis of the study was 15 channels in the Telegram messenger of Russian and Belarusian executive authorities, as well as channels of individual officials. The research was conducted using the TGStat tool. The research methodology was based on a comparative analysis of the effectiveness of content in Telegram channels. The main results of the study show that the use of various features of Telegram by the authorities as a full-fledged media is constantly increasing. It was found that messengers contribute to the creation of a fundamentally new model of political communication between representatives of the government and society. At the same time, it is noted that for the executive authorities in Russia and Belarus, interaction with the audience is not the cornerstone of their digital strategy on Telegram. Most public authorities use the messenger as a one-way communication channel. This data reveals new evidence of how the authorities are using Telegram as one of the tools of information support of public policy in the two countries. The authors conclude that new digital channels in the near future will allow public authorities to build an effective system of communication with the population on the basis of Internet platforms.

*Keywords*—*political communication, messengers, Telegram, social media, audience, engagement.*

## I. INTRODUCTION

Prospective directions of digitalization of political communication in recent years are becoming the subject of a number of scientific studies. Attracting the attention of the audience has become the main objective of the media in the modern digital environment. "To achieve this aim, more personalised content is now being produced, and attempts are being made to reach the user in a more direct and personal way through instant messaging platforms, especially Telegram" [1, p. 95]. In the context of the digital transformation of public life, the process of organizing the dialogue between the government and citizens on new digital platforms comes to the fore. The processes of digitalization of public policy create opportunities for the introduction of new forms of interaction between citizens and public authorities. The topic of this research is related to the need to study the increasing role of the Telegram messenger in the system of political communications in Russia and Belarus.

As a result of technological transformation, digital platforms have radically changed strategies of content production and distribution, as well as technologies of political communication. Following foreign researchers, by platforms we mean "digital infrastructures with affordances that offer diverse kinds of information and communication, and opportunities to produce, publish and engage with content" [2, p. 62]. The academic community is discussing the new challenges and risks that platforms pose to traditional media, journalists and audiences. The role that social media platforms play in the dissemination of news is attracting increasing attention from academics and policy makers. "Questions have been raised about the considerable market power of platforms and their ability to shape the news audiences receive in their feeds" [3, p. 2368].

Until recently, the main channels of interaction between the population and public authorities were personal visits, single days of information, "hot lines", meetings with the population in labor collectives and at the place of residence. There are a number of traditional ways of contacting local executive and administrative bodies. In recent years there is a transition from the model of informing and providing public services to the model of active involvement of citizens through digital platforms in the processes of public administration. The official websites of government bodies in most cases are platforms for one-way information, rather than full-fledged Internet platforms with developed feedback mechanisms. Social networks and messengers contribute to the creation of a fundamentally new model of political communication between representatives of state authorities and society. Telegram has the greatest potential in this context.

The topic of this research is related to the need to study the increasing role of the Telegram messenger and digital communications in the system of political communications in Russia and Belarus. From a niche messenger for IT-professionals, Telegram has become one of the most popular social platforms. In Russia today, Telegram is the leader among messengers by traffic volume. Analysts predict that in 2023 the service will overtake WhatsApp, its main competitor in Russia, by the number of active accounts. Telegram is already used by 40 % of the Runet audience, and the numbers continue to grow rapidly. In Belarus, Telegram is also the most popular messenger for news and necessary information. Viber and WhatsApp are also among the top three most popular messengers in 2023.

The results of research show that Telegram channels have become a unique tool of communication and influence on public opinion, different from other media channels in social networks [4, 5, 6]. Scientific works emphasize that the decline of interest in official websites and institutional media leads to the need for clear targeting, content segmentation. In

these circumstances, mobile messengers, which provide an opportunity to create thematic channels, reflecting the interests of the network audience, become an alternative to traditional media. In Telegram channels, the unidirectional dissemination of information is being replaced by developed feedback mechanisms.

According to Telegram audience research, there were more than 300,000 channels in Russian-language Telegram in 2021, but half of the users were subscribed to less than 15. The typical user read 5-10 channels, most of which had notifications turned off. News channels were read by four out of five respondents. More than half of the users subscribed to entertainment, educational or political channels. In Belarus, the study showed the dominance of Minsk among subscribers of both major political channels and Belarusian media channels. At the same time, 75% of the 70,000 respondents noted that Telegram was their main source of news [7].

## II. Method and data

The aim of the article is to study the specifics of the functioning of Telegram channels of local state authorities in Russia and the Republic of Belarus. The Russian sample includes Telegram-channels of administrative centers of each of the federal districts of the country. Since the administrations of Pyatigorsk, Nizhny Novgorod and Yekaterinburg have no relevant media resources on the Telegram messenger platform, five Telegram channels were included in the sample. The empirical basis for the Republic of Belarus were the official Telegram channels of six regional executive committees, the Telegram channel of Minsk City Executive Committee, as well as channels of several mayors and regional governors. The study was conducted in February 2023 using the tool TGStat.

The present study analyzes how Russian and Belarusian authorities produce and distribute content on Telegram, and how they interact with the audience. First of all, such parameters as page maintenance activity, number of subscribers, activity in communication with the population were assessed. We start with the following series of questions related to the object of study: What is the content strategy of the channels, what do they talk about? What formats of content are used? Is the content in the Telegram channel unique or is it hyperlinks to official websites? What tools do the authorities use to interact with the audience? Is it possible to leave comments? Are there surveys in the Telegram feed? What is the general reaction of subscribers to publications? What is the main audience of Telegram channels?

The design of this research was based on a systematic review of the literature, which has resulted in the main contributions to the state of the issue [8, 9, 10]. Firstly, the technique of direct observation was chosen as a strategy of the scientific method. Second, we used analysis from tgstat.com, which is the largest analytics service for more than 1,2 million Telegram channels and chat rooms, tracking more than 25 million new postings daily. The observation period was from January to February 2023. The exploratory unit of analysis, which was the object to be studied, was comprised of 15 channels in the Telegram messenger of Russian and Belarusian executive authorities, as well as their ongoing behaviour and attributes on this application.

## III. Results

For a pilot study of the main channels of interaction between the population and state authorities in the Russian Federation on the Telegram platform, the channels of the administrative centers of each of the federal districts of the country were selected. In the Central Federal District - the channel "City of Moscow" (@mosrutop) of the Moscow government (15797 subscribers), in the North-West - "Information Management" (@pressmol) of the administration of St. Petersburg (4278 people), in the South - "Administration of the City of Rostov-on-Don" (@Rostov_Gorod_Admin) - 1311 subscribers, in Siberian - "Mayor's Office of Novosibirsk" (@nsk54_official) with an audience of 2803 people, in the Far East - "Administration of Vladivostok" (@adm_vl) with an indicator of 13205 subscribers.

It is important to note that on the official portal of the executive power of the administrative center of the North Caucasian Federal District - the city of Pyatigorsk, there is no link to the official Telegram channel. Only links to the sites Vkontakte, Odnoklassniki, Twitter, My World and LiveJournal are presented. Also, a link to the Telegram channel available to visitors is not provided on the official website of the administration of Yekaterinburg. There are no links to social networks at all on the website of the administration of Nizhny Novgorod, which is the center of the Volga Federal District (Table 1).

TABLE. I. TELEGRAM CHANNELS OF THE EXECUTIVE AUTHORITIES OF THE ADMINISTRATIVE CENTERS OF THE FEDERAL DISTRICTS OF THE RUSSIAN FEDERATION, FEBRUARY 2023

| Channel name | Address | Number of subscribers | Engagement, % | Citation Index |
|---|---|---|---|---|
| Moscow City | @mosrutop | 15797 | 28,0 | 277,2 |
| Information Management | @pressmol | 4278 | 18,0 | 129,2 |
| Administration of the city of Rostov-on-Don | @Rostov_Gorod_Admin | 1311 | 34,0 | 4,0 |
| Mayor's Office of Novosibirsk | @nsk54_official | 2803 | 60,0 | 15,7 |
| Administration of Vladivostok | @adm_vl | 13205 | 37,0 | 132,6 |

The top three most popular publications of the Moscow City channel as of the end of February 2023 include a post about the restoration of the Khludov-Panteleev house, the announcement of "the Unizversky Quest" intellectual competition, which was held by the Moscow Zoo on student day, as well as information about the upcoming chess in the centers of Moscow longevity. However, as can be seen from Table 2, the activity of the audience is rather low. The number of views is hundreds and thousands of times greater than the number of reposts and reactions. There are no comments under these posts, as the corresponding opportunity for the audience is disabled.

| Channel name | Post content | Number of views, thousand | Number of reac-tions | Nu-mber of re-posts | Num-ber of com-ments |
|---|---|---|---|---|---|
| Mocow City | Restoration of the Khludov-Panteleev house | 13,8 | 42 | 16 | 0 |
| | "Unizversky Quest" | 11,1 | 16 | 15 | 0 |
| | Chess tournament | 11,1 | 19 | 9 | 0 |
| Infor-mation Mana-gement | Weather conditions on January 30 | 4,9 | 0 | 25 | 0 |
| | Weather conditions on February 12 | 4,6 | 0 | 22 | 0 |
| | Appointment of the head of the district | 3,7 | 0 | 39 | 0 |
| Admini-stration of the city of Rostov-on-Don | 100th anniversary of G. Balaev, concert | 1,9 | 12 | 4 | 0 |
| | Snow removal, February 14 | 1,5 | 11 | 13 | 0 |
| | Telethon "Everything for victory" | 1,3 | 9 | 5 | 0 |
| Mayor's Office of Novo-sibirsk | Relocation of the collection point | 6,6 | 24 | 45 | 0 |
| | Accommodation of victims | 3,4 | 26 | 25 | 0 |
| | Collection of humanitarian aid | 2,9 | 13 | 40 | 0 |
| Administration of Vladi-vostok | Transport network update | 33,6 | 22 | 37 | 349 |
| | Bus fare increase | 16,5 | 19 | 197 | 234 |
| | Movement restriction | 16,1 | 18 | 20 | 0 |

A similar situation with comments is also observed in the St. Petersburg channel of the Information Department. In addition, it is not possible for subscribers to send reactions to messages in this channel. The most popular posts in terms of the number of views were publications about the expected yellow level of weather danger on January 30 and February 12, respectively, as well as information on the appointment of Andrey Kononov as head of the administration of the Kronstadt district on February 20.

The ability to comment on the channel "Administration of the city of Rostov-on-Don" is also limited. The most popular publications from the beginning of the year were the message about the concert in honor of the 100th anniversary of the birth of the composer and arranger Georgy Mikhailovich Balaev on January 25, the report on the work of public utilities in the snowfall on January 14, presented by the deputy head of the city administration for housing and communal services Alexei Pikalov and the announcement telethon "Everything for Victory", which will be held live on the TV channel "Don24" on February 21, published on the 9th of the same month.

All the publications most in demand since the beginning of 2023 among the audience of the Novosibirsk City Hall channel are related to the partial collapse of a house on Lineinaya Street, which occurred on February 9 as a result of a gas explosion. They were published on the same date. The administration effectively used the media platform and this group in order to promptly inform and organize the fire victims, which is confirmed by the high rates of the number of reposts. The most popular posts were: information about the collection of humanitarian aid for residents affected by the collapse of the house, the decision to accommodate residents from the damaged building in the Severnaya Hotel, as well as the publication that the temporary collection point for humanitarian aid, which was deployed at the school No. 85, carried over.

The Telegram channel "Administration of Vladivostok" is of the greatest interest in terms of the activity of subscribers in the comments. Despite the fact that representatives of executive authorities do not publish responses to subscribers' comments and do not participate in discussions initiated by the audience, such openness of

authorities brings positive results. The channel's citation index is one of the highest among those analyzed and is second only to the indicators of the capital group. The number of subscribers is also comparable to the audience of the City of Moscow channel - 15,797 and 13,205 people, respectively. At the same time, the population of Vladivostok is only 5 % of the population of Moscow.

The most popular publications among the residents of Primorye were publications on the renewal of the rolling stock of ground transport (February 15), indexation of fares in public transport (February 16) and a post on the restriction of traffic through a railway crossing located near Uspensky Street, dated January 23.

As a result of the study, it can be concluded that the most effective tool for interaction between the executive authorities and the population is in Telegram channels is the use of the functionality of these sites not only for the purpose of unilaterally informing about the events taking place in the municipality, but also for the purpose of providing "platforms for statements" to the public. Despite the lack of feedback from the authorities and responses to comments, a channel with an open commenting option demonstrates significantly higher audience engagement rates than channels with similar quality content, but without such an opportunity. The channels used by the municipal administration to overcome crisis situations - informing and organizing the population - are also characterized by high audience involvement. At the same time, most of the channels in terms of functionality are "traditional municipal media" on a new platform, inferior in terms of audience indicators, as well as the quality and quantity of content to regional commercial channels that inform about the life of the municipality.

The channels of six regional executive committees were selected on the Telegram platform to study the specifics of interaction between the population and public authorities in the Republic of Belarus - Brest (@brestoik), Vitebsk (@vitebsk_region_officially), Gomel (@gomel_region_gov), Grodno (@pul_4region), Minsk (@minsk_region1), Mogilev (@reMogilev), Minsk city executive committee channel (@minskiygorispolkom). The channels of the mayor of Brest (@Rogachuk), Gomel (@VAPrivalov) and the Telegram

channel of the governor of the Mogilev region (@isachenkobel) were also studied (Table 3).

| Channel name | Address | Number of subscribers | Engage-ment, % | Citation Index |
|---|---|---|---|---|
| Brest Regional Executive Committee | @brestoik | 4550 | 67 | 43,2 |
| Vitebsk region. Officially | @vitebsk_region_officially | 3623 | 59 | 50,6 |
| Gomel region officially | @gomel_region_gov | 9082 | 44 | 118,7 |
| Pul 4 Region | @pul_4region | 3039 | 203 | 71,8 |
| Minsk Region \| About the Main | @minsk_region1 | 4400 | 94 | 41,5 |
| RM - Mogilev Region News | @reMogilev | 952 | 16 | 72,7 |
| Minsk City Executive Committee | @minskiygorispolkom | 5697 | 57 | 147,9 |
| Alexander Rogachuk | @Rogachuk | 11591 | 54 | 71,4 |
| Vladimir Privalov. Officially | @VAPrivalov | 6183 | 81 | 37 |
| Isachenko ONLINE | @isachenkobel | 1518 | 542 | 12,5 |

The number of subscribers to the Telegram channel of the Brest Regional Executive Committee @brestoik was 4550 people. We should not exclude the influx of subscribers. For example, according to TGStat statistics, from December 27 to 30, 2022, the increase in the number of subscribers was 1,330 people. Anyway, the channel relies on short news and photo collections. Occasionally a video is published. Among the advantages of the channel we can mention simple language, friendly communication with the audience. Unique content is made for the channel, and there are practically no links to the "parent" site. There are also no reposts from other channels, all content is author's. Each post can be evaluated by reaction. There is no opportunity to comment. Each post contains the hashtag #1region.

The official Telegram channel "Vitebsk region. Officially" @vitebsk_region_officially (3623 subscribers). The posts are more reminiscent of brief informational notes with photos. The variety of formats is not great, texts and photos are used more often. The editors of the channel put emoji at the beginning of each sentence. The posts often contain references to the publications of the city newspaper Vitsibichi and the BelTA news agency. Links to the website of the Vitebsk Regional Executive Committee are rarely used. There is no communication with the audience, the channel uses the strategy of broadcasting rather than communication.

The "Gomel region officially" channel has the largest number of subscribers among the examined sites. @gomel_region_gov (9082). The statistics of the TGStat analytical service, however, show that only 44 % of them regularly read the channel's posts. As we can see, a large number of subscribers does not necessarily mean that the content reaches all of them. You need to look at the reach of the publications. The high citation index (118,7) of this channel indicates that the posts are often reposted. We believe that the Gomel Regional Executive Committee views this channel exclusively as a means of broadcasting official information, which makes communication with the audience unidirectional. One can often find quite voluminous texts on the channel, as well as reposts of publications of other state channels. In our opinion, regional officials and employees of budgetary institutions are the main audience of such channels. The analysis shows that ordinary citizens of Gomel Region do not actively follow the channel "Gomel region officially".

The most successful of the sources we reviewed is the Telegram channel of the Grodno Regional Executive Committee "Pul 4 Region" @pul_4region (3039 subscribers). In particular, the channel's description immediately caught our eye: "The Governor's PUL to cover the activities of the head of the Grodno Region Vladimir Karanik. Exclusive. Backstage meetings at a high level". According to the TGStat service, the audience engagement ratio is 203 %. This can be explained by the fact that "Pul 4 Region" actively attracts traffic from other Telegram channels. Speaking of content, we can note the great attention to short videos, which are one of the most engaging content formats today. Each post can be evaluated by reaction, but there is no opportunity to comment, as in the three channels discussed earlier.

The channel "Minsk Region | About the Main" @t.me/minsk_region1 is run by the Minsk Regional Executive Committee. It has 4400 subscribers, the engagement rate was 94 %. This figure, again, can be explained by the large number of reposts to other channels. In the profile description, the resource positions itself as follows: "A channel about the Minsk region, the latest and most relevant news. Be aware of all the events of your region!" The content is presented in a fairly light form. The editors of the channel try to address the user with language that is informal and friendly. The text is structured thanks to emoji at the beginning of paragraphs, also a lot of photos and videos are published in the "here and now" format. Each post can not only be evaluated by reaction, but you can also leave a comment on it, but comments are rare.

The Telegram channel of the Mogilev Regional Executive Committee @reMogilev showed the lowest engagement rate among the local government platforms we examined. The number of subscribers to the channel named "RM - Mogilev Region News" is 952 people, of which only 16 % read the posts. This can be explained, in particular, by the insufficient amount of content on their own. The channel very often features reposts of posts from other state channels. There is an official narrative in the posts, and the editors of the channel do not seek to interact with the audience. There is neither opportunity to leave a reaction to the publication, nor to write a comment. Not surprisingly, according to TGStat statistics, the number of subscribers to this channel is decreasing rather than increasing every month.

The official channel of the Minsk City Executive Committee @minskiygorispolkom has a similar broadcasting strategy. Taking into account the population of Minsk (1,94 million people), the number of subscribers is extremely low - only 5697 people. The channel tells about events with the participation of city officials, official meetings of the mayor, etc. There is no possibility to leave an editorial comment to the posts, as well as to write a comment. Thus, the channel is more like a corporate media outlet in its functions.

Let's move on to an analysis of the channels of individual officials. The official Telegram channel of Brest City Executive Committee Chairman Alexander Rogachuk

@Rogachuk was launched in July 2020 and became one of the first Internet resources of its kind in Belarus. At the beginning of 2023, it had 11591 subscribers. It is important to note that the chairman of the Brest City Executive Committee personally runs the channel. Each publication has an average coverage of 54 %. It is not possible to comment on posts in the Telegram channel "Alexander Rogachuk", nor is it possible to add reactions at the moment.

Among the Belarusian channels studied, the Telegram channel of the Chairman of the Gomel City Executive Committee "Vladimir Privalov. Officially." The channel was launched on December 31, 2022, and gained 6183 subscribers in less than two months. "This is by no means a news feed, I see no reason and no point in competing with journalists - they do their job professionally. In my telegram channel I plan to tell what is now on the agenda of the city authorities, to build a feedback line with the citizens, to share my thoughts on various aspects of life in Gomel" - noted Privalov [11]. The channel's news feed is informal in nature, you can leave a reaction to each post, but the possibility of commenting is disabled.

Anatol Isachenko, chairman of the Mogilev Regional Executive Committee, also has his own channel @isachenkobel, which has 1518 subscribers. Unlike the two previous channels, the content here is presented in an official business style. There is no feedback from the audience. Posts are published several times a week. At the same time, the audience engagement rate is 542 %, which is explained by reading the posts outside the channel, for example, as a result of reposting to other channels.

Having analyzed the most popular publications of Belarusian channels in the last 30 days by the number of views, retweets, reposts, comments and reactions, we can distinguish the following patterns.

Most often, local authorities on their Telegram pages talk about working events, important events in the region, meetings with officials and citizens. Many of the posts contain an official narrative. It is not always possible to find posts in Telegram channels in which regional heads talk about solving problems. None of the channels we studied contain polls. Of the ten channels studied, comments are open only in one, but their number is small. This suggests that regional officials, heads and employees of state institutions are a large part of the audience of the studied Telegram channels. Ordinary residents, as a rule, do not actively follow government channels on Telegram.

According to the number of views, the highest positions are taken by posts related to social topics (purchase of new ambulances, construction of hospitals and kindergartens). The audience is also interested in such topics as awarding the winners of various competitions, victories of the region's residents in sports competitions. Popular are posts on the theme of urban improvement. For example, on the channel "Vladimir Privalov. Officially" channel, a post where residents of Gomel were invited to discuss which squares and parks of the city could be decorated with new avenues of chestnuts gathered a lot of reactions (Table 4).

TABLE. IV. AUDIENCE INDICATORS OF THE MOST POPULAR POSTS OF THE CHANNELS OF THE REGIONAL EXECUTIVE COMMITTEES AND GOVERNORS OF THE REPUBLIC OF BELARUS, JANUARY-FEBRUARY 2023

| Channel name | Post content | Number of views, thousand | Number of reac-tions | Nu-mber of re-posts | Num-ber of com-ments |
|---|---|---|---|---|---|
| Brest Regional Executive Committee | Collegium of the General Directorate of Health | 9,7 | 20 | 24 | 0 |
| Vitebsk region. Officially | Awarding the winners of the competition | 9,16 | 10 | 61 | 0 |
| Gomel region officially | The ceremonial events | 9,9 | 18 | 15 | 0 |
| Pool 4 Region | Construction of significant social facilities | 13,8 | 38 | 59 | 0 |
| Minsk Region \| About the Main | Biathlon competition | 7,4 | 7 | 24 | 1 |
| RM - Mogilev Region News | Exhibition "Intellectual Belarus" | 7,0 | 2 | 54 | 0 |
| Minsk City Executive Committee | Reception at the deputy | 20,8 | 0 | 169 | 0 |
| Alexander Rogachuk | Rising water levels in rivers | 10,0 | 0 | 28 | 0 |
| Vladimir Privalov. Officially | Planting chestnuts in the city | 2,9 | 57 | 3 | 0 |
| Isachenko ONLINE | Purchase of new ambulances | 13,2 | 0 | 100 | 0 |

Speaking about the type of content distributed, it should be noted that most channels place native formats of materials without links to sites. More often than not, reliance is placed on small short news and photo collections. In many cases, the news is accompanied by graphic symbols at the beginning of the test, which makes the news more enjoyable to read and visual. Recently, short videos have increased in popularity. Posts with videos are highly engaging. We can recommend that local authorities add commenting capabilities to their Telegram feeds. These findings are consistent with previous scientific studies that have found that the concept of attention is crucial [12, 13, 14].

## IV. CONCLUSION

As a result of the research we can draw the following conclusions. A comparative analysis of the political communication of the Russian and Belarusian state authorities in Telegram shows that they are building up their presence in this messenger in order to attract the attention of users and expand their reach. Of course, the number of channel subscribers depends on the region's population. If we compare the official communities of Moscow and Minsk mayor's offices, we can note that the channel in the Russian capital pays a lot of attention to city news, while in Belarus it mainly tells about events involving city officials, official meetings of the mayor.

The results of the study showed that in a number of cases, local administrations use Telegram channels exclusively as a means of one-way communication. This strategy was found in Russia in the "Information Management" channel (@pressmol) and in Belarus in the "RM - Mogilev Region News channel" (@reMogilev). We can recognize the most successful model of running the channel that allows for two-way communication with the audience. This model, in

particular, was found in the channels "Administration of Vladivostok" (@adm_vl) and "Vladimir Privalov. Officially" (@VAPrivalov).

Within the framework of this study, attention was also focused on the formats of the content distributed. Both in Russia and Belarus, multimedia resources occupy an increasingly prominent place in Telegram channels. The exception is the channel "Information Management" (@pressmol), which publishes only texts. In many channels, texts are emoji-filled. Some channels identify themselves to the user through a greeting in the morning, this is more typical for Russia. Also in the Russian Telegram channels of the authorities one can often find infographics, while this content format is absent in the Belarusian channels.

Overall, the study concludes that for state authorities in Belarus and Russia, interaction with the audience is not a key factor in their Telegram strategy. More often than not, the authorities use a one-way communication model. Although they value the characteristics and technical capabilities offered by Telegram (multimedia features, mass distribution, etc.), only a small number of the public authorities analysed adapt their content and try to strengthen ties with users.

We see the prospects of this study in the comparative analysis of new trends and innovations caused by the wide spread of the Telegram platform and its impact on the information support of the authorities not only in the Russian-Belarusian, but also in the international context.

REFERENCES

[1] H. M. Sánchez Gonzales, J. Martos Moreno, "Production and distribution of media news on Telegram", *Communication & Society*, vol. 36, no. 1, pp. 95–112, 2023, doi: 10.15581/003.36.1.95-112.

[2] S. Chua, O. Westlund, "Platform Configuration: A Longitudinal Study and Conceptualization of a Legacy News Publisher's Platform-Related Innovation Practices", *Online Media and Global Communication*, vol. 1, no. 1, pp. 60–89, 2022, doi: 10.1515/omgc-2022-0003.

[3] J. Meese, E. Hurcombe, "Facebook, news media and platform dependency: The institutional impacts of news distribution on social platforms", *New Media & Society*, vol. 23, no. 8, pp. 2367–2384, 2012, doi: 10.1177/1461444820926472.

[4] I. Bykov, M. Medvedeva, A. Hradziushka, "Anonymous Communication Strategy in Telegram: Toward Comparative Analysis of Russia and Belarus", *Proceedings of the 2021 IEEE Communication Strategies in Digital Society Seminar*, pp. 14–17, 2021, [online] Available: https://doi.org/10.1109/ComSDS52473.2021.9422858.

[5] O. Vikhrova, A. Hradziushka, O. Muravyova, M. Alekyan, N. Akhmedova, "Information support of the Eurasian integration: The image of the EAEU in the mainstream media of the member states", *World of Media*, no. 2, pp. 75–104, 2021, doi: 10.30547/worldofmedia.2.2021.4.

[6] L. Alonso-Muñoz, A. Tirado-García, A. Casero-Ripollés, "Telegram in campaign: the use of mobile instant messaging services in electoral political communication", *Communication & Society*, vol. 35, no. 4, pp. 71–88, 2022, doi: 10.15581/003.35.4.71-88.

[7] "Telegram audience research", URL: https://tgstat.ru/research-2021 (Accessed 13.02.2023).

[8] M. Zayani, "Digital Journalism, Social Media Platforms, and Audience Engagement: The Case of AJ+", *Digital Journalism*, vol. 9, no 1, pp. 24–41, 2021, doi: 10.1080/21670811.2020.1816140.

[9] R. Nielsen, S. Ganter, "Dealing with Digital Intermediaries: A Case Study of the Relations between Publishers and Platforms", *New Media & Society*, vol. 20, no 4, pp. 1600–1617, 2017, doi: 10.1177/1461444817701.

[10] H. Kermani, "Telegramming News: How have Telegram channels transformed journalism in Iran?", *Türkiye İletişim Araştırmaları Dergisi*, no. 31, pp. 168–187, 2018, doi: 10.17829/turcom.423307.

[11] "The Mayor of Gomel has his own Telegram channel", URL: https://belkagomel.by/2023/01/01/u-mera-gomelya-poyavilsya-svoj-telegram-kanal/ (Accessed 13.02.2023).

[12] M. Myllylahti, "Paying Attention to Attention: A Conceptual Framework for Studying News Reader Revenue Models Related to Platforms", *Digital Journalism*, vol. 8, no. 5, pp. 567–575, 2020, doi: 10.1080/21670811.2019.1691926.

[13] R. Ferrer-Conill, C. Jr. Tandoc Edson, "The Audience-Oriented Editor", *Digital Journalism*, vol. 6, no. 4, pp. 436–453, 2018, doi: 10.1080/21670811.2018.1440972.

[14] O. Vikhrova, A. Hradziushka, I. Gorlova, "Digital Information Openness of Public Authorities in Russia and Belarus", *Proceedings of the 2022 IEEE Communication Strategies in Digital Society Seminar*, pp. 55–61, 2022, [online] Available: https://doi.org/10.1109/ComSDS55328.2022.9769133.

# Professional Perception Shift of Digital Society Values among IT Students (Results of Empirical Research)

Pavel P. Deriugin
*Industrial Sociology,*
*Saint Petersburg State University;*
*Humanitarian Faculty,*
*Department of Sociology and Political Science*
*Saint-Petersburg Electrotechnical University "LETI"*
Saint Petersburg, Russia
deriuginpav@yandex.ru

Elena V. Strogetskaya
*Humanitarian Faculty,*
*Department of Sociology and Political Science*
*Saint-Petersburg Electrotechnical University "LETI"*
Saint Petersburg, Russia
https://orcid.org/0000-0002-5304-2613

Olesya S. Bannova
*Humanitarian Faculty,*
*Department of Social and Political Science*
*Saint-Petersburg Electrotechnical University "LETI"*
Saint Petersburg, Russia
bannova-o@mail.ru

*Abstract*— **The methodological principles of the study are the ideas of H. Innis and M. McLuhan about the role of mass media in the formation of modern society, where a person's access to information - working with big data and participating in the production of information - is the main factor in the shift in the perception of values. The shift in the perception of the values of the digital society in our understanding is the transformation of the ideas of IT specialists about significant phenomena that arise as a result of their involvement in the process of producing and analyzing information.**

**Involvement in the production of information can be considered in several ways, for example, as the creation of information content, or as the creation of mechanisms, software, devices providing the creation of tools for the production and analysis of information. Shifts in the perception of information, in our opinion, are determined by the nature of the attitude to information and depend on the professional orientation of the respondents. The accumulation and growth of contradictions in the perception of values between people of different professional orientations constitutes an urgent social problem of stratification in a digital society.**

**The hypothesis was that the nature of involvement in the information process will have a diverse effect on the nature of shifts in the perception of the values of the digital society, which will reveal features of these shifts as caused by the specifics of professional training.**

**The object of the study was the 3rd-year students of the Faculty of Journalism (96.7% of the general population) and the Faculty of Computer Technologies and Informatics (94.3%). The subject of the study is the peculiarities of the shift in the perception of digital information by students of the IT specialty in comparison with students of the humanities.**

**The purpose of the study is to identify and study the shift in the perception of the values of the digital society among students of IT specialties as caused by the peculiarities of professional training.**

**The results of the study revealed relevant characteristics of the shift in the perception of the values among students of IT specialties: firstly, the shift in the values of the digital society in comparison with the values of past years; secondly, a number of different stages in the formation of such a shift; thirdly, the separation of understanding of "companionship" and "communication"; fourthly, the peculiarities of the perception of IT tools rather as a means (for journalists) and as a goal of activity (for IT specialists); fifthly, the presence of a set of shifts in understanding the importance of such characteristics of IT activities as ethics, responsibility, accessibility, security and a number of others; sixth, minor shifts in understanding the role of the IT space as a potential means of self-education, typical for students of both groups.**

**The empirical study has confirmed the presence of a shift in the perception of the values of the digital society among students of IT specialties as caused by the peculiarities of their professional training.**

*Keywords*— *perception shift, digital information, involvement in digital information production.*

## I. INTRODUCTION

Studies of the activities of IT specialists show that their professional orientation inevitably affects the specifics of perception of the social environment as people with "significantly different" intelligence [1, p.79] - the basic ground of any perception and social communication. In this regard, it is rightly noted that the professional connection of a person with the world of technology irreversibly affects a person's holistic world [2]. This impact not only expands his or her abilities, but also forms a special view of the world of values and the system of social and professional communication. In particular, modern researchers speak of such changes in perception in doctors [3], police officers [4], teachers [5], managers [6], scientists [7], artists [8], military personnel [9] and other professionals. In summary, we can say that as professional specialization increases, shifts in value perceptions will deepen [10]. The social consequences of this process will inevitably affect stratification, new forms of inequality and features of communication. [11].

It is necessary to emphasize the growing activity of work on the problem of professional shift in perception among IT specialists. Such studies focus on a wide range of issues from the psychophysiological level to macrosociological issues [12]. For example, A.P. Gagarin and I.V. Chernyakov argue that changes in the perception of virtual reality in the human-computer system are caused by a slight (small) physical distance between a person and a computer, which in turn creates a special environment of human information perception, a special "human-computer" interface that changes the psychophysiology of perception [13, p.723].

Researchers are particularly interested in studying the shift in the perception of the social and humanitarian component of IT professionals. For example, some researchers show programmers as introverted,

uncommunicative individualists [14, p.1037]. Therefore, as L.N. Kanischeva points out, it is important to shift the emphasis and logic of cognition from understanding some mechanisms in IT activity to a "human" or "personal" attitude to these facts, forming a "humanistic type" of programmer, focused on a wide range of communication with people of different professional status and roles [15]. It is important to study feedback - social perception of the programmer profession in the student environment, where the greatest desire for social integration on the part of students is manifested. [16, p.298]

Despite the diversity of views, we can summarise them by referring to the conclusion of S.A. Mikhailina, who noted the presence of contradictions between the values of programmer ethos and particularist values [17, p.167], which are formed by the multiple contradictions of globalisation and the development of unified communication tools.

## II. RESEARCH

The theoretical basis for the study of value perception shifts among IT specialists is based on the mid-century concept of H. Innis and M. McLuhan about the crucial role of media communication in post-industrial society. The authors consider the role of mass communication in the formation of European civilisation as the main driving force, or rather the role of "technologies through which new means of communication emerge" [18, p.148], and based on their development, a succession of stages and forms of development of European society emerges: "Each means of communication, as the Canadian scholars have noted, has its own specific characteristics and, accordingly, unique ways of influencing each individual and society as a whole". [18, p.149]. The invention of new means of communication in the present case is seen as a force that provides a breakthrough - a "shift" of established perceptions.

"The Bias of Communication" (1951) by H. Innis concludes that the invented new means of communication have a decisive influence on the management of large territories, and have a decisive impact on the types of social structure and governance. In this sense, some authors consider the theory of the shift of communication to be macrosociological and equal in scientific importance to that of Karl Marx. Accordingly, from the point of view of the authors of this theory, people involved in the invention and creation of mass communication media will have different perceptions of reality, especially McLuhan spoke a lot about this (The Guttenberg Galaxy, 1961). For example, such professionals will have the broadest perceptions of the values of the global order; they will function among the broadest audiences, but their perception of the values of different cultures will be rather short-lived; commercialisation and relationships of the 'Global village' type will be important to them; they will be characterized by a loss of oral tradition and a transition to written communication; they will have peculiar ideas about housing, money, clothing, weapons and much more - a 'dress code' through which they will tell others about their preferences, character and values. Not all of the new people's predilections seemed attractive to the authors. For the most part, H. Innis saw the negative consequences of the approaching 'shifts' in perception, which he believed could manifest themselves in the formalisation of communication between people, the blurring of national boundaries, the onset of an era of nationalism and individualism, and ultimately, the undermining of the stability of social development.

The "perception shift" research methodology allows us to determine that the way IT specialists interact with information, their involvement in the production processes of information processing tools, directly and indirectly transforms the perception of the world of surrounding values. As a result, IT specialists' understanding and evaluation of social objects: other people, themselves, social groups and communities, etc. [19, p.17], is transformed. As a result, there is a transformation in IT specialists' understanding and evaluation of social objects: other people, themselves, social groups and communities, etc. [19, p.17].

The shift in the perception of IT professionals' values lies in a changed perception of the hierarchy, significance and importance of the phenomena that influence the choice of priorities and alternatives for behavior and activity.

The methodological basis of the empirical research procedure is based on three main postulates.

Firstly, any involvement in a professional activity changes the perception of reality. At the same time, according to M. Rokeach's concept, a shift in the perception of values of IT specialists is possible both in a substantive sense (terminal values) and in a methodological (instrumental) sense, as a transformation of attitudes and beliefs regarding the way of their behaviour and actions [20, p.183].

Another vector of empirical analysis of the shift in the perception of IT professionals is to study them as actors directly involved in the process of technical and technological means of production and reproduction. The very process of IT professionals' activity continuously enriches them with big data that characterises global development processes.

Thirdly, the communication of IT specialists differs from the communication of representatives of other professions, such as sociologists and journalists, who produce mass information products [21, p.163]. The work of sociologists and journalists in the Internet space differs significantly from the way IT specialists find and present information. It is stressed that, for example, the differences between journalistic creativity and the technology of information production for the new information environment are so great that they require a completely different approach to all aspects of activity. [22, p.247]

The research problem reflects the interest in analysing the contradictions in value perception shift of IT students, which is caused by their involvement in the process of creation, production and reproduction of information technologies, which is reflected in their value attitudes. The social problem of this situation lies in the fact that the accumulation of significant features in the perception and understanding of values forms a contradictory perception of these values in comparison with the nature of their perception by specialists of other profiles. Such differences can act as a trigger for new socio-structural changes and processes of digital inequality.

Our hypothesis was the assumption that the involvement in the digital technological reproduction of information (software students) or, conversely, the user's attitude towards the IT sphere (students of the social and humanitarian cycle) would differ in the orientation and nature of the perception of the same values, in particular, with regard to the understanding of information as a goal, means or result of professional activity, as well as in the specific features of the understanding of the economic, political, social and cultural spheres in a digital society.

The research object was IT students and students of socio-humanitarian faculties. The sample consisted of students from two St. Petersburg universities: Faculty of Computer Technologies and Informatics (94.3% of the general population), and two faculties of socio-humanitarian profile - sociology and journalism (96.7% of the general population of two faculties). The choice of students from these faculties was motivated by the interest of conducting a comparative analysis of programmers' perception of values, on the one hand, and sociologists and journalists, on the other. The quantitative composition of the sample was approximately the same: number of IT students was n=236 and number of socio-humanities students was n=252. The subject of the study is the peculiarities of the shift in the perception of digital society values among IT students.

The subjects of the study were IT students and students of socio-humanitarian faculties. The sample consisted of students from two St. Petersburg universities: Faculty of Computer Technologies and Informatics (94.3% of the general population) and two faculties with socio-humanitarian profile - Sociology and Journalism (96.7% of the general population of two faculties). The choice of students from these faculties was motivated by the interest in carrying out a comparative analysis of the value perceptions of programmers, on the one hand, and sociologists and journalists, on the other. The quantitative composition of the sample was approximately the same: the number of IT students was n=236 and the number of socio-humanities students was n=252.

The subject of the study is the peculiarities of the shift in the perception of the values of the digital society among IT students.

The aim of the study is to identify study and characterise the shift in the perception of the values of the digital society among IT students as a result of the specificities of their professional training.

The research method is content analysis of students' written answers (essays) on the topic of values of digital society, understanding of these values, examples of such values, degree of their formation, etc. The indicators of content analysis are formulated in accordance with the idea of M. Rokeach and reflect instrumental and terminal values. The limitations of this version of content analysis include a certain loss or distortion of meanings due to the categorisation of concepts and the subjectivity of the researcher in interpreting respondents' statements. Another limitation is that this is a pilot study.

In total, 488 essays from students of both specialties were analysed, including n=212 respondents - students of IT specialties.. The results of the content analysis can be reduced to some specific findings.

Result 1. There are significant differences in the perception of the role of information in the digital society. This shift in perception can be characterised as a major one.

It should be emphasised that students of both disciplines understand the values of the digital society mainly in terms of values, i.e. they perceive the digital society as a social environment with developed instrumental capabilities, which can be used to solve a variety of tasks. Among the most important characteristics of the digital society, the respondents identified the following: the availability and dissemination of information; the relevance of digital security; the expansion of online education and communication potential; new opportunities for adapting to the digital space; increased opportunities for expressing one's opinion and freedom of speech. In the present case, we can speak of a common understanding of the values of the digital society among students in both groups.

At the same time, IT students were more than three times more likely to formulate their attitude to information as a basic value of the digital society. They attach the greatest importance to the achievement of such orientations-means as the creation of new software products, the development of means to increase the speed of information transfer, the study and use of world experience in the use of new information technologies, the improvement of IT skills and other essentially technical and technological features of digitalisation, which shows their understanding of the important role of work with information as the main value of their activity in the digital society. This conclusion is confirmed, among other things, by the data on the frequency of mentioning the main categories of values of the digital society: for IT students it is the acquisition of new knowledge and skills that allow them to perform their professional functions most effectively, while for socio-humanistic students it is the characteristics of the emerging new social reality of the digital society.

Result 2. Differences in the perception of the relevance of the values of the digital society in the economic, political, cultural and social subsystems of society are revealed.

IT students see digitalization as a potential for economic empowerment of society (1.8 times more active than for humanities students). In particular, digitalization of stock exchanges, development of cryptocurrency potential, NFT, digitalization of management and banking, etc., are seen as new opportunities to improve economic performance.

With regard to the political sphere of society, IT students perceive the potential of the digital society as an additional resource for ensuring individual rights and freedoms, developing civil society and opposing the excesses of political authoritarian regimes. Overall, they are 1.6 times more likely to express their understanding of the digital society as a new condition for increasing political solidarity and social equality. A significant part of the IT students express doubts about the usefulness of the "digitalisation of politics" and emphasise the danger of using IT technologies as a means of replacing the results of elections, manipulating and changing the political situation in this or that country.

As for the cultural and social subsystems of society, IT students showed less interest and were rather passive in their perception of these spheres of human life.

Result 3. Other areas of shift in IT students' perception of the values of the digital society include:

- specific perception of social responsibility for the results of one's activities: for IT students it is the preservation of human life and health, for humanities students it is the content of publications and the veracity of information;

- simplistic perception of digital ethics issues: almost no IT students agreed with the importance of such ethics, whereas a significant percentage of social science students - 17.8% - agreed;

- perception of the problems of information accessibility as a given: this indicator as a value of the digital society is mentioned by IT students about twice less often than by humanities students;

- importance of mastering and using new digital technologies: IT students are 4.3 times more likely than humanities students to consider such skills relevant.

The discussion of the results of the empirical study allows us to identify a number of differences in IT students' understanding of the values of the digital society which, in our opinion, represent a shift in perception and are largely consistent with the findings of other authors, confirming their objectivity.

Firstly, the efforts of IT students largely shape the new digital society, and they themselves become "information people" (Homo informaticus) earlier than others, who, according to T. Karmazin, acquire a new form of existence earlier than others [23, p.2]. This is also evident when comparing IT students with people of a slightly older age - young people (25-36 years old), for whom the Internet is twice less important than for students (18-24 years old), according to VCIOM (Russian Public Opinion Research Centre) data [24]. At the same time, the shift in the perception of the values of the digital society among IT students differs in terms of the degree of formation of these values. The results of the empirical study allow us to speak about three groups of respondents with different degrees of shifts in perception: those who have significant and stable shifts in perception, the second group are students who have developed a shift in perception, but it is not as significant as in the first group, and finally, a group of students whose shift in perception is just beginning to form and does not differ much from the values of students of other specialties. The empirical data obtained allow us to state that, with the inclusion of students in the IT profession, the communicative space also changes.

Secondly, the obtained results also show that the recognition of the important role of value means, the understanding of value means as a leading characteristic of the digital society, turns out to be the most significant factor in the formation of the entire value system from the point of view of IT students. This fact indicates the main direction of the shift of perception among software students and reveals the peculiarities of the formation of IT specialists as personalities predominantly oriented towards technical-technological orientation, market principles, utilitarian psychology and often mercantile attitudes [25, p.49]. Identification and highlighting of the "values-means" as the main and principal element in the hierarchies of the activity structure among "goals-means-results" [26, pp.18-20], - shows that the instrumental component of IT-activities is perceived by student-programmers as a leading value and in this case acts as the major psychological mechanism of formation of the whole system of personal values [27], which subsequently becomes an important factor in the content and forms of their communication.

Thirdly, at the same time, the results suggest new developments and refinements in the classification of the values of the digital society and their perception by different social groups, which, according to some authors, may differ significantly from the traditional lines of research on the values of students [28], [29], and may disorientate society in diagnosing an adequate assessment of the role of IT professional.

## III.  CONCLUSION

We can say that, in general, the hypothesis of the empirical study has been proved - a shift(s) in the perception of digital society values among IT students, which distinguishes their understanding of digital society values from that of socio-humanitarian students, has been confirmed. It turns out that the shift in IT students' perception of digital society values develops during their university education and depends on the type of students' education, which, of course, affects the specifics of their communicative practices.

What are the prospects for a growing shift in IT professionals' perceptions of the values of the digital society? We see two main impacts of such shifts shaping the landscape of professional communication. Within the IT community, professional relationships and the use of a common language will reinforce shifts in value perceptions, globalising and cross-fertilising the knowledge of IT professionals. On the contrary, in the interaction of IT professionals with members of other social groups, the increasing shift in value perceptions will increasingly become a barrier to social communication and a constraint on the practical realisation of the potential of the information accumulated by the IT industry, as managers, educators, politicians and professionals in other fields are already talking about.

REFERENCES

[1] Orel E. A. Peculiarities of intelligence of professional programmers. *Bulletin of Moscow University. Series 14. Psychology.* 2007. №2. p.79.

[2] Petruneva R. M., Vasilieva V. D., Petruneva Y. V. Digital Student: Myths and Reality. *Higher Education in Russia.* 2019. №11.

[3] Kudelina O. V., Brazovskaya N. G. G. Evaluation of physicians' perceptions of changes in the labor management system of medical organizations. *Social Aspects of Population Health.* 2018. №2.

[4] Berdysheva E. C. Differentiation of "attractiveness" of delinquency in the perception of Russian police officers. *Economic Sociology.* 2016. №4.

[5] Temnikova E. Perception of teachers of innovative processes in education. *Personality, family and society: issues of pedagogy and psychology.* 2015. №8 (54).

[6] Rasskazov, S.V. Corporate governance: textbook / S.V. Rasskazov, A.N. Rasskazova, P.P. Deryugin. - Moscow: Limited Liability Company Scientific-Publishing Centre INFRA-M, 2020. - 338 с. - (Higher Education: Bachelor's Degree). pp. 178-179.

[7] Malakhov A. V. Sociological Studies of the Perception of Religion by Scientists in Different Countries. *Society: Sociology, Psychology, Pedagogy.* 2016. №2.

[8] Pinezhaninova N. P. And everything acquires a new sudden meaning... (Integration of poetic texts of Arseny Tarkovsky into the films of Andrei Tarkovsky). *MIRS.* 2011. №3.

[9] Borodina V. N. N. Peculiarities of subjective time perception by conscripts. *Proceedings of Russian State Pedagogical University named after A. I. Herzen.* 2008. №63-2.

[10] Danilova L.N., Ledovskaya T.V., Solynin N.E., Khodyrev A.M. Basic approaches to understanding digitalization and digital values. *Bulletin of Kostroma State University. Series: Pedagogy. Psychology. Sociokinetics.* 2020. T. 26, № 2. p. 5.

[11] Nitsevich V. F. F. Digital Sociology: Theoretical and Methodological Origins and Foundations. *Digital Sociology.* 2018. №1.

[12] Chereshneva I.A. Digital Inequality: Possible Ways to Overcome. *Education and Law.* 2022. №9.

[13] Gagarin A. P. P., Chernyakov I. V. Problems of virtual reality fidelity near observer. *Modern Information Technologies and IT-education.* 2019. №3. p. 723.

[14] Merzlyakov S. C. Socio-cultural peculiarities of Russian IT-specialists. *Labour Economics.* 2020. №11. p.1037.

[15] Kanischeva L. N. Humanitarian expertise as a method of forming future programmers humanitarian perception of scientific and technical problems. *Izvestia VGPU.* 2008. № 6. pp. 59 - 60.

[16] Perednya D. G. G., Polovnev A. V., Zhuchkov V. V. Social perception of professions in the views of Moscow student youth.

*Bulletin of Moscow State Linguistic University. Social Sciences.* 2019. №1 (834). p. 298

[17] Mikhailina S. A. A. Freedom of information in the global world and the ethos of the programming community. *ESGI.* 2014. №3-4 (3-4). p. 167.

[18] Arkhangelskaya I. B. B. The theory of communication in the works of H. -A. Innis and G.-M. McLuhan. *Vestnik of Nizhny Novgorod University named after N.I. Lobachevsky. Series: Social Sciences.* 2007. №3. pp. 148 - 149.

[19] Fomichenko A. S. Peculiarities of social perception. *Vestnik OGU.* 2017. №2 (202). p.17.

[20] Aminov S. R. R. Empirical sociological approach to the analysis of values. *System of values of the modern society.* 2008. №3. p.183.

[21] Izmailian D. B. Peculiarities of news text production in mass media. *Vestnik of Moscow University. Series 19. Linguistics and Intercultural Communication.* 2011. №2. p.163.

[22] Raskladkina M.K. The Internet as information environment and features of journalist's work in the era of new media. *OTO.* 2004. №2. p. 247

[23] Karmazin T. Values and key competences in the era of digital society. Business Excellence [5]. Leimeister J.M. Einfüh-rung in die Wirt schafts informatik. Berlin, Spring-er Gabler, 2015, p. 2.

[24] VCIOM, https://wciom.ru/analytical-reviews/analiticheskii-obzor/vozmozhnosti-dlja-molodezhi-monitoring. Date of access: 10.02.2023.

[25] Grehnev V. C. Value bases of the processes of education and education of people in modern society. *Philosophy and Society.* 2010. № 3 (59). p. 49.

[26] Sociodynamics of Values and Value Orientations of Employees of Russian Corporations: Network Approach / P. P. Deryugin, E. V. Strogetskaya, M. V. Sivokon [et al]; Ministry of Education and Science of Russia, Saint Petersburg State Electrotechnical University "LETI" named after V. I. Ulyanov (Lenin). - Saint-Petersburg: Publishing house of St. Petersburg State Electrotechnical University, 2021. 149p. pp.18-20.

[27] Janovsky M. I., Borisov N. A., Kuznetsov Y. M. On the psychological mechanisms that create the human character. *Psychology and Psychotechnics.* 2022. №4. pp. 73-88.

[28] Factora A.M., Kamolov S.G., Nikandrova A.A. Human values in the digital age. *Modeling, optimization and information technology.* 2018. №2 (21). pp. 86-103.

[29] Yarmak, O. V. Social Portrait of the Modern Student. *Discourse.* 2019. T. 5, № 4. pp. 53-64.

# Public Relations in the Funeral Industry of Russia

Irina A. Ilyina
*Faculty of Humanitarian Sciences;*
*Public Relations Department*
*Saint-Petersburg Electrotechnical*
*University "LETI"*
St. Petersburg, Russia
inka4@yandex.ru

Liubov S. Moskovchuk
*Faculty of Humanitarian Sciences;*
*Department of Philosophy*
*Saint-Petersburg Electrotechnical*
*University "LETI"*
St. Petersburg, Russia
lsmoskovchuk@etu.ru

Ksenia A. Uvarova
*Faculty of Humanitarian Sciences;*
*Public Relations Department*
*Saint-Petersburg Electrotechnical*
*University "LETI"*
St. Petersburg, Russia
uwarowaxenja@gmail.com

Anna S. Piatkova
*Faculty of Humanitarian Sciences;*
*Public Relations Department*
*Saint-Petersburg Electrotechnical*
*University "LETI"*
St. Petersburg, Russia
annasrgpyat@gmail.com

*Abstract*— **This article consideres ethical and communication issues in the promotion of the funeral business. The complexity of promoting offers of companies in this area is based on the importance of considering internal and external factors using communication practices. The authors analyze the practice approach using various tools and ethical regulations to promote this sphere and increase the level of adaptation possibilities for these mechanisms in Russia. The aim of the study is to identify trends of modern communications (virtual reality, video-conferences etc.), Public Relations tools and ethical standards in the development of the funeral business in Russia, comparing the funeral business in Russia and abroad.**

**Authors analyze the differences of the role and place of the funeral services industry in industrial and post-industrial cultures. If in the first case the main factor is the provision of services, in the second one it is psychological support and mediation aimed at expanding the ability to control one's life.**

**As a result, the strategic approach to communications and building public relations can't help bring this service to a new level. Instead of this, negative connotations can be improved to suit the image of a socially significant and approved profession through PR communications based on media relations, community relations, anti-crisis communication technologies, corporate social responsibility approaches and ethical regulation in the field of funeral services. The work of public relations specialists in the funeral industry involves implementing basic adaptation skills with regards to the professional environment. This shows that Public Relations can be one of the important factors in the funeral industry's development.**

*Keywords*— *negative demand promotion, funeral industry, Public Relations support, Russia, ethical business issues.*

## I. INTRODUCTION

The funeral industry is characterized by negative demand market, where communication is required only after a target request, whereas the business itself is full of criticism and stereotypes. In Russian and foreign traditions, the funeral industry provides commodities and renders services related to memorial ceremonies taking into account socioeconomic, moral, ethical, cultural, historical, religious, ecological, and technological factors.

For modern society, the issue of end-of-life planning is quite sensitive and essential at the same time. Funeral services that envisage exclusively utilitarian and commercial approaches are in line with industrial culture, but poorly correspond to modern trends promoting individualistic values: freedom, comfort, the right to dispose of one's own body. The widespread rise of secularity contributes to the lack of strict guidelines in this part of human existence, and reinforces the need for reforming communications. It requires PR specialists' competence in forming adequate interaction between funeral industry and a client.

Ethical regulation of funeral services, legal standards and codes are aimed at reducing the industry's reputational setbacks. For example, the state standard for funeral companies regulates etiquette and legal side. It also includes a ban on enforcing services and abuse of power. Moreover, state standards define the responsibility of the companies including the family of the deceased and professional community [1]. In the North American funeral industry, ethical provisions focus primarily on the wishes of the deceased [2], or on the entire family expectations [3]. The American codes of ethics are also distinguished by their delicate intonation and use of sensitive and tactful terms (serving the family, caring for the deceased, etc.), which helps to distance from the commercialized and cynical approach that clients may imagine about funeral business. Thorough staff selection and corporate culture management is done by high ethical standards.

Despite the diversity of ethical codes regulating the field of funeral services, there is a lack of healthy communication support. Namely, it includes the absence of a key message and distinct tone of voice for interactions between staff of funeral agencies and customers. This underlines the importance of using facilitation techniques, which can be implemented by a PR-specialist, within the profession's aptitude.

Services within the funeral industry are promoted with certain attributes inherent only to this market segment. In this field the demand cannot be created artificially, whereas it arises at the moment of an objective urgency, which implies a lack of detailed price quote and commodity selection analyses. In addition, social prejudices that stigmatize this sphere are demonstrated throughout social networks, media, and review sites in the form of negative comments about the activities of funeral homes. Businesses in this field have to make an effort to overcome negative attitude so that a proper business strategy can be developed.

## II. LITERATURE REVIEW

Attitudes towards death and relations between the living and dead evolve alongside cultural tradition and allow us to judge the paradigmatic changes taking place in society. In the

classic work of F. Arjes, "Man in the Face of Death" [4] denial and fear of death are extremely prominent in the twentieth century, as a result of which the concept of death has been pushed outside of cultural practices and influenced mainly by the medical field. In traditional pre-industrial societies, the process of human passing was not as protracted as it is now, when medical technology makes it possible to prolong human existence long enough for an individual to confront the fact of their own demise. In traditional cultures, various practices helped people to cope with this and prepare for the final stage in their life, but these customs are being lost as a result of secularization.

The gap is currently being bridged with the help of a new business model within the funeral industry, which involves helping a person depart life in peace and dignity. This assistance, combined with the opportunity to participate in arranging one's own funeral is perceived in contemporary to postsecular culture as an extension of the ability to control one's life, cope with anxiety and preserve one's identity, and "generate a sense of commitment to life despite the fact of death" [5].

An important role in the framework of this new model is attributed to assistants, guides, companions, or, in other words, death doulas. In the field of funeral services the term "doula" comes from childbirth, which in itself is very symbolic and inherent to traditional cultures, where the connection between birth and death is emphasized. For example, the Buddhist tradition is characterized by burial in a pose resembling an embryo; in Christianity, birth and subsequent life are perceived as preparation for death. Traditionally, female guides provided comfort to the families of the deceased, and we are now witnessing a formalization of this occupation. In their services death doulas see a fundamental social mission, which makes it possible to consider this field worthy of public recognition. The International End of Life Doula Association "INELDA" states in its code of ethics that the main duty of the doula is to help the dying person maintain their dignity at the end of their life. An important professional task is to avoid conflicts of interests that might interfere with the role of an impartial, unbiased companion and guide in the departing process. At the same time, the End of Life Doula will not use their relationship with the client and their loved ones to put forward their own personal, religious, political or business interests [6].

The Canadian Association of Death Doulas states that its mission is to develop the standards of end-of-life care. The mission of an End of Life Doula is to provide emotional, educational and practical support that will enable the client to make informed decisions about end of life care. Doulas exist to advocate, but in no way make decisions or project their own beliefs onto another person [7].

This way, doulas provide a safe and comfortable environment for the dying person, shielding them in this vulnerable situation from possible abuse of others. It should be emphasized that this profession establishes itself as a socially significant field of work aimed at affirming the value of human life.

The implementation of digital technology has made an impact on all fields, including the funeral industry. The matter of digitalization and innovative technology in the field of funeral services is analyzed in a study conducted by van Ryn, L., Meese, J., Arnold, M., Nansen, B., Gibbs, M., & Kohn, T. [8]. It shows that funeral directors act as intermediaries between consumers and designers. The study notes the conservative nature of the field, and establishes morticians' roles within the frameworks of facilitation and pastoral power.

The analysis of planning tools, mediation, and digital products in funeral services is presented in the study by Nansen, B., Kohn, T., Arnold, M., van Ryn, L., & Gibbs, M. [9], showing how social networks change grieving scenarios and adapt to the needs of grief culture.

The COVID-19 pandemic significantly contributed to the implementation of digital technology within the funeral industry, as noted in a study by Enari, D. & Rangiwai, B. W. [10], Alexis-Martin, B. [11]. It highlights the importance of maintaining traditional scenarios of grief and loss in conditions of limited social interaction. Research conducted by Nansen, B., Gould, H., Arnold, M., & Gibbs, M. [12], analyzes economic, cultural, and technical reasons for instances of failure and obscurity in incorporating innovative digital tools within the funeral industry (the funeral attendance robot CARL, the in-coffin sound system CataCombo, the posthumous messaging service DeadSocial and the digital avatar service Virtual Eternity). This study also introduces the concept of necro-technology into the industry's vocabulary. Studies conducted by Han, G.-S. [13], Sanders, G. [14], Xu, Y. [15] etc. touch on the criticism of "funeral capitalism" (how traditional rituals are often commercialized and misrepresented) and document the way consumerism has influenced the industry.

Studies conducted by Han, G.-S. [13], Sanders, G. [14], Xu, Y. [15] etc. touch on the criticism of "funeral capitalism" (how traditional rituals are often commercialized and misrepresented) and document the way consumerism has influenced the industry.

The research conducted by Elder A. [16], Lambert, A., Nansen, B., & Arnold, M. [17] presents an ethical examination of digital tools and defines media ethics of grief.

## III. Research

In the United States and many European countries, public relations in this field of funeral industry carry informative and educational functions. At the same time, communication plans must focus on attending clients before and after death, and this makes funeral homes a full cycle service agency.

Speaking about the complicatedness of the funeral industry, it is essential to note that managing crisis communication, dealing with different categories of people, and serving the society are of particular importance within this area of business.

A comparative analysis of the funeral industry in Russia and the United States has shown that the businesses are capable of modernizing their services and presentations. The intention to avoid publicity, or, on the contrary, to develop shock content, remains the most distinctive feature and greatest communication problem of Russian funeral business. Foreign companies use different approaches by implementing complex branding techniques and advertising, including social advertising, to combat negative thinking about the industry and its elements.

In general, the models of the funeral services market are built depending on the form of ownership. According to the American sociologist T. Walter, the funeral service industry functions within the framework of three models based on private, church and mixed ownership [18]. Promoting and developing national funeral service markets is an important aspect of business activity in the field. Continuing the traditions of Walter's research practices, Russian researchers

S.V. Mokhov and Y. Kuporov proposed the use of integrated approaches to communications in the industry, particularly learning on American funeral practices [19, 20]. The concept of the American system consists in the assistance of the government and greater customer orientation, as well as the development of alternative funeral homes and the services they provide. In addition, funeral homes show their involvement in the process of preparing for the farewell ritual. At the same time, there is the concept of "death planning", which implies the process of spiritual, emotional, and even financial preparation for the end of one's life and the subsequent support of public groups associated with this process after the final event, that is, burial [21].

For the last several years in Russia, a crisis of the domestic funeral service market has been widely discussed. In the unanimous opinion of market participants, experts community, 3 mass media companies, and general public and consumers, it is of a systematic and comprehensive nature.

One of the reasons for the current situation is the ambiguity of the 1996 "On Burial and Funeral Service" Federal Law. Ideally, it should be supplemented with new standards that will be efficient in regulating the funeral industry.

According to statistical data compiled by the Federal State Statistics Service [22], over the past 100 years the dynamics of life expectancy has been positive (Fig.1).
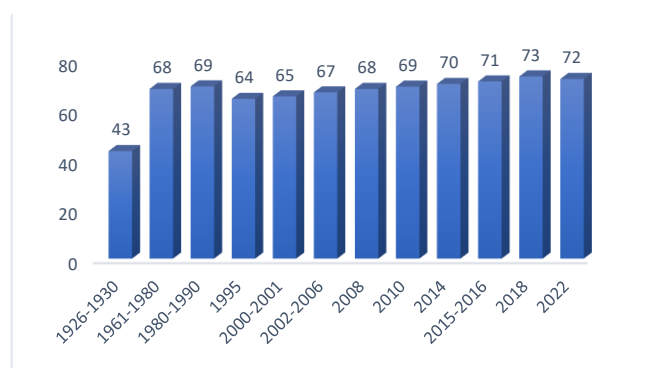


Fig. 1. Life expectancy in Russia for the period from 1926 to 2022 according to the Federal Statistics Service.

Based on the aforementioned data, the average life expectancy in Russia has increased. This is caused by such factors as:

- improved medical standards worldwide;

- a decrease in infant mortality rates;

- more comfortable and gentle living and working conditions.

Despite the positive statistics, the average lifespan of men and women in Russia is significantly lower compared to other countries in the world. In developed countries such as Japan, the USA, Canada, and a number of European countries, life expectancy exceeds 80 years.

It should also be noted that the average life expectancy for women in Russia is ten years more than that of their male counterparts. In developed countries the gap between male and female life expectancy amounts to 2-3 years. This wide gap in statistics can be explained by several national peculiarities:

- the male population's neglect of their own health;

- harmful habits such as alcohol consumption and smoking, as well as the lack of healthy lifestyle promotion;

- poor quality of medical services for senior citizens.

As for mortality, 5.1 million people were born in the EU in the pre-pandemic period (2017-2018), 90 thousand less than in previous years a year earlier. The mortality rate was 5.3 million, which is 134 thousand less compared to the same previous period.

In Russia, the natural decline of the population has increased significantly. In 2018, the number of deaths reached 1,828,910. In 2019, their number decreased to 1,798,307. However, there has been a significant increase in the last two years. In 2020, Russia's mortality rate was 2,138,586. Only in 2006 was there a greater mortality rate, standing at 2,166,703 deaths. The extremely high rates of deaths in the last 2 years can be attributed to the coronavirus pandemic and the resulting congestion of the healthcare system.

As for the funeral business, it should be noted that there is a significant difference in the cost of funeral services in Russia. Thus, according to a study by the Urban Specialized Funeral Service, the minimal commercial cost of a funeral in Russia is 4 times higher than in Germany and about 6 times more expensive than in the United States. At the same time, there are 8-10 funeral agents per a deceased person in Russia and 1 and 1.8, respectively, in Germany and the USA, and this is in the absence of private morgues, crematoriums, and cemeteries in the Russian Federation, with a lack of transparency in pricing for services and the presence of gray markets for funeral services.

Ordering funeral commodities from traditional materials is becoming too expensive for the population, that is why alternatives are being actively developed.

For example, a monument printed on a construction 3D printer was installed as a tombstone at the Vagankovsky cemetery. The memorial is made in the form of a stage with a curtain and theatrical spotlights. At night, solar-powered spotlights light up and illuminate the unique monument. It was commissioned by Alexander Zhdanov for the grave of his grandfather, a famous lighting designer who worked for more than 50 years in the Stanislavsky theater. [23].

In general, the funeral industry is being transformed despite its presumed conservatism. Existing tendencies for jewelry made from ashes, eco-funerals, online planning, involvement in funerals and cremation, and grief counseling are not exempt from Russia, however these changes are slower than it could be.

Many Russian funeral industry businesses are switching to an individual approach to service, staff, and PR communications.

However, the specific responsibilities of efficient communicators in the funeral industry can be determined after taking into account PR-communications using, media relations, community relations, crisis communications technology, and corporate social responsibility (CSR).

In the funeral industry, it is extremely important that an employee's personal qualities and values are aligned with the values of the company. This opinion is expressed in an expert interview by an owner of such a company based in St. Petersburg. According to the expert, activity in this field must be based on a "four pillars" concept: honesty, sensitivity, clarity and humanity.

The proposed model of professional communication is anthropocentric and humanistic and takes into account the nuances of communication within the field's framework, from

a correct greeting and goodbye to the absence of aggressive sales tools.

Furthermore, when using the tools of media relations in developing messages for an audience, it is necessary to consider the specifics of confessional, national, emotional and ethical components of social reality, where the public can form its opinions based on not only the industry's image, but on a facilitator who is able to construct a perception of the industry from a non-marketing viewpoint. This can be accomplished via charitable partner programs with psychological and spiritual centers and educational events that shift the ambiguous outlook on end-of-life matters.

Another important element in interactions with the public is community relations. These include establishing the funeral home's presence in the community and creating a positive perception among local residents and business owners. This could be achieved through blogging, creating and distributing educational content.

An important point of improving public perception lies in suggesting ways of overcoming crisis situations, which can also affect the relationship with the community. For example, the Homesteaders Life Company is an organization engaged in promoting and financially supporting funeral planning and end-of-life expenses in advance. Its representatives emphasize the need to use crisis management approaches and transparent communication techniques, encourage interaction with media representatives and empathy training [24].

Naturally, an important development aspect is assuming corporate social responsibility. In this case, the concept can include both the funeral business itself and third-party organizations wishing to provide assistance in the form of charity and sponsorship. Following the United Nations' Sustainable goals can construct a new socially significant brand image funeral homes. The industry has a lot of potential for managing resources like paper, light, and water in an ecologically-friendly way. Thermal insulation can reduce production costs and save energy. Cooperating with local businesses who make funeral commodities from sustainable materials may foster the status of an organization that is environmentally, corporately, and socially responsible. Corporate culture based on sustainable development goals helps build a comfortable and efficient work environment for employees and strengthen team building and productivity in the funeral home [25].

Modern culture is primarily interested in the ethical and humanitarian traits of funeral industry companies, as people requesting their services are in a vulnerable state of grief and loss. The slightest violation of tact and propriety, or indifference to religious and cultural peculiarities in such situation will be perceived hyperbolically. Communication with those who are mourning undoubtedly requires serious psychological, cultural, and religious competence. The key to successful communication abides in adhering to ethical principles by all who professionally provide services in funeral preparation.

The modern funeral service market implies a wide range of options focused on the organization of farewells, a support system for the family and the person on the threshold of death. Death doulas, pet therapy, psychological care, and religious practices are all ethically regulated services. For example, the highest value in the professional ethics of death doulas is the preservation of the client's autonomy and consideration of their emotions, desires, and thoughts [6, 26].

The use of therapy dogs implies respecting the interests of both clients and animals. Creating a comfortable environment and establishing the pet's status as an equal partner involves a strict screening process on the basis of mental and sanitary criteria. This is done to prevent possible psychological and emotional risks associated with the human body's reaction to stress, and risks of physiological nature, such as allergies and phobias [27].

There are particularities in the ethics of providing psychological help to someone who is passing away. In this case, psychologists are allowed to build a fonder and more emotional relationship with their client. Tactile expressions of support are allowed [28], which implies high requirements so that a specialist has ample self-control and an understanding of personal boundaries.

An important point to consider in the transformation of the funeral industry is it refeminization. In Russian culture, an important place in farewell rituals was historically held by women who mourned the deceased person. Russian non-profit organizations providing palliative care for the terminally ill have a predominantly female composition (for example, the Vera Foundation has 4 out of 6 women on its governing board, and 10 men out of its 76 team members). In our interview with Elena Elsalieva, there is also an emphasis on the importance of women's experience and participation in funeral organization as an appeal to the archetype of maternal care. Studies of the emerging market for death doula services show that among them women are the majority [29].

The awareness of how crucial, socially important, and humanitarian these services are, leads to the necessity to ensure strict selection and control of the field's workforce, as to prevent disorganization and unprofessionalism.

## IV. CONCLUSION

According to the results of the analysis, it can be concluded that drastical implementation of innovative solutions in the Russian funeral industry may face such difficulties as religious dogmas, strict ethical and professional codes in this area and a lack of state regulation of the funeral business. But the way out can be a strategic approach to communications and building public relations, which can help bring this service to a new level.

Serious difficulties in promoting this field should be, first of all, aimed at transforming public attitudes. Funeral service businesses are successfully promoted via website development and correct advertising communications. Likewise, negative connotations can be improved to suit the image of a socially significant and approved profession through PR communications based on media relations, community relations, anti-crisis communication technologies, corporate social responsibility approaches, and ethical regulation in the field of funeral services.

The use of media relations tools in forming messages for the audience should be based on the specifics of confessional, national, emotional and ethical components of social reality, where the public can form its opinions based on not only the industry's image, but also on a facilitator who is able to construct a perception of the industry from a non-marketing viewpoint.

These manifest in the form of charitable partnership programs with psychological help centers, animal shelters, therapeutic and spiritual centers, or educational events in order to raise people's awareness about death and change and soften their attitude towards it. Since such practices already exist and

have been tested in the United States, they can quite realistically be adapted to businesses in Russia.

The work of public relations specialists in the funeral industry involves implementing basic adaptation skills in regards to the professional environment. Furthermore, public relations is one of the important factors in the funeral industry's development. With the help of properly built communication strategies, a funeral home, both in the United States and Russia, can become not a place of pain and grief, but a home where, first and foremost, the families are experts, and the morticians are professionals who honor and respect that.

## REFERENCES

[1] "Code of Ethics of the Corporation of Funeral Directors" (https://krpp.info/codex/ (accessed Feb. 01, 2023).

[2] Code of Ethics NYS Funeral Directors Association" https://www.nysfda.org/about/code-ethics (accessed Feb. 01, 2023).

[3] CPC Code of Ethics" https://nfda.org/education/certification-programs/cpc-code-of-ethics (accessed Feb. 05, 2023).

[4] P. Aries, En face de la mort,Cambridge : Harvard University Press, 1985, 297 p.

[5] D. Davies, Death, Ritual and Belief. The Rhetoric of Funerary Rites, London: Bloomsbury Academic, 2017, p. 320.

[6] "Code Of Ethics The International End of Life Doula Association (INELDA)", https://inelda.org/resources/inelda-code-of-ethics/, (accessed Feb. 01, 2023).

[7] "Death Doula Association of Canada: Scope Of Practice and Code of Ethics" https://endoflifedoulaassociation.org/death-doula-association-of-canada-scope-of-practice-and-code-of-ethics/ (accessed Feb. 01, 2023).

[8] L.van Ryn, , J. Meese, M. Arnold, B.Nansen, M. Gibbs, & T. Kohn, Managing the consumption of death and digital media: The funeral director as market intermediary. Death Studies, 2019, 43(7), pp. 446–455

[9] B. Nansen, T. Kohn, M. Arnold, van Ryn, L., & M. Gibbs, Social Media in the Funeral Industry: On the Digitization of Grief. Journal of Broadcasting and Electronic Media, 2017, 61(1), pp. 73–89.

[10] D. Enari, B. W. Rangiwai, Digital innovation and funeral practices: Māori and Samoan perspectives during the COVID-19 pandemic. AlterNative, 2021, 17(2), pp. 346–351.

[11] B. Alexis-Martin, Sensing the deathscape: Digital media and death during COVID-19. Journal of Environmental Media, 2020, 1(1), 11.1-11.8.

[12] B. Nansen, H. Gould, M. Arnold & M. Gibbs, Media, mortality and necro-technologies: Eulogies for dead media. New Media and Society. 2021.

[13] G.-S. Han, Funeral Capitalism: Commodification and Digital Marketing of Funeral Services in Contemporary Korea. Korean Studies, 2016, 40(1), pp. 58–77.

[14] G. Sanders, "Late" Capital: Amusement and contradiction in the contemporary funeral industry. Critical Sociology, 2009, 35(4), pp. 447–470.

[15] Y. Xu,. Digitizing death: commodification of joss paper on Chinese online cemetery. Journal of Cultural Economy, 2022, 15(2), pp. 151–167.

[16] A. Elder, Conversation from Beyond the Grave? A Neo-Confucian Ethics of Chatbots of the Dead. Journal of Applied Philosophy, 2020, 37(1), pp. 73–88.

[17] A. Lambert, B. Nansen, & M. Arnold, Algorithmic memorial videos: Contextualising automated curation. Memory Studies, 2018, 11(2), pp. 156–171.

[18] T. Walter, Three ways to arrange a funeral: Mortuary variation in the modern West, Mortality, 2005, vol.10(3). pp.173–192/

[19] S.V. Mokhov Funeral industry: the role of infrastructure in creating national models. // Sociological Journal, 2017. vol. 23., no. 4. pp. 51-68.

[20] Yu.Yu. Kuporov, Peculiarities of ritual services in large cities // EHI. 2022. №40 (2). pp. 157-167.

[21] "How to start a funeral home aftercare program" https://www.homesteaderslife.com/blog/how-to-start-a-funeral-home-aftercare-program, (accessed Jan. 04, 2023)

[22] "Federal State Statistics Service" https://rosstat.gov.ru (accessed Jan. 04, 2023)

[23] "City specialized funeral service" https://ritual.ru/poleznaya-informacia/articles/ritualnyy-rynok-v-rossii-v-2022-godu/(accessed Jan. 04, 2023)

[24] "Homesteaders Life Company" https://www.homesteaderslife.com/our-story (accessed Jan. 04, 2023)

[25] "Sustainable Development Goals in funeral business URL: https://news.wfuneralnet.com/en/sustainable-development-goals-funeral-business/(accessed Jan. 24, 2023)

[26] "Death Doula Association of Canada: Scope Of Practice and Code of Ethics", https://endoflifedoulaassociation.org/death-doula-association-of-canada-scope-of-practice-and-code-of-ethics/, (accessed Jan. 15, 2023)

[27] "Code of Ethics for Guardian Professional. Pet Assisted Therapy Facilitators", https://windwalkerpettherapy.org/code-of-ethics.htm (accessed Jan. 15, 2023)

[28] L. A. Gamino, R. II. Ritter Ethical Practice in Grief Counseling. N. Y.: Springer Publishing, 2009. (accessed Jan. 15, 2023)

[29] A. A. Francis, Gender and Legitimacy in Personal Service Occupations: The Case of End-of-Life Doulas and Death Midwives. Journal of Contemporary Ethnography, 51(3), 376–406., 2022 https://doi.org/10.1177/08912416211048927

# Specificity of Digital Technologies in Territorial Branding

Alexey D. Krivonosov
*Department of Communication Technologies and Public Relations*
*Sankt-Peterburg State University of Economics*
Sankt-Peterburg, Russia
krivonosov.a@unecon.ru

Aleksandra V. Zakharova
*Faculty of Humanities*
*Department of Sociology and Mass Communications,*
*Novosibirsk State Technical University*
Novosibirsk, Russia
sah31zah@mail.ru

Elena Yu. Karmalova
*Department of Communication Technologies and Public Relations*
*Sankt-Peterburg State University of Economics*
Sankt-Peterburg, Russia
elen.ka05@mail.ru

*Abstract* — The purpose of the article is to describe modern digital technologies used in territorial branding. Based on the case studies of St. Petersburg presented at the competition in the field of public relations development "Silver Archer - North-West" in 2023, frequently used and innovative digital technologies for positioning the territory are identified.Digital technologies can be actively used for internal and external audiences: both to promote tourist destinations, as an investor relations tool, and to form a strong brand for the internal public - residents of the territory. Features of modern branding - the development and prompt adaptation of new online formats, direct contact with target audiences, including the obligatory emotionality of the message - are applied to territory branding.

*Keywords— geobranding, digital communications, geobrand model and attractor*

## I. INTRODUCTION

One of the current trends in the branding communication paradigm is territorial. Today, the definitions of territorial image-making and territorial branding are clearly distinguished. The latter, in turn, has its own characteristics that differentiate it from territorial marketing.

The glocalization of the "global village" (according to M. McCluhan) was one of the catalysts for the first non-spontaneous attempts to form a territory brand, which date back to the 1950s-60s. European specialists are aware of the need to position the territory in order to "search for positioning and promotion in a new quality, which had to be identified in front of new audiences and public opinion in general" [1: 46]. The next decade is the time to develop PR strategies for the formation of a territorial brand.

The period of the turn of the XX-XXI centuries in connection with the transformations of a geopolitical nature is the time of the formation of strong geo-brands with "added value" and the active development of geo-branding for the purposes of the tourism business and international relations. For Russian territories, as well as for many foreign ones, especially in the post-COVID era, the formation of a strong brand of the territory is important due to the need to attract investment and labor, to solve problem areas in the economy and social life. Building geo-branding strategies is relevant in view of the formation of a human-oriented Russian society and, accordingly, the desire to increase the well-being and degree of satisfaction with the standard of living of the population.

In this paper, we will take as a starting point the definition of a geobrand proposed within the framework of the Romanesque school of public communications: a geobrand is "a set of stable features that characterize an administrative-geographical entity or territory as a brand, subject to a well-formed concept of them in the broad public consciousness" [ 2:46].

The current stage of the state and development of public communications has two main striking characteristics - strategic and digitalization. As A.N. Chumikov, "most of the currently existing brands of countries, regions, cities have become to a dominant extent the result of the historical situation and only to a small extent - the result of the implementation of strategic plans with proper sociological and communication support" [3].

So, in this article we proceed from the fact that the geobrand serves the purposes of long-term positioning of a certain territory; digital technologies make it possible to transform geobrand communication formats and thus position and stand apart from competing brands.

## II. LITERATURE REVIEW

Despite the fact that the practice of territorial branding has a sufficient basis, theoretical studies in this area are secondary, they naturally rely on this practical basis.

Among the major foreign researchers of the phenomenon of geobranding, it is necessary first of all to name Simon Anholt, who worked with the heads of fifty regions and developed his own integrated approach to geobranding in 2002 (regardless of the narrowly focused - tourist, for example - the direction of territorial branding). By the end of the 2000s, S. Anholt moved to the concept of "competitive identity", based on the specifics of building a territory brand in synthesis with public diplomacy and other public practices. S. Anholt believed that the formation of a geo-brand is a form of counteraction to crisis social phenomena and is a necessary condition for the effective development of a place, that "branding has a much greater potential compared to other tools that have a popularizing character." The scientist proposed 8 principles of territory branding [4]. We emphasize that S. Anholt's research was carried out in the marketing paradigm of branding.

Kaith Dinnie also played an important role in shaping the correct modern opinion on the practice of geobranding, the translation of the book under whose editorship is published in Russia in 2013 [5]. Successful and less successful cases of city branding are considered here "in terms of attracting tourists and investments, consolidating residents and local communities."

In Russia, in the first decade of the 21st century, research in the field of territory branding is primarily associated with the names of A.P. Pankrukhin [6], D.V. Vizgalov [7], V.S. Vazhenina [8], who primarily studied the geobrand constructs - "a unique emotionally positive image", intangible attributes and paid their attention more to the subject of image-making itself than to branding.

Russian researchers of recent years, meanwhile, offer a wide range of works on the formation of a territory brand, which are based, for example, on the problems of forming a regional political identity [9], regional cultural brands [10], or ethnocultural values of a territory [11]. In the works of scientists from Russia, the trajectories of scientific studies in the field of regional identity are clearly traced - the country, the region itself [12], the city, small territories [13]. A separate and important component in the formation of the scientific basis of geobranding is the work on events in the formation of a territory brand [14]. "Today, events are increasingly focused on the formation of a model that represents an ecosystem that combines the physical and digital dimensions (fi (sical) – (di) gital event) <…> Figital events are differentiated from hybrid events that involve the simultaneous use of different venues – online and offline, and from online events that take place entirely online. The combination of old and new paradigms involves the creation of a mixed reality space, which poses new challenges for event organizers," writes K.V. Vinogradov [15]. Obviously, figital technologies are becoming more and more in demand today in country, territorial branding, we will give some examples in the next part of the article.

Today, emphasizes M.G. Shilina, "the relevance of theoretical studies of territory branding is determined by the scientific interest in intangible assets as an essential part of the territory as a socio-economic actor. In the "new reality", the economy and politics, both global and Russian, are being transformed and are moving from classical economic motivational models to value-based conditions" [16]. A variety of approaches to the specifics of the formation and maintenance of a geobrand are indicated in a special edition of the materials of the International Branding Conference, held in St. Petersburg and Pskov in 2023, the main topic of which was territorial branding [17]. There are a number of works on the digitalization of the territorial brand, which is relevant in the aspect of our article [18].

At the current level of development of territorial branding, it is necessary to scientifically reflect a certain matrix, a model that could be built on various grounds and be as operational as possible in the context of a global trend towards branding territories of various scales (from a region to a small territory) and taking into account modern technologies, and in the first place, online and digital technologies.

In this vein, the publication of 2014, initiated by the European Institute of PR (Paris, France) in the form of a collective monograph "Geo-branding: practical communications in the promotion of territories", was successful in this vein. In the book, based primarily on European experience, ten geobranding models were demonstrated, which the authors called the "ten commandments" of territorial brand communication [1]. These are such models as the "hero of the place" - a link to a historical influencer, an iconic personality; adherence to the genetic code of the territory; identification of the communication driver; creation of a communication chain - an associative series; choosing the right communication channel; taking into account multicultural features and "baggage" of art; emotionality of communication; following current trends; creating "one's own" history; brand ecosystem. It is clear that such models, taking into account various external and internal factors, can change, having, in addition, a certain driver that allows you to modify the design of the geobrand.

## III.   RESEARCH

In 2023, in the work of A.D. Krivonosov and T.Yu. Lebedeva proposed the concept of a geobranding attractor, by which the authors proposed to understand the "subject of branding within a specific territory (person, museum, theater, sports club, festival, multimedia or online project, etc.) as a communication product that has individual procedural , information characteristics that depend on the goal setting of the positioning of the territory and correspond to a specific tactical setting in the geo-branding strategy of the territory (and / or a spontaneously formed communication product as a branding subject)" [19: 9-10]. The paper also presents an attempt to classify attractors of geobranding according to certain criteria, including the information channel - online, offline.

It is known that digital technologies today imply information search, mail messages, content products, blocks, chats, social networks, surveys among digital resource consumers. The main web tools for promoting a territorial brand have already been described in general. This is the site of the subject of branding, banner advertising, advertising in social networks, on thematic forums, targeting on the Internet, articles in online media, blogs on the topic of geobranding, SEO, SMM, flash games, branded snippets, contests on certain thematic sites [20], however, "so far, these communication channels are practically not involved in promoting the city" [21: 91]. Meanwhile, there is still a depiction of the effectiveness of individual digital tools in promoting a territory, for example, in work on territorial SMM [22].

Online projects can be actively used in project activities for the formation of geobranding attractors, which was clearly demonstrated by the projects of 2022 presented at the competition for the development of public relations "Silver Archer - North-West-2023".

Let us dwell on some projects aimed at both the formation of a new urban brand of the city and the maintenance of existing geobrands.

In 2022 Energetik Corporate Communications Agency LLC, commissioned by Gazprom Mezhregiongaz LLC, implemented the online project Information Resource "Petersburg – the Cradle of Russian Gas" (Istoriyagaz.rf). The authors set a goal to explore the history of the St. Petersburg gas industry on the basis of archival documents, draw up a complete picture of the past and perpetuate the history of the emergence and development of the industry, make it publicly available, and eventually form a new (and, importantly, quite unexpected) city brand - "Petersburg - the cradle of Russian gas.

To maximize the coverage of all target groups of the public, it was decided to submit voluminous information material in three different formats, each of which was designed for a specific group of the public:

1. popular science (in the section "Historical Notes"); historical milestones in the formation of the gas industry are described, archival documents, reproductions of paintings, eyewitness accounts are given as illustrations.

2. the language of the blogosphere (in the Gas Legacy section). Blogger-local historian who spoke about the sights of St. Petersburg and monuments of industrial architecture associated with the development of the gas industry.

3. video tours (in the section "Journey through the gas capital"). Excursions are conducted in the format of a

dialogue on the objects of the gas heritage of St. Petersburg, where information is given about the little-known side of the formation of the gas economy - household. As the authors of the project note, there are no analogues to such excursions.

To draw attention to the information resource, the project partners built a tourist route and presented it in the Petersburg24 mobile author's guide. The route was designed so that it can be passed offline (moving around St. Petersburg by car with a smartphone) or online - in the form of video tours.

The next project was originally designed for an internal audience. It was a project commissioned by St. Petersburg State Budgetary Institution "Centralized Library System of the Moskovsky District" of the Central Library System of the Moskovsky District - "UrbanCosmoTech" - a popular science show with the aesthetics of television of the 1990s, popularizing the activities of Russian scientists.

Today, the library is a space for various cultural and leisure practices, business and informal communication, work and learning. The authors set themselves the goal of creating a set of educational products to popularize domestic scientists. The objectives of the project were to organize an All-Russian flash mob, where everyone can get acquainted with one of ten facts about the famous scientist and choose what he has in common with the inventor by posting it on his wall. The flash mob is organized using an application on the Vkontakte website. More than 2500 people from all over Russia took part in it.

The authors filmed a popular science show in the aesthetics of television in the 1990s. - "UrbanCosmoTech". Here the heroes of the rubrics talk about the contribution of the Russian scientist, make prototypes of his inventions together with invited experts. More than 117 thousand views of the show were recorded. Finally, the authors aired on the radio as an additional promo for the filmed show. An hour-long broadcast was made with an invited expert, where the facts from life and the significance of the developments and contributions of the scientist were considered in detail.

It is important that this project is considered as part of the branding of St. Petersburg, since the activities of a particular scientist are "linked" to this city, and St. Petersburg itself is positioned as one of the scientific centers of the country.

Today, both hybrid events and actual online projects are actively used in branding. As an example of the latter, let us mention the project of the St. Petersburg GBUK "Petersburg Concert", where digital content is created on the basis of its repertoire policy, thus forming the brand of St. Petersburg as a cultural capital and its sub-brand as a theater and concert center of Russia.

St. Petersburg GBUK "Petersburg Concert" is the largest state production agency in the North-West of Russia, which dates back to 1931 and continues the traditions of "Lengosestrada". It consists of 17 creative teams: 400 professional artists working in different genres - classical, jazz, folklore, variety art, theater, crossover, operetta, modern dance.

Petersburg Concert contributes to the promotion of state policy to ensure wide access to cultural benefits and improve the standard of living of a person. Ensuring the maximum accessibility of cultural content, including the availability of concerts and theatrical performances throughout the country through the digitalization of the cultural sphere and the introduction of digital technologies into the cultural space.

The project provides online access to significant federal and regional events, as well as the preservation and promotion of national cultural traditions. Thus, conditions are being created for access to the cultural product "Petersburg Concert" in an online format, outside the concert hall of the Catherine's Assembly, and in other regions of the Russian Federation.

Within the framework of the non-commercial project "Virtual Concert Hall", within the framework of the national project "Culture" and the federal project "Digital Culture", the following was implemented:

- 150 hours of the highest quality media content: symphonic classics, jazz, folklore, variety art, theater, crossover, operetta, modern dance,

- 80 broadcasts on online video platforms popular in Russia with free and unlimited access,

- about 100,000 views of Virtual Concert Hall events.

To promote the cultural product "Petersburg-Concert" in the digital environment, on the basis of the establishment of the "Virtual Concert Hall" (VKZ) project, within the framework of the national project "Culture" and the federal project "Digital Culture", the media center "Petersburg Concert" was created. Its goal is to create digital cultural content based on the Petersburg Concert repertoire, increase the overall level of accessibility of cultural goods to a wide audience of viewers, improve the quality of the digital cultural product, and promote the Petersburg Concert brand in the digital space through online broadcasts of cultural events, creating special digital projects.

As part of the strategic program for the development of this area, developed by Petersburg Concert for 2021–2022, all the technical capabilities for creating a digital product of the highest quality and level of complexity are provided in a fairly short period of time; uninterrupted and almost daily work has been established to ensure broadcasts from the stage of the "Petersburg Concert" to the most remote corners of Russia and media support for the theatrical and concert repertoire - symphonic, pop, jazz musical sets with the participation of virtuoso performers, both Russian and foreign, from all over world, special children's programs, master classes and educational projects.

Another project demonstrating the digital capabilities of maintaining an already well-known brand of the city, which has the slogan formula "St. Petersburg is the cultural capital", was implemented by the A'REAL production studio. This is the Sonorum Scientia Musical VR Channel project using, as the name of the project implies, VR and AR technologies. The Sonorum Scientia channel team implements new digital technologies, connecting digital and creativity, striving to give a new vector of development to traditional art forms. This channel creates a VR library of unique VR concert recordings and musical excursions with spatial sound. Ambisonics technology creates a surround sound field that, unlike traditional immersive sound formats, is not tied to channels, but uses an encoded set of several audio signals that allow you to place sound sources in any position in the sound field, allowing you to experience the effect of complete visual and acoustic immersion in the event.

Today, IT giants create and bring to the world market virtual and augmented reality devices that require new content. Virtualization is a trend that is rapidly changing the media space. The Sonorum Scientia channel is one of the few creators of high-quality audiovisual works made in the VR +

Ambisonics technique. The channel's specialists develop and apply new tools and techniques to create an immersive virtual space that come to various genres of journalism (VR reports on the example of VR live releases performances), in documentaries (Sonorum Scientia in LOCO), in theater and in many other areas, and thus create a new communication space that is quite easy to apply in the process of building a geobrand.

The channel drew attention to a number of exclusive events in the cultural life of the city, for example, the tour of the Spanish mime Carlo Mo, the work of a number of ethnic groups of the EurAsEC. In the presentation of the excursion material of the VR-excursion, immersion in the context of the audiovisual space of iconic cultural objects was used: a tour of the carillon of the Peter and Paul Fortress, a tour of the organs of St. them. D.D. Shostakovich. Together with the Lutheran Church of Saints Peter and Paul (Petrikirche), a unique immersive VR tour "Angels of Petrikirche" was created. Canal resident musicians, Petrikirche guides and the Sonorum Scientia film crew have developed an immersive route that includes climbing the East Clock Tower via a spiral staircase to live music performed by baroque musicians on ancient instruments.

The creation of VR versions of music and theater festivals has become a good tradition when a cross-section of the brightest premieres of the year in various fields of culture was proposed - the international festival of world premieres in the field of new music reMusik.org; festival "VolkovManifest"; jazz festival "Brodsky DRIVE"; theatrical festival of non-state theaters "Christmas Parade"; international theater festival "Rainbow", organized by the Youth Theater named after. A. A. Bryantseva; Festival "Another Theater"; international festival of modern dance "Open Look", festival of street theaters on Yelagin Island.

An interesting project of Sonorum Scientia together with the St. Petersburg Scientific Center of the Russian Academy of Sciences - "Music of the Pulkovo Meridian". In the Meridian Hall of the Pulkovo Observatory, professional musical groups performed works by famous composers and young authors. This project is aimed at maintaining the image of science in St. Petersburg as a versatile phenomenon, not limited exclusively by academic scientific frameworks. Five unique performances of magnificent musical groups of different genres were recorded. Links to the releases of the project, in addition to the channel page, were posted on various academic resources, which allowed employees of academic institutions to get acquainted with the work of new performers, and musicians to expand their audience.

## IV. CONCLUSION

Digital technologies imply a set of communication tools for promoting products and services using digital channels to reach a potential target audience on a large scale. Such technologies can be a key direction in the development of the cultural and entertainment segment of tourist destinations. They contribute to the planning of an individual trip, the formation of a comfortable tourist environment and the popularity of the segment in the market [24: 227] and, more broadly, to tourists, branding and PR specialists, the formation of a new image of the country to attract new business.

As M.G. Shilin, in the development of geo-branding, "the latest theoretical works fix the demand for a communication component: the territory today is considered not only as a

geographical, economic, political, social, but also as an emotional space" [25].

Digital technologies allow using video images of various formats to control emotions, desires, possible behavioral reactions of content consumers, and in this their effectiveness is quite high [26]. This is evidenced by the presented examples of implemented projects in the North-West region, in particular, the online project Information resource "Petersburg - the cradle of Russian gas". When using online branding models, it is necessary to take into account the digital literacy of the population.

Returning to the concepts of an attractor and a geobranding model, it seems important to note the following: digital technologies can significantly expand the repertoire of territorial attractors, actively involving the phenomena of the spiritual (non-materialized) sphere, revealing more deeply the possibilities of the "old", well-known attractors.

REFERENCES

[1] Geobrending: prakticheskaia kommunikatsiia v prodvizhenii territorii [Geobranding: practical communication in the promotion of territories] / Ed. by T. Lebedeva. Paris: L'Harmattan, 2014. 247 p. (in Russian).

[2] Entsiklopediia pablik rileishnz {Encyclopedia of Public Relations} / ed. by T.Y. Lebedeva: Moscow: Paris; Image-Contact: L'Harmattan, 2009. 250c. (in Russian).

[3] [3] Chumikov A.N. . Malye goroda: brending kak razvitie aktualnykh vozmozhnostei territorii in *Malye goroda v sotsialnom prostranstve Rossii* [Small towns: branding as the development of actual opportunities of the territory in *Small towns in the social space of Russia*] / ed. Markin, M.F. Chernysh. M.: FNISZ RAN, 2019. 545 p. (in Russian).

[4] Anhalt, S.Competitive Identity: The New Brand Management for Nations, Cities and Regions. 1st edition. Paalgrave Macmillan, 2007. 160 p.

[5] Kaith Dinnie. City Branding. Theory and Cases. Moscow: Mann, Ivanov, Farber, 2013. 336p.

[6] Pankrukhin A.P. Marketing territorii. [Marketing of territories ]. M., 2002. 4312 c. (in Russian).

[7] Vizgalov D.V. Marketing goroda in *Marketing v Rossii i za rubezhom [*Marketing of the city in *Marketing in Russia and abroad]*. 2008. N 3. P. 78-85. (in Russian).

[8] Vazhenina I.S. Imidzh i reputatsiia territorii kak osnova prodvizheniia v konkurentnoi srede in *Marketing v Rossii i za rubezhom*. [The image and reputation of the territory as a basis for promotion in a competitive environment in *Marketing in Russia and abroad*]. 2008 N 6. P. 82-98. (in Russian).

[9] Kulakov S.V. Territorialnyi brending kak instrument formirovaniia pozitivnoi regionalnoi politicheskoi identichnosti in *PolitBook. Cheboksary: NII Obshchestvennykh i politicheskikh nauk* [Territorial branding as a tool for forming a positive regional political identity in *PolitBook. Cheboksary: Research Institute of Social and Political Sciences*], 2019. N 1. P. 101-105. (in Russian).

[10] Shtanko E.S., Kalashnikova N.N., Efremova N.V. . Regionalnye kulturnye brendy kak sposob prodvizheniia i sotsialno-kulturnogo razvitiia territorii in *Sovremennye naukoemkie tekhnologii*. [Regional cultural brands as a way of promotion and socio-cultural development of territories in Modern science-intensive technologies. 2019. № 10 (ч. 2). P. 381-386. (in Russian).

[11] Etnokulturnoe brendirovanie territorii v kontekste strategii regionalnogo razvitiia: nauchno-metodicheskie podkhody i praktiki: monografiia [Ethnocultural branding of the territory in the context of regional development strategy: scientific and methodological approaches and practices: monograph] / I.I. Gorlova, T.V. Kovalenko, O.I. Bychkova et al. Moscow: Heritage Institute, 2020. 114 p. (in Russian).

[12] Vorobyev V.P., Golubovskaya O.L., Eremina E.V. Rol regionalnykh brendov v formirovanii regionalnoi identichnosti i imidzha territorii in/ *Vlast*. [The role of regional brands in the formation of regional identity and image of the territory in *Vlast*. 2014. №11. C.122-127. (in Russian).

[13] Repnikov A.Y. Osobennosti territorialnogo brendinga malykh gorodov in *Fundamentalnaia i prikladnaia nauka: sostoianie i*

*tendentsiia razvitiia : Sb. st. III Mezhd. nauchno-prakticheskoi konferentsii. Petrozavodsk: Novaia Nauka* [Features of territorial branding of small towns in *Fundamental and Applied Science: State and Trends of Development: Proceedings of the III Int. III Int. scientific-practical conference. Petrozavodsk: Novaya Nauka*], 2020. P.220-223. (in Russian).

[14] Krivonosov A.D., Shevchenko A.S. Ivent kak instrument regionalnogo imidzhmeikinga in *Imidzhevaia politika Rossiiskoi Federatsii: teoriia i praktika regionov : materialy Vserossiiskoi nauchno-prakticheskoi konferentsii* [Event as a tool for regional image-making in *Image Policy of the Russian Federation: Theory and Practice of Regions : materials of the All-Russian Scientific and Practical Conference*] / Editor in Chief: A.V. Kuzmin. - Ulan-Ude: East Siberian State University of Technology and Management, 2012. P. 106-111. (in Russian).

[15] Vinogradova K.E. Fidzhital-tekhnologii v sobytiinom marketinge budushchego in *Kommunikatsii v usloviiakh tsifrovoi transformatsii : Sb. materialov V Mezhdunarodnoi nauchno-prakticheskoi konferentsii* [Figital-technologies in event marketing of the future in *Communications in the conditions of digital transformation: Proceedings of the V International Scientific and Practical Conference*]. SPb.: ANO "Sofia", 2021. P.148-153. (in Russian).

[16] Shilina M.G. Tsennosti kak normativnoe osnovanie brendinga rossiiskoi territorii v kontekste krizisa in *Brending kak kommunikatsionnaia tekhnologiia XXI veka : Materialy IKh Mezhdunarodnoi nauchno-prakticheskoi konferentsii 27 fevralia - 2 marta 2023 goda* [Values as a normative basis for Russian territory branding in the context of crisis in *Branding as a communication technology of the XXI century: Proceedings of the IX International Scientific-Practical Conference on February 27th - March 2nd, 2023*] / edited by A.D. Krivonosov. SPb.: Publishing house of SPbSEU, 2023. P.65. (in Russian).

[17] Brending kak kommunikatsionnaia tekhnologiia XXI veka : Materialy IKh Mezhdunarodnoi nauchno-prakticheskoi konferentsii 27 fevralia - 2 marta 2023 goda [Branding as a communication technology of the XXI century : Proceedings of the IX International Scientific-Practical Conference February 27 - March 2, 2023] Ed. by A.D. Krivonosov. SPb: Publishing house of SPbSEU, 2023. 315 p. (in Russian).

[18] Berendeev M.V., Drucker M.M. Tsifrovizatsiia i mediatizatsiia flagmanskikh regionalnykh brendov Rossii: novye traektorii brendinga kaliningradskogo eksklava in *Rossiiskaia piarologiia: trendy i draivery: Sb. nauchn* [Digitalization and mediatization of Russia's flagship regional brands: new branding trajectories of Kaliningrad exclave in *Russian PR: trends and drivers: Collection of scientific works*] / Ed. by A.D. Krivonosov. SPb. : SPbSEU, 2021. P. 14-20. (in Russian).

[19] Krivonosov A.D., Lebedeva T.Yu. Modeli i attraktory sovremennogo geobrendinga in *Brending kak kommunikatsionnaia tekhnologiia XXI veka : mat. IX Mezhdunarodnoi nauchno-prakt. Konf* [Models and Attractors of Modern Geo-Branding in *Branding as a Communication Technology of the XXI Century: Mat. IX International scientific and practical conference*] ed. by A.D. Krivonosov. SPb.: SPbSEU, 2023. PP. 9-10. (in Russian).

[20] Alexandrova I.Y. Issledovanie konkurentnoi identichnosti geobrenda «Baikonur» in *Marketing i marketingovye issledovaniia [*Research of competitive identity of geobrand "Baikonur" in Marketing and marketing research]. 2002. N 2. P. 158-170. (in Russian).

[21] Gerasimova G.I. Upravlenie protsessom brend-identifikatsii in *Brending kak kommunikatsionnaia tekhnologiia XXI veka : Materialy VIII Mezhdunarodnoi nauchno-prakticheskoi konferentsii* [Management of brand identity process in *Branding as a communication technology of the XXI century: Proceedings of VIII International Scientific and Practical Conference*]. SPb.: SPbSEU, 2022. P.89-21. (in Russian).

[22] Larionov A.S. Significance of Social Media Marketing-communications in modern territorial branding // Branding as communication technology of the XXI century: Proceedings of the VIII International scientific-practical conference. SPb: SPbSEU, 2022. C. 100-103. (in Russian).

# Strategies of Interaction with the Audience of Belarusian Regional Media in Messengers

Aleksandr A. Hradziushka
*Chair of Periodicals and Web Journalism*
*Belarusian State University*
Minsk, Belarus
webjourn@gmail.com

Ina I. Minchuk
*Chair of Journalism*
*Yanka Kupala State University of Grodno*
Grodno, Belarus
i.minchuk@grsu.by

Hanna F. Velikaborats
*Chair of Periodicals and Web Journalism*
*Belarusian State University*
Minsk, Belarus
anuta247500@gmail.com

*Abstract*—**Regional media in Belarus, fighting for the audience's attention, are solving the issue of multiplatform distribution of content. Global platforms radically changed the strategies of content production and distribution and as well as audience engagement. Using the example of Telegram channels of 10 Belarusian regional newspapers with high subscriber numbers, we traced the dynamics of audience engagement strategies in the practice of local media on five quantitative and qualitative parameters. We surveyed 22 editors-in-chief of news organizations in 6 regions of Belarus and checked their Telegram accounts using a mixed approach. An opinion is expressed about the importance of building communication with the audience in the digital environment. According to the data obtained, the greatest involvement is caused by materials with an emotional component. The results of the study showed the increasing role of video content in attracting the audience.**

*Keywords—regional media, digital journalism, platformization, audience, engagement, Telegram, Viber.*

## I. INTRODUCTION

Modern digital journalism "has become intertwined with the ecosystem of platforms, as news companies distribute their news through these channels in an effort to capture the audience's attention" [1, c. 568]. The most important channels for receiving news are messengers. Unlike social networks, in messengers all posts go out in chronological order, hence they are seen by all subscribers who flip through the feed. News consumption is now integrated into broader patterns of communication on social platforms, hence "audience attention is a very desirable and increasingly scarce commodity" [2, c. 518].

According to a survey conducted by the Baltic Internet Policy Initiative in October 2002, Telegram is the most popular messenger in Belarus for receiving news and necessary information (73 %). During the study, respondents were asked: "What messengers do you usually use to get news and necessary information? The top three most popular were Viber (65,8 %) and WhatsApp (31,9 %). In terms of gender, Telegram in Belarus is more popular among men, while Viber and WhatsUpp are more popular among women. Next in the ranking are Facebook Messenger, Skype, Google Hangouts, and the rating is closed by the previously popular messenger ICQ, which was mentioned by only 1% of respondents [3].

Telegram, created by Pavel Durov in 2013, has now become both a platform for communication and a significant source of information. It is a completely separate platform that cannot be put on the same level as other social networks and messengers. Public channels are a key feature of Telegram. They allow sharing content with an unlimited audience and are gaining popularity every year against the backdrop of the new economy of attention, which has become the cornerstone of engagement in the digital environment [4, 5]. Without a doubt, the messenger Telegram continues to gain popularity and remains one of the main platforms for media.

According to the "News and Media" directory of Telegram channels and chats, there are more than 1000 channels in this category in the Belarusian segment of the messenger. Viber channels also continue gaining popularity in Belarus. Statistics show that the number of Viber channels in Belarus increased by more than 15 % in 2022. Popular channels in Belarus have tens and hundreds of thousands of subscribers, for whom it is important to receive interesting and relevant content on topics that interest them. As for WhatsApp, this messenger is used mainly for personal and business correspondence.

Today, with more than 86,9 % of the country's population connected to the Internet, the media strive to implement digital technologies in their work. The aim of the article is to theoretically and experimentally substantiate and assess the degree of influence of messengers on the development of the regional media space of the Republic of Belarus. More and more users get news through social networks instead of buying a newspaper or visiting media websites. This makes scholars worry about the future of the media. Nevertheless, "the current digitized and fragmented environment can also be seen as an opportunity for news media to innovate in ways that make them more useful to users" [6, p. 182].

## II. METHOD AND DATA

The design of this research was based on a systematic review of the literature, which has resulted in the main contributions to the state of the issue [7, 8, 9]. First, the direct observation technique was chosen as the scientific method strategy. Second, we used analysis from tgstat.com, which is the largest analytics service for more than 1,2 million Telegram channels and chats, tracking more than 25 million new messages daily. The observation period is from January to February 2023. The research unit of analysis, which was the object of the study, consisted of 10 channels in the Telegram messenger of regional media in Belarus, as well as their current behavior and attributes in this application.

In addition, the methodology of expert interviews, statistical analysis, secondary data analysis, and media research was used. The results of a sociological survey, in which 22 chief editors of state regional media from the Brest, Vitebsk, Gomel, Grodno, Mogilev and Minsk regions were interviewed on a wide range of topics: their views on the mission and tasks of journalists in the digital environment, the impact of new technologies on the journalistic profession, the need for state regulation of digital platforms and on other topical issues.

## III. Results

The strategy for the development of regional media in the Republic of Belarus is one of the burning questions, the answer to which the state administration, media researchers and the editors themselves are looking for today. An analysis of the literature shows that the present requires an active digitalization of the media, the creation of convergent editorial offices and active work on the distribution of content on different digital platforms [10, 11, 12]. In this context, an important task for editorial offices may be to build a closer relationship with the audience and increase its involvement.

There are 136 state regional print media registered in the Republic of Belarus, of which 118 are district, 9 are regional and 9 are municipal. In the last few years the landscape of regional media has changed significantly. Major players on the regional information market have appeared in Belarus, such as the news agency "Mogilevskie Vedomosti" (2018); the news agency "Minskaya Pravda" (2020), created on the platform of the regional holding "Minskaya Pravda" (2017), which included the editorial office of the Minsk regional newspaper and three district editorial offices. A regional media holding "LidaMediaCompany" (2022) was created in Hrodna Region, which unites the editorial offices of the Lida district newspaper, two FM radio stations, and a city TV channel.

Every media outlet has its own website, as well as accounts in several social networks and messengers. In an effort to maintain and increase their readership, the vast majority of editorial offices in the last few years are mastering Telegram for content distribution [13]. The strategies of interaction of regional media with the audience in the messenger are of research interest in order to generalize best practices and implement them in the practice of publications.

Today, Telegram messenger has become one of the popular platforms used in media practice in Belarus, surpassing Viber, which is more in demand in interpersonal communication of Belarusians. The number of media channels in Telegram is much higher than in Viber. Smartpress.by is the leader among Belarusian media in terms of Viber subscribers in 2023 (over 160,000). The "News" catalog features 7 more channels of Belarusian publications. Among them are several city channels ("BrestCity. Brest News", "Online Brest - News", "NewGrodno News"), which have several tens of thousands of subscribers. However, the functionality of Viber channels is significantly inferior to Telegram channels. Other messengers have too small an audience to take them seriously (TamTam, ICQ).

The indicators of the audience engagement of the analyzed Telegram channels of 10 Belarusian regional state media are presented in Table 1. The Telegram channel "BEREZA.BY" (editorial office of the Bereza district newspaper "Mayak") has the highest number of subscribers (7347), the regional news agency "Mogilevskie Vedomosti" (5246) and the news agency "Minskaya Pravda" (4458).

The number of subscribers is an important metric, but not the only one and certainly not the most important one. Much more important are the average number of views per post and the viewers/subscribers ratio (ERR). The editorial board should be primarily concerned with increasing the number of views. After all, thanks to high views (rather than the nominal number of subscribers), it can get further

conversions: traffic to the site, conversions, sales of services, etc.

The highest engagement rating (average reach of one post divided by the number of the channel's subscribers and multiplied by 100) is for the "BEREZA.BY" (54,1 %), "Baranovichi - Nash kraj" (37,8 %), Telegram-channel "Novosti Belynichej" of the district newspaper "Zara nad Druttsyu" (37 %) and "LidaMediaCompany" editorial channel - "Lida News | LIDANEWS" (36 %). This indicator reflects the degree of demand for the content from the audience and is directly related to its interest in the published materials.

TABLE. I.    ENGAGEMENT OF THE AUDIENCE OF THE LARGEST BELARUSIAN REGIONAL MEDIA TELEGRAM CHANNELS, FEBRUARY 2023

| Channel name | Address | Number of subscribers | Engagement, % | Citation Index |
|---|---|---|---|---|
| BEREZA.BY | @berezaby | 7347 | 54,1 | 13,0 |
| MOGILEVNEWS | @mogilevnewsby | 5246 | 22 | 38 |
| Minskaya Pravda\|MLYN.by | @mlynby | 4458 | 16,7 | 208,3 |
| Baranovichi - Nash kraj | @nashkraj | 3398 | 37,8 | 23,0 |
| Vitebskie vesti | @vitvesti.by | 3744 | 23 | 25 |
| Grodnenskaya pravda. Online | @grodnonewsby | 3072 | 23,7 | 48 |
| Pravda Gomel | @pravdagomel | 2068 | 31 | 17 |
| Gomelskie vedomosti | @newsgomel | 1600 | 31 | 14 |
| Novosti Belynichej | @belynichinews | 1485 | 37 | 12,2 |
| Novosti Lidy \| LIDANEWS | @lidanewsby | 1406 | 36 | 8,1 |

The highest citation index (it is calculated based on the analysis of all mentions of the channel, including reposts and mentions of publications of the channel, in other Telegram channels) have the Telegram channels of "Minskaya Pravda news agency" (208,3), the regional newspaper "Hrodzenskaya Pravda" (48) and the regional news agency "Mogilevskie Vedomosti" (38). There is no need to explain the high positions of the news agencies in terms of citations. The high quotation index of the Telegram channel of the Grodno regional newspaper is explained by its leading position within the Innovative media cluster of the Grodno region.

The analysis of the qualitative characteristics of Telegram channels was based on the study of the nature of the content, its types, as well as ways of interactive interaction with the audience (Table 2). The analysis according to the highlighted criteria showed the following features.

Two different editorial approaches to publishing news content have been identified. Some newsrooms, aiming to create a community, provide a summary of the news, highlighting the most important things and supplementing it with photo illustrations or infographics, without referring to the newsroom's website. This is the approach taken by the Telegram channel "BEREZA.BY" (only 10 percent of publications make reference to the editorial site), "Minskaya Pravda -MLYN.by" (15 percent) and "Baranovichi - Nash kraj" (12 percent). In the Telegram channels of other editorial boards, a significant part of the publications contain references to the site of the editorial board, stimulating traffic

to the editorial board or to the sites of the partners: "Grodnenskaya Pravda. Online" (more than 90 % of the content contains a hyperlink), "Gomelskie Vedomosti" (75 %) and "Novosti Belynichej" (70 %). In addition, the study found that 6 out of 10 editors regularly publish digests for a day or a week.

As for the multimedia content, it can be noted that absolutely all the editors use photos or other illustrative content when placing the publications. The analyzed channels recorded regular publications based on photo content: 3-5-7-9 photos in combination with a brief explanation are published. Such publications, supplemented with a hyperlink to the website, constitute the absolute majority of publications in the Telegram channel "Gomelskie Vedomosti", and the Telegram channel Baranovichi - Our Edge announces photo reports on the editorial website in this way. Video content is also used by all newsrooms, and the Telegram channel "MOGILEVNEWS" builds its news feed based on video content, which distinguishes it from all other channels analyzed.

Another difference can be seen in the content strategies of editorial offices. Some newsrooms actively communicate with the audience by posting engaging content: greetings, congratulations, appeals, and invitations. Telegram channel "Novosti Lidy | LIDANEWS" is particularly active in this regard: the morning on the channel begins with a warm greeting (Good morning! May the whole week be productive, rich, fruitful, lucky and successful!); the editors conduct surveys in which they try to get to know their readers better: When would you like to know the weather forecast? and then give feedback. The editorial board may address the audience, inviting them to participate in contests, campaigns, and meetings: Lidcians, let's prove to everyone that the Christmas tree in Lida is the best in the region! There are only hours left until the voting in the Christmas tree contest "Whose Christmas tree is prettier" closes.

TABLE. II. QUALITY CHARACTERISTICS OF TELEGRAM CHANNEL CONTENT OF THE LARGEST BELARUSIAN REGIONAL MEDIA CHANNELS, JANUARY-FEBRUARY 2023 *

| Channel name | Breaking News | Site Links | Multimedia content | Engaging and interactive content | Entertain ment |
|---|---|---|---|---|---|
| BEREZA.BY | ++ | + | + | + | ++ |
| MOGILEVN EWS | - | ++ | ++ | - | + |
| Minskaya Pravda\|MLY N.by | + | + | + | - | + |
| Baranovichi - Nash kraj | + | + | + | ++ | ++ |
| Vitebskie vesti | - | ++ | + | + | + |
| Grodnenskay a pravda. Online | + | +++ | + | + | + |
| Pravda Gomel | - | + | ++ | ++ | + |
| Gomelskie vedomosti | - | +++ | ++ | + | + |
| Novosti Belynichej | - | +++ | + | ++ | + |
| Novosti Lidy \| LIDANEWS | ++ | + | ++ | +++ | + |

* Conditional symbols in the table: - not used, + used regularly, ++ used actively, +++ used intensively.

The analysis of the material revealed a whole list of interactive tools that editors use in communication with the audience: comments, reactions to publications, chatbots, hashtags, polls, different types of hyperlinks, mentioning other Telegram channels. It should be noted that editors have different approaches to the issue of using interactive content. Only three Telegram-channels out of 10 analyzed ("BEREZA.BY", "MOGILEVNEWS", and "Grodnenskaya pravda. Online") do not use reactions under their publications. At the same time, the list of negative reactions in all Telegram channels was limited or excluded altogether.

The analysis showed that some editorial boards use hashtags to navigate the channel and make it easier to find information. For example, the Telegram channel "Grodnenskaya Pravda. Online", thematic hashtags are placed under each publication (#border #transport under the news about the State Border Committee: a cluster of trucks and cars is fixed in front of three checkpoints; #sport #hockey under the news about Neman hockey players won their sixth match in the Belarusian Extra League); "Pravda Gomel" marks certain regular columns (#pravdayumor, #pravdakrasivo, #dayzadnem) with hashtags.

Comments to the publications are open in the Telegram channels "Minskaya Pravda|MLYN.by", "Vitebskie vesti", "Novosti Belynichej". However, with few exceptions, readers do not use the opportunity provided. It should be noted that the subscribers of the Telegram channel "Minskaya Pravda|MLYN.by" are relatively active in their comments: more than two dozen comments were recorded under some problematic publications. However, such examples are rather an exception to the general practice.

It was found that 5 out of 10 analyzed editorial boards used a chat-bot in Telegram: "BEREZA.BY", "MOGILEVNEWS", "Minskaya Pravda|MLYN.by", "Vitebskie vesti", "Novosti Lidy | LIDANEWS". This interactive tool is used for feedback (responding to comments in the chat, answering questions in personal messages) and allows to automate communication and preserve anonymity.

Focusing on a modern, pragmatic audience, the editorial offices of regional media strive to publish useful and entertaining content: weather forecasts, currency exchange rates, announcements of events, name days, horoscopes for the day or the week, calendars of events. For example, the Telegram channel "BEREZA.BY" traditionally starts its morning with a greeting to the audience and a reminder of what event the current day is marked in the calendar (Good morning! Today is International Lifeguard Day. Have a good day and a sunny day!). On Fridays there is a movie schedule at the local cinema, on weekdays there are announcements of events in the area. Closer to the middle of the day, currency exchange rates are published. Such a set of useful information is published daily.

The SMM editorial board of "BEREZA.BY" says that the content for the channel is prepared separately. On average, six to ten posts a day are published. It is important to publish interesting content, not to overload subscribers with information and not to distract them with notifications. Alexander Kragel, editor-in-chief of the newspaper, is actively involved in content creation. Other journalists are more focused on the newspaper. Today, simply publishing interesting content is not enough; it has to be attractively designed. Content formats such as posts with photos,

headlines, and digests help in this regard. The newspaper Mayak also helps with promotion. The editorial board constantly monitors the statistics of our channel. We study what people react to, what they like, and we engage in active dialogue. These factors explain the largest number of subscribers to "BEREZA.BY" among all regional publications in the country.

The Telegram channel "Pravda Gomel" demonstrates a somewhat different nature of communication with the audience: jokes in the #pravdaYumor column appear regularly throughout the day in the feed (How do you know if the cheese with mold has gone bad? It's not at all coincidental that there are 28 days in February. Everyone's really looking forward to spring), winged expressions in the #pravdauramor rubric. Each day begins with a friendly greeting in the Telegram channels "Novosti Belynichej" (Good morning, friends! Let Tuesday begin with a positive mood for you. Good luck to you in the new day! and "Gomelskie vedomosti" (Good morning, I wish you a positive mood). Others in the analyzed list of editors choose a more restrained tone of communication with the audience, giving preference to emoji.

As a result, we can distinguish several strategies of interaction between Belarusian regional media with the audience in messengers. The first strategy involves using Telegram as a link feed to the publication's website. This strategy is followed by the editors of "MOGILEVNEWS", "Vitebskie vesti", "Grodnenskaya pravda. Online" and "Gomelskie vedomosti". The primary platform for content distribution is the website, and Telegram is only a tool to promote the main platform. As a consequence, we can call a weak degree of interactive interaction. As a rule, such channels have a high citation index, but medium or low engagement rating.

The second strategy is the regional community. In our sample, it is characteristic of the editorial boards of "Baranovichi - Nash Krai", "Pravda Gomel", "Novosti Belynichej", and "Novosti Lidy | LIDANEWS". In this case, the media view Telegram as a separate platform, as a full-fledged media. Separate content is created for Telegram. Journalistic materials are published on the messenger in an adapted form. Editorial offices strive to get closer to the audience, paying great attention to the creation of multimedia and interactive content. As a result - average or high engagement rating, low citation index.

The third strategy is a mixed type; it is more characteristic of regional editors who accumulate a significant audience in their Telegram channels. Examples include "BEREZA.BY" (7347 subscribers) and "Minskaya Pravda|MLYN.by" (4,458 subscribers). "BEREZA.BY" has the highest engagement rating (54.1%) and a low citation index (13). Conversely, "Minskaya Pravda|MLYN.by" has the highest citation rate in our sample (208.3), but at the same time the lowest engagement rating (16.7%). We can evaluate this strategy as experimental.

In order to validate our results, we additionally administered a questionnaire to 22 editors-in-chief of Belarusian regional state-owned media. The questionnaire included about 30 closed and open-ended questions. According to the majority of respondents, the emergence of global digital platforms (social networks, messengers) has had a significant impact on the production and distribution of news in the digital environment, as well as on the development and future of traditional media. Experts consider the most promising strategy for working in digital

environments to be increasing their presence on platforms, distributing content through them, and placing unique materials on them (86,4 %). A desire to reduce dependence on platforms that are not the property of editors, was expressed by only 9,1 % of respondents, and 4,5 % noted the priority of the site for the distribution of content. According to the research participants, the most effective platforms for distribution of journalistic content are Instagram, Telegram and "VKontakte" (Table 3).

TABLE. III.          RESULTS OF THE ANSWER TO THE QUESTION "WHICH DIGITAL PLATFORMS ARE MOST EFFECTIVE FOR DISTRIBUTION OF JOURNALISTIC CONTENT BY YOUR NEWSROOM?" (N = 22)

| Platform | Number of respondents, % |
|---|---|
| Instagram | 77,3 |
| Telegram | 45,5 |
| VKontakte | 45,5 |
| YouTube | 27,3 |
| TikTok | 22,7 |
| Odnoklassniki | 22,7 |
| Viber | 4,5 |
| Facebook | 4,5 |

Respondents also noted that audiences tend to use social media without following links outside of it. Therefore, many newsrooms tend to go out of their way to reach audiences rather than trying to attract them to the site. In addition, it was noted that it hardly makes sense to chase the coverage of as many social networks as possible and spend time on maintaining Facebook and Twitter communities that show insufficient engagement.

If we talk about the formats of interaction with the audience, we can note the fact that the editors-in-chief of the Belarusian regional state-owned media understand the importance of the readers' attention being the main value for them. When answering open-ended questions, experts noted that in Telegram and Viber messengers, editors try to address users using language that is informal and friendly, or using multimedia content such as videos, emoji, emoticons, etc.

Notably, when asked about the negative impact of digital platforms on journalism, 63,6 % of editors-in-chief of Belarusian regional newspapers considered state regulation of digital platforms (recognition of them as extremist organizations, prohibition of their activities in the country, etc.) to be absolutely justified. Respondents also expressed the opinion that the power over the Internet today is concentrated in the hands of a relatively small number of global technological giants that do not themselves produce original news content. At the same time, the main interests of these platforms are to distribute journalist-produced content and make money from it by selling advertising.

Experts also stated that new technologies bring numerous negative consequences, not the best for the quality and objectivity of journalism. Experts singled out fake news, the publication of unreliable information on social networks, and the lack of sustainable business models in the digital environment as serious challenges for journalism. The dependence on algorithms of platforms, as well as the theft of content, the need to protect copyrights, which in general can have a negative impact on reputational management, were of great concern to regional media managers [14]. This thesis is consistent with the results of foreign scientific studies, which state that "The largest digital intermediaries not only have literally billions of users across the world but also account for

a large part of the time people spend with digital media, and are integral to more and more of the things we do online" [15, p. 1601].

The conducted survey confirmed the fact that the requirements for professional skills and competencies of a journalist have increased significantly. As it was found in the course of the study, the modern journalist performs a huge number of duties in preparing content, its placement, promotion on various media platforms. The experts interviewed named video and small texts as the most effective types of content for distributing journalistic materials on messengers (Table 4).

TABLE. IV. RESULTS OF THE ANSWER TO THE QUESTION "WHAT TYPES OF CONTENT ARE MOST EFFECTIVE FOR DISTRIBUTING JOURNALISTIC CONTENT ON MESSENGERS?" (N = 22)

| Type of content | Number of respondents, % |
| --- | --- |
| Video | 63,6 |
| Small texts | 63,6 |
| Photos | 40,9 |
| Stories | 40,9 |
| Site links | 22,7 |
| News digests | 18,2 |
| Reposts from other channels | 0,00 |

During the interview, the editors-in-chief pointed out that five or seven years ago, the website of an online publication was perceived only as an "online mirror" of the print version, and platforms such as Telegram, Viber, and others were not taken seriously. Today, digitalization has led to a radical change in journalism. Models of media consumption have changed, new positions have appeared in editorial offices, and media content has become significantly different from the works of journalism of the 20th century. The main value of the media in the digital environment, as in the old days, was and will be its audience.

## IV. CONCLUSION

The results of the study were as follows. Since the website is no longer the main platform, many Belarusian regional media are switching to multi-platform content distribution, successfully building up their presence on Telegram. It is no longer the audience going to the media, as it used to be, but the media seeking their attention on platforms controlled by global digital corporations.

Guided by the theory of "attention economics," the media seek to find new formats for interacting with audiences by producing and offering them journalistic content that is innovative and adapted to their needs. In this context, we can refer to the creation of relevant and engaging content, the stable attraction of subscribers, and obtaining high coverage and quotability as the most important components of an editorial team's digital strategy in messengers.

Among the limiting factors should be noted the search nature of the study, its focus on the analysis of statistical data and the choice of only regional media of the Republic of Belarus. We see the prospects for this study in a comparative analysis of new trends and innovations caused by the wide spread of messengers and their impact on journalistic practice in both national and international contexts.

## REFERENCES

[1] M. Myllylahti, "Paying Attention to Attention: A Conceptual Framework for Studying News Reader Revenue Models Related to Platforms", *Digital Journalism*, vol. 8, no. 5, pp. 567–575, 2020, doi: 10.1080/21670811.2019.1691926.

[2] K. Lamot, "What the Metrics Say. The Softening of News on the Facebook Pages of Mainstream Media Outlets", *Digital Journalism*, vol. 10, no. 5, pp. 517–536, 2022, doi: 10.1080/21670811.2021.1974917.

[3] "Telegram is the most popular messenger in Belarus for getting information", URL: https://belretail.by/news/telegram-samyiy-populyarnyiy-messendjer-v-belarusi-dlya-polucheniya-informatsii (Accessed 13.02.2023).

[4] H. M. Sánchez Gonzales, J. Martos Moreno, "Production and distribution of media news on Telegram", *Communication & Society*, vol. 36, no. 1, pp. 95–112, 2023, doi: 10.15581/003.36.1.95-112.

[5] S. Giraldo-Luque, C. Fernández-Rovira, C. "Redes sociales y consumo digital en jóvenes universitarios: economía de la atención y oligopolios de la comunicación en el siglo XXI", *Profesional de la información*, vol. 29, no. 5, 2020, pp. 1–15, 2020, doi: 10.3145/epi.2020.sep.28.

[6] J. V. Pavlik, "Innovation and the Future of Journalism", *Digital Journalism*, vol 1, no. 2, pp. 181–193, 2013, doi: 10.1080/21670811.2012.756666.

[7] M. Zayani, "Digital Journalism, Social Media Platforms, and Audience Engagement: The Case of AJ+", *Digital Journalism*, vol. 9, no 1, pp. 24–41, 2021, doi: 10.1080/21670811.2020.1816140.

[8] R. Ferrer-Conill, C. Jr. Tandoc Edson, "The Audience-Oriented Editor", *Digital Journalism*, vol. 6, no. 4, pp. 436–453, 2018, doi: 10.1080/21670811.2018.1440972.

[9] J. A. Lischka, "Logics in social media news making: How social media editors marry the Facebook logic with journalistic standards", *Journalism*, vol. 22, no. 2, pp. 430–447, 2021, doi: 10.1177/1464884918788472.

[10] J. Meese, E. Hurcombe, "Facebook, news media and platform dependency: The institutional impacts of news distribution on social platforms", *New Media & Society*, vol. 23, no. 8, pp. 2367–2384, 2012, doi: 10.1177/1461444820926472.

[11] I. Bykov, M. Medvedeva, A. Hradziushka, "Anonymous Communication Strategy in Telegram: Toward Comparative Analysis of Russia and Belarus", *Proceedings of the 2021 IEEE Communication Strategies in Digital Society Seminar*, pp. 14–17, 2021, [online] Available: https://doi.org/10.1109/ComSDS52473.2021.9422858.

[12] O. Vikhrova, A. Hradziushka, O. Muravyova, M. Alekyan, N. Akhmedova, "Information support of the Eurasian integration: The image of the EAEU in the mainstream media of the member states", *World of Media*, no. 2, pp. 75–104, 2021, doi: 10.30547/worldofmedia.2.2021.4.

[13] O. Vikhrova, A. Hradziushka, I. Gorlova, "Digital Information Openness of Public Authorities in Russia and Belarus", *Proceedings of the 2022 IEEE Communication Strategies in Digital Society Seminar*, pp. 55–61, 2022, [online] Available: https://doi.org/10.1109/ComSDS55328.2022.9769133.

[14] I. Bykov, J. Akhmedova, "Reputation Management as an Applied Communication Technology in Digital Society", Proceedings of the 2022 IEEE Communication Strategies in Digital Society Seminar, pp. 154-157, 2022, [online] Available: https://doi.org/10.1109/ComSDS55328.2022.9769117.

[15] R. Nielsen, S. Ganter, "Dealing with Digital Intermediaries: A Case Study of the Relations between Publishers and Platforms", *New Media & Society*, vol. 20, no 4, pp. 1600–1617, 2017, doi: 10.1177/1461444817701.

# Strategies of Self-Presentation in a Professional Environment in the Context of Generations

Evgeny A. Pashkovsky
*Department of Sociology and Political Science*
*Saint Petersburg Electrotechnical University "LETI"*
Saint Petersburg, Russia
egn-pashkovsky@rambler.ru

Vladimir P. Miletskiy
*Department of Sociology and Political Science*
*Saint Petersburg Electrotechnical University "LETI"*
Saint Petersburg, Russia
falesm@mail.ru

Vladimir A. Glukhikh
*Department of Sociology and Political Science*
*Saint Petersburg Electrotechnical University "LETI"*
Saint Petersburg, Russia
vladimirglu@mail.ru

*Abstract* — The communicative settings of the representatives of three generations, who are active participants in communicative interactions in the professional environment of modern society, are investigated. The authors focus on finding the differences between the self-presentation strategies of the mentioned groups. The empirical basis was the questionnaire survey of respondents, selected by quota sampling. The conclusions of the study can be used by a wide range of readers in the practice of business communication, as well as by teachers in improving approaches to practical lessons with students studying in the modern university communication disciplines aimed at the formation of soft skills.

*Keywords — presentation of self, self-monitoring, communicative setting, communicative competence, communications in a professional environment, generation, impression management, social networks*

## I. Introduction

In modern conditions self-presentation skills not only determine the success of communication, but are an important means of achieving a high social position, promotion in the professional sphere, determine the number and duration of social contacts. Representatives of different social generations, most actively interacting in the modern professional environment, are prone to the manifestation of communication attitudes specific to their group. Colliding with each other against the background of the digitalization of society, these attitudes form a unique specificity of social communications in the modern professional environment.

The aim of the study is to identify and describe the typical self-presentation strategies of representatives of the three generations, who are the most active participants of professional communications in present time.

We formulated the following research hypotheses:

- Each generation, as a set of individuals who hold specific values, has its own repertoire of the most frequently practiced patterns of communicative behavior;

- Representatives of "Generation X" and "Generation Y" are more inclined to monitoring of self, as well as to supportive style of communicative behavior, rather than "Generation Z";

- The proliferation of digital communications in modern society and related transformations in social values have a similar (independent of generational affiliation) effect on the ways in which individuals represent themselves during social interactions.

## II. Methodological Framework

The methodological framework of the study consisted of: Theory of Social Dramaturgy (E. Goffman); Concept of Impression Management (E. Jones, T. S. Pittman), Theory of Generations (W. Strauss, N. Howe).

For the first time the phenomenon of self-presentation was most fully described by the American sociologist E. Goffman [See: 1]. He argued that social behavior involves one person's attempt to influence another person's perception of him or her. Goffman referred to created social identities, public images of oneself, as "faces", and he viewed all interpersonal interactions (contacts, meetings, social events) as common work by the participants together to maintain a face. Thus, a face, according to Hoffmann, is a particular image chosen at a given moment by an individual with noticing socially accepted traditions, norms and values for interactions with others. One person can choose a face from a variety of options in a particular conversation. This choice may be more or less conscious [2], but in any case it becomes clear that self-presentation is a process that constantly accompanies communication.

One of the conditions for conscious presentation of self is self-monitoring - the ability to see oneself in a conversation from the outside, through the eyes of others, and to regulate one's actions on this basis. It includes, among other things, the skills of selecting the "right" reaction in a difficult communicative situation as opposed to reacting spontaneously (for example, when the interlocutor is the object of accusation); thinking ahead about conversations, understanding the consequences of what is said.

Goffmann also emphasizes that every person, group, community, and culture has its own repertoire of typically played out faces. It is possible to assume that groups of different generations are no exception.

American psychologists E. Jones and T. S. Pittman [3] created the concept of Impression Management, which revealed the dependence of the choice of self-presentation strategy on the motives of a person. It was found that the need for approval, the motive of power and the desire for superiority, the need for respect and attention underlie the desire to present oneself favorably to society. Based on these motives, scientists proposed the following classification of self-presentation strategies: Ingratiation, Self-promotion, Intimidation, Exemplification, Supplication.

The tactic of ingratiation implies a benevolent, soft attitude toward the interlocutor. It is an attempt to present oneself as attractive in the eyes of others. Those who follow this strategy agree, praise, support, compliment, and offer

favors. According to the authors of the concept, the one who tries to be liked must hide the real purpose of his activity or he will achieve the opposite effect. The result of this strategy will be the "power of charm".

The goal of self-promotion is not to try to be liked, but to look competent, to gain respect from others. The most effective way of self-promotion is to demonstrate one's knowledge and skills. By implementing this strategy, a person achieves the "power of an expert".

The intimidation strategist seeks to create an impression of himself as strong. He will try to convince those around him that he is to be feared, he can strike if necessary. The result of this strategy will be "power of fear".

He who chooses the strategy of exemplification pursues the goal of establishing a reputation as a worthy person. To do this, he must convince those around him that he can serve as a role model. He also demonstrates moral qualities worthy of emulation - honesty, decency. As a result, the person receives the "power of a mentor".

Supplication tactics involve a demonstration of weakness, helplessness, and dependence, which leads to a gain of "compassionate power". By demonstrating his inadequacy, the speaker relies on social norms that presuppose helping those in need.

Let us consider Strauss and Howe's Generational Theory [4] as another component of methodological basis of our research. According to this theory social generations are a set of people born once in a twenty-year period and possessing three common criteria: age position in history, common beliefs and behavior patterns, and feeling of belonging to a given generation. The result of the research of the authors of the theory was the allocation of several generations. The most active participants of social communications in professional environment today are representatives of generations X, Y and Z.

Generation X, born between 1965 and 1980, has a number of characteristic features: reliance on life experience, willingness to change, and self-reliance. It is a generation of individualists who value freedom of choice, they are also pragmatic. Their desire for profit and gain is higher than the desire to benefit their society and the state.

Generation Y ("Millennials") has birth years 1981 - 1996. Representatives of this generation tend to make instant decisions and are less influenced by authoritarianism. They are characterized by rapid consumption and achievement of necessary goals, infantilism and a predilection for playful forms of presentation of media reality, inability to critically comprehend and perceive a large amount of complex information, adherence to the visual format [5].

The value system of Generation Z (born between 1997 and 2012) is in its formative stages, so it is quite difficult to unambiguously formulate the characteristic features of its representatives. Some scientists, nevertheless, offer their own versions. According to A.B. Kulakova [6], they are fast learnability and fast information processing, representatives of this generation can instantly switch from one type of activity to another, and act in multitasking conditions. The clip thinking is also highlighted. Such categories as education and professionalism are of instrumental value for Generation Z, but the profession itself does not arouse interest and is seen as a resource for achieving success in the future. These characteristics allowed us to assume that members of Generation Z think less about how they look from the outside

in communication, and are more inclined to egocentric communication than supportive.

## III. RESEARCH RESULTS

Fifty respondents took part in the research by questionnaire. When selecting respondents, we somewhat narrowed the age range of the generations in order to more clearly trace the differences between the communicative settings of their representatives. All three generations were represented among the respondents in roughly equal proportions: 32% of the respondents were from Generation X (age 50 - 60), 30% from Generation Y (28 - 40), and 38% from Generation Z (18 - 23).

The first question, "Do you often think about how much the other person will like your words or actions during the conversation?" was asked to test differences in the level of self-monitoring in the subjective view of respondents. The cumulative response across all generations showed respondents rating their level of self-monitoring as high (58% saying "yes" or "rather yes" and another 34% saying "occasionally"). There are no significant deviations from the general statistics in the context of generations for this indicator. Two details, however, are noteworthy. First: 25% representatives of generation X give a definitively positive answer here, versus 13% and 11% for generations Y and Z, respectively. This suggests they are more inclined to be oriented to altercentrism or being other-oriented. Second: among representatives of generation Y a higher percentage of people (20%) than for other generations say that they rather do not think about the reaction of others to themselves.

By second question we wanted to test whether the respondents were inclined to react "spontaneously" in a difficult communicative situation, or whether they tended to consciously choose a more appropriate response. We asked them to evaluate a fictional situation and put themselves in the place of the character: "Billy and Johnson are working together on a project. Their boss called them in and expressed dissatisfaction with the results. Before this conversation, both colleagues were confident that they had done their part of the job well. When they came out, Billy categorically blamed Johnson for everything. What would you have done if you were Johnson?" The most common answers among all respondents ("Would have asked him why he thought that," 56%, and "Would have reacted based on my knowledge of Billy's character," 38%) indicate a conscious rather than spontaneous reaction, a "braking" of negative emotional outbursts (e.g., "Would have blamed Billy back," 4%). We assume that in the described situation silence or showing aggression in response are more spontaneous and natural reactions, while thinking through the consequences before responding, considering the character of the interlocutor, clarifying the problem - reactions that indicate a higher communicative competence. Almost complete absence of spontaneous reactions is shown by the representatives of generation Y, almost all of their responses reveal the attitude to think over their remark in a difficult or conflict situation. Among generation X the response "I would keep silent" is relatively common (19%), and among the representatives of generation Z - "I would accuse Billy in response" (16%).

The third question sought to identify preferences among the self-presentation strategies suggested by Jones and Pittman. We asked respondents to introduce themselves to a new workplace and to rank the behavioral models they would prefer to use in this case. To make it easier for respondents to

match the strategies with their actual possible behaviors, they were presented in a less categorical and more positive interpretation: "I will be a smiling, charming, positive person" (Ingratiation), "I will try to become a role model as soon as possible, especially for less experienced colleagues" (Exemplification), "I will try to be sincere, including demonstrating my weaknesses" (Supplication), "I will try to show in full my professional capabilities, level of competence" (Self-promotion), "I will show my limits, that I cannot be used" (Intimidation). For each strategy, respondents had to identify a position from 1 (most likely) to 5 (least likely). Moreover, more than one strategy could be placed on the same level. As a result, the representatives of the generations X and Y most often put the strategy "Ingratiation" in the first place, which can be interpreted as their great focus on building relationships in the team. Within generation Z we can talk about the absence of obvious patterns in preferences.

The next question tested the level of readiness for empathy, respondents' possession of supportive communication skills and readiness to use them, in the subjective opinion of the respondents themselves. The question was formulated as describing of a case: "Your friend/girlfriend emotionally tells you about a misunderstanding with a colleague in the team, as if complaining. What would be your action?" In general let's note a significant number of responses "I will ask more about what happened" (36%), "I will try to support him/her" (28%), "I will say encouraging words" (12%) and a small number of responses "I will try to change the subject" (1%), "I will feel uncomfortable and have difficulty choosing a solution" (8%), "I will give advice what to do next" (8%) which indicates a high degree of setting to empathic communication. No significant deviations from this choice were found in any generation, so further testing of the propensity of their representatives to empathic communication seems to be more effective through experiments and observation. The only notable detail is that the majority of answers "I'll give him/her advice on what to do next" belong to generation X (19% of respondents of this generation), which can be explained either by the predisposition of this particular generation to giving advices to others, or by their great life experience. To confirm or refute the latter, it is necessary to check whether the propensity to give advice to others grows with age, which can be a topic of a special research.

We were also interested in the influence of digital communication channels on the peculiarities of self-presentation. In order to identify the respondents' attitudes on this topic, we asked an open-ended question "What, in your opinion, in the realities of modern life, should people learn about a person through his page on a social network?"

The general orientation of the answers of the representatives of Generation X is as follows: social networks should demonstrate that this person really exists, that it is possible to communicate with him or her. Representatives of this generation do not perceive social networks as a way to tell a lot about themselves. The answer of one of the respondents is indicative: people should learn from a person's page in the social network "that this person is real and no more; the less colleagues know about their personal life the better, and if I decide to tell, I will tell by myself".

For Generation Y the most frequent answer is "interests". There are also "life orientations," "peculiarities of world outlook," and "hobbies. In addition, some formal data about the person are listed - place of work, date of birth, education.

The settings of Generation Z about this question are more different and more uncertain. It seems that its representatives do not have a unified model of self-presentation in social networks. However, we can notice that the respondents talk about the benefits of limited information about self in social networks, and most likely do not see social networks as a tool for self-disclosure (Ex.: "I think that a person does not even have to give his real name. You can find out all the necessary information from a person in person"). Here we can speak about a parallel with Generation X. We suppose that the difference in the vision of social networks by generation Y against X and Z is due to the fact that representatives of this generation were the most active initiators and participants in the process of social networks entering into the everyday life of Russians, which took place in 2007-2010. And they have probably retained from that time the attitude for a fuller acceptance of this means of communication, a positive, more trusting attitude towards it.

The final question of the questionnaire, like the first, was general in nature. It was open-ended and was phrased as follows: "What do you usually do to give people a positive impression of yourself?" In the answers we were interested in tracing specific tools of self-presentation that the respondent had not named before, checking the truthfulness of the answers to the previous questions, and determining the clarity of respondents attitudes regarding self-presentation.

The answers to this question reveal more specific differences between the attitudes of all three generations than the previous ones. For each of the generations there are clear accents. For generation X these are: demonstration of affability, friendliness, smiling, sincerity in behavior. For generation Y: the general tendency is the emphasis not on sincerity, but on positive or fully appropriate social role behavior regardless of the mood, demonstration of interest, even if it is not really there. In other words, this generation has a greater tendency to self-monitoring. For generation Z the obvious markers are honesty, openness and straightforwardness in communication.

## IV.  CONCLUSION

We were able to draw the following conclusions based on the results of research:

1.  The assumption that each generation as a set of individuals-carriers of special values has its own repertoire of the most frequently practiced patterns of communicative behavior has been confirmed.

2.  Our empirical study confirms and complements the conclusions made earlier by other scientists that the common features of Generation Z representatives at the moment are difficult to determine, the same applies to their communicative settings, strategies of self-presentation.

3.  Our hypothesis that representatives of Generation X and Generation Y are more inclined to self-monitoring as well as to a supportive style of communicative behavior than representatives of Generation Z has found partial confirmation: X and Y in the professional environment are more inclined to the strategy of self-presentation "ingratiation" (based on theory of Impression Management), which implies support, a friendly attitude towards the interlocutor, a focus on relationship building rather than self-promotion, that is, eventually, supportive communication, rather than egocentric communication.

4. Representatives of generation Y see in social networks an opportunity for self-disclosure and more actively use them as a tool of self-presentation, and generation X and Z refer to it either as an attribute that confirms to others the reality of a person's existence (that is, some informal identity document), or as a means of remote interpersonal communication.

5. The greatest tendency to being other-oriented in the process of communication (some scientists call this skill the main one for a competent communicator [See: 7]) is shown by representatives of Generation Y. X's self-presentation is based on sincerity and a positive attitude, while Z's is based on honesty, straightforwardness, and openness.

REFERENCES

[1] Goffman E. The Presentation of Self in Everyday Life. Overlook Press, 1973. 259 p.

[2] Metts S., Grohskopf E. Impression Management: Goals, Strategies and Skills // Handbook of Communication and Social Interaction Skills, Ed. by J.O. Green & B.R. Burleson. Mahwah, NJ: Erlbaum, 2003. Pp. 357 – 402.

[3] Jones E.E., Pittman T.S. and Jones E.E. Toward a General Theory of Strategic Self-Presentation // Psychological Perspectives on the Self, Ed. by Suls J. Vol. 1, Erlbaum, Hillsdale, 1982. Pp. 231-262.

[4] Howe N., Strauss W. Generations: The History of America's Future, 1584 to 2069. New York: William Morrow & Company, 1991. 538 p.

[5] Zvereva E. A. Osobennosti mediapotreblenija "Pokolenija Y" i "Pokolenija Z" // Social'no-gumanitarnye znanija. 2018, №8. Pp. 205 – 216.

[6] Kulakova A. B. Pokolenie Z: teoreticheskij aspekt // Voprosy territorial'nogo razvitija. 2018, №2(42). P. 6

[7] Mezhlichnostnaja kommunikacija: teorija i zhizn' / O.I. Mat'jash, V.M. Pogol'sha, N.V. Kazarinova, S. Bibi, Zh. V. Zarickaja. Pod nauch. red. O.I. Mat'jash. SPb.: Rech', 2011. 560 p.

# Structural Harmonization of Digital Media Communications: Methodological Analysis

Anna M. Kuzmina
*Institute Higher School of Journalism and Mass Communication*
*St.Petersburg State University*
St. Petersburg, Russia
a.m.kuzmina@spbu.ru

*Abstract*— The ontological complexity and discursive diversity of digital media communications requires adequate methodological approaches of research and analysis. In this article, to describe the structural organization of the system of digital media communications, the author focused on the application of N.Bor's general scientific principle of additionality. Structural harmonization and sustainability of digital media communications involves finding a certain ratio (measure) of structural order (order) and structural diversity (chaos) in modern media systems.

The different communication tools used by media communication actors in the digital environment, which seem to be incompatible, in fact cannot be directly related to each other in the usual way, but can be seen as complementary to each other. In this case, the result of their use will be determined more holistically.

The law of harmonization of opposing natural and social formations in the context of the theory of communication and media communication is objectively considered through the prism of the concept of "information" and its basic properties affecting communication processes. In this regard, the author considers modern quantitative theories of information (A.D.Ursul, R. Hartley, C. Shannon, L. Brillouin, W.R. Ashby, N. Wiener, V.B. Vyatkin, etc.) to conduct a methodological analysis and form the preconditions for structural harmonization in digital media communication systems. Structural harmony of digital media communications system not only provides its structural integrity, but also affects the property of stability of such a system.

Stability of media communication system implies the ability of system objects to preserve the integrative quality of the system, even if the system undergoes influences from external and internal environments. Integrative quality of the system is determined by such an interconnection of the structural elements of the system, which generates new properties of the elements of the system compared to those that they had this relationship. The stronger the links between the elements, the more stable the system and is able to maintain its integrity. Maintaining these integrative parameters within acceptable limits by controlling them and, consequently, preserving the system is called system homeostasis. System development and existence is possible as long as the most important integrative parameters maintain homeostasis or stability.

*Keywords— digital media communications, stability, structural harmonization, information, law of additionality, digital media area*

## I. INTRODUCTION

Let us refer to the system of digital media communications as an information system, the integrative quality of which is determined by the quality and diversity of information circulating in digital media space. The structure of any system is a set of stable interactions and interconnections between its elements. But according to I.V. Prangishvili, in developing systems the stability of the links between the elements is relative, because the structure of the system changes with the development of the system.[1]. Stability of any system is characterized by the ability of its elements and their connections with each other to contain the destructive impact of external environment. Stable systems under external and internal threats can remain within specified boundaries and certain parameters necessary for their normal functioning. Information as a measure of diversity and integrative property of digital media communications system is a factor in the stability of such a system. The article considers information from the perspective of methodological approaches of systems theory and information theory. Information is presented as a reflected diversity, that is, any element of the system of digital media communications is determined by the reflected diversity of its properties of the other object of the system in their communication interaction. Communication interaction of elements of the system is associated with the processes of perception of information, its storage and transmission. The processing of perceived information into signals directing the activity of the system elements is connected with the control of communication. The definition of information as a reflected variety was first presented by A.D. Ursul. However, the author argued that while information does not exist without reflection, it also does not exist without other attributes of matter - motion, space, time, etc.

The article also presents the methodology of the theory of systems, which, in terms of the problems of finding the mechanism of structural harmonization of system formations, defines the relationship of structural ordering and structural diversity so that system formations acquire stability within the equilibrium interval of quantitative values of their structural characteristics [2]

## II. METHODOLOGY

The system approach is the methodology of the general theory of systems, which is set out in the works of one of the founders of the system approach - L. Bertalanffy [3] and the founder of cybernetics - N. Wiener [4]. The allocation of research communicativism in an independent direction, associated with the use of formalized methods of systems analysis falls on the 50s-60s of XX century. At the same time the theoretical basis is given to the systems approach in the works of T. Parsons [5](social systems theory), D. Easton (functional approach)[6], G. Almond (structural and functional approach)[7], K. Deutsch (communication and cybernetic direction)[8]. As domestic researchers interpret the essence and significance of communicativism, «the importance of this subsystem is great, since people are known to be able to assess actions, including political ones, only in the presence of a certain amount of knowledge and information»[9].

Each subsystem of a system more general to itself is a node in the communication network, in which many information

flows intersect, coordination and correlation of which is engaged in the communication subsystem. The system of digital media communications in today's reality can no longer perform simply an auxiliary operational function as a linking element of the system, its structure is becoming too complicated and structural diversity (chaos) is increasing. Therefore, the media communication system is not just a link in the relationship with other subsystems, it is an independent system that determines the main processes occurring in various systems (political, social, economic). Moreover, in our opinion, the system of digital media communications, which is part of a more general media system, transforms political, economic, social processes and institutions in such a way that they acquire the properties and context of media environment elements. All this happens due to the integrative quality of the media system and its subsystem of digital media communications – information.

Despite the fact that studies of communication processes were conducted throughout the twentieth century, the key, in terms of methodological basis, is the emergence after World War II with the development of information sciences and technology of new approaches to the study of communication. First of all, the cybernetic approach. The cybernetic approach in the study of political systems was applied as early as D. Easton in the 50-60s of the XX century in the context of studying the functioning of the political system through the allocation of certain phases: "input", "conversion", "output", "feedback loop". The cybernetic approach was applied more thoroughly in 1963. K. Deutsch in his work "The Nerves of Control: Models of Political Communication and Control". K. Deutsch views the political system as a communication process for coordinating the efforts of political actors to achieve their goals[8].

The system of digital media communications, with its inherent systemic properties, is a cybernetic system. In this case, it is necessary to refer to such categories of cybernetic system as "information", "direct" and "feedback", "input", "output", etc. On the basis of these categories media communication is considered in the context of the idea of political and communication processes in the media environment as the collection, transmission and transformation of information, identifying the direct connection (through which information flow is transmitted from the subject to the object, from the communicator to the recipient), as well as in the context of identifying the feedback (through which the subject (communicator) transmits information about the state of the object (recipient)).

It should also be noted that the cybernetic approach considers media communication as the transmission of information, with the fundamental elements inherent in this process - the source of information, the recipient of information (recipient), the information message itself, the channel of transmission, interference, distortion of information. In this regard, the model of the communication process developed by the domestic researcher of communication processes Yu. Vorontsov. As components Yu. Vorontsov singles out [10] : 1. The source of information. 2. Communicator. 3. Message. 4. Communicator. 5. The communication channel. 6. The extralinguistic parameter of the message. 7. A source of mechanical interference. 8. Source of semantic interference. 9. Class and social filters. 10. Personality and individual filters. 11. Semantic fields. 12. Fields of communication environment. 13. Information losses. 14. "Communicant-communicator" feedback. 15. Feedback "communicant-source of information". This model helps to consider the communicative process not in terms of the system

"communicator-communicator", but in more depth, with the inclusion in the communicative process of feedback as the recipient's reaction to the stimulus received from the source of information.

In this regard, the development of early models of communication processes and media communication processes was significantly influenced by the ideas of Claude Shannon (1916-2001), the famous American mathematician and one of the founders of information theory and W. Weaver, American mathematician, the founder of machine translation, the organizer of science. The Shannon-Weaver model, like the Lasswell formula, describes communication as a linear and unidirectional process. In the process of information transmission, according to the Shannon-Weaver model, there is an overlap of noise or interference, which leads to the fact that the transmitted and received signal are more or less different from each other: "the message created by the information source and the message received by the recipient as a signal recovered by the receiver will somehow have different content, to the point that sometimes they may not even coincide in terms of meaning"[11].

The emergence of certain factors that distort the message, violate its integrity and the possibility of its perception by others, indicates the entropy of the system of digital media communications, the manifestation of which can lead to the collapse of communicative processes. In information theory, entropy refers to the measure of uncertainty of any experience (test), which is invariant as such. It was Claude Shannon who first began to use the knowledge of entropy gained in thermodynamics and statistical physics in his research on the amount of information. These circumstances indicate the uncertainty of the results of the communicative process, which cannot but have an impact on the stability of the entire media-communication system.

## III. STRUCTURAL HARMONY OF THE DIGITAL MEDIA COMMUNICATIONS SYSTEM

Based on the selected methodological constants of systemic and behaviorist approaches, we determine what determines the stability of structural relationships in the system of digital media communications, due to what laws determine the structural harmony of such systems. Description of such regularities is made within the framework of the research in the concept of information theory and information determination in the category of reflection and the category of difference (diversity).

In this case, it is very important to clarify that the initial task of the theory of information is to assess the amount of information reflected relative to each other by two interrelated system objects. in Shannon theory, information is understood as uncertainty removed, it is believed that the incoming information is always valuable. The notion of non-valuable information is alien to the Shannon theory - information that does not reduce uncertainty is simply not information [2]. However, information cannot be viewed only as a value that reduces uncertainty, but somewhat more broadly. In this case, it is necessary to rely on the approach of necessary diversity of one of the founders of cybernetics, the English scientist W. Ross Ashby, which he outlined in his work "Introduction to Cybernetics". According to Ashby, the concept of information is inseparable from the concept of diversity. In other words, the nature of information is diversity, and the amount of information expresses the amount of diversity [11]. Subsequently, researchers paid attention to the relationship between the categorical notions of information and reflection, suggesting that information represents only the diversity that

one element in the system learns (or reflects) about another element in the system. The category of "reflected" information was introduced into the scientific toolkit of information theory by A.D. Ursul, and later V.E. Vyatkin defined the meaning of the amount of information that is reflected by the elements of the system during their interaction with each other ("the information law of reflection"). The quantity of information is determined in accordance with the law of unity and struggle of opposites by its opposite - entropy. Thus, L. Brillouin called the opposite of entropy - negative entropy - non-entropy and introduced this term into information theory, formulating his non-entropic information principle: "Information is a negative contribution to entropy" (non-entropic information principle) [2].

According to V.E. Vyatkin's information law, the reflected information in the processes of system interactions is divided into reflected information (or additive reflection nagentropy) and unreflected information (or reflection entropy). At the same time, the additive non-entropy of reflection characterizes the structural order of the system, while the position of the entropy of reflection characterizes the structural chaos of the system [14].

As an indicator of structural harmonization of system formations V.B. Vyatkin proposed to use R-function defined as a ratio of structural order ($I\sum$) to structural chaos (S): R = $I\sum$ /S = order/chaos. The values of the R-function show what and to what extent prevails in the structural organization of the system formation - structural chaos or structural order. Thus, if R>1, then order prevails in the structural organization of the system, otherwise, when R<1, chaos prevails. If R = 1, then chaos and order balance each other, and the structural organization of the system is recognized as equilibrium and stable [15].

## IV. RESULTS

This article presents the methodology of systems theory and information theory. The author refers to the law of unity and struggle of opposites, when for stability of system formations and harmonization of the structure of systems the equilibrium position of structural order and structural chaos is necessary. In the system of media communications this is ensured by the equilibrium position of structural characteristics of the integrative property of the system - information.

## V. CONCLUSION

In order to bring any systemic formation to a stable position where the system can reflect external influences, structural chaos and structural order need to balance each other. Media communication system, the integrative property of which is information, also functions according to these laws of structural harmonization. Media communication system tends to the structural uniformity of information in order to control communication processes, while participants of media communication and infrastructure of media means and media

platforms determine the structural diversity of information. Therefore, some technological parameters of collection, circulation, use in the media environment of information, which provide the balance of these two extremes and create the stability of the system of media communication, are necessary.

REFERENCES

[1] Prangshivili I.V. System Approach and General System Laws. MOSCOW: Sintec, 2000. P.21-115.

[2] Ursul A.D. Nature of Information: Philosophical Essay. - 2nd ed. - Chelyabinsk: Chelyab. State Academy of Culture and Arts, 2010 - 231 p.

[3] Bertalanffy L. History and Status of the General Systems Theory. - Moscow: Progress, 1973 - p. 23.

[4] Wiener N. Control and Communication in Animals and Machines. New Chapters of Cybernetics. - Moscow: Soviet Radio, 1963; Wiener N. Cybernetics and Society / Per. from English by E. G. Panfilov; Ed. and preface by E. Ya. - Moscow: Foreign Literature Publishers, 1958. - P. 199.

[5] Parsons T. P. The System of Modern Societies / Translated from English by L.A. Sedov and A.D. Kovalev. Ed. by M.S. Kovaleva. - Moscow: Aspect Press, 1998. - 270p.; Parsons T.P. On the structure of social action. - Moscow: Academic Project, 2000. - P.880.

[6] Easton D. Categories of System Analysis of Politics. URL: http://grachev62.narod.ru/hrest/chapt27.htm (accessed 25.12.2023).

[7] Almond G., Powell J., Strom K., Dalton R. Comparative Political Science Today. A World Survey. - M., 2002. - P.430.

[8] Deutsch K.W. The Nerves of Government: Models of Political Communication and Control. - London, Free Press of Glencoe, 1963. - P.316.

[9] Political Communication in Post-Soviet Russia: Problems of Formation and Paradigms of Development. Materials of the section "Political Communication" of the Third All-Russian Congress of Political Scientists on April 28-29 2003 / edited by L.N.Timofeeva, E.V.Lobza, author B.G.Zhigmitov. - In: OJSC "Republican Printing House". - M. - Ulan-Ude, 2003. - P.336.

[10] Vorontsov Y. V. To a question on the structure of a communication flow / / the Subject of semiotics. Theoretical and practical problems of mass media interaction. - M., 1975. - C. 88-107. Quoted in: Zverintsev A. B. Communication management. Working book of the manager of PR. - SPb: SOYUZ, 1997. - P. 25-26.

[11] Stability of federal systems (questions of methodology) / O.V. Morozov, M.A. Vasiliev. - M. : Publishing house "Delo" RANEPA, 2015.

[12] Ursul A.D. Reflection and Information. Moscow: Mysl, 1973; He also: The Problem of Information in Modern Science. Moscow: Nauka, 1975.

[13] Kozlov V.G., Ovechko V.M., Sokolov N.L. About the stability of infocommunication systems functioning// Fundamental Researches. - 2009. - № 5. - P. 54-55;

[14] Vyatkin V.B. Synergetic theory of information: explanations and terminological notes // Scientific Journal of the Kuban State Agrarian University,80 (06), 2012.

[15] Morozov O., Vasiliev M. Quantitative analysis of federal states by indicators of structural heterogeneity // Federalism. 2018. № 3. p. 120-142

[16] Uemov A.I. System approach and the general theory of systems . - Moscow: Mysl,1978. - p.7-141.

[17] Bohr I. Selected scientific works. T2. - Moscow: Nauka, 1971. - 675c.

Shkondin M.V. Media-system as a factor in the development of the world by society. - Moscow: Faculty of Journalism of Moscow State University, 2021. – 156 p.

# Telegram Bots and Groups as a Communication Channel between Authorities and Citizens

Boris Nizomutdinov
*University ITMO*
Saint-Petersburg, Russia
0000-0002-4090-9564

*Abstract*— The article discusses bots and Telegram channels to study the communicative practices of urban residents. The methods of automated information unloading, intelligent data processing and thematic modeling based on machine learning are used in the work. The paper analyzes two entities - channels in Telegram and state bots in Telegram. For the channels, the direction was selected - the channels of the governors of the regions of the Russian Federation, the channel of the head was selected for each region, followed by the unloading of posts. The total base of uploaded messages was 87.5 thousand messages. The goal was set — using the available data set representing posts collected on the channels of the heads of regions, to automatically determine which topics are mentioned in the texts. The clustering method based on machine learning was used for the analysis. As a result, it was possible to identify the main topics that are covered in different regions. The second entity under study is government bots aimed at providing services to citizens or for informing. 53 bots were selected and then divided into 13 categories. As a result, a catalog of bots was compiled and possible methods of comparative analysis in future studies were proposed. The tools tested as part of the pilot project have shown their promise, and the data obtained can be used by both researchers and representatives of government agencies. Thus, the data obtained allow us to evaluate the main topics that are covered in the reports of officials.

*Keywords— telegram, bots, channels, communication*

## I. Introduction

In recent years, social networks have become a powerful tool for spreading information that influences people's opinions and behavior. Popular social media accounts reach a wide audience, which leads to the appearance of professional authorities on the network who can influence the behavior and choice of consumers. In the modern media environment, opinion leaders and influential users are playing an increasingly important role in regulating access to online content [1].

Assessing the reliability of information, people tend to rely on their social networks. A study of the behavior of people reading news on the Internet shows that when determining the reliability of a news article, it is extremely important who shares it [2]. People tend to rely on information recommended by a person they trust, to the extent that the same news is perceived as more trustworthy if it is recommended by a friend from a social network than when reading it on the original news site [2]. Official platforms for discussing urban development issues on the web publish news and information on key issues, as well as collect comments from residents of the city. In order to assess the reaction to the published content, it is necessary to take into account the specifics of such reactions, as well as the possibility of identifying key users who actively express a

civic position and influence public opinion on the issues raised.

Telegram is a free instant messaging service available internationally. Telegram supports a wide range of devices available for iOS, Android, macOS, Windows, as well as Linux. Telegram's cross-platform support is one of the reasons why the app has received over a billion downloads and 500 million monthly active users. Over time, Telegram has moved beyond traditional messaging apps. Despite the fact that it is inferior to WhatsApp in terms of the number of users, since its inception, it has surpassed WhatsApp in terms of characteristics. One of these functions is the presence of channels and bots. The presence of channels and bots has opened up the possibility of using Telegram as a broadcast channel for any media [3]. These functions have had such a significant impact that they have changed the configuration of the tool, which is now widely used as a platform for storing, managing and exchanging data.

This article attempts to evaluate the Telegram channels of the heads of the constituent entities of the Russian Federation and the quality of online bots of the authorities, a review of scientific papers confirming the relevance of the topic. A combination of automated methods of processing and collecting information using machine learning methods is used.

## II. Literary review

The scientific literature on Telegram is expanding, confirming the relevance of the topic, this area is increasingly attracting research interest. A search in Scopus, limited to journals, for the word Telegram in the header and keyword fields revealed 569 publications. The search was performed using the formula (TITLE (telegram) OR KEY (telegram)). Analyzing the publication activity, we can conclude that every year the interest of scientists in this messenger is growing. Figure 1 shows publication activity by year.

A network analysis of the joint appearance of thematic keywords (co-keywords) extracted from publication records found in Scopus showed the most developed industries in which Telegram is studied.
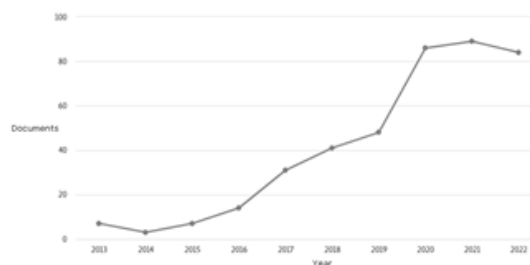


Fig. 1.  Publication activity by year

The most frequent words are the Internet of things, COVID-19, social networks. Separately, it is worth highlighting the issues of political science, there are a number of studies studying election processes via messenger. The results of the analysis are shown in Figure 2.
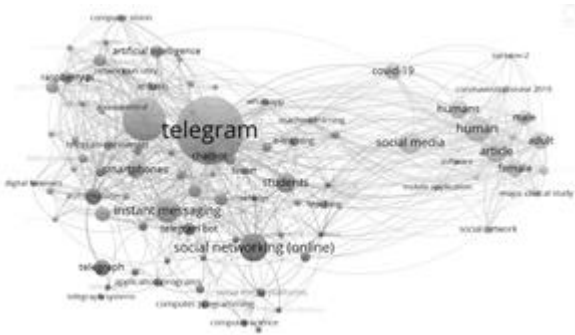


Fig. 2. Network map of keyword matches (composed by author)

Let's look at some examples of research. Professor of St. Petersburg State University S.S. Bodrunova in her work [4] explores communities in the Russian-speaking segment of Telegram that oppose vaccination. To solve this problem, more than 282 thousand comments were evaluated in the largest antivaxxer community in the Russian Telegram (anti_covid21: from January to July 2021). Based on a detailed analysis of this channel, it was concluded that the "discourse of distrust" is highly politicized and this contributes to the spread of protests against vaccination.

A group of researchers from the Institute for the Study of Crime and Law Enforcement (the Netherlands) in their work [5] also focused on the views against vaccination in Denmark, which intensified during the COVID-19 pandemic. The structure of five Telegram groups opposing vaccination was studied, as well as their interactivity and behavior when posting messages were analyzed. As a result of the application of methods of group modeling of trajectories, the behavior of users when posting messages was modeled.

Researchers from the University of Oxford [6] considers Telegram as a decentralized network, exploring the British far-right network in Telegram, using a community detection method based on clustering the flow of random visitors, which allows you to reveal the organization of the Telegram network in communities with different roles.

It should be noted that in the articles selected for analysis there are practically no publications devoted to electronic governance (E-Governance) or electronic participation (E-Participation). At the same time, in our opinion, Telegram, in the future, may become a new generation tool for electronic participation. Therefore, it is important to analyze the potential of this development and use of the platform.

## III. RESEARCH DESIGN

The article considers 2 directions, in the first part the official channels of the governors of the subjects of the Russian Federation are analyzed, in the second part the results of the study of Telegram bots created by authorities or subordinate structures are presented.

### A. Exploring Telegram Channels

The study of channels was divided into 4 stages: channel selection, collection of statistical information, message unloading and processing of text information. At the first stage, the channels of the heads of the constituent entities of the Russian Federation were selected using the Telegram search, and a set of links was obtained. Then statistical information was collected. The TGStat tool was used for the collection. All the data obtained were stored in a single database for comparative analysis. The following parameters were recorded: the total number of subscribers, the citation index, the average coverage of one publication, the total number of publications, the share of subscribers reading. Additionally, the dates of the creation of channels were analyzed and it was found that more than half of the studied channels were created in March 2022.

Further, all posts from 75 channels were unloaded. To upload messages, the regular functions of the Telegram messenger were used, without using the API, all the information received was stored in JSON format. As a result, we managed to get a collection of 75 files in JSON format containing all the posts of the channels. At the final step, the data obtained were analyzed.

The final database of uploaded messages amounted to 98.5 thousand posts. The goal was set — using the available data set representing posts collected on the channels of the heads of regions, to automatically determine which topics are mentioned in the texts. To automatically determine the topic in the text, it is necessary to develop an algorithm for solving text clustering problems.

Clustering is the splitting of a set of similar documents into clusters – subsets, the parameters of which are unknown in advance. The number of clusters can be arbitrary or fixed (set by the user at the initial stage of the algorithm implementation). The clustering task refers to the well-known approach of teaching without a teacher, (training on data not marked up by experts). To implement the solution of the clustering problem, the KMeans method (k-means method) was used. The action of the algorithm consists in the task of minimizing from the centers of these clusters themselves. The software platform has developed a script for database processing, which includes clustering, as well as keyword allocation and tag cloud compilation.

The result of the processing were the selected thematic clusters (table) as well as the keyword cloud The clustering results (see table) show that the Telegram channels of the governors are focused on the general information agenda, bearing a positive character and coverage of events that form patriotic sentiments in society. According to the research, this agenda takes up about 20% of the information content.

Probably, joining the general positive agenda is the most convenient and simple form of forming a positive image of the head of the region, which does not require careful study, and often such posts only highlight the daily current agenda and activities of the governor, his interaction with various social strata of the population.

TABLE I.          RESULTS OF CLUSTERING COMMENTS FROM TELEGRAM
CHANNELS

| Group | Terminological Content of The Cluster | Qty | % | Function |
|---|---|---|---|---|
| All-Russian events and holidays | day, holiday, great, war, memory, congratulate, victory, hero, veteran, life | 8531 | 19,6 | Unification, patriotism |
| Emergency situation, notification | regime, fire, situation, operational, coronavirus, vaccination, control, restriction, spread, infection | 4469 | 10,3 | Notification and protection |
| Economic development | development, cooperation, forum, republic, agreement, region, region, discuss, economic, tourism | 4340 | 10 | Resource allocation and planning |
| Leisure, sports | festival, sport, athlete, competition, team, game, sports, championship, guest, museum | 3287 | 7,5 | Leisure |
| Housing and communal services, real estate | construction, housing, house, object, emergency, apartment, gas, gasification, ruble, program | 3205 | 7,4 | Housing issue |
| Landscapin, environment | road, street, kilometer, plot, landscaping, repair, work, road, yard, bridge | 3109 | 7,1 | Comfort of living |
| Business environment | production, enterprise, products, factory, company, ton, manufacturer, volume, produce, worker | 2822 | 6,5 | Welfare |
| Healthcare | help, doctor, medical, hospital, patient, medic, healthcare, help, person, ambulance | 2727 | 6,3 | Healthcare |
| Support for family and children | school, building, kindergarten, new, renovation, garden, construction, build, facility, equipment | 2672 | 6,1 | Demographics |
| Social support | support, ruble, measure, payment, business, rate, income, family, loan, preferential | 2491 | 5,7 | Social protection |
| Feedback | question, live, broadcast, answer, broadcast, line, governor, clinic, phone, answer | 2423 | 5,60 % | Feedback, engagement |
| Young people | competition, guys, student, university, education, graduate, student, winner, youth, young | 2238 | 5,1 | Education |
| Coronavirus and other | discharge, person, patient, this, coronavirus, sakhalin, treatment, coronavirus, infection, pneumonia | 1284 | 2,9 | Other |

## B. Analysis of government bots in Telegram

The second part of the study is devoted to the study of another type of entities of the Telegram ecosystem, namely, bots of official departments, politicians and authorities. Bots are small applications that work completely in the Telegram application. Users interact with bots through flexible interfaces that can support any tasks or services.

Telegram bots can host full-fledged web applications created in JavaScript. This allows you to create flexible interfaces that can be used by various applications, from online stores to games. Unlike websites, bots support simple authorization and notifications via Telegram. Telegram bots are special accounts that do not require a phone number to set up. Bots connect to their owner's server, which processes input data and requests from users. The Telegram intermediate server handles all encryption and data exchange using the Telegram API. Developers interact with this server via a simple HTTPS interface with a simplified version of the Telegram API, known as the Bot API. Users can interact with your bot using built-in queries directly from the message field in any chat. All they have to do is start the message with your bot's @username and enter the keyword.

At the moment, the Telegram Bot platform contains more than 10 million bots and is free for both users and developers. In the commercial sector, there are metrics for evaluating the effectiveness and quality of bots. Within the framework of Chatbot Rank 2021, a standard for the quality of customer experience when communicating with chatbots was developed, the solutions of the largest companies were evaluated and the solutions for creating bots presented on the Russian market were systematized [8]. However, such a rating is still not applicable to the public sector.

To collect the list of government bots, we used different methods - search for ready-made collections, built-in Telegram search by keywords, search in Yandex. Separately, we can note the Ecosystem of city services in St. Petersburg, all city bots were presented on this portal. For other regions, such a selection could not be found, therefore, standard search methods were used, which significantly reduced the number of results found.

As a result, 53 Telegram bots were selected, the table contains the name, description and link, then, based on the description or name, they were assigned one of 13 categories: army, security, business, healthcare, housing, real estate, appeals, education, work, social support, sports, transport, tourism.

At the same time, the bot can relate to different categories, but one, the main one, was chosen. The category "Filing appeals" was defined separately, in these bots you can send complaints or questions on various topics to the authorities.

It is worth noting that back in October 2021, chatbots were created in 10 regions by Regional Management Centers to send complaints and appeals integrated with the Incident Management system, with reference information and the ability to get an answer or solve a problem, therefore, a large number of solutions in this area were found.

The final results of the division by topic are shown in Figure 3. The largest number of links relates to the topic of submitting citizens' appeals to the authorities, from which it

can be concluded that Telegram bots are already becoming an integral part of electronic participation. The rest of the thematic bots are more often informational in nature and represent a set of knowledge and answers to frequently asked questions, however, such services can be useful for citizens and authorities, as they relieve the burden on administrative staff by giving answers to various topics according to pre-prepared scenarios.
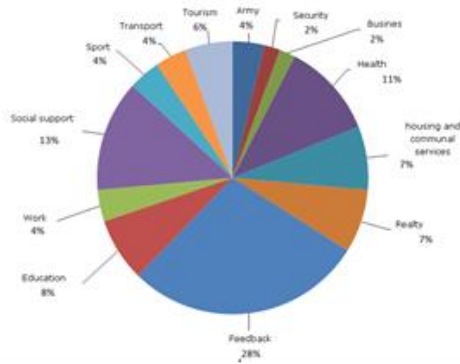


Fig. 3. Topics of selected Telegram bots

At this stage of the work, the analysis of bot scenarios was not carried out and the quality of service execution was not evaluated. Detailed benchmarking is planned for the next stage, which involves the creation of metrics to assess the quality of such services.

It should be noted that it is necessary to develop uniform standards for bots in Telegram, as their popularity will continue to grow. Unified standards will reduce the cost of development and improve the quality of products. In addition, it can be assumed that a single designer of state bots may soon appear, which will reduce the cost of developing and supporting such solutions. In this regard, St. Petersburg stands out, where the specialists of the St. Petersburg Information and Analytical Center have developed a chatbot constructor, which is actively used within the Ecosystem of urban services.

## IV. CONCLUSIONS

The tools tested as part of the pilot project have shown their promise, and the data obtained can be used by both researchers and representatives of government agencies.

A method has been developed for collecting and processing messages from Telegram Channels. It was possible to unload all the messages of the selected channels and conduct a cluster analysis of messages, the final array amounted to 87.5 thousand messages, the main topics of messages were highlighted. With the help of the received method, you can study the communication practices in the Telegram messenger.

Next, it is planned to develop methods for automated uploading of comments to posts, with subsequent processing. To solve this problem, the Telescrape library was defined on the Github platform [7], the documentation for which provides information that using this library you can upload messages and comments, which solves the task. At the current stage, the work on uploading comments has not been carried out, the purpose of the work is to find a tool for further extraction of information. In addition, a Telethon library was found. This library is designed to simplify writing

Python programs that can interact with Telegram. The data obtained after unloading will allow for a discursive analysis in urban Telegram channels and study the moods of citizens, as well as identify problem spaces. Using this method, it is planned to continue studying communication between residents and authorities. At the previous stage, an analysis of comments on the Vkontakte social network was carried out [9], now it will be possible to compare communication practices in different sources.

At the second stage, automated bots were evaluated. A collection of 53 government bots has been collected, divided into 13 categories according to the proposed functions. Manual testing of the main functions of bots has been carried out, it is necessary to further develop a unified methodology for assessing the quality of such bots. Further study of bots and development of automated scenarios for analysis and tests are planned. This study will help in the formation of standards and requirements for government bots and online assistants.

## REFERENCES

[1] D. Mutz, L. Young. "Communication and public opinion: Plus ça change? Public Opinion Quarterly", volume 75, number 5, pp. 1018–1044. doi: https://doi.org/10.1093/poq/nfr052

[2] J. Turcotte, C. York, J. Irving, R. Scholl, R. Pingree "News recommendations from social media opinion leaders: Effects on media trust and information seeking", Journal of Computer-Mediated Communication, 2015, volume 20, number 5, pp. 520–535. doi: https://doi.org/10.1111/jcc4.12127

[3] M. Kovalyova. "What news media need to know to get started on Telegram" [Online]. Available: https://thefix.media/2021/2/1/news-org-need-to-love-telegram /

[4] S. Bodrunova, D. Nepiyuschikh "Dynamics of Distrust, Aggression, and Conspiracy Thinking in the Anti-vaccination Discourse on Russian Telegram", Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), LNCS, vol. 13315, pp. 468-484, 2022.

[5] A. Schlette, J.-W. van Prooijen, A. Blokland, F. Thijs. "The online structure and development of posting behaviour in Dutch anti-vaccination groups on Telegram", New Media & Society, 2022, doi: 10.1177/14614448221128475.

[6] A. Bovet, P.Grindrod "Organization and evolution of the UK far-right network on Telegram", 10.21203/rs.3.rs-1964336/v1.

[7] M. Júnior, P. Melo, D. Kansaon, V. Mafra, K. Sa, F. Benevenuto, "Telegram Monitor: Monitoring Brazilian Political Groups and Channels on Telegram", in The WebConf'22, April 25–29, 2022, doi: 10.48550/arXiv.2202.04737.

[8] C.C. Su, M. Chan, S. Paik, "Telegram and the anti-ELAB movement in Hong Kong: reshaping networked social movements through symbolic participation and spontaneous interaction", Chinese Journal of Communication, vol. 15, iss. 3, pp. 431-448, 2022, doi: 10.1080/17544750.2022.2092167.

[9] "Chatbot Rank 2021 - research of the client experience of chatbots in digital business channels" [Online]. Available: https://www.markswebb.ru/report/chatbot-rank-2021/

B.A. Nizomutdinov, A.B. Uglova "Communication Practicies in the Information Space of City Residents Interested in the Improvement and Greening of Urban Areas (on the Example of St. Petersburg)", Proceedings of the 2022 Communication Strategies in Digital Society Seminar 2022, ComSDS 2022, 2022, pp. 23–26

# Telemedicine Consultations: Mediatization of Doctor-to-Patient Practices

Marina V. Shutova
*Assistant lecturer of the Public Relation Study department St. Petersburg State Electrotechnical University "LETI",*
Saint Petersburg, Russia
marbelru@gmail.com

Yana S. Rocheva
*Assistant professor of the Public Relation Study department St. Petersburg State Electrotechnical University "LETI";*
*Head of the Monitoring rights of persons with disabilities department*
*Federal Scientific Center of Rehabilitation of the Disabled Persons named after G.A. Albrekht, the Ministry of Labor and Social Protection of the Russian Federation*
Saint Petersburg, Russia
rocheva_yana@mail.ru

*Abstract*—The COVID-19 pandemic has geared up the ingression of medicine digitalization in the practice of patient and doctor interaction. Telemedicine consultation moves to become routine. While the law on telemedicine assigns this practice to medical institutions, existing practices of telemedicine consultations aim for non- institutional doctor-to-patient interaction as well. Which may defined as mediatization of medicine. There are two digital media discourses whose goal is to attract the patient's attention. The personal discourse of a doctor trying to promote himself and the media discourse of a clinic competing for the patient. Both practices synergisticly work successfully to form positive doctors' image. This study aims to examine how the digital technology impacts the doctor-patient relationship and its manifestations. Primary research based on a qualitative sociological analysis of 10 in-depth interviews revealed the difference between existing individual and institutional practices of interaction with the patient in digital media.

*Keywords— medicine, doctors, patients, telemedicine, mediatization, social institutions, personal discourse, social media.)*

## I. INTRODUCTION

The COVID-19 pandemic has accelerated the digitization of medicine, which was bound to be reflected in scientific journalism. The legal and financial implications of telemedicine technologies are the primary topics of study. There are research devoted to patient satisfaction with the caliber of telemedicine consultations, and other articles offer reflections on the experience of telemedicine in individual regions or medical specialties [1]. While social media and the use of remote medical consultations are changing the paternalistic pattern of doctor-patient, clinic-doctor, and MOH-clinic interaction that has been established in Russian healthcare, researchers are concentrating on understanding how the new technology is incorporated into the existing structures of the social institution of medicine.

Some characteristics of doctor-patient interaction that were implicit in the daily activities of the Soviet (Russian) doctor have been increased by mediatization and brought into the realm of sociological study. That is the practice of remote counseling, which was carried out via confidential telephone calls, e-mail correspondence,

and, as technology advanced, various software-engineered remote interaction solutions. This study aims to examine how the digital technology impacts the doctor-patient relationship and its manifestations. Mediatization refers to the process and outcome of the mass media's formative influence on social relationships, social practices,

and institutions through media technology, which results in the construction (and reproduction) of a unique media and social reality. [2] It roughly aligns with the definition of mediatization used in international scientific literature. In the authors' opinion, the mediatization of medicine has become established as a new phenomenon. What is implied by this term is the process of transformation invoked by the emerging digital communication that has given the masses free access to medical information; has caused medical knowledge to lose at least some of its sacral nature; and has pushed the personality of a particular actor to the fore in the context of interaction, with their communicative skills now playing the decisive role. [3] The institutional approach in the doctor-patient-clinic triangle still gives the award to the latter, while applied research demonstrates the increasing importance of the doctor due to the active formation of personal interaction practices, when the doctor acts as a guarantor for the patient and the basis for the promotion of the clinic. [4]

The research is devoted to the description and analysis practices of digital patient-doctor interaction. The theoretical basis for the study of interaction in the doctor-patient-clinic system are the theories of structural functionalism (T. Parsons) [5], the institutional approach, the dramaturgical approach (I. Hoffman) [6], the phenomenological approach (A. Schutz, P. Berger, T. Lukman) [7;8], the theories of mediatization (A. Heppa, F. Krotz) [9;10].

## II. RESEARCH

The authors' approach was founded on the notion that a modern patient's options go much beyond a straightforward doctor's consultation. Remote communication between the patient and the treating specialist can be characterized as a series of stages broken down into cycles that occur before, after, or in place of the patient visiting the doctor (offline or online).

The "pre-doctor visit" cycle, in its simplest form, consists of researching a presumed diagnosis and symptoms, visiting review aggregator websites about medical specialists and clinics, reading reviews on Yandex, Google, and navigation services, and then calling or using an online appointment service to schedule an appointment with a chosen specialist or clinic. This list of actions is frequently expanded by personal messages written to doctors-bloggers of the relevant speciality in social networks, chats on the clinic's website, personal messages in social networks, or emails sent to the "clinic".

Following a visit to the doctor, the patient typically looks up information about diagnoses and recommendations (double-checking the doctor), receives "personalized" health information via electronic delivery of medical documents (results of tests, examinations, consultations, as well as extracts, conclusions, etc.). Frequently the patient seeks a "second opinion" via remote consultations with doctors-bloggers via social networks or specialized portals, tries to get in remote contact with the treating physician via messengers, e-mail, and sometimes social networks. Remote patient-doctor interaction may tighten if remote patient monitoring and monitoring of ongoing treatment are included in the appointments. Remote patient monitoring and control of ongoing treatment can be organized both under the control of clinics and personally by a medical specialist. However, there are not enough medical organizations with such technical capabilities and data on the organization of the said process to discuss the current practice. The "instead of seeing a doctor" cycle includes searching for information about a presumed diagnosis and symptoms, contacting doctor-bloggers on social networks, visiting specialized sites and forums dedicated to a particular ailment, and (or) a "virtual" remote doctor appointment. Each cycle includes online doctor consultations (this can be doctors-bloggers, online consultation services, Internet portals, or communities on social networks). Patients express the urge to communicate with doctors remotely, frequently through social media. Consequently, it can be said that remote human contact between a patient and a doctor is already a fundamental part of contemporary digital health care, a crucial aspect of patient practices, and an example of how doctor-patient interaction has become mediatized.

An empirical study of the patient-doctor interaction practice was conducted by the method of expert interviews among doctors of St. Petersburg in 2021 (10 interviews), the purpose of the study was to identify the real experience of remote interaction of therapists with patients. The sample included doctors of different fields (surgeons, oncologists, urologist, gastroenterologist, coloproctologist, gynecologist, nephrologist, dermatologist, endocrinologist).

The study's findings are supported by Russian doctors, who concur that remote patient counseling combines institutional and individual procedures. Eight of the ten doctors who took part in in-depth interviews acknowledged that they frequently provide remote counseling. For instance, a urologist reported that he receives 3-5 email consultation requests per day from patients who contact him on their own, and that no more than one patient per month inquires about a remote consultation from the clinic where the doctor practices (urologist, 13 years of practice). A general surgeon with five years of expertise notes that, despite the clinic's own service for "remote talk with the patient," he has been consulting 1-2 patients remotely via phone or messenger for at least two years and has not received any requests for in-person consultations through the clinic.

Time savings are the key benefit of telemedicine consultations for both the doctor and the patient. Hence, almost all doctors who participate in confidential remote consultations have a predetermined preferred scenario of contact. Typically, a patient who requests a consultation is first asked to send objective information, such as notes from a previous consultation with a similar specialist, photos, and the findings of clinical and functional tests. Only then will the doctor begin a direct remote interaction with the patient. "I request to provide me with all medical records in one letter, along with a detailed account of medical history and current symptoms, […] so that we can jointly decide on a time and day for the virtual consultation. […] Then they conduct the recommendations, the testing, the appointments, and so on, and then we get back in touch. The second kind is when one of my previous patients phones and inquires. And if I determine that I can provide counsel over the phone without a physical exam, I do so — especially if it is an old patient of mine. Nonetheless, if I determine that a test is necessary, I state, "An examination would be preferable here." Obviously, these telemedicine sessions are not very comprehensive in their purest form. There is now no way out of this format (during the epidemic — author's comment)." (Gastroenterologist, 28 years of practice).

An analysis of remote consultations descriptions organized by the St. Petersburg Committee on Public Health [11] during the pandemic, "telemedicine consultations" pages of the outpatient and polyclinic department of the Dr. Sergey Berezin Medical Institute (St. Petersburg) [12], Sberzdoroviye [13]of the Saint Petersburg University's N.I. Pirogov Clinic of High Medical Technologies [14], Gostelemed [15], and Scandinavia Clinic [16] revealed that they were identical to face-to-face consultations in every way except for the technical requirement that the patient have access to a computer, microphone, and, ideally, a video camera. When we see the doctor in the usual manner, we first ask a question and are given a list of necessary tests; a comprehensive consultation is only delivered at the second appointment.

Traditionally referred to as "two-stage" consultations, private medical consultations involve the following pattern of interaction:

1. the patient sends a request for a consultation;

2. the doctors sends a list of clinical and functional examinations to be submitted, sometimes photographs, and a chronological description of the development of the situation as perceived by the patient (his or her relatives);

3. upon receiving the requested information, the doctor schedules an appointment for an online consultation.

The eight specialists who engage in remote consultations agreed that this set-up is the most efficient for routine appointments. The doctor's preferences and the degree to which remote consultations are "embedded" into his or her daily routine will determine the medium via which they are done. Typically, those include email, messengers, and video chat takes up the third place. One of the 10 specialists who were interviewed occasionally offers remote medical care as well because of his speciality. They employ improvised means in this situation: *"[...] or the child, the mother also phones quickly and asks: "He's coughing; what should I do?" The child coughs, and the mother claims him to have been coughing for two hours. I deduce that he has a foreign body in his esophagus because it happened when he was eating. "Now what? What drug should I give him to stop coughing?". And in this case, the problem is not the medication; rather, the food is stuck in the esophagus. These kids have esophageal strictures, and in this case, only EGD is required. We urgently call an ambulance, and discuss in what position we transport and where we take them. Every patient from the fund gives a call just like this"*(Pediatrician, neurologist, 15 years of practice).

A networked (virtual) social media environment (a social media space based on current media traits like mass, interaction, interconnectivity, multimedia, transnationality,

and decentralization) has already formed in healthcare. For instance, Yandex contextual advertising for the term "online doctor's consultation" (reference date: 25.01.2023) displays deals from hospitals or intermediary organizations such as Yandex.Health. For the term "online doctor's consultation," the social network VKontakte lists 1423 communities, 19 products, 10,062 videos, and 8 clips. More than 150K people are subscribed to the most well-known community, Medical Consultations Online, where independent doctors who are not affiliated with any organization or clinic respond to questions. The following distribution by affiliation is shown by an investigation of VKontakte communities in the Russian Federation with 4K+ users that offer online consultations in the area of health-preserving medicine: Communities with an undefined source (neither a doctor or a clinic) – 10, clinics – 16, doctors – 19. In addition, medical professionals' personal accounts dominate the list of communities with more than 10,000 subscribers (Fig. 1).
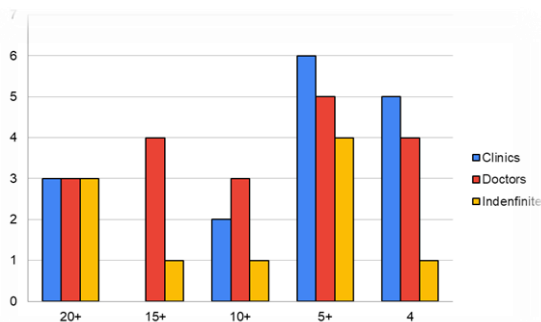


Diagram 1. Distribution of subscribers in the social network VKontakte of pages belonging to the "clinic," "doctor," and "undefined" sources, 2 (reference date: 25.01.2023, the authors' calculation)

Together with the activity of doctors in social networks, the almost complete lack of individual doctor advertisements in contextual advertising (we only managed to find one ad) suggests that social networks and the more intimate, personal tone of communication they enable are more consistent with the idea of comfortable promotion among doctors and the idea of a comfortable interaction with a doctor on the Internet among patients. Contrarily, contextual advertising — a brief delivery of important information to the facility — is more in line with the communication strategies of the functional (administrative) staff of the MPI, as evidenced by the prevalence of institutional ads on Yandex.Direct. At the same time, we cannot say that a doctor's social media advertising is a need for conducting remote consultations. Only four of the ten respondents were actively managing their social networks at the time of the interview, and only eight of the doctors routinely counsel patients remotely (of those managing their Instagram account in 2021, three continue to do so now). Patients still find a way to get in touch with the appropriate physician and schedule a virtual consultation.

According to the authors' research, at the time of the study (2021), the sources of online counseling requests combined both the conventional technique of patient transportation to the doctor and the use of remote methods of work, including those connected to the promotion of the doctor. The number of times request sources were mentioned is as follows: Word of mouth among physicians – 10, and among patients – 9; YouTube – 5, Instagram – 5, Messengers (WhatsApp, Telegram) – 6, an individual website – 2, a clinic website– 4, and email – 5.

*"The majority of my patients find me by **word of mouth**, [...] but now it's lot simpler [...]they can communicate on **forums and chats**. Every new patient with the disease starts an Internet search, discovers people who are experiencing this issue, and they further recommend the clinic, doctor, and give administrators' contact information. The second choice is also viable, so the patient reaches me via **social media**."* (Orthopedic surgeon, 16 years of practice).

*"They (patients – authors' note) share, refer doctors, and spread the word. I'm currently on [...] Instagram. As I'm on Instagram, they begin to find me in the app. Even though I don't do anything there, I got involved since a coworker requested me to perform alongside her. I had to use Instagram for this. I do not, however, have the time or energy to engage in this practice of promoting oneself on Instagram."* (Gastroenterologist, 28 years of practice).

The functions of social institutions are progressively being incorporated into contemporary media. Finding a doctor through a system of recommendations from other doctors or patients — the "word of mouth" mechanism already mentioned above — requires the involvement of the media: a recommendation of a doctor through "word of mouth" but already on a specialized medical forum or even a media endorsement. As one responder claimed: *"If you're not online, you disappear from your colleagues' radar and people forget about you quite soon."* (Endoscopist, 20 years of practice).

### III. CONCLUSION

The patient's journey to the doctor has already been shaped by mediatization. We are witnessing a situation in which traditional ways of finding "his or her" doctor (word of mouth) and new, high-tech ways of finding a doctor the patient is willing to trust are working in synergy in the case of a particular treating specialist.

Two patient engagement paradigms are being observed: personal and institutional. Analysis of the patterns of digital interaction between clinics and patients revealed that it exactly repeated the offline protocol: the patient schedules an appointment, the doctor listens to complaints, consults with the patient, sends the patient to gather additional information (clinical and/or functional studies), the patient undergoes tests, and then schedules an appointment for a second consultation, as a result of which he or she receives a more thorough, individualized consultation. Doctors prefer a two-stage consultation process when consulting patients who visit them in person. This process involves the patient sending a request for a consultation, the doctor sending a list of tests (and other information he or she needs for an effective consultation), the patient gathering data, and only then does a remote consultation take place. This method saves time for both the patient and the doctor since they are both prepared for the visit and costs less money because the patient just needs to make one online appointment (assuming the consultation is paid for).

Despite clinics having greater resources, people are more likely to visit a doctor's personal page because there are more of them on social media and they have the most subscribers. A diagram depicting the distribution of subscribers among the communities started by particular doctors and clinics demonstrates how readily doctors compete with societal institutions like clinics or businesses that offer "remote doctor consultation" services. The fact that doctors' personal pages on social networks are more popular than clinic pages

shows that patients feel more at ease interacting with doctors in a personal manner on these platforms than they do with impersonal, neutral publications from clinics.

Patients frequently use "Internet word of mouth" — reviews of certain doctors in search engines, aggregator websites, specialized medical forums, etc.

When formulating legislative proposals in the area of online health care, organizing public awareness campaigns to draw attention to innovative health-saving ideas and practices, or promoting particular health care institutions (clinics), it is important to take into account the unique conditions that are formed and created for the social regulation of social relations in a mediatized society.

## REFERENCES

[1] Starshinin A. V., Tyazhel'nikov A. A., Pogonin A. V., Kostenko E. V. Sravnitel'nyĭ (2020) Analiz udovletvorennosti pacientov s COVID-19 medicinskoĭ pomoshch'yu, predostavlyaemoĭ v telemedicinskom centre. Medicinskiĭ alfavit. 2020; (36): 73–77. (in Russ.) DOI.org/10.33667/2078- 5631-2020-36-73-77.

[2] Primakov V.L. (2019) Mediatizaciya kak teoreticheskij koncept . Vestnik Moskovskogo gosudarstvennogo lingvisticheskogo universiteta. Obshchestvennye nauki, Vyp.3 (836), 221-238. (In Russ)/

[3] Shutova, M.V., & Rocheva, Y.S. (2021) Digital mediatization in medicine: New models of clinic- to-doctor-to-patient interaction. RUDN Journal of Studies in Literature and Journalism, 26(4), 722–729. doi: 10.22363/2312-9220-2021-26-4-722-729

[4] Shutova M. V. Rocheva Ya.S. (2022) Digital media of personal an institutional patient-doctor interaction practice». Communication strategies in digital society. Seminar» (2022 ComSDS) April 13, 2022.P.71-73.

[5] DOI: 10.1109/ComSDS55328.2022.9769160

[6] Parsons T., Sistema sovremennyh obshchestv / Per. s angl. L.A. Sedova i A.D. Kovaleva. Pod red. M.S. Kovalevoj. — M.: Aspekt Press, 1998. — 270 s. (in Russ.)

[7] Gofman I. (2000) Predstavlenie sebya drugim v povsednevnoj zhizni / Per. s angl. i vstup. stat'ya A.

[8] D. Kovaleva — M.: «KANON-press-C»,

[9] «Kuchkovo pole», 2000. — 304 s. (in Russ.)

[10] Shyutc A. (2003) Smyslovaya struktura povsednevnogo mira: ocherki po fenomenologicheskoj sociologii / Sost. A. YA. Alhasov; Per. s angl. A. YA. Alhasova, N. YA. Mazlumyanovoj; Nauchn. red. perevoda G. S. Batygin, M.: Institut Fonda «Obshchestvennoe mnenie», 2003, 336 s. (in Russ.)

[11] Berger P., Lukman T. (1995) Social`noe konstruirovanie real`nosti. Traktat po sociologii znaniya. / Per. E.D. Rutkevich. — M.: Medium, 1995. — 323 s. (in Russ.)

[12] Krotz Friedrich (2009) Mediatization: A concept with which to grasp media and societal change. In Mediatization: Concept, changes, consequences, ed. Knut Lundby, 19–38. New York: Peter Lang.

[13] Hepp, Andreas (2013). The communicative figurations of mediatized worlds: Mediatization research in times of the 'mediation of everything December 2013 European Journal of Communication. 28(6):615-629 DOI:10.1177/ 0267323113501148

[14] Rukovodstvo pol'zovatelya servisa distancionnyh konsul'tacij «Vrach-Pacient (Pacient). Available at: https://gp93.ru/wp-content/uploads/2022/07/rukovodstvo_polzovatelj a_tmk_pacient_vrach_pacient.pdf (accessed 26. 02. 2022)

[15] Telemedicina v MIBS. Availabe at: https://clinic.ldc.ru/telemeditsina (accessed 26. 02. 2022)

[16] Sber zdorov'e. Availabe at: https://lk.sberhealth.ru/catalog-products?utm_source=main_sberhealth&utm_med ium=internal&utm_campaign=header (accessed 26. 02. 2022)

[17] Beseda s vrachem onlajn. Availabe at: https://www.gosmed.ru/price/online/index.php (accessed 26. 02. 2022)

[18] Gostelemed – servis telemedicinskih konsul'tacij v gosudarstvennyh medicinskih organizaciyah. Availabe at: https://gostelemed.ru/gosuslugi/ (accessed 26. 02. 2022)

[19] Skandinaviya. Availabe at: Distancionnye konsul'taci https://www.avaclinic.ru/service/pediatriya/distant sionnye-konsultatsii/?sphrase_id=817362 (accessed 26. 02. 2022

# The Impact of Digital Tools on Conflictive Communications in the "Government-Society System": St. Petersburg Experience

Ekaterina M. Enikeeva
*School of Journalism and Mass Communications*
*St Petersburg University, Saint Petersburg State University*
Saint-Petersburg, Russia
kat98@bk.ru

Anastasia V. Kulnazarova
*Department of Social and Political Sciences*
*The Bonch-Bruevich Saint-Petersburg State University of Telecommunications*
Saint-Petersburg, Russia
av-spn@ya.ru

Arturт I. Rafikov
*Department of Social and Political Sciences*
*The Bonch-Bruevich Saint-Petersburg State University of Telecommunications*
Saint-Petersburg, Russia
arturrafikov24@gmail.com

Denis V. Shutman
*Department of Social and Political Sciences*
*The Bonch-Bruevich Saint-Petersburg State University of Telecommunications*
Saint-Petersburg, Russia
denis_sh2@mail

*Abstract*— The paper examines the influence of digital tools on conflictive communications in the "government-society" system using the example of interaction between the St. Petersburg Government and the citizens. The aim of the research is to reveal the dynamics of conflicts in the digital space. The main method of investigation is sentiment analysis [6] based on a one-dimensional emotive space for determining the degree of influence of digital tools on the escalation or de-escalation of conflicts. The empirical base is composed of the materials and comments in the official social media of the St. Petersburg Government. The results of the study demonstrate dominating negative impact of the introduction of digital tools on conflict communications in the sphere of relations between the government and the society.

*Keywords*— *digital tools, political communication, incident management.*

## I. INTRODUCTION

The digital transformation of society, which started in Russia in 2017 with the approval of the program "Digital Economy of the Russian Federation", continues to form a new communication environment. Digital technologies can be applied in the public sector, in almost all sectors of the economy and social life. Since their implementation leads to serious changes in structure and substance, it is appropriate to use the term "digital transformation" (DT), which implies systemic changes in management (of the state, city, enterprise, organization) through the revision of strategy, models, operations, products, marketing approach and goals, provided by the introduction of digital technology. Digital transformation is one of the global trends of our time, and projects in this area are funded at the international and state levels, as well as at local and individual ones.

From the perspective of government bodies, digitalization contributes to more efficient and effective service provision, including in terms of economic expenses. For example, artificial intelligence speeds up service provision, improves the accuracy of personnel's work, and reduces the number of people required for performing specific tasks. Adaptation to "Internet of Things" technologies and interoperability allows systems to work together, providing significant cost saving in time, money, and human resources. Thus, digitalization provides governments with a number of economic and social benefits [1].

In practice, digitalization is carried out through the implementation of a specific digital toolset. Digital tools used in the public and political sphere include [2]:

1. social networks. Their widespread use in the political sphere officially began in 2014, when the Russian government approved the "Open Government" project, which implied an increase in the level of information openness of government bodies. At that time, it was decided to encourage all government agencies to create and maintain profiles in various social networks. Political actors also use social networks to influence the electorate during the pre-election period;

2. video conferencing services (e.g. TrueConf [3]). Such services allow organizing conferences remotely, especially it was relevant during the COVID pandemic. In addition, there is a possibility of live broadcasting of conference data and recording video meetings;

3. government portals and websites. This type of digital technologies can be classified as a credible source of broadcasting political decisions. Also, many portals have the possibility of feedback or "virtual receptionist's" that allow asking a question or leave a complaint remotely, without visiting government agencies. An example of such a portal is the portal of public services "Gosuslugi". A multifunctional portal that links many government agencies into a single database and allows receiving many services remotely, including taking part in online-voting;

4. video hostings. Such resources allow many politicians to reach different audiences (depending on the chosen video hosting) through their own videos;

5. system of Regional management centers (RMCs). This system monitors and processes complaints from residents in different areas of regional life. This system uses:

a. "Incident Management" program which collects and analyzes appeals and complaints from citizens in social networks (VKontakte, Twitter, Odnoklassniki.ru, etc.) in real time, around the clock. All processed "signals" are sorted according to the topic of the problem and sent to the relevant agency, which is

supposed to process the "incident" within 24 hours after its registration in the system [4].

b. a monitoring system "Prism" used to analyze the overall picture of what is happening in the region, including catching extremist comments and people who might create fake information [5].

The main possibilities of using digital tools are:

1. Prompt communication of information to the public. The Internet has been one of the most operational sources of information for a long time [6], and social networks have become a platform for broadcasting the state structures' activities, as well as political figures' decisions and opinions. For example, the St. Petersburg Government has its own official website with a built-in electronic reception of citizens' appeals, as well as pages on social networks (VKontakte, Odnoklassniki, etc.), which publish up-to-date information about the city administration's activities, summs up the results of the week and upload videos about the governor's visits.

2. Increasing interest in politics. It is important to note that here we talk, among other things, about the involvement of people in political activities, for example, participation in elections, which is implemented in the result of the introduction of online-voting through the remote electronic voting service "DEG", authorization in which is possible through the portal "Gosuslugi". So, in 2020, more than 964 thousand Moscowites took part in voting for amendments to the Constitution of the Russian Federation, and the turnout was 93.15 percent.

3. Response to complaints from residents, that is, accelerating the solution of social problems faced by the population. The possibility of providing feedback to solve the problems of the population is realized through the implementation of the SDGs [4]. In 2020, about 300 appeals were received daily in the Krasnodar region with the help of the "Incident Management" system. Within two and a half months, 7.5 thousand comments from social networks were processed. Most of the complaints concerned domestic problems: bad roads, illegal landfills, water and light outages [7].

4. Popularization of live broadcasts and increasing information openness. The use of digital tools makes it possible to hold more meetings, and also promotes dialogue between citizens and politicians. For example, on the State Duma website there is a section of live broadcasts that broadcasts all meetings around the clock (after the broadcast, a recording is uploaded), which allows the viewers to monitor the activities of officials on an ongoing basis. In addition, live broadcasts are also held on social networks with the ability to ask questions in a chat.

5. Raising the level of citizens' awareness. We talk about cognitive information that helps citizens in the field of their rights and security. So, the Ministry of Emergency Situations of Russia has its own channel on the TikTok network, where it publishes video instructions on how to behave in various emergency situations. The choice of this platform allows them to influence different target groups, including teenagers and young people.

6. Assessment of mass sentiment. The analysis of comments, complaints and messages allows us to consider in detail the trends and dynamics of public opinion, to form an urgent agenda determined by the most acute problems for the population that create social tension and negative mass mood [4].

7. Forecasting and prevention of information risks, as well as recording extremist comments [5]. For example, during the pandemic period, the SDG identified 2,425 topics of fake coronavirus messages. The revealed information was transferred to Roskomnadzor and law enforcement agencies, after which the Ministry of Home Affairs initiated 37 criminal cases for fakes about coronavirus and compiled 450 administrative protocols [8].

## II. Research

In order to determine the degree of influence of digital tools on conflictive communications in the system "government-society" in St. Petersburg, 22 conflictive topics were selected during the period from January 1 to January 10. The selection was carried out according to the following parameters:

− the presence of contradictions, marking the first stage of the emergence of a conflict;

− the presence of an official response from the Government or Committees. An official response means both a manual response (including through the incident management system) and a mechanical response (using bot technologies);

− development of the topic in a "thread" of comments (5 or more comments).

In the next stage, we conducted a sentiment analysis (based on one-dimensional emotive space) of comments to publications in the official group of the St. Petersburg Government in the social network "VKontakte" (Table 1). Doctor in Philology, Professor at the Higher School of Economics defines sentiment analysis as the procedure of identifying and extracting from a text the emotionally and evaluatively marked attitude of the speaker or writer toward the subject of the statement [9].

TABLE. I. The Sentiment Analysis of Comments to Publications in the Official Group of the St. Petersburg Government in the Social Network "VKontakte"

| Conflictive topic | Number of comments before the official response | | | Comments after the official response | | | Result |
|---|---|---|---|---|---|---|---|
| | + | - | 0 | + | - | 0 | |
| Liquidation of enterprises | 2 | 9 | 14 | - | 7 | - | Conflict escalation |
| Increase in the price of public transport | 2 | 17 | 1 | - | - | 1 | De-escalation of conflict |
| Increase in the price of housing and communal services | - | 7 | 2 | - | - | - | De-escalation of conflict |
| Blocking accounts for direct appeals to the governor via social networks | 3 | 8 | 1 | - | - | - | De-escalation of conflict |
| Open-air project "A Seaside Winter Tale" | 10 | 1 | 0 | - | - | - | De-escalation of conflict |
| Change in transport tariffs | 2 | 11 | 2 | - | 2 | - | Conflict escalation |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Low level of organizing New Year's events | 13 | 2 | 2 | - | 2 | - | Conflict escalation |
| Reducing the number of camps | 5 | 9 | 1 | - | - | - | De-escalation of conflict |
| Demolition of the complex of buildings with cultural heritage features | 3 | 19 | 6 | - | 8 | 2 | Conflict escalation |
| Problems with transport infrastructure | 4 | 29 | 9 | - | 3 | - | Conflict escalation |
| Development of public places with living facilities | 4 | 54 | 17 | - | 10 | 4 | Conflict escalation |
| Failure to meet subway construction plans | 3 | 14 | 7 | 3 | - | 1 | De-escalation of conflict |
| Building renovation | 5 | 8 | 1 | 1 | - | - | De-escalation of conflict |
| Censorship in the St. Petersburg Government Group | - | 10 | 4 | - | 3 | 1 | Conflict escalation |
| Improvement of living facilities | 2 | 5 | 1 | 1 | - | - | De-escalation of conflict |
| Snow removal | 2 | 17 | 6 | - | 3 | - | Conflict escalation |
| Installation of works of monumental art | 5 | 10 | 2 | - | 4 | 1 | Conflict escalation |
| Urban beautification | 5 | 15 | 5 | - | - | - | De-escalation of conflict |
| Payments to the families of the mobilized people | 4 | 24 | 8 | 1 | 6 | 3 | Conflict escalation |
| Construction of social facilities | 7 | 27 | 8 | - | 3 | - | Conflict escalation |
| Suspicion of state group moderators for illegal activities | - | 11 | 2 | - | 6 | 1 | Conflict escalation |
| Disagreement with the results of the contest "Your Budget" | 4 | 7 | 4 | - | 3 | 1 | Conflict escalation |

The data in the table show that in 64% of cases the answer given from the official page of the Government or Committees in the social network "VKontakte" led to conflict escalation. The most conflict-prone topics were: Liquidation of enterprises, Development of public places with living facilities, Demolition of the complex of buildings with cultural heritage features, Payments to the families of the mobilized people, Suspicion of state group moderators for illegal activities. The following factors became reasons for conflict escalation:

1. Citizens' perception of a system-generated message as a "robot response".

2. There was no formal answer to the main question, a shift in emphasis.

3. Duplication of an answer already given earlier, which did not satisfy the citizens.

4. Frequent use of scripts and templates.

5. Use of legal language difficult for understanding by citizens.

In the remaining 36% of cases the introduction of digital tools ("Incident management" program, profiles of the Government and Committees on social networks) led to de-escalation of conflicts. Important factors were:

1. The use of visual arguments (photographs from the scenes of events, statistical data) by government agencies.

2. Not an impersonal answer, without a template.

3. Continuation of the dialogue with the citizens, further answers to new questions on this topic.

4. Concreteness in the information provided, including the exact indication of who is to blame for the situation and a description of the measures taken.

Thus, the digital toolset in the "government-society" system sufficiently influences conflictive communications. The results of the study showed that in the overwhelming number of cases the official responses of the St. Petersburg Government and Committees lead to conflict escalation. This is due to generating automatic answers with the use of templates, as well as avoiding answering the main question. At the same time, the use of digital tools can also lead to de-escalation of the conflict. It is important that formal responses contained sufficient reasoning, used the language that is understandable to the audience, and, if necessary, developed a dialogue.

## III. Conclusion

In conclusion, the use of digital tools in the political sphere is promising. It organizes not only several directions of communication with society, but also opens up opportunities to prevent misinformation of the population and to prevent deviant behavior of some citizens. However, despite the wide range of applications of digital tools, their impact on conflictive communications, and their positive goals of transparency in the politicians' activities there are concerns about the use of RMCs to solve other strategic tasks of the state without taking into account the citizens' interests, including restrictions on freedom of speech.

References

[1] A.V. Kulnazarova Tsifrovaya transformatsiya publichnykh kommunikatsiy: rossiyskiy i evropeyskiy opyt [Digital transformation of public communications: Russian and European experience]. Saint-Petersburg, SUT, 2021. 135 p. P. 14.

[2] E.M. Enikeeva Tsifrovoy instrumentariy politicheskikh kommunikatsiy // Sbornik luchshikh dokladov Vserossiyskoy nauchno-tekhnicheskoy i nauchno-metodicheskoy konferentsii magistrantov i ikh rukovoditeley [Digital tools of political communications // Collection of the best reports of the scientific-technical and scientific-methodical conference of undergraduates and their supervisors]. 2023. P. 469-473. P. 470.

[3] Pod kontrolem ATS Smol'nogo: nadezhnaya videokonferentssvyaz' v period pandemii // Ofitsial'nyy sayt Administratsii Sankt-Peterburga (gov.spb.ru) [Under Smolny's PBX control: reliable video conferencing during the pandemic // Official site of the St. Petersburg Administration]. 01 June 2020. URL: https://www.gov.spb.ru/gov/otrasl/c_information/news/189713/ (accessed 10 February 2023).

[4] E.M. Enikeeva "Intsident-menedzhment" kak sredstvo formirovaniya doveriya k pravitel'stvu Rossii // Global'nye i regional'nye kommunikatsii: nastoyashchee i budushchee ["Incident management" as a means of building trust to the Russian government // Global and Regional Communications: Present and Future]. 2020. P. 69-72. P. 71.

[5] V.A. Achkasova Mediatizirovannyy konflikt: osobennosti i politicheskie sledstviya // Konfliktnoe pole publichnoy politiki. Opyt,

uroki i perspektivy sovremennogo rossiyskogo obshchestva [Mediatized conflict: peculiarities and political implications // The conflict field of public policy. Experience, lessons and prospects of contemporary Russian society]. Moscow, Argamak-Media, 2022. 336 p.

[6] S.V. Patyukov Social network: concept, history of origin, current state of affairs // Young scientist. 2017. No. 2 (11). pp. 75-77.

[7] The Russian system "Incident Management" will help to control regional officials: [Electronic resource] // dzen.ru . Moscow, 09.11.2020. URL: https://dzen.ru/media/sferalive/rossiiskaia-sistema-incident-menedjment-pomojet-kontrolirovat-regionalnyh-chinovnikov-5fa82349b1fbcf2e23c3a8d4. (accessed 10.11.2022)

[8] A. Polorotov The Sovereign's eye of the Runet. Who analyzes and fulfills the political agenda: [Electronic resource] // dailystorm.ru . Moscow, 20.07.2020. URL: https://dailystorm.ru/vlast/gosudarevo-oko-runeta-kto-analiziruet-i-otrabatyvaet-politicheskuyu-povestku. (accessed 10.11.2022)

[9] A.V. Kolmogorova, A.A.Kalinin, A.V.Malikova Lingvisticheskie printsipy i metody komp'yuternoy lingvistiki dlya resheniya zadach sentiment-analiza russkoyazychnykh tekstov // Aktualnye problemi filologii i pedagogicheskoi lingvistiki [Linguistic principles and computational linguistics methods for the purposes of sentiment analysis of Russian texts // Current Issues in Philology and Pedagogical Linguistics]. 2018. № 1(29). P. 139-148. DOI: 10.29025/2079-6021-2018- 1(29)-139-148.

# The Impact of Digital Transformation on the Process of Interaction of Public Authorities with Citizens

Alexey E. Kuzmin
*CAA II SPbU*
*Russian Presidential Academy of National Economy and Public Administration*
*(North-West Institute of Management, Branch of RANEPA)*
*St. Petersburg, Russia*
Kuzmin- ae@ ranepa.ru

Alexander A. Matveev
*Russian Presidential Academy of National Economy and Public Administration*
*(North-West Institute of Management, Branch of RANEPA)*
*St. Petersburg, Russia*
Matveev-aa@ranepa.ru

*Abstract* - **The study examines the impact of digital transformation on the process of interaction between public authorities and citizens in St. Petersburg. The study describes how the processes of communication interaction between public authorities and citizens were built before and after digital transformation activities. Special attention is paid to the work of public authorities with citizens using information and communication technologies. The study concludes with the main prospects for further improvement of these processes and the likely problems of digital communications. The main research methods are analysis of the regulatory framework, analysis of official statistics, secondary analysis of sociological research.**

*Keywords— digital transformation, public authorities, citizens, digital communications*

## I. INTRODUCTION

In the late XX and early XXI centuries in developed countries in the sphere of public administration began to undergo radical changes, which also affected the process of information interaction between public authorities and citizens. First of all, these changes were due to the ongoing reforms based on the concept of new public management, as a result of which the citizens began to be considered as customers of the state needs, which must be met in the most qualitative and effective way. Further, the development of modern information and communication technologies allowed to improve this model by introducing automation and expanding channels of interaction with citizens. A new round of development was initiated by the digital transformation spurred by the coronavirus pandemic COVID-19, which forced to improve the existing channels of interaction between public authorities and citizens, as well as search for new ones, which are primarily related to remote forms of interaction based on the use of modern information technology. In general, we can talk about an outlined transition from a client-centered model to a client-centered one.

## II. LITERATURE REVIEW

Currently, there are several views on the digital transformation of public authorities and the general automation of work in all sectors of the economy. Some authors are optimistic about this process, but point to the possibility of job elimination, which will significantly transform the labor market and require specialists to possess new knowledge, skills, and abilities [9; 16].

Other authors believe that it is premature to talk about universal automation, pointing to the periodicity of the emergence of the discourse about automation in society, citing the example of such phenomena «... in the 1930s, 1950s and 1980s, and then emerged again in the 2010s» [1].

Despite the existence of opposing points of view, one cannot deny the fact that information and communication technologies, thanks to the ongoing digital transformation, have become part of our lives and will continue to influence it, including in the aspect of interaction between public authorities and citizens.

In Russian scientific literature, the range of works devoted to modern information and communication technologies, on which the digital transformation is based, is quite extensive, from studies of the possibility of applying artificial intelligence in the sphere of public administration to general studies on data management [6; 8; 10; 11; 12] and ethical issues of using modern technologies [13; 15; 20].

Regarding the models of interaction between the state and citizens (and in a broader sense, with civil society institutions), it is possible to note the works. I.N. Shapkin [18], N.A. Makedoshina [7], A.A. Chalygin and E.A. Ageeva [17], M.N. Kotsybovskaya [5], A.V. Tikhovodova [14] and others. Of particular interest is the work of O.Y. Golub and E.V. Sergeev, who explore the issues of crisis power and society communication in social networks [3].

It is impossible not to mention the work of M. Castells, who has already become a classic in the field of interaction in the Internet space [4].

## III. RESEARCH

In domestic practice, the transition to a new model of interaction between the state and society was marked by administrative reforms among the tasks of which a number of tasks related to the introduction of information and communication technologies can be distinguished: «implementation of a unified vertically integrated automated system for monitoring the performance of public authorities and local authorities in achieving the most important indicators of socio-economic development of the Russian Federation and the performance of their powers (Government automated system «Administration» - https://gasu.gov.ru/); creation of multifunctional centers to provide public and municipal services; organization of provision of public services in electronic form; modernization of the information support system of the body» (Decree of the Government of the Russian Federation of 25.10.2005 No. 1789-r «On the Concept of Administrative Reform in the Russian Federation in 2006-2010»). As practice has shown, the main focus was on the provision of public services. The principle of client-oriented approach was implemented, citizens had the opportunity to

receive services not only in the traditional format directly in the public authorities, but also in multifunctional centers, and through the portal of public services in a remote format. It should be noted that the most popular channel was the multifunctional centers of public services - there are a number of explanations for this. First of all, the habit of citizens to interact in offline format, the low level of computer literacy and lack of skills in working with modern technology, especially among the older generation, as well as the lack of technical ability to access the Internet.  It should be noted that the effective functioning of the multifunctional centers of public services became possible thanks to the introduction of a Unified system of interagency electronic interaction.

Over time, the accessibility and convenience of receiving services electronically for citizens has increased significantly, and if we apply the Gartner Digital Maturity Model to determine the digital maturity of the Russian government, Russia is at the third «Data-Centric» level, that is, the government has moved from listening to the needs of citizens to seeking new opportunities for interaction based on data collection and processing.  One of the most important sources of obtaining such data has become social media.

The development of information and communication technology and the intensification of information exchange between citizens and public authorities has led, as A.N. Shcheglova rightly points out, to «.... an increase in the popularity of using the Internet by the population to promptly contact state institutions. Citizens began to abandon traditional tools of interaction with public authorities in favor of modern information and communication technologies» [19].

Thus, it is possible to distinguish four main channels of interaction between the state and society:

1)   Directly in public authorities;

2)   Through the network of multifunctional centers of public services;

3)   Portal of public services;

4)   Social media.

As we can see, two of the four interaction channels assume a remote format, while the remaining two are restructuring existing processes as part of the digital transformation and moving toward gradual automation of processes.

In addition, it should be noted that based on data processing it becomes possible to implement the principle of client-centeredness in the provision of public services and preparation of legal acts.

In order to improve the quality of interaction with citizens and more promptly respond to their requests, on December 1, 2020, all regions of Russia established Region Management Centers (RMCs) to coordinate the monitoring and processing of all types of appeals and messages coming from the population, as well as to interact with citizens through social networks, messengers and other means of electronic communication on the directions and topics of the Region Management Center (Decree of the Government of the Russian Federation of 16 November 2020 N1844 «On Approval of the Rules for Granting Subsidies from the Federal Budget to «Dialogue Regions», an autonomous non-profit organisation for developing digital projects in public relations and communications, for creating and ensuring the functioning of regional management centres in constituent entities of the Russian Federation and the Rules for Creating and Operating Regional Management Centres in constituent entities of the Russian Federation»).

The structure of the RMC consists of three main blocks: analytics, information, and feedback. Each of them is responsible for a separate area of work: predictive analytics, the maintenance of governmental publics and obtaining feedback from citizens. In turn, the feedback is categorized into: difficult to solve issues; quickly solved and simple informing [2].

The task of the Region Management Center in St. Petersburg (https://vk.com/tsur_78) is to coordinate the work of monitoring and processing the appeals received by the authorities and institutions. Messages and appeals received via social networks will also be analyzed. In addition the data will be received through the feedback platform. Widgets of the platform will be placed on the sites of public authorities of St. Petersburg. Through them St. Petersburg residents can send their appeals, as well as participate in polls, votes and public discussions.

Regional management center and feedback platform were created on the basis of the Single portal of public services. You can learn about the status and results of messages in your personal account on the website of public services.

The center will process information in 8 areas - housing and communal services, social protection, education, roads, transport, health, energy, solid municipal waste. Each area has already identified the top 3 problems, which in 2018-2020 St. Petersburg residents addressed most often. The Region Management Center in St. Petersburg is preparing proposals to optimize the process of handling complaints, analyzing the reasons for them. Roadmaps for systemic problem solving will also be developed.

In two years of work, the Region Management Center in St. Petersburg helped to process 1 million 114 thousand 813 appeals which St. Petersburg residents sent to the authorities in social networks and via the Feedback Platform. In addition, Region Management Center in St. Petersburg analytics helped in the development and adoption of a number of management decisions.

In 2022, sociologists from Region Management Center in St. Petersburg conducted 16 online surveys of St. Petersburg residents about the improvement of urban areas. The data obtained formed the basis of the projects for the improvement of new public spaces in 12 districts of the city. In just two years, thanks to the online sociology of the Region Management Center in St. Petersburg, projects for the improvement of 19 areas in 14 districts of the city were created on the basis of the wishes of St. Petersburg residents.

In addition to the Region Management Center in St. Petersburg, there are other channels of communication with citizens in St. Petersburg, first of all the work with appeals from citizens will be considered in detail on the activities of the Committee on Informatization and Communications of St. Petersburg (https://kis.gov.spb.ru/). Statistical materials taken from the portal of the Committee on Informatization and Communications of St. Petersburg are shown in Table 1.

As we see the average percentage of citizens' appeals fluctuates, which indicates that not always citizens choose electronic forms of interaction, although on the other hand most often citizens address questions about the functioning of the portal «Our St. Petersburg» (https://gorod.gov.spb.ru/) and about the work of the portal of public services.

| Year & Quarter | Total appeals (written requests) | Personal reception of citizens | Received appeals from the Administration of the President of the Russian Federation | E-mail requests received | Percentage of appeals by e-mail from the total number of written appeals |
|---|---|---|---|---|---|
| 2020 Q1 | 261 | 1 | 16 | 83 | 31.8% |
| 2020 Q2 | 439 | 0 | 51 | 122 | 27.79% |
| 2020 Q3 | 533 | 1 | 35 | 127 | 23.83% |
| 2020 Q4 | 442 | 0 | 29 | 113 | 25.57% |
| 2021 Q1 | 348 | 0 | 13 | 131 | 29.91% |
| 2021 Q2 | 368 | 0 | 27 | 137 | 37.23% |
| 2021 Q3 | 428 | 0 | 37 | 109 | 25.47% |
| 2021 Q4 | 605 | 0 | 64 | 164 | 27.11% |
| 2022 Q1 | 418 | 1 | 25 | 160 | 38.28% |
| 2022 Q2 | 419 | 3 | 21 | 151 | 36.04% |
| 2022 Q3 | 358 | 0 | 30 | 120 | 33.52% |
| 2022 Q4 | 456 | 1 | 24 | 146 | 32.02% |

The portal «Our St. Petersburg» is known as the city's largest Internet resource for receiving messages on the topics of housing and communal services and urban improvement. Every day the resource is visited by more than 5000 users. Moderators of the portal check for correctness and compliance every day more than 2100 messages from city residents. From November 5 2022 new features are available on the «Our St. Petersburg» portal. The portal update touched several key aspects of the user interface, the administrative part, and the performer's office. First of all the mobile application of the portal has been updated. Updates include a code base, a redesign, and changes to the order of submitting messages according to the new features of the web version. Automatic addition of a watermark on a user's photo when submitting a message and when a performer responds has been implemented. In addition, improved functionality in the part of messages by categories related to the «Yard» object. Information in this category will be loaded in accordance with data about buildings in the regional information system containing information about real estate objects and land management objects «Geoinformation system of St. Petersburg» and in the departmental regional classifier «Unified address system of buildings, structures of St. Petersburg».

Most likely, faced with the problems in the functioning of electronic services citizens decided to use the traditional channels of interaction to clarify the situation. Also, the most frequently asked questions were about the work of the multifunctional centers for providing state services. Thus, despite the emergence of new channels of interaction between public authorities and the population, the traditional channel remains in demand and stable. This situation indicates a lack of trust in electronic services on the part of citizens.

## IV. CONCLUSIONS

To summarize, it can be noted that in the first decades of the XXI century there was a significant change in the model of communication interaction between public authorities and citizens. The forms and channels of such interaction have expanded. These changes have increased the efficiency and transparency of public authorities, which has had an impact on increasing the confidence of citizens in the state. However, the digital transformation that initiates changes in the model of interaction, in addition to the benefits, brings with it a number of dangers, such as unresolved ethical issues, security issues and the possibility of manipulating public opinion, as well as the critical dependence of people on technology. One of the side effects of the coronavirus pandemic has been the accelerated digitalization of government processes and the automation of tasks, as well as increased remote interaction with citizens.

As we see gradually there is a transition from the model assuming unilateral communication from the state through the model of bilateral communication to the model assuming and horizontal communication assuming a certain equality of participants interaction, In other words from the subject-object interaction in public administration there is a transition to the subject-subject interaction on the principles of partner relations.

It seems that in the future the state will intensify the involvement of citizens in the digital interaction, continue to collect data and on the basis of them to implement the principle of clientcentricity.

## REFERENCES

[1] Benanav A. Automation and the Future of Work. Translated from English by N. Protsenko - M.; Publishing house of Gaidar Institute, 2022.-208 p.

[2] Bolshakova K.Y., Klimova A.V. Region management centers as a new form of management activity // Bulletin of Peoples' Friendship University of Russia. Series: State and Municipal Management. 2022. №4. [Electronic resource]. – URL: https://cyberleninka.ru/article/n/tsentry-upravleniya-regionom-kak-novaya-forma-upravlencheskoy-deyatelnosti (Accessed 25.02.2023).

[3] Golub O.Y., Sergeeva E.V. Crisis communication of power and society in social media: definition of problem areas // Izv. Ser. Sociology. Political Science. 2020. №3. [Electronic resource]. – URL: https://cyberleninka.ru/article/n/krizisnaya-kommunikatsiya-vlasti-i-obschestva-v-sotsialnyh-media-opredelenie-problemnyh-zon (Accessed 24.02.2023).

[4] Castells M. Information epoch: economy, society, culture / translated from English under scientific ed. by O.I. Shkaratan. M.: GU-HSE, 2000. - 608 p.

[5] Kotsybovskaya M.N. Main models of interaction between civil society institutions and the state under globalization // Izvestia Saratov University. Series Sociology. Political Science. 2015. №2. [Electronic resource]. – URL: https://cyberleninka.ru/article/n/osnovnye-modeli-vzaimodeystviya-institutov-grazhdanskogo-obschestva-i-gosudarstva-v-usloviyah-globalizatsii (Accessed 24.02.2023).

[6] Kosorukov A.A. Artificial Intelligence Technologies in Modern Public Administration // Sociodynamics. - 2019. - No 5. DOI: 10.25136/2409-7144.2019.5.29714. [Electronic resource]. – URL: https://nbpublish.com/library_read_article.php?id=29714 (Accessed 24.02.2023).

[7] Makedoshina, N. A. The evolution of the system of information interaction between public authorities and society as one of the conditions for sustainable economic and social development / N. A. Makedoshina // Problems of Economics and Law.- 2012.- № 2.- P. 97-101. [Electronic resource]. – URL: https://law-journal.ru/files/pdf/201202/201202_97.pdf (Accessed 24.02.2023).

[8] Novitsky N. A. Issues of improving public administration to reduce investment risks in the development of digital systems with artificial intelligence // Eurasian Union of Scientists. 2020. №8-3 (77). [Electronic resource]. – URL: https://cyberleninka.ru/article/n/voprosy-sovershenstvovaniya-gosudarstvennogo-upravleniya-v-tselyah-snizheniya-investitsionnyh-riskov-pri-razvitii-tsifrovyh-sistem (Accessed 24.02.2023).

[9] Siebel T. Digital transformation. How to survive and succeed in the new era. Translated from English - Moscow: Mann, Ivanov & Ferber, 2021. - 256 p.

[10] Talapina E.V. Artificial Intelligence and Legal Expertise in Public Administration // Vestnik (Herald) of Saint Petersburg University. Law. 2021. № 4. P. 865-881. [Electronic resource]. – URL: https://lawjournal.spbu.ru/article/view/10278 (Accessed 25.02.2023).

[11] Talapina E.V. Using Artificial Intelligence in Public Administration // Information Society. 2021. № 3.P. 16-22. *[Electronic resource].* – URL: http://infosoc.iis.ru/article/view/603 (Accessed 25.02.2023).

[12] Talapina E.V. et al. Possibilities of Application of Artificial Intelligence in Public Administration and Legal Expertise / E.V. Talapina, V.N. Yuzhakov, A.A. Efremov, I.A. Chereshneva. - Moscow: Delo Publishing House RANEPA, 2022. - 190 p.

[13] Talapina E.V., Yuzhakov V.N., Chereshneva I.A. Ensuring fundamental human rights in data processing in public administration / E.V. Talapina, V.N. Yuzhakov, I.A. Chereshneva. - Moscow: Delo Publishing House RANEPA, 2022. - 214 p.

[14] Tikhovodova A.V. The relationship between state and civil society: a review of conceptual models // Scientific problems of water transport. 2015. №44. *[Electronic resource].* – URL: https://cyberleninka.ru/article/n/vzaimootnosheniya-gosudarstva-i-grazhdanskogo-obschestva-obzor-kontseptualnyh-modeley (Accessed 24.02.2023)

[15] Data management in the public sector. Navigator for beginners / Edited by O. M. Giacintov, V. A. Sazonov, M. S. Shklyaruk. - M.: RANEPA, 2022. - 198 p. *[Electronic resource].* – URL: https://cdto.ranepa.ru/reports/data/ (Accessed 24.02.2023).

[16] Ford M. The power of robots: How to prepare for the inevitable. Translated from Engl. -M.: Alpina non fikshin,2022. -326 p.

[17] Chaplygin A.A., Ageyeva E.A. Models of interaction between the state and civil society institutions // Bulletin of the Expert Council. 2018. №3 (14). *[Electronic resource].* – URL: https://cyberleninka.ru/article/n/modeli-vzaimodeystviya-gosudarstva-i-institutov-grazhdanskogo-obschestva (Accessed 24.02.2023).

[18] Shapkin I.N. Corporatism or pluralism? Institutional models of interaction between the modern state and society // Century of Globalization. 2018. №1 (25). *[Electronic resource].* – URL: https://cyberleninka.ru/article/n/korporativizm-ili-plyuralizm-institutsionalnye-modeli-vzaimodeystviya-sovremennogo-gosudarstva-i-obschestva (Accessed 24.02.2023).

[19] Shchegoleva A.N. Factors of improving information and communication links of public administration // Communicology: electronic scientific journal. 2019. Vol. 4. no4. P. 116-125. *[Electronic resource].* – URL: https://cyberleninka.ru/article/n/faktory-sovershenstvovaniya-informatsionno-kommunikativnyh-svyazey-gosudarstvennogo-upravleniya?ysclid=leqt6dm0g1372451952 (Accessed 24.02.2023).

[20] Ethics and «digital»: from problems to solutions / edited by E.G. Potapova, M.S. Shklyaruk. - Moscow: RANEPA, 2021. - 184 p. *[Electronic resource].* – URL: https://cdto.ranepa.ru/reports/ethics/2021 (Accessed 24.02.2023).

# The Phenomenon of Networked Media Activism: Bifurcation Point

Vera A. Achkasova
*School of Journalism
and Mass Communications
Saint Petersburg State University*
Saint Petersburg, Russia
v.achkasova@gmail.com

Andrey Nosikov
*School of Journalism
and Mass Communications
Saint Petersburg State University*
Saint Petersburg, Russia
a.a.nosikov@gmail.com

Nina N. Zhuravleva
*School of Journalism
and Mass Communications
Saint Petersburg State University*
Saint Petersburg, Russia
pr_nina@mail.ru

*Abstract* — **This paper discusses the tendencies of media activism development in increasing complexity and network distribution in sociopolitical processes, as well as in the context of general turbulence escalation. The research methodology is the concept of communicative action. The methods of literature corpus analysis, case study, secondary research made it possible to identify the main vectors for media activism development: anonymization, data activism formation, the expansion of network forms of media activism and, potentially, the emergence of meta activism standing for metaverses and virtual environment.**

*Keywords — Media Activism, Political Communications, Networked Activism, Data Activism*

## I. Introduction

Media activism began to play a special role in current conditions of systemic crisis and global transformations. It is considered to be a term that has taken hold in literature since 2011, after the Arab Spring events, when in a short time the networked communication made it possible to bring previously stable political systems into a state of crisis [1]. The concept itself has many meanings. One can agree with the opinion of I. Bronnikov and M. Gorbachev that media activism uses media and communication technologies to represent and strengthen social and political movements [2]. The authors note that one of the most important reasons for the rapid development of media activism is the lack of access to traditional media for marginalized groups known as dissatisfied, oppositionists, representatives of small nations, etc. Craft online publications, blogs, social networks and instant messengers therefore have become widespread.

The digital version of mass communication had the greatest impact on the relationship between state and society.

Reflected at the first stages in the sphere of state policy towards the media in the concept of the "fourth power", later the influence of the state on social media turned out to be wider and began to affect the sphere of information policy in various areas of society. If at first stages the influence of the state on social media reflected in the concept of the "fourth power", later this influence turned out to be wider and began to affect the sphere of information policy in various areas of society. Moreover, the authorities' reaction to the evolution of digital communication tools has affected the nature of political regimes in a number of states, sharply reducing the level of their objectified transparency.

The current stage associated with a sharp entropy increase is characterized by contradictory trends, such as the growth of the state restrictions on the Web, the spread of slacktivism, the viral promotion of initiatives that affect the entire sociopolitical life and the all-encompassing process of mediatization. Accordingly, the contribution to the social development of media activism changes and its forms become more complicated, which makes it necessary to rethink the meaning of media activism in sociopolitical life.

Hence, our goal is to analyze the trends in media activism development in the context of expanding technological capabilities and, at the same time, the factors limiting this development.

We see the following tasks to reveal the content of the goal:

- to analyse the state of metaactivism in modern entropic realities;

- to make a forecast of media activism development vectors.

## II. Methodology and Methods

Since, in the current conditions of a systemic crisis, almost all social problems are being politicized, whether it is garbage recycling, vaccination against Covid-19 or the construction of a religious building, media activism almost automatically to some extent acquires a political character.

But one cannot assume that media activists use social networks exclusively to organize nationwide democratic or anti-elite revolutions and riots. Social networks allow update local problems, including them in the regional or national agenda.

The methods used to solve the problems posed in our study are the method of apperception, which is the accumulation of knowledge by interpreting new information obtained from other sources; the method of secondary analysis of empirical (including statistical) data, case study method.

The heuristic value of case study method should be especially noted. It proved to be extremely productive in the analysis of bots' use for network media activism ("GVA Dictator Alert"), in the analysis of neural networks' use for media activism ("DeepDrumpf", "Neuroramzan"), in the analysis of Data activism application mechanism (the activities of ICIJ, End The Backlog, DataKind and others) and technological components of media activism phenomenon (actions in Decentraland and others).

## III. Literature Review

Researchers, studying this phenomenon, insist that subjectivity is the most important determinant of media activism, because it is the features of the subject taking action that determine the very nature of media activism [3].

However, a sharp discusion over the question of what role media activism plays in political processes, unfolded in scientific discourse.

Proponents of the technocratic approach (S. González-Bailón, N. Wang and others) argue that political media activism is a form of activism that arises as a result of the actualization of problems in various spheres of public life [4]. According to this approach, any form of civic participation can become a part of the political agenda, indirectly affecting the political space. At the same time, the critics of this approach (P. Gerbaudo and others) declare its ambiguity and define political media activism as the result of an action with an initially political goal-setting [5].

An attempt to resolve this issue was made by M. Joyce [6], who proposed the following consensual distinction between concepts. The group of such concepts as "cyber activism", "online organization", "online activism" refers only to activist online practices. If activists use devices and technologies that do not require access to the Web (flash drives, disks, the Mexican startup Bridgefy3 messenger that works via Bluetooth, etc.), their activities can no longer be described in such terms. The group of concepts with the word "electronic" (for example, "electronic activism") implies the use of electronic devices, but many of them are already outdated, which makes such terms seem irrelevant. The group of concepts with the word "informational" (for example, "infoactivism") describes not only the use of ICT in activism practices, but also any activity aimed at disseminating information, including the distribution of newspapers, leaflets or brochures, which does not reflect the essence of the phenomenon under consideration.

According to M. Joyce, the most general and at the same time exhaustive concept of those that arose in the 1990s–2000s, is the term "digital activism", which reflects the speed, reliability, size and low costs of the digital network, thanks to which modern activism has reached a huge scale and coverage.

In modern conditions, media activism has been replenished with the new forms. We are talking about destructive, non-conventional forms of digital activism (hacktivism, cyberterrorism, etc.), which imply a high level of computer literacy and do not involve the use of social media resources for communication purposes [7].

## IV. RESULTS

Nowadays, the media environment in which a media activist operates is undergoing a radical transformation. The total spread of the Internet has led to the fact that through the "digit" the public space of traditional civic media activism has been transformed into the so-called networked activism. If the main task of traditional civic media activism was to relay a message in order to influence the state of affairs in the real world (while traditional mainstream media - TV, radio, magazines - were the main transmission channels), then networked activism does not need this. A networked activist spreads the product of his communicative action using networked communication - from one network node to another, trying, like a virus (or more precisely, in the terminology of the American media researcher D. Rushkoff, a media virus [8]), to convey his message to the widest possible audience. Networked activism is born and lives online, but, like traditional civic media activism, it seeks to influence the state of affairs in the real world.

Traditional civil activists include the actions of Greenpeace, Femen, The Voina (The War) group, and others that attracted attention in the 2000s. Their task is to perform a communicative action in a physical world, so that the media then broadcast it to the media environment. If traditional activism critically needed the media as an intermediary to transmit its message to the public space, then networked activism today is able to independently convey its message through the network.

Today's networked activism is about online broadcasts, hacker attacks with the substitution of information for their message, viral videos and other, more specific forms of communicative action. Modern infocommunication technologies make the arsenal of networked media activists' tools and methods extremely diverse.

It should be noted separately the use of bots for networked activism, first of all, the "GVA Dictator Alert" bot created by Swiss journalists, which signals on Twitter about the arrival of aircrafts at Geneva airport with state leaders that are classified as authoritarian [9]. Another bot, called "Neuroramzan", is a neural network trained on Instagram posts by Ramzan Kadyrov - the head of Chechnya region of the Russian Federation. This neural network posts messages generated in Kadyrov style on Twitter [10]. Neuroramzan is considered to be a kind of successor of the famous bot "DeepDrumpf" [11], which is known as a neural network that generates messages on Twitter based on the messages of former US President Donald Trump. "Hashtag activism" [12] can also be attributed to the network forms of activism, which allows displaying information on a specific issue and being marked with a specific hashtag.

Data activism has become one of the important varieties of networked activism. It is considered to be a type of media activism based on data analysis methods (primarily open data) in order to solve socially significant problems. This can be, for example, the identification of abuses of power by responsible persons through the analysis of open sources by media activists. This approach to the networked activism is similar to the concept of monitoring democracy by D. Keane [13], but with the increased data volumes and information dissemination speeds. Such platforms include the International Consortium of Investigative Journalists (ICIJ), the Anti-Corruption Foundation in the Russian Federation.

Often data activism is aimed at solving social problems. Thus, one of the first studied cases of data activism is the creation and support of a map of victims and destruction after an earthquake near the capital of Haiti, Port-au-Prince [14]. The map was updated in real time, thousands of volunteers took part in that action. They worked with the software and sent reports from the affected areas via e-mail, SMS messages or Twitter, processed and published information.

Such socially oriented data activist projects include End The Backlog (an anti-violence project in the United States that tracks violent actions to develop proposals for improving legislation) and DataKind, an international project on using big data to solve social problems.

At the same time, over the past decade, we can clearly observe a trend towards the regulation of media and networked space. The most obvious empirical confirmation of this trend is the dynamics of the Internet Freedom Index. Thus, from 2009 [15] to 2022, the percentage of countries with an Internet freedom index classified as "free" decreased from 27% to 24% [16]. At the same time, the percentage of

countries with an Internet freedom index defined as "not free" increased from 27% in 2009 to 30% in 2022.

A number of researchers argue that this trend will only intensify [17]. As a result, media activists will be forced to look for ways to ensure their own protection. The most likely way is to anonymize a media activist, both personal and technological (anonymous messengers, P2P networks, Tor, local and private networks, high-level crypto-encryption and other technologies for deep anonymization of Internet traffic).

Thus, the political activism of the 2000s with its bright leaders, evolves into anonymous network activism, where a leader is not important (he/she is anonymous or hidden behind a virtual avatar for his/her own safety), only a message and an idea are supposed to be primary ones.

The tightening government institutions' control is not the only component of the networked space transformation. The expansion of the networked space to the metaverse can be defined as one more qualitative metamorphosis which is taking place nowadays. Metaverse can be defined as a virtual space in which individuals are able to interact with each other and with digital objects through various technological devices. Decentraland, VRChat are supposed to be the examples of such platforms. So, the Decentraland users, demonstrating only their avatars (which correlates with the above-defined trend to anonymize activism), staged a joint protest against the commercialization of the metaverses. It can be interpreted as that the Decentraland users reproduced the rally model in virtual space [18].

Indirectly more familiar multiplayer games can also be attributed to metaspaces. And they also become a platform for media activism. Thus, one of the high-profile cases in the Russian Federation was the guilty verdict against a schoolboy who planned to blow up a virtual model of the Federal Security Service building in the Minecraft video game [19].

All this gives rise to a new trend in networked activism which can be defined as meta-activism, as activism in virtual digital spaces, aimed at relaying a message through modern ICT / augmented or virtual reality to the networked public.

## V. CONCLUSION

At the present stage of media activism development there are certain contradictory tendencies. First of all, media activism has begun to lose the room for manoeuvre and its former freedom due to the state attempts to regulate the Internet. Social media are considered to be a source of potential national security threats by most of the governments.

At the same time, and this is the second trend, even the total state control over the Internet space is not capable of leading to the complete disappearance of media activism. As the experience of China and North Korea demonstrates, in the digital space there is always a place for the existence of an "alternative" Internet. Moreover, there is a so-called "conspiratorial" media activism: anonymous messengers (for example, Telegram, Signal and others), Tor, P2P networks, etc. Deep encryption, the use of virtual avatars for identity substitution in cases of meta-activism tend to make the user's existence in the digital space more and more anonymous. According to experts [2], the complete anonymity will become a reality in the next decade and allow media activists to consolidate on the Internet conspiratorially, carry out actions promptly and unpredictably, which will create huge problems for state bodies. They simply will not be able to

counteract this actions, which can lead to the most unpredictable consequences for the political system and society as a whole.

Moreover, if we talk about meta-activism in virtual spaces, then the question arises about the regulation of such spaces. Is it possible to regulate the metaverses? If so, how should institutionalized rules be developed for these spaces, who should ensure the implementation of these institutional rules? These questions require further serious research.

Beyond that, the media activism itself is becoming more complex: the level of mastery of technical means and the number of technical specialists among media activists are growing. All this makes it possible to implement more complex initiatives. A striking example is data activism as a form of media activism. In general, nowadays, the most typical type of media activism is network activism, which has actually replaced digital media activism.

Thus, the current stage in the evolution of media activism is a bifurcation point, where the dominant trends in the evolution of relations between media activists and political actors will determine the fate of the digital community in the medium term from the degree of online discourse transparency to the issue of metaspaces institutionalization.

## REFERENCES

[1] I. V. Suslov, Z. Z. Knyzhova, "Potentsial i perspektivy politiceskoy mobolizatsii v internet-prostranstve: obzor empiricheskikh issledovaniy v mirovom I rossiiskom kontekste" [Potential and prospects of political mobilization in the Internet space: a review of empirical research in the global and Russian context], Vlast, vol. 3, 2019, pp. 59-66. URL: https://cyberleninka.ru/article/n/potentsial-i-perspektivy-politicheskoy-mobilizatsii-v-internet-prostranstve-obzor-empiricheskih-issledovaniy-v-mirovom-i-rossiyskom/viewer (Accessed 10.02.2023)

[2] I. A. Bronnikov, M.V. Gorbachev, Politicheskaya kommunikatsiya v izmenyauschemsya mire: teoriya i praktgika [Political communication in a changing world: theory & practice]. Moscow, Moscow State University, 2022.

[3] A. A. Braighi, M. T. Câmara. What is mediactivism? Interface: a journal for and about social movements, 2021, 13 (1), pp. 300-316.

[4] S. González-Bailón, N. Wang. Networked Discontent: The Anatomy of Protest Campaigns in Social Media. In: Social Networks, 2016, vol. 44, pp. 95–104.

[5] Gerbaudo P. From cyber-autonomism to cyber-populism: An ideological history of digital activism. In: triple C: Communication, Capitalism & Critique, 2017, vol. 15, pp. 477–489.

[6] M. Joyce, Digital activism decoded: the new mechanics of change. IDEBATE Press, New York & Amsterdam, 2010.

[7] I. A. Bronnikov, M.V. Gorbachev, O. S. Kononenko, I. K. Timirchev, Mediaaktivism I grazhdanskaya mobilizatsiya: genesis i tendentgsii [Media Activism and Civic Mobilization: Genesis and Trends]. URL: https://istina.msu.ru/publications/article/363166174/?ysclid=lej0k83y gn409382310 (Accessed 12.02.2023)

[8] D. Rushkoff, Mediavirus! Hidden agendas in popular culture. Ballantine books, New York, 1996. URL: https://www.google.ru/books/edition/Media_Virus/u6b1bVz8djwC?hl =ru&gbpv=1&dq=Rushkoff+mediavirus&printsec=frontcover (Accessed 13.02.2023)

[9] A. Toor, This Twitter bot is tracking dictators' flights in and out of Geneva. The Verge, Oct. – 2016. https://www.theverge.com/2016/10/13/13243072/twitter-bot-tracks-dictator-planes-geneva-gva-tracker (Accessed 13.02.2023)

[10] Neiroset' nauchilas' pisat' tvitty za Ramzana Kadyrova [The neural network has learned to write tweets for Ramzan Kadyrov]. URL: https://nplus1.ru/news/2016/08/05/neurokad (Accessed 10.02.2023)

[11] DeepDrumpf. URL: https://twitter.com/DeepDrumpf (Accessed 10.02.2023)

[12] J.J. Jackson, M. Bailey, #HashtagActivism: Networks of Race and Gender Justice. MIT Press Direct, 2020. doi:10.7551/mitpress/10858.001.0001

[13] J. Keane, Democracy and media decadence. Cambridge University Press, 2013.

[14] S. Milan, Data activism as the new frontier of media activism. In Media activism in the digital age, Routledge, 2017, pp. 151-163.

[15] Freedom on the net A Global Assessment of Internet and Digital Media Report. Freedom House. 2009, pp. 20-21.

[16] Freedom on the net 2022 Report // Freedom House, 2022, pp. 28-29.

[17] J. Kamasa, Internet Freedom in Retreat. CSS Analyses in Security Policy, 2020, p. 273.

[18] Groups experiment with activism inside metaverse. NBC news. URL: https://www.nbcnews.com/now/video/groups-experiment-with-activism-inside-metaverse-145756229685 (Accessed 09.02.2023)

[19] Za plan vzorvat' zdanie FSB v Minecraft shkolnika prigovorili k 5 godam kolonii [For a plan to blow up the Federal Security Service building in Minecraft, a schoolboy was sentenced to 5 years in prison]. URL: https://www.vesti.ru/article/2675240 (Accessed 07.02.2023)

# The Problem of Text Transformation in Digital Communication

Larisa G. Tyutelova
*Department of Russian and Foreign Literature and PR*
*Samara National Research University*
Samara, Russia
largenn@mail.ru

Valeria N. Lisovitskaya
*Department of Russian and Foreign Literature and PR*
*Samara National Research University*
Samara, Russia
lisovitskaya.v@yandex.ru

Ekaterina S. Shevchenko
*Department of Russian and Foreign Literature and PR*
*Samara National Research University*
Samara, Russia
slash99@mail.ru

Viacheslav D. Shevchenko
*English Department*
*Samara National Research University*
Samara, Russia
vds@ssau.ru

*Abstract*— **The paper refers to the problem of digital transformation of fictional texts, which results in appearance of new digital meta realities – computer games based on the fictional texts, including texts of the classics. The authors try to analyze the parameters and outcomes of digital transformation of texts. During the research the methods of literary text analysis, participant observation, comparison, content analysis, discourse analysis and survey have been employed. The authors argue that digital transformation of a text creates a meta reality, which performs new functions. The authors come to a conclusion that a literary source serves as a solid foundation for creating the virtual world of a computer game. The players are more concerned about their own experiences and meanings appearing in the process of playing the game. The developers of computer games use the plots of the classics actively. The plots make it possible to model the relationship between a person and the world as a whole, the way of creating the world and the birth of life in it. Using someone else's plot or just a hint to it, the scriptwriters do not often become intermediaries in a dialogue between the modern consumer and the author of a literary classic. The developers use a language of the game to speak to the player about new values, forcing him/her to make his/her choice without regard to the time-tested experience of the literary characters. According to another type of scenarios, a computer game becomes a precise tool for connecting the past with the present. Via this connection it becomes possible not only to immerse oneself into the distant world of a classical text, but also to understand the present and the inner world of the player. The modern game technologies make this process exciting, intense, lively and efficient, because due to the gameplay the player acquires an essentially real experience of interacting with the Other.**

*Keywords—text transformation, digital communication, fictional text, meta reality, computer game, discourse analysis, original text*

## I. INTRODUCTION

Art, being one of the multiple forms of communication, reacts most acutely to changes in the environment. The art of the 20th – early 21st century has gone through a transformation caused by the development of telecommunication systems. Besides a completely new space for creative expression, technology has also provided a number of tools resulting in the emergence of a completely new type of art – digital. Such classical forms of art as graphics and photography may also be supplemented with volume or audio effects, animation, etc. The digital environment is a part of a shared culture. It has common features with the generally accepted concept of culture. For example, digital culture can be considered a characteristic of the material and spiritual level of development of certain social formations, specific societies, peoples and nations. Also, virtual culture can be considered as a specific area of activity, such as artistic culture, culture of everyday life, etc.

## II. THE PROBLEM

The subject area in which the present research is being carried out is a computer game as a type of digital culture. Presently, a lot of research refers to the phenomenon of a computer game. It is also investigated within the framework of communication theories. The psychological features of communication carried out via a computer game are studied [1]. The social features of such type of communication are also investigated [2, 3]. Researchers have also paid attention to the possibilities of special "man – machine" communication via game [4].

Within the framework of the theory of artistic communication, a computer game is also considered as a phenomenon of culture [5]. According to L. Mesenyashina and A. Selyutin, "this form of culture, despite the retention of the name of the game, has for some time now been a new kind of art" [6]. D. Tregubova and D. Shkaev note that "... in the eyes of many experts, the gaming industry has acquired the functions of a driver of modern media culture, a conductor of newly formed meanings, images and narratives, a source of myth-making in modern reification" [7]. I. Yugai argues that "a computer game is a specific artistic phenomenon that has developed within the framework of virtual artistic culture, the artistic image and plot basis of which is built on the basis of a computer program and special artistic means" [8].

The undertaken research has been focused not on the artistic features of a computer game, but on the technologies for its creation, in particular, the digital technologies for translating the classic text that underlies the scenario of a computer game, which create the conditions for modern communication between the consumer and the classics. Such phenomenon is significant for implementation of not only commercial, but also social projects.

## III. METHODS OF RESEARCH

At present, a computer game can act as a kind of communication tool, which creates communication between the author and his reader; it also can establish communication between the computer game user and the strategic communications organizer.

It is important to determine whether the developers of a computer game act as interpreters of the classical text. It may also be assumed that digital technologies for translating the original text into the language of the game are not so much designed to open up new meanings of the text as they should make the final product – a computer game – attractive to the consumer. And if turning to the classics is just a marketing ploy, then what is the reason for using the classic literary plot in a computer game? Is it possible to use the game and its inherent communication technologies in organizing strategic communication?

The notion of interpretation is significant for the present research. V. Tyupa has been investigating the phenomenon of interpretation within the framework of artistic communication. He believes it to be a purely intellectual operation – interpreting or revealing the meanings of cognizable phenomena [9]. V. Khalizev also argues that while working with the phenomenon of art, the interpreter opens up "a range of correct and adequate interpretations", which constitutes the main task of the interpreter [10].

The scholarly papers on practical marketing are the theoretical basis of the undertaken research [11, 12]. These papers define the peculiarities of computer games promotion, describe the practices of promotion as well as the means used for this purpose. The use of a classical plot as a means of a computer game promotion is not mentioned in the scholarly papers. The scholarly papers, in which computer games are considered to be a cultural phenomenon, have also been used for research [5, 6].

The undertaken research deals with computer games, the scenarios of which are based on the precedent texts of both classical and popular literature.

During the research the methods of literary text analysis, participant observation, comparison, content analysis, discourse analysis and survey have been employed.

## IV. RESEARCH PROGRESS

The undertaken research has been focused on several games based on the classical literary texts. E.g., the tragedy by J.W. Goethe was transformed into a computer game. The graphic adventure quest game was released as "Faust" in Europe and "Seven Games of the Soul" in North America in 1999. This project was intended to be a unique journey for the players, providing them with an opportunity to choose various outcomes of certain actions. The game was quite progressive in 1999.

The game is divided into seven parts and has detective investigation features: Episode 1. Crime for Two; Episode 2. The Alchemist and the Genie; Episode 3. Casanova's Shadow; Episode 4. Phantom Lover; Episode 5. Tiger Nature; Episode 6. One Meter Tall Robin Hood; Episode 7. Giselle's Masterpiece. Each chapter is a story of the past and after the game there is an ending, in which the player must determine the fate of the amusement park. The narrator is Mephistopheles.

The epilogue is about lost souls. The player assumes the role of an elderly African American. Finding himself in an abandoned amusement park called Dreamland, he meets a mysterious man. It turns out to be Mephistopheles himself, he says that he and the "boss" are arguing about the fate of seven souls.

Mephistopheles instructs the player to examine their cases, search for evidence and decide whether or not they are guilty of their sins. During the game, one can observe human nature and the authors tried to uncover ideas and observations about a person via the journeys of seven characters. Only at the very end it turns out that the character, not Mephistopheles, is the devil himself. His memory was erased in order to be able to look at the misdeeds of people objectively. At the end of the game, it is possible to switch roles with the owner of the park. There are two options: the player becomes the new owner of the park or the park is demolished. The choice of the endings depends on the player.

The game has dozens of locations to be studied; these locations have a 360 degree access. The following statements are found on "Faust: The Seven Games of the Soul" box: "7 souls succumbed to temptation, 7 souls will be damned, 7 souls must be saved: and one more – yours". Apparently, the use of figure 7 refers to the idea of seven deadly sins. The goal of each of seven levels is disclosure of the secrets of the characters. As soon as Faust understands why this or that character is sinful, a cutscene occurs and a new level begins. Examining or using an object may trigger a small video, a fragment of speech. This is mainly the way the characters' memories are presented, they are designed to fill in the story, and can also provide hints for solving the puzzle.

It is supposed that the exciting plot of the game does not let you relax throughout the story. The players experience different emotions: horror, laughter, they empathize with the characters. By going through many 360 panoramic screens and clicking on objects, players can manipulate objects, completing quests helps move around the level.

It should be noted that the player is fascinated by the plot of the game, and not by the Goethe plot and its meanings. Therefore, the classic plot as the basis of the game scenario can hardly be considered a marketing tool for its promotion. The names of the characters in the game become the signs of literature, the content of which is unknown to the player, it is not important for developers of the game, in particular, its scriptwriters. Faust is a name known to everyone, but few people know the specifics of this character. Therefore, allusions to the Goethe story cannot really bring the classical text closer to the modern reader. The game does not become a communication tool for Goethe and his new readers. It is not Goethe who speaks to the players, but the screenwriters. Using the verbal, visual and procedural rhetoric, the game developers convince the player of their ideas. At the same time, this is the suggestion of certain meanings, which do not arise as a result of a critical analysis of information, but are a finished product presented by the game. The game is a tool for modeling and constituting social reality, in which the ethical and social aspects, formed by a computer game, are highlighted.

O. Aronevich noted that "the content of computer games is <...> that they make it possible to transfer and share perception of abstract experience and reconstruct personal experience and ideas in the form of dynamic interactive systems. This allows us to see in computer games the potential of a form that, via multidimensional synthesis (on the level of synthesis of experience and relatively dynamic, polymorphic communication), can cope with the flow of information in the modern world" [13].

In the second game investigated, the goal of the developers to immerse players into the world of Goethe is more obvious. Goethe's tragedy "Faust" became a virtual work: due to the 360-degree technology used in the game, it was possible to employ VR technology. The philosophical poem has been adapted using virtual reality glasses by the German National Library. "Goethe VR" is an interactive

digital project allowing people to experience the drama of Dr. Faust with interesting, unusual, new sensations provided by the use of virtual reality. The players have an opportunity to feel like Faust, experience all the obstacles of his path – a whole series of trials and temptations.

Each guest gets to play the role of a young Faust. In order to start the game, they choose twelve value cards, depicting their six most important values; using the cards they make a deal with the devil: fame, wealth, power, progress, love, family, lust, beauty, freedom, knowledge, youth or faith. What is more important to a person in life? The game uses a phone book of the person playing the game. In order to win, the player needs to earn satisfaction points. The player gets them if he/she correctly selects quotes from the original – Goethe's tragedy – for the purpose of communication in the game.

It is evident that the game developers use the technique of translating a literary text into language of the game. They take into account the difference between the two languages – the language of literature and the computer game language. Defining the features of a computer game language, T. Majkowski argues that "the auditory, visual, haptic, spatial-temporal and systemic elements of a video game are in constant interaction" [14]. The language of fiction is the language of images that arise due to verbal signs, which have both a special visuality and a special "audiality", but are neither visual nor auditory, etc. The very possibility of translating the language of literature into the language of a computer game reveals the possibilities of the artistic language. But when translating, it is important to study why not verbal signs are selected. In a translation that claims to be an interpretation, the meaning and possibilities of its transmission into the language of different art are important.

It must be borne in mind that the meaning in the art of the present is not equal to some idea that exists a priori (before the text). Hence the famous quotation by Leo Tolstoy, who said that in order to understand what his novel is about, you need to read it. In other words, the meaning is associated with an adequate understanding of the text by the reader. On the other hand, the computer game developers with their text – the text of the game – do not retell a work of fiction, do not mechanically translate one text into the language of another, but convey their understanding of the original work and also create conditions for the perception of their version of the classics by a consumer. F.M. Dostoevsky, when asked about the possibility of staging his novel "Crime and Punishment", mentioned such a translation: "There is some secret of art according to which the epic form will never find a match for itself in the dramatic form <...> It's a different thing if you remake and change the novel as much as possible, keeping only one episode, for processing into a play or, having taken the original idea, would you completely change the plot?" [15].

In other words, a literary text will never find a match in the text of a computer game, but one can reveal the meaning of the original text even without repeating its plot. It is important to find an opportunity to convey your own understanding of the idea of a text translated into the language of different art. And thus convey the meanings and values, which are important for organization of strategic communications with the consumer of digital products.

When presenting a computer game, PR specialists and marketers can rely on the basic values of the culture of a country, in which organizing communication with the consumer is taking place. This has become possible due to

the value potentials of the classical text, which underlies the plot of the game and is implemented in a computer game that claims to be a work of art. Therefore, the product can solve not only marketing tasks. Thus, in Berlin at the Theatertreffen exhibition an exposition with a game dedicated to Faust was exhibited with the support of the German National Library. It was later exhibited in many cities, from Seoul, where she caused a real stir, to Tokyo, Shanghai, Johannesburg, Athens, Budapest, Vilnius, Weimar, Prague, Hong Kong. Depending on the country and culture, it was possible to observe how people chose different values. Love was a universal value everywhere, but in Johannesburg, for example, freedom was the most important value, in Europe it was knowledge, and in China it was family.

The most popular games are the ones, which do not just immerse the player into a fictional world created on the basis of someone else's text (hyperreality), but provide an opportunity to exist in it for as long as possible and discover his/her own creative abilities.

One of the most striking examples is "The Witcher" series of games based on the cycle of books by the Polish author Andrzej Sapkowski. The developers of the game do not recreate the virtual story told by the writer, but make their own one. The choice of the RPG genre is not accidental. In the games of this genre, the player has the role of a controlled character and experiences an interactive story with him. Thus, in "The Witcher", players go through the plot on behalf of the main character of the book cycle – the witcher Geralt of Rivia. The game begins after the end of the book story, and thus the plot is an alternative version of the events associated with Sapkowski's books, with the features of the world (the dark Middle Ages without a clear division into good and evil), with backstories of the characters and peculiarities of their relationships.

The developers are likened to the authors of fan fiction, creating their own texts based on various literary worlds. It is noteworthy that the author of the literary cycle about the witcher is negative about computer games in general. He says: "The Witcher is a well-made game, its success is absolutely deserved, and praise is due to the authors. But this can in no way be considered either an "alternative version" or a "sequel" of the story of the witcher Geralt. Because only the creator of Geralt can say that. A certain Andrzej Sapkowski" [16].

Speaking about the features of computer games narrative, A. Sapkowski notes the limited language means, the lack of depth of narration as well as the inability of games to reflect culture. The CD ProjectRed studio, despite the lack of support from the writer, while recreating the literary world, managed not to break, but to enrich the original source.

The development of the gaming industry makes it impossible to reproduce the language of fiction in the computer game texts. Consumer expectations force developers to complicate the game play, introduce various interactive elements, plot twists, etc. into it. Developing, and in some cases, completing the author's text, the makers use various digital technologies. These are technologies for the development of images and events, technologies for "generating" and building a new plot.

It is the success of the game series (as of April 2022, more than 65 million copies of games have been sold) that largely influenced the sales of the book series and subsequently the games served as one of the sources of inspiration for the creators of "The Witcher" series by Netflix

streaming video service. E.g., the swords from "The Witcher 3: Wild Hunt" game appear in the series. In addition, the appearance of the protagonist is more consistent with the game version of Geralt than with the book version.

Being placed within the recreated world of "The Witcher" book, the players explore this world, interacting with both non-playable characters and with elements of space. By completing the secondary quests or simply traveling around the map on foot or by horse (named Roach as in the book), the players can find books that tell about the history of the world or key events in the books as well as discover many references to both classical literary phenomena and popular phenomena of mass culture. E.g., in one of the missions, the player may find a statue with a hand into which a correct object should be placed. A skull is one of the items. After placing it, the character says: "No, you do not look like an indecisive prince". An attentive player would immediately recognize that the game developers refer to Shakespeare's "Hamlet". And when studying the picture in the "They lived happily ever after" quest, Geralt says: "All families are happy in the same way and each is unhappy in its own way". This is a reference to the beginning of Leo Tolstoy's "Anna Karenina" novel. One of the characters cries out "It's not my fault. He came himself"; this phrase would be understood only by those who watched the famous Soviet-era "The Diamond Arm" film; the witch hunters, attacking, shout "Take demons alive" (a catchphrase from "Ivan Vasilyevich Changes His Occupation" film). By weaving these references and other interactive elements into the game world, the developers make storytelling more complex and more immersive for players. The makers enter a dialogue with the original source, rethinking it and developing the story; they also offer the player to become a part of this story himself/herself. The choices that are to be made to complete the story are consistent with the logic of the original source.

"The Witcher" series of games is also unique, because the players, despite the statements of Andrzej Sapkowski, perceive it as part of the canonical history.

The second example of a game based on the popular fictional universe is "Hogwarts Legacy" based on the Harry Potter series. It was called the most anticipated game of 2023. As in "The Witcher", the developers use a work of fiction as the fundamental principle, but tell their own story. The game takes place in the past long before the events described in J. Rowling's books. The players are given the opportunity to create their own character, which enhances immersion. If in "The Witcher" the game served as a source of inspiration for the film series, in this instance one can observe the reverse process – films based on the books about Harry Potter become the main visual reference for developers. The key locations of Hogwarts Castle reflect those in the film, and some plot twists are exact quotations from the original source. If in "The Witcher" the player does not have to be familiar with the literary source, in "Hogwarts Legacy" the player needs to know the contents of books and films in order to be involved deeper in the story. In order to trace how the literary world is transferred into the virtual space of a computer game, one of the authors of the article went through several story quests and explored the world offered by the developers. In the initial mission, at the moment when the characters are attacked by a dragon, thestrals, winged horses, visible only to those who have met with death, are suddenly harnessed to the flying carriage. The game plot does not provide any explanation; it is assumed that the player is familiar with this feature of J. Rowling's art world. There is also a brief mention in the books that the

castle's kitchen can be reached by tickling a pear in a still life. Exploring Hogwarts, one can stumble upon a picture where the player is asked to tickle the fruit and after that a passage to the kitchen will open. The game also has many recognizable locations described in the books. It is premature to talk about how much the game will be in demand by fans of the Harry Potter universe, but the fact that it will allow you to plunge into the magical world created by Rowling is beyond doubt.

In order to trace the extent to which the game developers manage or fail to transfer, and most importantly, to translate the meanings of the original literary works, the authors of the present paper conducted a survey among an audience of mainly fans of computer games. The survey involved 434 young people aged 20 to 35. The questionnaire was compiled in such a way that a negative answer to the question "Do you play computer games?" opened a branch of additional ones, revealing the attitude of respondents to games as a phenomenon of modern digital culture. According to the survey results, approximately 7% (31 respondents) have never played computer games. Of these, 13 respondents are negative about this type of leisure, 8 respondents are neutral: "I'm not interested, but I know that many people love it". 10 people responded positively. The remaining 93% of the respondents (403 people) play computer games periodically. Such a high percentage of positive responses is due to the specifics of sampling. The offer to participate in the survey was posted on game forums as well as in the gaming communities of VKontakte social networking site.

Among the reasons for playing games, the respondents named the following: a need to relax, an opportunity to escape from routine, a desire to immerse themselves into the well-known literary world, to live a short life in a story along with a controlled character. For the majority of respondents (91.4%), a well-developed plot of the game is important as well as the opportunity to explore the world offered by the developers. We asked all respondents about popularity of the games described in the present paper. "Seven Games of the Soul" is overwhelmingly unfamiliar to the gamers. Only 3% answered affirmatively. Less than 1% heard about the second game based on the book by Goethe. However, we were more interested in how and what meanings and interpretations appear in the process of transferring a classical literary text into the virtual space of a computer game. We asked respondents who were not familiar with these games the question: "What do you think these games are about?". The overwhelming majority could not answer this question and some respondents said that the game "most likely repeated the plot of the tragedy by Goethe". Among those who were familiar with these games, the most popular answer was: "About the human soul". Thus, the results of the survey have confirmed the idea that the game does not directly translate Goethe's meanings, but is able to actualize its own meanings in the minds of recipients. 396 of the respondents are familiar with the game based on "The Witcher"; 308 people have played it, which is 70% of all respondents. Of these, only 203 people are familiar with the literary source. But all respondents noted a good elaboration of the computer game world as well as the depth of experiences. For the respondents, "The Witcher" has turned out to be a story in its own right, which keeps with the spirit of the book series. The questions about the last game were not included into the survey.

## V. Results

The analysis of the survey results has made it possible to draw a number of conclusions:

a) the literary source serves as a solid foundation for creating the virtual world of a computer game;

b) the recipients are more concerned about their own experiences and meanings appearing in the process of playing the game.

## VI. Conclusion

The world of classical literature is becoming more and more distant and incomprehensible to modern youth. They are fascinated by other worlds – the worlds of computer games. At the same time, the developers of computer games actively use the plots of the classics, especially since it has long been proven that the types of these plots are not numerous. The plots make it possible to model the relationship between a person and the world as a whole, the way of creating the world and the birth of life in it; the plots also make it possible to create a model of a person's attitude to his own destiny and identify the basic values of the world of the past and the present, which, when colliding, often result in serious crises and catastrophes.

Using someone else's plot or just a hint to it, the scriptwriters do not often become intermediaries in a dialogue between the modern consumer and the author of a literary classic. The developers use a language of the game to speak to the player about new values, forcing him to make his/her choice without regard to the time-tested experience of the literary characters.

But there is another type of scenarios. According to them, a computer game becomes a precise tool for connecting the past with the present. Through this connection, in this movement from the past to the future, it becomes possible not only to immerse oneself into the distant world of a classical text, but also to understand the present and the inner world of the player. The game technologies make this process exciting, intense, lively and efficient, because due to gameplay the player acquires an essentially real experience of interacting with the Other.

It is digital technologies that make it possible to take into account the limited capabilities of modern recipients, who prefer specific visual, auditory and other images to imagination and independent thinking. This fact should be taken into consideration by the organizer of modern strategic communications.

## References

[1] N. Polutina, "Computer Game Psychology," *Bulletin of Mordovia University*, no. 2, pp. 83–86, 2007.

[2] N. Appakova-Shogina, "Computer Games: Pro et Contra," *Problems of Modern Pedagogical Education*, no. 73-3, pp. 18–21, 2022.

[3] I. Chumpurova, "Negative Influence of Computer Games," *Sociology of Education*, no. 11, pp. 80–91, 2011.

[4] A. Selyutin, "The Precedent Phenomena in Computer Games' Scenarios," *Humanitarian of Chelyabinsk*, no. 4(45), pp. 38–42, 2018.

[5] O. Potapova, "Computer Game within the Space of Culture," *Vestnik of Lobachevsky University of Nizhni Novgorod*, no. 4(1), pp. 349–353, 2010.

[6] L. Mesenyashina, A. Selyutin, "Computer Game: Amusement? Art?", *Sign: Problems of Media Education*, vol. 1, no. 7, pp. 82–86, 2011.

[7] D. Tregubova, D. Shkaev, "Philosophy of Cyberculture: Digital Identities, Subcreation and Game Narratives," *Social Sciences and Humanities*, no. 4, pp. 152–157, 2020.

[8] I. Yugai, "Computer Game as a Type of Artistic Practice," 2022. URL: https://lib.herzen.spb.ru/media/magazines/contents/1/14(37)/yugai_14_37_367_372.pdf. (Accessed 24.12.2022).

[9] V. Tyupa, *Analytics of the Artistic*. Moscow: Labirint, 2001.

[10] V. Khalizev, *Theory of Literature*. Moscow: Vysshaya shkola, 1999.

[11] V. Aleksunin, "Branding of online games," *Practical Marketing*, no. 2 (168), pp. 12–16, 2011.

[12] A. Golenok, "Ways of Modern Mobile Games Promotion," *Proceedings of Higher Educational Institutions*, no. 1 (47), pp. 125–133.

[13] O. Aronevich, *Game or Reality? Experience of Computer Games Investigations*, Ed. by V. Savchuk. Saint Petersburg: Conflict Studies Development Fund, 2016.

[14] T. Majkowski, "The Birth of Heteroludoglossia from Discordance of Computer Games' Languages," *Sociology of Power*, no. 32(3), pp. 74–90, 2020, doi: 10.22394/2074-0492-2020-3-74-90.

[15] F.M. Dostoevsky, *Complete Works in 15 Volumes*. Leningrad: Nauka, 1989–1996.

[16] A. Kaleev, "What Is Going On between Andrzej Sapkowski and CD Projekt RED," 2022. URL: https://dtf.ru/games/28521-chto-proishodit-mezhdu-andzheem-sapkovskim-i-cd-projekt-red. (Accessed 24.12.2022).

# The Role of Reputation in Enhancing the Competitive Attractiveness of the Territory and the Formation of an Effective Regional Innovation System

Irina A. Ilyina
Faculty of Humanitarian Sciences;
Public Relations Department
Saint-Petersburg Electrotechnical
University "LETI"
St. Petersburg, Russia
inka4@yandex.ru

Valeriia V. Kulibanova
Institute of Innovative Design and
Technological Entrepreneurship
Department of Applied Economics
Saint-Petersburg Electrotechnical
University "LETI"
Faculty of Management
International Business Department
Saint-Petersburg State University of
Economics
St. Petersburg, Russia
valerykul@mail.ru

Tatiana R. Teor
Faculty of Humanitarian Sciences
Public Relations Department
Saint-Petersburg Electrotechnical
University "LETI"
St. Petersburg, Russia
teort@rambler.ru

*Abstract*—A place reputation is a key competitive advantage for building partnerships with diverse stakeholder groups, thus being one of the most important factors of the region's socio-economic development. Therefore, methodical work on it should be an integral part of the strategic plan for place spatial development. The reputation that a territory has depends to a large extent on the information located both in the offline space and in the virtual environment. It should be noted that nowadays the struggle for consumers' preferences of a regional product is increasingly shifting to online. Therefore, when shaping the place reputation, it is necessary to take into account the "digital footprint" that creates the media image that directly affects the perception of the territory by various stakeholder groups. In the current economic realities, of all possible stakeholder groups, investors and innovators are of particular importance, as effective regional innovation systems are the drivers of economic development not only of individual territories, but also of the country as a whole.

To improve the reputation and, as a consequence, to increase the regions' competitiveness in the modern information society, it is necessary to pass consistently and systematically the stages of "recognition and acceptance" in the external environment. In this case, the online environment is the place where you cannot just deliver information to many people, but also to target the audience of users saving financial and time resources. Digitalization opens new opportunities for transferring interaction between different stakeholder groups to a qualitatively higher level.

The monitoring of media and social media, conducted in the paper, with the use of Medialogia and Brand Analytics platforms has led to the conclusion that the formation of place's publicity is an important component in the implementation of public activity. Participation in various events and ratings, promotion in social networks, implementation of social projects and demonstrating activities are of particular importance for improving reputation. The monitoring has also shown that the region's innovative activity is one of the most important components of the region's attractiveness for almost all stakeholder groups.

*Keywords—place reputation, place reputation monitoring, sustainable development, innovative entrepreneurship, regional innovation system, entrepreneurial university.*

## I. INTRODUCTION

Currently, the place reputation is able to ensure sustainable competitive development of a region, being a valuable intangible asset of its economy, a critical resource for partnering with important stakeholder groups such as investors and innovators. The work of a number of foreign and Russian scientists is devoted to various factors that influence building strong place reputation [1], [2], [3], [4]. In particular, the researchers note the pattern — the countries leading in the most important reputational indicators demonstrate the highest degree of public trust in the authorities and the best conditions for doing business. [5], [6].

The last two decades have been characterized by increasing globalization, the logistical accessibility of markets, and knowledge facilitation. This has determined a shift in the most important competitiveness factors from traditional production resources to knowledge-based resources [7], [8]. Simultaneously, the increasing importance of regional innovation systems (RIS) and clusters that are drivers of innovative development of the country as a whole [9]. Nowdays the RIS framework perceives regions (e.g., Silicon Valley, in the USA, as well as the Tokyo-Yokahama cluster (Japan), Shenzhen-Hong Kong (PRC, Hong Kong), Seoul (South Korea), Beijing (PRC)), and not countries, as the unit of economic interest meriting attention [10].

Furthermore, the following should be stressed that while innovation occurs at the enterprise level, the emergence and success of the innovation system as a whole requires interaction with institutional agents such as universities, sectors in industry, government entities and agencies dedicated to regional development [11], [12]. Any region is not just a place for investment. It is also a place for introducing the most ambitious innovations [3]. Furthermore, competition between regions is a competition to attract the attention of consumers who are interested in the acquisition of a territorial product, which is expressed in the influx of all type of resources.

It should be emphasized that not only and not so much the financial benefit affects the decision to invest in a particular region. A potential investor always takes into account the stability of not only political, socio-economic, geographical

and cultural and organizational-legal factors, but also how the territory is represented in the information space. This factor is essential not only for the reputation of the region, but can also affect the reputation of the investor. Therefore, the key system-forming factor here is communication for the formation of a positive opinion by various stakeholder groups.

## II. Literature Review

The issue, being raised in the scientific discourse, is not just about innovative entrepreneurship as a single phenomenon, but about the formation of regional innovation ecosystems. For building effective systems interaction is needed along the entire chain: university — industry — government relations [13]. Etzkowitz, author of a "Triple Helix" model changed the view of the role of universities. He saw the university as an effective tool for enhancing the innovation process. Subsequently, it was recognized by many that entrepreneurial universities were one of the most important elements of these innovation ecosystems. The "entrepreneurial university" has become a widespread concept in developed nations regarding to its impact upon increasing the level of educated members of the community, filling jobs, and increasing economic growth [14]. Digital entrepreneurial university is becoming the main link in a new branch of the economy — the innovation generation industry. The foregoing cannot but influence on the socio-economic development of the region.

For the last five years, in Russia also there has been an awareness of the need to organize innovation activities in the regions on the "Triple Helix" model with the active involvement of universities. A number of researchers conducted an empirical analysis of the contribution of universities in the formation of regional innovation systems [15], [16].

Nowadays there is a tendency to shift attention from R&D (Research and Development) processes to C&D (Connect and Development). This is due to the companies changed the focus from the development of their technologies to the search for already created technologies in universities, institutes, laboratories.

The open and closed innovations approach, which originated in the late 1980s, has now gained relevance through the works of Chesbrough [17]. In the researcher's concept, the achievement of digital economy targets and ensuring the necessary economic growth potential should be based, on the one hand, on the development of successful innovation in the company itself using its own R&D as a strategic asset and on attracting new ideas, sources of knowledge, technology from outside in the form of interactions with universities. An active transition to an open model of innovation is happening in information technology, mass communications, and the pharmaceutical industry. [18]. Slightly slower these processes are being implemented in the banking, healthcare, automotive and consumer goods industries. This is due to the critical for all companies stage of transition from the creation of single samples to mass production, which must be accompanied by re-equipment of enterprises, organization of new lines, training and retraining of personnel.

Open innovation is the integrated use of inherent scientific and technical developments with the support of third-party innovations and competent specialists in the development of technologies and technological products [19]. Continuing the development of the "triple helix" model proposed by Etzkowitz [13], a number of authors consider open innovations as a possibility to form a quadruple helix in the form of progressive innovative development of the economy in coevolution with the knowledge society, where the basic settings are institutional, political, climatic and geographical features of a certain territory, as well as the influence of the mentality of society and media influence. [19], [20], [21]. That is, media is already being incorporated as an important element of the model. The above has been examined by Cruz-Ruiz, Ruiz-Romero de la Cruz, Zamarreño-Aramendia, and Cristòfol emphasizes the importance of a place brand, since the mechanism described here presents an adaptation to a specific need that has to take into account the values of branding, among which several elements stand out [21].

## III. Research

We assume that in order to attract innovators to the region and create a competitive regional innovation system, it is necessary not just to form these ecosystems, but to engage in informing and coordinating stakeholders.

Public demonstration of the activity on creation of favorable conditions for innovative entrepreneurship development in the region contributes to the formation of the place image in the minds of target audiences. And informing must be not sporadic, but systematic, regular in order to pass all stages of recognition and acceptance in the external environment.

The place attractiveness is formed not only through the media, but also with the help of objective information, which is reflected in ratings and rankings. At the same time, ratings are of greatest interest in the process of working with reputation programs in the long term, and rankings reflect the current state of work with the placeimage.

Ratings are one of the sources of information reflecting the place's innovative attractiveness. An example of such ratings is the Global Innovation Index (GII) ranking countries by their capacity for, and success in, innovation, published by the World Intellectual Property Organization. National Research University Higher School of Economics analyzed the position of Russia in the new GII, which contains the results of a comparative analysis of the innovation systems of 132 countries. According to the results of the analysis Russia demonstrates insignificant dynamics (Table I). At the same time, some of the considered indicators of the subcomponents of the index (trade, diversification of industrial production and market scale, higher education, knowledge acquisition, ICT development, creation of intangible assets, online creativity) contributed to the improvement of Russia's performance in the overall rating, which in general has had a stronger position in more than half of the analyzed indicators in the overall rating for five years [22].

Russia's advantages in comparison with other economies of the world are the number of graduates in science and engineering, the coverage of higher education and the position of universities in the global ranking. At the same time, some indicators — subcomponents of (school) education and knowledge of employees were at a disadvantage.

TABLE I.        Dynamics of Russia's Position in the GII: 2018-2022

|  | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| **Global Innovation Index** | 46 | 46 | 47 | 45 | 47 |
| Resources for innovation | 43 | 41 | 42 | 43 | 46 |
| Innovation results | 56 | 59 | 58 | 52 | 50 |
| Number of countries analyzed | 126 | 129 | 131 | 132 | 132 |

Source: https://issek.hse.ru/news/777572032.html

Since enterprises are interested in obtaining highly qualified personnel for the development of innovative directions, then, considering the above, we can conclude that one of the important stakeholder groups for the formation of effective regional innovation systems will be young people.

Therefore, the Index of inventive activity of Russian universities is an important tool for communication with these stakeholders. A project of the Expert analytical center, launched in 2016 to assess the transformations in science and education, which began with the "5-100" project and were continued in the "Priority 2030" program. Thus, according to this rating, the top 10 universities in Russia are those whose activities meet the criteria stated in the rating. The first position is taken by Moscow State University 'M. V. Lomonosov', which moved up from second place compared to 2021. The National University of Science and Technology climbed from positions 3-4 in 2021 to 2-3, and The Ural Federal University named after the first President of Russia B. N. Nemirov took first place in 2021. N. Yeltsin is on 3-4 positions in 2022 in comparison with 9-11 in 2021, also in the top ten rose Skolkovo Institute of Science and Technology, Saint Petersburg State University, Moscow Power Engineering Institute, seriously ousting National Research ITMO University, The Bauman Moscow State Technical University, Kazan (Volga region) Federal University, Belgorod State University [23].

The assessment of inventive activity is based on the analysis of universities' activities in the field of patenting developments. The indicators analyzed in the rating are divided into three blocks: 1) initial conditions (weight 10% of the total rating indicator), which includes the number of licenses; 2) quality (weight 30%), includes the share of cited patents, active patents, patents in collaboration with universities and academies; 3) relevance with weight 60%, includes positions on the number of licenses and sold patents, technologies patented abroad, foreign patents and patents with OECD countries, patents in collaboration with companies.

Forbes Education has presented the rating of the best universities in Russia according to employers, where technical universities were most in-demand. Among the universities, whose graduates tend to be hired first, the Higher School of Economics (this university was mentioned by 54% of employers), Lomonosov Moscow State University (49%), Bauman Moscow State Technical University (40%), MIPT (37%), MIFI (31%) and Yeltsin UrFU (31%) were mentioned. [24]

An important prerequisite for effective development of innovative entrepreneurship is regular reporting on the costs of innovative activities of organizations, by subjects of the Russian Federation. A comparative analysis of such costs was compiled by the authors on the basis of open reports of the Federal State Statistics Service (Fig.1). Based on the data obtained, we can conclude that the interest in innovation activity is growing in almost all Russian regions. However, a clear regional disproportion is evident — the most significant growth is demonstrated by the leading regions — Central and Volga Federal Districts, in the rest of the regions this trend is not so noticeable.
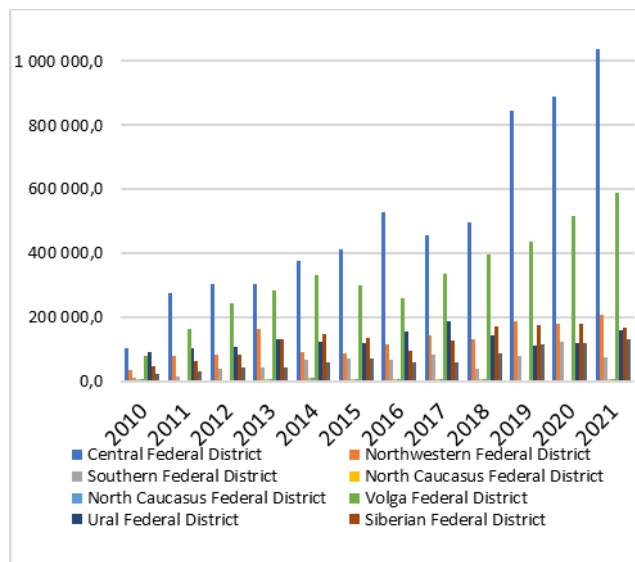


Fig. 1. Expenditures on innovation activities of organizations, by constituent entities of the Russian Federation (mln. rubles).

Digitalization creates certain conditions for transferring the interaction of various stakeholder groups, primarily the youth audience, to a qualitatively higher level. This requires a number of skills, such as the ability to work with information and communication technologies, and to use the new possibilities of the digital space for professional needs. This creates the need to form publicity capital and regular informational coverage of innovative entrepreneurship.

Thus, media monitoring (Fig.2) through Brand Analytics (mg.ru) shows an increase in interest in the topic under study. This is demonstrated by the analysis of publications from December 2020 to December 2022, which showed a high interest and demand for this activity in the regions. The number of publications for the selected period has almost doubled.

The topic of innovative entrepreneurship is actively broadcast in the regional media. For the analysis carried out as part of this study, ten regions were selected, where the number of publications on the topic of innovation activity in the region from January 2020 to December 2022 was 400 or more.

Assessing the information field allows to see the reaction of the media to the initiated info-messages and assess the competitive advantages of the region, understand the general information context, and anticipate the growing crises.

Fig. 3 shows the leaders of the rating of Russian regions by the level of media activity of regional authorities in the sphere of innovations and investments, including the assessment of PR-activity and holding of public offline and online events. This figure does not show the absolute leaders — Moscow and St. Petersburg.

A detailed analysis of social media publications through "Brand Analytics" (Fig. 4) showed the active discussion of this issue in social networks. The main platforms for the implementation of media activity in the regions — telegram — 38%, vk.com — 28%, ok.ru — 7%, youtube.com — 6%, ru24.net — 1%, russia24.pro — 6%, ria.city — 1%, 123ru.net — 2%, yandex.ru — 5%, facebook.com — 2%, rambler.ru — 1%, zen.yandex.ru — 3%.
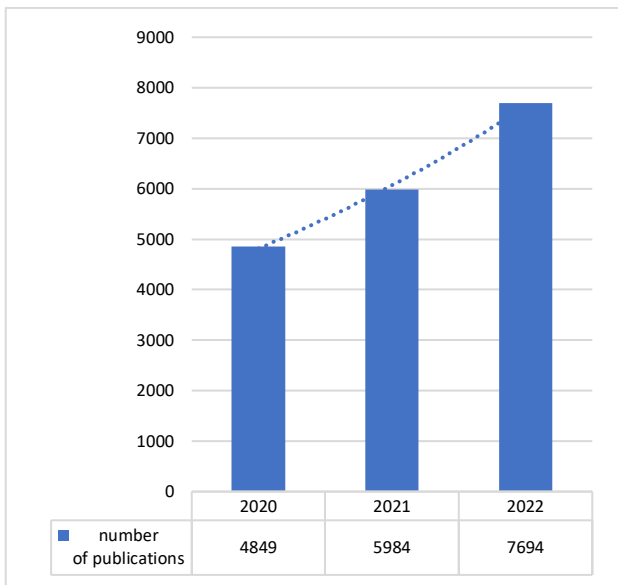
Fig. 2. Monitoring of the representation of the issues of innovative development of the regions within the topic of innovative entrepreneurship for the period January 2020 – December 2022
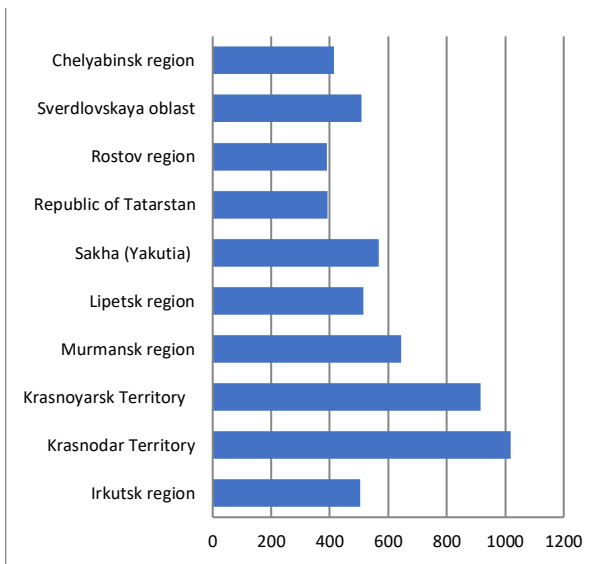


Fig. 3. Top 10 regions with high media activity. Monitoring results for the period January 2020 – December 2022

The formation of attitudes toward the agenda broadcast by the leadership of the region is shaped, among other things, by the opinions of the people who live and work in the area. The main problem here is the lack of systematic and high-quality communication with a wide audience. The regional centers, where significant events (forums, conferences) are held to discuss these issues, including on the platforms of social media, are active. Fig. 5 shows the age of the active authors who broadcast the agenda in social media. We can clearly see the interest of young and middle-aged people in the topic.

On average, the daily growth of messages is in the range from 10 to 60 (for example, from January 15, 2023, to February 2023), and the maximum activity has shifted from the media to social media, where the leading position network Telegram, which indicates not just information about the implementation of the agenda for innovative entrepreneurship, and the involvement of the regional public in the discussion of this topic.
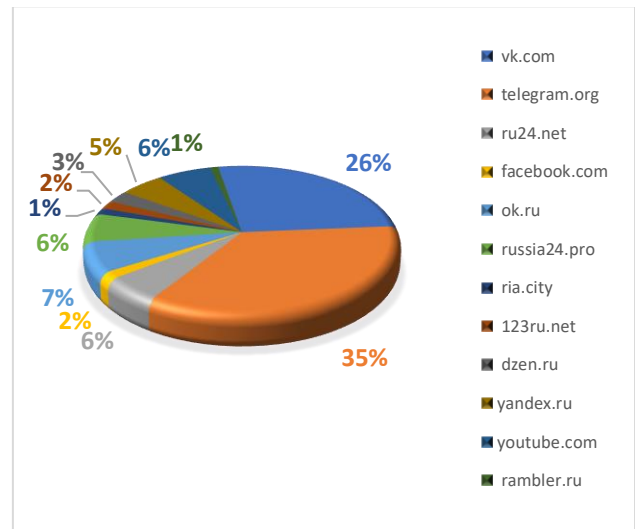


Fig. 4. Distribution of publication activity by social media platforms and mass media for 2021–2022, % of the total
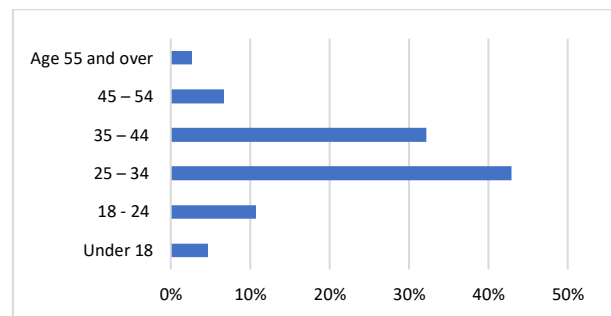


Fig. 5. Age of authors of publications interested in the topic of innovative entrepreneurship

As a result of the monitoring, it was concluded that the formation of publicity of the region is an important component in the implementation of public activity and includes participation in various events and ratings, promotion in social networks, implementation of social projects and demonstrating activity. In comparison with the previous years there is a clear tendency in striving to increase publicity capital and realization of openness in activity.

IV. CONCLUSION

Region's innovative activity is one of the most important components of the attractiveness of the region for almost all groups of stakeholders.

At the moment there are no generally accepted international standards for ratings of innovative entrepreneurship, and the question of unification of methodology for their compilation remains open.

Ratings of regions on the level of innovation activity implementation provide an opportunity to analyze the readiness of federal subjects to innovations, as the formation of indicators takes into account not only the activities to achieve specific results, but also trends in the interaction of different stakeholder groups, such as the involvement of universities as a source of personnel and a way to implement an open approach to innovation

The demand for the topic of innovative entrepreneurship in the public discourse, as a noticeable progress towards increasing the number of mentions of this topic in the media and social media was revealed. Regions are actively broadcasting all stages of this agenda implementation.

The leading regions in the implementation of innovations are identified. However, it should be emphasized that in the field of innovative entrepreneurship, many regions focus on enhancing the interaction with universities and their developments, are quite successful in achieving their goals, which allows them to come to the leading positions

The monitoring of the media and social media representation of the innovative entrepreneurship topic in the information field of the regions has revealed that the implementation of innovative entrepreneurship in the regions of the Russian Federation is extremely uneven and abruptly. At the same time, the topic itself has partially moved from the field of information (using the media to cover the implementation of the agenda) into the sphere of communication (social media), where the regional public is actively included in the discussion, which may serve as a basis for selecting as one of the criteria for assessing the presence of this agenda in the media space.

REFERENCES

[1] E. Braun, J. Eshuis, E.-H. Klijn, and S. Zenker, "Improving place reputation: Do an open place brand process and an identity-image match pay off?," Cities, vol. 80, pp. 22–28, Oct. 2018, doi: 10.1016/j.cities.2017.06.010.

[2] S. del Barrio-García and M. B. Prados-Peña, "Do brand authenticity and brand credibility facilitate brand equity? The case of heritage destination brand extension," J. Destin. Mark. Manag., vol. 13, pp. 10–23, Sep. 2019, doi: 10.1016/j.jdmm.2019.05.002.

[3] V. V. Kulibanova and T. R. Teor, "Identifying key stakeholder groups for implementing a place branding policy in Saint Petersburg," Balt. Reg., vol. 9, no. 3, pp. 99–115, Oct. 2017, doi: 10.5922/2079-8555-2017-3-7.

[4] S. Bose, S. K. Roy, and B. Nguyen, "Place branding: developing a conceptual framework for place Image." in Asia branding: Connecting brands, consumers & companies. ed. B. Nguyen; T.C. Melewar; D. E. Schultz. Palgrave Macmillan, pp. 150–173, 2017

[5] F. Bell, "Looking beyond place branding: the emergence of place reputation," J. Place Manag. Dev., vol. 9, no. 3, pp. 247–254, Oct. 2016, doi: 10.1108/JPMD-08-2016-0055.

[6] E. Akhmetshin, I. Ilyina, V. Kulibanova, and T. Teor, "Special aspects of master data-based integrated management of region reputation in modern IT environment," IOP Conf. Ser. Mater. Sci. Eng., vol. 497, p. 012022, Apr. 2019, doi: 10.1088/1757-899X/497/1/012022.

[7] R. F. F. Moutinho, "Absorptive capacity and business model innovation as rapid development strategies for regional growth," Investig. Economica, vol. 75, no. 295, pp. 157–202, 2016.

[8] P. Maassen and B. Stensaker, "The knowledge triangle, European higher education policy logics and policy implications," High. Educ., vol. 61, no. 6, pp. 757–769, Jun. 2011, doi: 10.1007/S10734-010-9360-4/METRICS.

[9] D. Bourletidis, "The strategic model of innovation clusters: implementation of blue ocean strategy in a typical greek region," Procedia — Soc. Behav. Sci., vol. 148, pp. 645–652, Aug. 2014, doi: 10.1016/j.sbspro.2014.07.093.

[10] S. Kilpatrick and B. Wilson, "Boundary crossing organizations in regional innovation systems," Reg. Sci. Policy Pract., vol. 5, no. 1, pp. 67–82, Mar. 2013, doi: 10.1111/j.1757-7802.2012.01087.x.

[11] P. Cooke, "Regional innovation systems, clusters, and the knowledge economy," Ind. Corp. Chang., vol. 10, no. 4, pp. 945–974, Dec. 2001, doi: 10.1093/icc/10.4.945.

[12] J. L. Furman, M. E. Porter, and S. Stern, "The determinants of national innovative capacity," Res. Policy, vol. 31, no. 6, pp. 899–933, 2002.

[13] H. Etzkowitz and L. Leydesdorff, "The dynamics of innovation: from National Systems and 'Mode 2' to a Triple Helix of university–industry–government relations," Res. Policy, vol. 29, no. 2, pp. 109–123, Feb. 2000, doi: 10.1016/S0048-7333(99)00055-4.

[14] S. O. Peterka and V. Salihovic, "What is entrepreneurial university and why we need it?," Econ. East. Croat. yesterday, today, tommorow, vol. 1, pp. 98–107, 2012.

[15] D. Rodionov and D. Velichenkova, "Relation between Russian universities and regional innovation development," J. Open Innov. Technol. Mark. Complex., vol. 6, no. 4, p. 118, Oct. 2020, doi: 10.3390/joitmc6040118.

[16] G. I. Popodko, O. S. Nagaeva, "'Triple Helix' Model for Recourse-Based Regio," J. Sib. Fed. Univ. Humanit. Soc. Sci, vol. 12, no. 12, pp. 2309–2325, 2019, doi: 10.17516/1997.

[17] H. W. Chesbrough, Open innovation: the new imperative for creating and profiting from technology Boston: Harvard Business School Press, 2003.

[18] U. Lichtenthaler, "Technology exploitation in the context of open innovation: Finding the right 'job' for your technology," Technovation, vol. 30, no. 7–8, pp. 429–435, Jul. 2010, doi: 10.1016/j.technovation.2010.04.001.

[19] J. J. Yun and Z. Liu, "Micro- and macro-dynamics of open innovation with a Quadruple-Helix model," Sustainability, vol. 11, no. 12, p. 3301, Jun. 2019, doi: 10.3390/su11123301.

[20] E. Carayannis and D. Campbell, "'Mode 3' and 'Quadruple Helix': toward a 21st century fractal innovation ecosystem," Int. J. Technol. Manag., vol. 46, Jan. 2009, doi: 10.1504/IJTM.2009.023374.

[21] E. Cruz-Ruiz, E. Ruiz-Romero de la Cruz, G. Zamarreño-Aramendia, and F. J. Cristòfol, "Strategic Management of the Malaga brand through open innovation: tourists and residents' perception," J. Open Innov. Technol. Mark. Complex., vol. 8, no. 1, p. 28, Jan. 2022, doi: 10.3390/joitmc8010028.

[22] " Global Innovation Index — 2022 — News — Institute for Statistical Studies and Economics of Knowledge — National Research University "Higher School of Economics»." https://issek.hse.ru/news/777572032.html (accessed Feb. 03, 2023).

[23] "Rating «Index of inventive activity of Russian universities» — 2022 | AC-Expert." https://acexpert.ru/publications/rating/reiting-indeks-izobretatelskoi-aktivnosti-rossiiskikh-universite (accessed Feb. 03, 2023).

[24] "Rating of the best universities of Russia 2021 by version Forbes | Forbes Education — study abroad and in Russia." https://education.forbes.ru/authors/rating-vuzov-2021 (accessed Feb. 03, 2023).

# The Specific Nature of the Turkic Communities' Content on Social Networks on the Territory of Yenisei Siberia

Alexey V. Mikhaylov
*Institute of Social Engineering*
*Department of Public Relations*
*Reshetnev Siberian State University of*
*Science and Technology*
Krasnoyarsk, Russia
avm_2006_64@mail.ru

Tatiana V. Mikhaylova
*Institute of Social Engineering*
*Department of Public Relations*
*Reshetnev Siberian State University of*
*Science and Technology*
Krasnoyarsk, Russia
ta.rada@mail.ru

Tatiana V. Ukhova
*Institute of Social Engineering*
*Department of Foreign Languages*
*Reshetnev Siberian State University of*
*Science and Technology*
Krasnoyarsk, Russia
ukhovta@yandex.ru

*Abstract*—**The paper presents the unique nature of the Yenisei Siberia social network discourse within the cultural and national communities of Turkic origin. We are considering WhatsApp messenger chats and discussions on VKontakte social network accounts from mid-2022 to early 2023. Methods for analyzing the hierarchy of topics, the frequency of significant words, and the semantic correlation of lexemes are used. The results obtained are compared with data on basic publicistic texts.**

*Keywords— social networks, Yenisei Siberia, discourse, communities of Turkic origin*

## I. Introduction

In Siberia and the Far East of the Russian Federation, the presence of multiple cultures and ethnic communities is a rule with no exception for any territorial unit.

Polyethnicity is a fact and effective force of the Krasnoyarsk Territory as well. At present (since 2012), this region constitutes the informal main part of so-called "Yenisei Siberia". In the 17th–19th centuries, this was also the case for regional units of government (voivodships, governorships, territories, provinces, counties and volosts), which preceded the current division of regions in Russia.

At present, there are over 150 nationalities in the Krasnoyarsk Territory. Many of them are considered autochthonous, while ethnologists and historians express conflicting opinions about others. A large number of communities ended up in the Eastern part of Russia for various reasons and at different times. This article deals with new media in the interaction of the Turkic-speaking ethnic communities of the Krasnoyarsk Territory: Tatars, Chuvashs, Dolgans, Khakasses, and Tuvans.

According to the description of Turkic-speaking communities given in the books of the "Ethnic groups and Cultures" series of the Russian Academy of Sciences, the Siberian ethnic groups of Turkic origin include Dolgans, Yakuts, Khakasses, Tuvans, Tatars, Siberian Tatars, Chulym Turks, Shors, Teleuts, Telengits and others [1; 2]. Not all of them are represented in the Krasnoyarsk Territory. Moreover, it should be noted that the modern administrative boundaries of the regions do not always successfully determine the ethnic distribution.

In addition, we can observe the relative stability of ethnic communities from the time of the early USSR to the post-Soviet period. During the Soviet period, many of them received a written language. Primary, secondary and even higher education was organized for them in their native languages. Mechanisms for the development of educational and cultural personnel were formed. The ethnic groups of Siberia were involved in the processes of municipal and state administration. According to researcher L. N. Evmenova, "transformations in the way of life and culture of ethnic groups, their involvement into the socio-cultural space of the modern world and their adaptation to civilization have not led to the loss of their unique identity <...> Despite some cultural adjustments, these communities retain their philosophy of life. Modern Russian society should use every opportunity to preserve the national cultural wealth of the Siberian ethnic groups and pass it on to new generations" [3, p. 5].

Along with many benefits acquired by the Turkic-speaking communities in the 20th-21st centuries, there are also complexities in the modern existence of ethnic groups. Researchers report on the negative consequences of technological progress and on the difficulties of incorporating traditional ethnic groups into modern industrial processes and culture. The settled and/or nomadic way of life is often completely destroyed upon interaction with modern living.

At the end of the 20th and beginning of the 21st century, the situation becomes more complicated due to waves of multi-ethnic migration from the European part of Russia, the North Caucasus, the Transcaucasus, Central Asia, China and other eastern countries.

T. V. Stupina in her work on cultural discourse and migration in Eastern Siberia following the American researcher Indira Somani [4] points to the mechanisms of migrant acculturation and the positive influence of the media on the processes of migrant acculturation and inculturation [5, p. 6]. At the same time, we note that I. Somani considers the positive value of newcomers entering American culture axiomatic, even if they are 40 years of age or older. The Russian practice of studying intercultural communications, in our opinion, should move away from a priori recognition of acculturation as a positive process, as it leads to the loss of ethnic groups' identity.

T. V. Stupina believes that an integrated approach to the formation of channels for the cultural integration of migrants into the host society is important, specifically in such spheres as language, education, religion, family life, eating habits, clothing, media, economics and sports. Successful cultural integration contributes to the social, economic, and political adaptation of migrants [5, p. 13].

According to T. V. Stupina and V. M. Antolinovskaya, consideration of historical experience can help to understand the modern integration processes in Siberia, particularly based on the Siberian travel records of the German geographer P. S. Pallas at the end of the 18th century [6, p. 268-275].

Siberia researcher N. M. Yadrintsev pathetically proclaimed in his book "Siberia as a colony" (1892): "... the union of ethnic communities, and not their separation" is the goal of movement to the East [7, p. 708]. It was typical for the scientist, as well as for other representatives of "imperial" thinking, to underestimate the idea of a civilizational movement to the East from the European part of Russia, the history and current state of the territories to which new settlers arrived.

This part of the problem area can be viewed as a failure to change the paradigm of thinking of the majority of specialists involved in the study of intercultural interactions, and this impossibility obstructs the objective and unbiased study of intercultural and interethnic processes.

Problem statement.

Another part of the problem lies in the need to form a "general public", "public opinion" and "social attitude" both in ethnic communities and outside them on the territory of Siberia as a mega-community. This was indicated by the above-quoted N. M. Yadrintsev: "... we lack full civil development" [7, p. 709], "…the telegraph has not yet completed its miraculous work of unification" [7, p. 719], "Siberia needs intellectual life, the desire for publicity, to develop social needs through the press; society wants guarantees for life and protection from local arbitrariness" [7, p. 712].

If a representative of the Russian culture-forming community pointed to a lack of public discussion of pressing issues for the population through publicity, the use of the press and printed word, then what could the position of the ethnic communities of Siberia have been in this regard? Obviously, it was in its infancy. However, what is happening now at the beginning of the 21st century? How developed are the mass media in relation to the coverage of the Turkic-speaking communities' life in Siberia? What is the structure and power of mass media? In what ways and for which social groups is the information conveyed? Which Turkic-speaking communities are more active and which are less actively represented in the media, including new media? What topics are covered on a daily basis? What is the role of government entities therein, and what is the role of individuals and social groups?

In some aspects, the public perceptions of the scientific community remain just as "deaf" to the demands of shaping public interest in various, including ethnic, ethno-cultural aspects of life in Siberia. A number of publications by very interested scientists, for example, from Novosibirsk can prove the above, see [8; 9].

In this paper, we can only partially raise these questions without thinking of analyzing them in detail, much less resolving them.

Another important problem is the divergence in research positions while discussing media discourse, including those reflecting a naive world picture or a "simple" worldview, as well as in research methods.

## II. RESEARCH

Among the areas of media linguistics and the study of media discourse, despite the development of the "new media" and social networks (they have been actively existing in Russia since the early 2000s and have been actively used by customizable media since the early 2020s), a generally recognized scientific understanding of the relationship between "new" and "old" media, the "convergence" of the media has not yet been fully comprehended and the boundaries of "infotainment" among other things are not fully understood [10; 11; 12].

It is also important that ethnic issues (Siberian in particular, and even less so those connected with the Turkic-speaking community of Siberia) are almost never the subject of research in serious scientific periodicals about the media. For example, the authors discuss "Mediascope" (published by the Faculty of Journalism of Moscow State University named after M. V. Lomonosov and the Higher School of Journalism and Mass Communications of St. Petersburg State University), "Vestnik MGU. Journalism series". In these scientific journals for the last three years (end of 2019 - 2022), out of more than 80 published articles, only one concerns ethnic journalism [13], but it is also connected with the problems of the Russian metropolis of St. Petersburg and the socialization of foreign migrants in it.

The scale of the problem of the lack of ethnic projects as a subject of study by both the media community and the community of teachers/student of media discourse has not been fully understood, as the authors of this paper perceive it.

## III. LITERATURE REVIEW

The field of ethnic media discourse study, especially the Turkic-language discourse of Siberia in the media, is limited in comparison with how widely political, international discourse and the discourse of the digital environment is studied, cf. the works of M.G. Shilina [17; 18] in particular, as well as many other researchers.

The result is a lack of recognized methods for researching ethnic discourse in media studies. The most that one can hope for in texts about media discourse and ethnic relations in it are, for example, references to the old works of T. Van Dijk, Ruth Wodak, references to "hate speech" and "political correctness".

In our case, even relatively timid questions about the subject of social network media discourse analysis are important, and through this we can go further - to the study of ethnic media discourse in them, to the technologies for studying texts and contexts in social networks and instant messengers.

In the journal "Modern Discourse Analysis" (Belgorod, NRU BSU) the article by E.V. Dyk, in which the social media discourse entities are considered [19] is presented. This can be considered an important step forward, but most certainly not exhaustive, since it does not provide samples of the social network text analysis which allow the capabilities of the proposed methods to be evaluated.

As I. V. Savelyeva states: "Internet commenting as a mass discursive action, as a set of texts united meaningfully (via discussing political news/articles) and formally (located in the "Comments" section on one / a series of articles

relating to the latest political event) is defined by us as unprofessional political discourse [emphasized by the authors A. M., T. M.]" [20]. Paraphrasing the researcher and continuing her idea, we can propose a separation of professional and non-professional content for the analysis of ethnic discourse on social networks. We mean here that we can clearly trace in the assessments, vocabulary, syntax, and most importantly, in the presumptions and intentions of text fragments, the assignment of texts to two categories: 1) generated by a "semi-official" and official Author, 2) generated by an unprofessional, "simple", unbiased Author.

In a number of cases, these two types of Authors interact with each other in quite a friendly manner, expressing concordant positions. However, there are situations where there are not only differences, but also irreconcilable contradictions. We are discussing Russian-language messages and, in general, Russian-language accounts and groups. What exactly can happen in multi-Turkic social networks has yet to be thoughtfully analyzed.

We have considered social media posts from August 31, 2022, to January 31, 2023, as an example to begin with. These posts are from communities on social networks that can be qualified as "official".

Azerbaijan Regional National and Cultural Autonomy of the Krasnoyarsk Territory (=ANKA_AMOR of the Krasnoyarsk Territory, https://vk.com/anka_amor_krasnoyarsk, 652 users) [21], Kazakh National and Cultural Autonomy "Ak zhaiyk" (https://vk.com/public211868475, 44 subscribers) [22], Kyrgyz National and Cultural Autonomy (https://vk.com/kyrgyzskayanka, 734 users) [23], Tatar National and Cultural Autonomy "YAR" (site address given www.yar24.ru, does not work) [24], Tuvan National and Cultural Autonomy "Bedik Sulde" (https://vk.com/public126855620, 980 subscribers) [25], Uzbek National and Cultural Autonomy "Humo" (https://vk.com/public191062360, 286 subscribers) [26], Khakass National and Cultural Autonomy "Khada" (https://vk.com/hada_20, 2632 users) [27], Yakut Regional Public Youth Organization "Aartyk" ("Istok") (https://vk.com/krsk_aartyk , 1267 users) [28], Chuvash National and Cultural Autonomy ("Autonomy Chuvash-Krasnoyarsk", https://vk.com/avtonomia1991 [29].

"Community of Dolgans of Taimyr - Turubul" is not included in the system of cultural and national autonomies united by the Friendship Centre of the Krasnoyarsk Territory communities, (https://vk.com/public212712571), Dolgan ethno-cultural community with only 6 subscribers. The reason may underlie in the specific geographical position of the Dolgans as a community in the north of the Krasnoyarsk Territory, where they live compactly on the Taimyr Peninsula, and feel relatively isolated among non-Turkic people as an ethnic group (Enets, Nganasans, Nenets, Evenks, and Russians).

In addition to the above, we considered messages in WhatsApp messenger chats - "Chuvash of the Krasnoyarsk Territory" (206 users), "Friends of the Krasnoyarsk ChNKA" (23 users).

The topics of discussion for 2021-2023 are very different: from coronavirus reports there is a sharp switch to the Russian Special Military Operation in Ukraine in early 2022.

In messages between August, 29 and October, 30, we observe only 26 topics, but the number of posts and topics in different communities varies dramatically: from one news to 45 posts for this period.

At the Siberian Historical Forum, the issue of the historical relationship of a number of ethnic groups, including the Turks of Asia, their current situation and culture, was specially considered. However, this topic was not reflected in the text messages of the communities, except for the Tuva NCA, and only because the Chairman of the Khural of the Republic of Tyva specifically noted this event on his page. The Chairman of the Supreme Khural of the Republic of Tuva Kan-Ool Davaa announces his meeting with the head of the national cultural autonomy of the Tuvans on the sites of the Siberian Historical Forum [in 2022 it was dedicated to the 200th anniversary of the Yenisei province] "Their work is multifaceted - they help students adapt, teach children the Tuvan language, hold national holidays and other cultural events for our co-residents..." [30, 14 Sept. 2022 at 23:18].

Another pressing topic is the "Asia-Siberia" Festival, with the Asia Siberia Krasnoyarsk community of 9689 users (https://vk.com/miss_asia_russia ).

Following in terms of the number of messages are posts about the performances of folk amateur groups, sports competitions, and the achievements of the "metropolis" (if these are non-autochthonous communities).

A significant place in the posts of the Yakuts, Tatars, Bashkirs, and Chuvashs is occupied by ethnic holidays such as Ysyakh, Sabantuy, Akatui, and Chukleme, days of national writing, memorable dates associated with national heroes, cultural figures, scientists and public figures.

Significant attention is given to official holidays (March, 8, May, 1, May, 9, June, 12, Flag Day, National Unity Day, New Year, Christmas, and Chinese New Year). At the same time, November, 4, the Day of National Unity, predictably enjoys the greatest popularity, when ethnic communities formally and informally demonstrate their unity.

Almost unique messages appear in the VK group of the Yakut NCA "Aartyk", namely "Let's get to know other communities?" [29, 20 Sept. at 16:40], which refers to the festival "In the name of strengthening peace and friendship of the ethnic communities of Russia", held by the Ethnic Friendship Center of the Siberian Federal University and the Council of National Youth Associations "Mir" of the Krasnoyarsk Territory.

A specific feature for a number of Krasnoyarsk communities is posting information about events in the context of interethnic relations in the region. For example, communities in "Odnoklassniki" and "VKontakte", "Typical Zelek" (= Zelenogorsk) https://ok.ru/tipzelek and https://vk.com/public33160704, where messages connected with interethnic cultural projects occasionally appear.

The work of the Ethnic Friendship Centre of the Krasnoyarsk Territory and its activity in communities in the social networks "VKontakte" (https://vk.com/ddn24) and "Odnoklassniki" (https://ok.ru/group/59643684585647) being biased cannot fully replace or supplement the interaction of ethnic communities and individual groups or individuals "horizontally".

## IV. CONCLUSIONS

Thus, we can observe the minimal use of new media in interethnic contacts and intercultural interaction, even within the Turkic-speaking community, which more often focus on individual events within communities than informing about interethnic and all-Turkic events and processes.

Apart from this, a number of Turkic-speaking communities of Siberia, in the Krasnoyarsk Territory do not perceive themselves as part of the Turkic Megaterritory. The Yenisei Siberia project, which has become known since 2016-2017 under the initiative of the Krasnoyarsk Territory Governor A. V. Uss, did not become the unifier of ethnic groups along the Yenisei, among which there are many Turkic-speaking communities.

New media, including instant messengers, are struggling to become platforms for consolidation of the Turkic-speaking mega-community in the Krasnoyarsk Territory, which can be extrapolated to other regions of Siberia (not only Eastern) and the regions of the Far East of the Russian Federation. If this occurs, it does not lead to explosive growth in the interest of subscribers, both quantitatively and qualitatively. The reasons for this situation also need to be studied based on the new media data.

The authors would like to highlight that the textual activity on social networks (topics, their content, intensions, and evaluation characteristics) corresponds (is isomorphic) in principle to the structure of the publicist content. We mean both the "high" journalism (saturated with philosophical understanding of the fate of a separate Turkic ethnos, and the common fate of the super-ethnos of Turks), and the journalism of periodical traditional mass media.

This means, in particular, that the creators of journalistic constructions do not bother to go beyond the limits of Turkic subjects, for example, they are not involved in the systematic interaction of the Slavs as a whole and the Russians in the Eurasian space with other cultures and nations. This phenomenon requires a separate discussion and analysis. In the near future, the authors of this article have a desire to analyze more thoroughly the works of Khakass, Tuvinian, and Yakut masters of words (among them the Khakass writer P.T. Shtygashev, Yakut publicist O.G. Sidorov, Tuvinian writer Kara-Kuske Chodu, and others).

Self-awareness of the common Turkic heritage and individual ethnic cultures, apparently, requires purposeful formation. It seems that the mediation of Russian culture and the maxim of acculturation and inculturation into the Russian supra-ethnic culture are not sufficient for the full functioning of national cultures and national self-awareness of the Turkic communities of Siberia. An alternative is the analysis of the centuries-old Turkic and Slavic interaction (as well as the mutual penetration of many other cultures and communities with a Slavic element).

One of the drivers of ethnic self-awareness may become an increase in the number of bloggers from the ethnic groups of Siberia, ethnically-active citizens. An ethnically-oriented, ethnically-mobilized interested journalistic community and an asset of "public correspondents" are able to stop the erosion of ethnic consciousness. All of this, therefore, should be supported by the state, educational institutions, and cultural organizations.

## REFERENCES

[1] Turkic communities of Siberia / chief. ed. D. A. Funk, N. A. Tomilov; Institute of Ethnology and Anthropology named after N.N. Miklukho-Maclay RAS; Omsk branch of the Institute of Archeology and Ethnography SB RAS. M.: Nauka, 2006. 678 p.

[2] Turkic ethnic groups of Eastern Siberia / V. A. Tishkov, S. V. Cheshko, L. I. Missonova [et.al.]; Institute of Ethnology and Anthropology. N.N. Miklouho-Maclay. M.: Nauka, 2008. 422 p.

[3] [3] Evmenova L.N. Ethnic cultures of the Yenisei region: monograph. Krasnoyarsk: Polikom, 2007. 256 p.

[4] Stupina T.V. Modern migration processes in cultural discourse (based on the materials of the Krasnoyarsk Territory): Abstract of the thesis. dis. ... cand. cultural studies. Ulan-Ude, 2017. 24 p.

[5] Somani Indira. Becoming American // Journal of International and Intercultural Communication February. 2010. № 3(1). Pp. 59-81. DOI:10.1080/17513050903428125.

[6] Stupina T.V., Antolinovskaya V.M. Culturological review of the interaction between the indigenous population and settlers in Siberia in the 18th century (based on the works of P.S. Pallas) // In the world of scientific discoveries. 2014. No. 5-1(53). pp. 268–275.

[7] Yadrintsev N.M. Siberia as a colony in geographical, ethnographic and historical terms. SPb.: Ed. I.M. Sibiryakova, 1892. 720 p.

[8] Siberia as a mega-region: parameters and goals: coll. monograph / under. ed. V.I. Suprun. Novosibirsk: Foundation for socio-prognostic research "Trends", 2018. 192 p.

[9] Klistorin V.I. "Siberia as a colony". Views of N. M. Yadrintsev on the problems and prospects of Siberia development // EKO. 2019. No. 1 (535). pp. 25–40.

[10] Dobrosklonskaya T.G. Medialinguistics: theory, methods, directions. Moscow: KDU "Dobrosvet", 2020. 178 p.

[11] Dobrosklonskaya T.G. Medialinguistics: current trends in the study of media speech // Bulletin of Moscow University. Series 19: Linguistics and Intercultural Communication. 2020. No. 4. P. 26–38.

[12] Vartanova E. L. Theory of media: domestic discourse. M.: Fac. magazine Moscow State University; Moscow un-ty publishing house, 2019. 224 p.

[13] Blokhin I.N., Alsalibi R.M.S. Ethnic media in the adaptation of immigrants in the Russian metropolis (on the example of St. Petersburg) // Mediascope. 2020. Issue. 1. URL: http://www.mediascope.ru/2598 (Accessed: 19.10.2022). DOI: 10.30547/mediascope.1.2020.2.

[14] Language and religion: abstracts of International scientific conf. (UrFU, September 15–17, 2021) / Chief ed. T.V. Itskovich. Yekaterinburg: "Azhur" Publishing House, 2021. 132 p.

[15] "Language and Religion": international conference at the Institute of Slavic Culture // Institute of Slavic Culture of the Russian State University named after A.N. Kosygin [official page VKontakte]. Oct 26 16:40. URL: https://vk.com/@iskrgu-yazyk-i-religiya-mezhdunarodnaya-konferenciya-proshla-v-inst (Accessed: 26.10.2022).

[16] Karasik V.I. Religious Discourse // Language Personality: Problems of Cultural Linguistics and Functional Semantics: collection of scientific papers Volgograd: Peremena, 1999, pp. 5–19.

[17] Shilina M.G., Kravchenko S.V. Internet as a factor of actual transformations of public relations models in the context of mediatization // Mediascope. 2021. Issue. 1. URL: http://www.mediascope.ru/2681 (Accessed: 26.10.2022).

[18] Shilina M.G. Blog as a resource of social Internet communications. Moscow University Journalism Bulletin. Ser. 10. 2007. No. 4. P. 18–24.

[19] Dyk E.V. Text analysis as a social media discourse entity // Modern discourse analysis. 2020. No. 2-1(26). pp. 88–94. URL: http://www.discourseanalysis.ru/ada26_1/st294.shtml (Accessed: 19.10.2022).

[20] Savelyeva I.V. Unprofessional political discourse: questions of modeling // Modern discourse analysis. 2022. No. 2(30). pp. 89–95. URL: https://elibrary.ru/download/elibrary_49564492_16239907.pdf (Accessed: 19.10.2022).

[21] Azerbaijan Regional National-Cultural Autonomy of the Krasnoyarsk Territory [official page VKontakte]. URL: https://vk.com/anka_amor_krasnoyarsk (Accessed: 26.10.2022).

[22] Kazakh National and Cultural Autonomy "Ak zhaiyk" [public organization, community in the social network "VKontakte"]. URL: https://vk.com/public211868475 (Accessed: 26.10.2022).

[23] Kyrgyz National and Cultural Autonomy [public organization, community in the social network "VKontakte"]. URL: https://vk.com/kyrgyzskayanka (Accessed: 26.10.2022).

[24] Tatar National and Cultural Autonomy "YAR" [official site].URL: www.yar24.ru (Accessed: 26.10.2022).

[25] Tuvan NCA "Bedik Sulde" [NGO, community in the social network "VKontakte"]. URL: https://vk.com/public126855620 (Accessed: 19.10.2022).

[26] Uzbek national-cultural autonomy "Humo" [official page VKontakte]. URL: https://vk.com/public191062360 (Accessed: 26.10.2022).

[27] Khakass National and Cultural Autonomy "Khada". [official page VKontakte]. URL: https://vk.com/hada_20 (Accessed: 26.10.2022).

[28] Chuvash National and Cultural Autonomy ("Autonomy Chuvash-Krasnoyarsk" [official page VKontakte]. URL: https://vk.com/avtonomia1991 (Accessed: 26.10.2022).

[29] Yakut Regional Public Youth Organization "Aartyk" [official page VKontakte]. URL: https://vk.com/krsk_aartyk (Accessed: 26.10.2022).

[30] Kan-Ool Davaa [Chairman of the Supreme Khural of the Republic of Tuva, social network account in VKontakte]. URL: https://vk.com/kdavaa (Accessed: 30.10.2022).

[31] Festival "Asia - Siberia", community "Asia Siberia Krasnoyarsk" [official page VKontakte]. URL: https://vk.com/miss_asia_russia (Accessed: 26.10.2022).

# Trends in Conflictive Communications between the Government and Society in the Digital Space

Ekaterina M. Enikeeva
*School of Journalism and Mass Communications*
*St Petersburg University, Saint Petersburg State University*
Saint-Petersburg, Russia
kat98@bk.ru

Anastasia V. Kulnazarova
*Department of Social and Political Sciences*
*The Bonch-Bruevich Saint-Petersburg State University of Telecommunications*
Saint-Petersburg, Russia
av-spn@ya.ru

Arturr I. Rafikov
*Department of Social and Political Sciences*
*The Bonch-Bruevich Saint-Petersburg State University of Telecommunications*
Saint-Petersburg, Russia
arturrafikov24@gmail.com

Denis V. Shutman
*Department of Social and Political Sciences*
*The Bonch-Bruevich Saint-Petersburg State University of Telecommunications*
Saint-Petersburg, Russia
denis_sh2@mail

*Abstract—* **The paper examines the trends in conflictive communications that have emerged in the process of mediatization of the society. It provides examples of strategies of conflict behavior in social media for government. The aim of the study is to identify trends in conflictive communications, as well as social problems that have arisen during the mediatization of the society. As empirical methods, the authors use "the stack method" described in the book "Not Obvious. How to Spot Trends Sooner Than Others" by a marketer and trend-spotter Rokhit Bkhargava. The study revealed the consequences of the transfer in government-society communications to the digital environment, including less control over information as well as spread of fake news. The study demonstrated that some trends can be identified in conflict communications in the government-society system, including the introduction of digital tools. The paper raises problems, the solution of which can have an impact not only on increasing citizen confidence, but also on the solution of acute social problems.**

*Keywords— conflictive communications, social media, government-society.*

## I. INTRODUCTION

The 21st century is characterized by significant quantitative and qualitative changes in the media field [1], which has led to mediatization of public life. This process includes transformation of the socio-political sphere in close intertwining with the media field. According to M. N. Grachev, mediatization provokes conflict situations and leads to an increase in the degree of conflictogenicity of the socio-political sphere [2].

The modern political and legal culture of the Russian Federation implies a "government-society" dialogue, which is confirmed by the launch of the "Open Government" project by the Russian government in 2014, aimed at a qualitative change in the level of information openness of the agencies, and the approval in 2019 of the national program "Digital Economy of the Russian Federation". The Digital Transformation program covers almost all spheres of society and involves the implementation of a number of major projects and initiatives, among which are:

- creation of a system of legal regulation of the digital economy, based on a flexible approach in each area, as well as the introduction of civil turnover based on digital technologies;

- creation of a global competitive infrastructure for data transmission, processing and storage based on domestic developments;

- ensuring the training of highly qualified personnel for the digital economy; The transfer of the dialogue to the digital space forms a new environment of conflictive communications;

- ensuring information security based on domestic developments in the transmission, processing and storage of data that guarantees the protection of the interests of the individual, business and the state;

- creation of "end-to-end" digital technologies mainly based on domestic developments, as well as the creation of a comprehensive system for financing projects for the development and (or) implementation of digital technologies and platform solutions, including venture capital

- financing and other development institutions;

- introduction of digital technologies and platform solutions in the areas of public administration and public services, including in the interests of the population and small and medium-sized businesses, including individual entrepreneurs [3].

The current level of Internet development and population coverage makes the World Wide Web a special factor in the social, economic, cultural and political development of both individual states and the entire globalized world. The Internet provides a free exchange of opinions between a large circle of people without the use of mass media. Popular bloggers become opinion leaders, I sometimes spread ideas that are not safe for society [4]. As A.V. Chugunov notes, under the influence of Internet technologies, the political information and communication system of modern society acquires new features. The Internet provides government institutions with opportunities for prompt consultation with the population, which, in turn, arouses the interest and activity of political participation of citizens [5].

The transformation of political communication on the Internet is primarily due to interactivity, the consequences of which are:

- building relationships with voters based on dialogue;

- mobilising and encouraging political commitment;

- systematic and reliable information about the activities of a political actor;
- facilitating discussion on the most important social and political issues and increasing participation in important discussions [6].

The transfer of the dialogue to the digital space forms a new environment of conflictive communications.

It was proposed to single out conflictive communications as a separate area of theoretical and applied research by A. N. Chumikov in his paper "Conflict communications in modern media".

L. N. Tsoy, Ph.D. in Sociology and Executive general manager of the Moscow School of Conflictology, defines conflictive communications as a clash of interests, needs, values and views, which is represented in speech communication and is a non-linear, naturally developing process [7].

In today's realities of mediatization of the society, new trends of conflictive communications in the government-society system are taking shape. Due to the fact that information openness of government bodies' activities has reached a new level (filling official websites with governing documents, maintaining social networks of almost all government bodies, interaction with users through the Internet, etc.) the number of platforms for conflicts has increased.

## II. Research

The study is built on the use of "the stack method" of a marketer and trend-spotter Rokhit Bkhargava described in the book "Not Obvious. How to Spot Trends Sooner Than Others". The stack method implies collecting stories and ideas and then identifying trends in them and giving them a generalized meaning. The method includes 5 stages: gathering information, grouping, refining, naming, and presenting evidence.

Gathering information involves finding and preserving a variety of ideas and stories in the course of interacting with people or materials in any form from a variety of sources.

Grouping means combining collected ideas and facts into common themes.

Refining of the trend consists in highlighting the key thoughts that connect different ideas, and the formulation of one, more general and clearly expressed idea or direction.

Naming for a trend involves a simple, concise and memorable description of the finished idea.

The final stage of the stack method is the presentation of evidence. This stage implies the presence of a sufficient number of examples and concrete research results to confirm that the idea really describes a phenomenon developing at an accelerating pace, which means that it can be considered a trend.

In the course of the study, we analyzed 86 news items published by Russian mass media. The pieces of news were selected by the feature of carrying the keywords "conflict", "government official", "politician", "social media", "deputy", and "scandal". The publications were grouped by topics of conflicts, the use of digital technologies in them, as well as by conflict resolution. In the next step, single pieces of news that could not be grouped according to the selected

parameters were excluded. In the following analysis of the news groups, common patterns and trends were identified.

The first trend can be associated with the fact that many government bodies, as well as officials, not only inform citizens about their activities, but also express their views on various situations, and this often provokes a conflict.

For example, in 2021, Andrei Agafonov, advisor to the head of the Krasnoyarsk Territory Governor's Administration, published a post on Facebook (banned in Russia), concerning the statements of Krasnoyarsk region residents who criticized figure skater Alexei Yagudin for noting that during his visit to Krasnoyarsk, which was covered with smoke from forest fires in Yakutia, he could not smell the smoke. The publication was as follows:

"I read the comments on Yagudin's Instagram, and it made me feel a little ashamed that I am also from Krasnoyarsk. How did people turn into this, this whining heap of shit? And how do they constantly live with this sense of permanent inferiority? <...> Special compliments to the fighters of the invisible front, who raised an entire generation of drama queens in the "black sky" mode. These are not Siberians, they are not Russians at all, they are some kind of whiny rabble" [8]. Soon, the post was removed. The governor's press service stated that Agafonov's statement was his personal business, so they refused to comment on the situation. However, after a large number of negative comments, the press service confirmed the importance of the air quality issue. They also assured that the authorities were taking measures to reduce harmful emissions into the atmosphere.

Thus, one publication in a social network led to a conflict between the citizens of Krasnoyarsk and a representative of authorities.

Here comes the following tendency: any conflictive communication in the media field leaves a digital footprint. Even the timely removal of provocative publications does not guarantee avoiding a conflict, because the public has time to see the deleted information quickly thanks to the functionality of social media (for example, notifications about new publications), as well as to make a screenshot of the message and distribute the information among users.

Another trend related to the removal of information is the possibility of moderation of social networks as a method of escaping from a conflict.

For example, in 2019, Saratov regional Duma deputy Nikolai Bondarenko removed the video from YouTube at the request of the Prosecutor General's Office because of extremist comments [9]. The video depicted a clash between police and protesters in Yekaterinburg against the ban on the construction of a temple on the site of a park.

Another example from 2022, when Health Minister Dmitry Beglov blocked a disgruntled resident of Kuzbass in social networks [10]. A pensioner and disabled woman of group II asked for help from the Minister in undergoing examinations by highly specialized doctors, but the comment was deleted, and the woman's profile was blocked. The press service commented that the profile could only be blocked due to violations of one or more rules of communication with D. Beglov, but the agency did not provide a more specific response.

As a result of such actions by moderators, government bodies face the problem of public distrust, because they create an impression that the residents' opinion is hidden,

complaints are hushed up, and the problematic situation is not resolved.

Hacking and attacks upon official pages on social networks, websites and other Internet resources is widespread. Hacking can become a tool to provoke conflicts. For example, when a deputy or official's page is hacked and a provocative post is published on his or her behalf, it may result in public dissatisfaction with the content of the post. Subsequent statements about the hacking often do not arouse public confidence. For example, in 2022 on Dmitry Medvedev's page, Deputy Chairman of the Security Council of the Russian Federation, a post was published claiming that some CIS countries owed their existence to the Russian Empire and were artificial states in their present form [11]. Later, the assistant of the deputy head of the Federation Council made a statement that Medvedev's account had been hacked. As a result, there was a lively discussion on social networks, with a significant number of users expressing their disbelief in the hacking claim. This trend poses a serious problem of that hacker attacks cannot be proved and consequences of this in the media space.

Among the current issues of contemporary media space is the widespread use of fakes. The media can distribute politicians' quotes or parts of the administration's decrees without a context, attributing to officials actions and statements that they did not commit. This entails misinformation. Society does not look for primary sources and reacts to the information broadcast by media. This can provoke a conflict, as, for example, in 2021 the media reported that during a meeting of the Federation Council Committee on Constitutional Legislation, Senator Lyudmila Narusova allegedly proposed introducing a law on the "inadmissibility of single-person protests" [23]. Media readers reacted harshly to this story, as it was perceived as an attack on freedom of speech. Later, Narusova gave an explanation to Gazeta.ru, where she called the message a fake, since the phrase was taken out of context. Then there was a video from the Federation Council, showing that Narusova condemned the protester's behavior calling upon putting Gorbachev on trial. Thus, the senator was able to prove that the phrase was used by the media without context, but the conflict situation had already been created.

The expansion of platforms for communication between the government and the society increases the number of topics raised in conflicts, this leads to the emergence of a trend to create conflictogens. For example, in the official group of the Government of St. Petersburg in the social networks the publication about decorating Leo Tolstoy Square with artistic illumination [23] provoked a conflict. There was condemnation of the Government activities in the field of improvement of social facilities (kindergartens and schools), because the budget spent on illumination could have been spent, in the commentators' opinion, on repairing schools. Thus, any topic of publication can lead to a conflict.

One of the most striking trends that have emerged during the digital transformation of the society is the introduction of Region Management Centers (RMCs), which are designed to monitor and process complaints from residents in different areas of the life of the region. The tool for obtaining this information is the Incident Management System, which collects and analyzes citizens' appeals and complaints in social networks (VKontakte, Odnoklassniki.ru, etc.) 24/7 in real time. All processed "signals" are sorted according to the topic of the issue and sent to the profile structure, which is obliged to process the "incident" within 24 hours, from the moment of its registration in the system [14]. Thus, under the publications of the Government of St. Petersburg in the social network VKontakte the responses from various committees to the residents' comments can be found. For example, under the post about preparing the Summer garden for winter and covering the sculptures with special fabrics, a city resident questioned the originality of the sculptures and the materials they were made from. Within a day he received a response from the St. Petersburg Culture Committee about the material composition and its fragility. The conflict was kept back. However, this system does not always contribute to solving social problems, but is used to analyze public moods and identify oppositional forces through Big Data [15].

## III. CONCLUSION

Thus, mediatization of the society has led to the emergence of several trends of conflictive communications in the political sphere that raise serious social issues. The avoidance of conflict through the removal of information leads to a decrease in citizen confidence. The expansion of platforms for dialogue with the government increases the number of conflictogens. The ability to obtain and publish information quickly leads to the spread of fake news and public disinformation and, subsequently, to the escalation of conflicts. The introduction of digital tools to respond to complaints from residents, on the one hand, can have the effect of reducing the conflict situation by solving a social problem, but on the other hand, in the absence of the purpose to eliminate the residents' difficulties, this system works as an analysis of public moods, as well as creating the appearance of operational activities of the government.

## REFERENCES

[1] A.N. Chumikov Konfliktnye kommunikatsii v mediynom pole // Kommunikologiya [Conflict communications in modern media // Communicology]. 2021. № 2. URL: https://cyberleninka.ru/article/n/konfliktnye-kommunikatsii-v-mediynom-pole (accessed 15 October 2022).

[2] M.N. Grachev Modelirovanie protsessa mediatizatsii politiki // Rossiyskaya piarologiya: trendy i drayvery [Modeling the process of the mediatization of politics // Russian PR: Trends and drivers]. 2021. № 11. P. 34-41.

[3] Passport of the national program "Digital Economy of the Russian Federation".URL: http://government.ru/info/35568 / (accessed 21.02.2023)

[4] A.V. Kulnazarova, .Digital transformation of public communications: Russian and European experience / A.V. Kulnazarova; SPbSUT, 2021 – 136 p.

[5] Akopov, G. L. Political Internet communications as an innovative factor of social development. Dis. ... Dr. polit. n. SPb. - 2013 – P.46

[6] T. Wierzbic, Political communication on the Internet as a new dimension of political rivalry / URL: http://yadda.icm.edu.pl/yadda/element/bwmeta1.element.desklight-1e3fff39-9951-4ec2-96c4-0240956bb514/c/Wierzbica-T.-Political-Communication-on-the-Internet-as-a-New-Dimension-of-Political-Rivarly.pdf (accessed 21.02.2023).

[7] L.N. Tsoi Konfliktologicheskaya kompetentsiya v kommunikatsii: teoriya i praktika // conflictmanagement.ru [Conflict competence in communication: theory and practice // conflictmanagement.ru]. 2022 (accessed 15 October 2022).

[8] Vlasti nazvali slova chinovnika o «noyushchey kuche der'ma» ego lichnym delom // rbc.ru. [Authorities called the official's words about the "whining heap of shit" his personal business // rbc.ru] 12 August 2021. URL: https://www.rbc.ru/society/12/08/2021/611501e59a7947e70deae64e (accessed 15 October 2022).

[9] Deputat Bondarenko udalil video po trebovaniyu Genprokuratury iz-za ekstremistskikh kommentariev // 4vsar.ru [Deputy Bondarenko removed the video at the request of the Prosecutor General's Office because of extremist comments // 4vsar.ru]. 31 May 2019. URL: https://www.4vsar.ru/news/119839.html (accessed 15 October 2022).

[10] Ministr zdravookhraneniya zablokiroval nedovol'nuyu zhitel'nitsu Kuzbassa v sotssetyakh: press-sluzhba poyasnila prichiny // ngs42.ru [The Minister of Health blocked a disgruntled resident of Kuzbass in social networks: the press service explained the reasons // ngs42.ru]. 16 August 2022. URL: https://ngs42.ru/text/health/2022/08/16/71573708/ (accessed 15 October 2022).

[11] Vinovnye budut nakazany. Medvedev vyskazalsya o vzlome svoey stranitsy vo «VKontakte» // fontanka.ru [The perpetrators will be punished. Medvedev spoke out about hacking of his VKontakte page // fontanka.ru]. 04 August 2022. URL: https://www.fontanka.ru/2022/08/04/71542967/ (accessed 15 October 2022).

[12] Narusova: slova pro "bomzhovogo vida lyudey" i pikety vyrvali iz konteksta. Ob etom soobshchaet "Rambler" // news.rambler.ru [Narusova: words about "homeless-looking people" and pickets were taken out of context, as Rambler reports // news.rambler.ru]. 03 March 2022. URL: https://news.rambler.ru/politics/45933426/?utm_content=news_media &utm_medium=read_more&utm_source=copylink (accessed 15 October 2022).

[13] V Letnem sadu nachalas' podgotovka k kholodam // vk.com [Preparations for cold weather have begun in the Summer Garden // vk.com]. 23 October 2022. URL: https://vk.com/spb?w=wall-25882042_872084 (accessed 23 October 2022).

[14] E.M. Enikeeva "Intsident-menedzhment" kak sredstvo formirovaniya doveriya k pravitel'stvu Rossii // Global'nye i regional'nye kommunikatsii: nastoyashchee i budushchee ["Incident management" as a means of building trust to the Russian government // Global and Regional Communications: Present and Future]. 2020. P.69-72.

[15] V.A. Achkasova Mediatizirovannyy konflikt: osobennosti i politicheskie sledstviya // Konfliktnoe pole publichnoy politiki. Opyt, uroki i perspektivy sovremennogo rossiyskogo obshchestva [Mediatized conflict: peculiarities and political implications // The conflict field of public policy. Experience, lessons and prospects of contemporary Russian society]. Moscow, Argamak-Media, 2022. 336 p. (P. 204-213)

# Typology of Risks in the Field of Higher Education: Crisis "Harassment" in the Digital Communication Field of Universities

Aleksandra V. Zakharova
*Faculty of Humanities,*
*Novosibirsk State Technical University,*
Novosibirsk, Russia
sah31zah@mail.ru

Elena Yu. Karmalova
*Department of Communication Technologies and Public Relations*
*Sankt-Peterburg State University of Economics,*
Sankt-Peterburg, Russia
elen.ka05@mail.ru

*Abstract* – **The study is devoted to the digital crisis communications of the university, the most frequent risk in higher education. The following risk aspects and directions are designated as the most frequent: "activities of the university/institute management", "university marketing", "development of educational programs", "admission of students", "implementation of basic educational programs" and "educational and extracurricular work with students". The main target groups of the public for reducing these risks and identifying strategies for responding to the crisis have been identified. The main research methods are typological and structural-typological. An information audit was used to analyze the empirical material in the information field of specific basic subjects. As the main conclusions, strategies for overcoming the crisis for such a risk as harassment are outlined, and anti-crisis and post-crisis programs for implementation in the digital environment are proposed.**

*Keywords— Crisis, Anti-crisis Communications, Typology of Crises, Information Audit, risks in higher education in Russia, harassment. anti-crisis strategy, digital communication*

## I. INTRODUCTION

Today, there are two main approaches to the study of crises, including in the field of education: from the point of view of risks in anti-crisis management (risk management) and from the point of view of crises themselves in anti-crisis public relations. At the end of the 20th century, crisis management acquired the features of an academic discipline, and the theoretical apparatus and methodological core of science developed. This process continues at the present time, when the author of a particular concept of crisis management focuses on the author's vision of the causes, manifestations, and finality of the crisis. This explains the many definitions of crisis/risk and crisis management technologies, which are defined by the general idea of counteracting events that threaten the existence of the organization. Anti-crisis PR as part of crisis management is still not designated in many studies as an obligatory component of the latter.

Based on the generalization of various approaches, we adhere to the following content of the definition: A crisis is a situation that is characterized by a disruption in the life of an enterprise and, in the absence of opposition, can lead to its death. This situation can arise at any stage of the company's or brand's life cycle.

At the same time, as S.M. Emelyanov writes, "In the National Standards of the Russian Federation, risk is defined as the impact of uncertainty on the achievement of the goal. Nevertheless, an analysis of the literature on the problem under consideration shows that there is no unambiguous interpretation of the concept of "risk". In the context of the stated topic, we define risk as the probability of events caused by external and internal factors that lead to the emergence of threats to the implementation of the organization's strategic goals [1: 9]. On the one hand, the concepts of "risk" and "crisis" are synonymized by researchers in some contexts, and in others they are divorced from the point of view of the "real" and "potential" dichotomy.

There is also no clarity in the classifications and typologies of risks and crises. S. M. Emelyanov summarizes that today there is no unambiguous approach to the classification of risks. Many authors proceed from the main types of activity, highlighting technological risks in the technical sphere of activity and commercial, financial, and other risks in the business sphere. He himself writes about the risks in the field of PR, which are "associated with the loss of publicity capital and are in themselves intangible" [1: 22–23]. It still seems strange to us to differentiate risks by areas of activity, as if, for example, an IT company cannot have reputational or financial risks that are not inherent in them.

As for the classifications of crises, in the foreign scientific literature we will find a sufficient number of typologies based on various criteria. These are, first of all, English-language studies by S. Black [2], D. Newsom, A. Scott J. Turk [3]; R. Wilmer, T. Sellnau, and M. Seeger [4]; O. Lerbinger [5]; and T. Coombs [6]. In Russian-language studies, we are close to the position of D.P. Gavra and E.V. Bykova, who differentiate crises by spheres and sectors of business and economy depending on industry risks and the composition of stakeholders, thereby determining the characteristics of the response to the crisis in each area [7]. In a study on the typology of crises in the field of education, we identified the types of crises that are based on a specific problem or action: harassment, harassment, political persecution, shutting, corruption, bullying, and mass poisoning [8: 38–42].

Risks in the field of education are quite stereotyped. If we summarize the essence of the relevant publications, we can designate the following:

1. Objective risks (natural phenomena, technical risks, epidemics, pandemics, wars, etc.), as well as fires, floods, and other excesses, which may adversely affect the work of the university;

2. political and socio-political changes (in the social system, forms of ownership, laws, land use, pricing, taxation, etc.);

3. market risk (market conditions, complications with equipment, changes in exchange rates and off-design inflation, changes in the requirements of students, university staff and applicants, etc.);

4. mistakes and miscalculations in the development of educational and other projects (lack of time due to unrealistic planning, lack of labor, specialists, materials, etc.);

5. disruption of work plans (weak management, unexpected replacement of management, unqualified personnel (teaching staff and other employees of the university), strikes, disruptions in the supply of materials and components, etc.);

6. crimes (terrorism, sabotage, theft, vandalism, etc.).

Or, rather, risky areas of functioning, rather than types: "activities of the university or institute management", "university marketing", "development of educational programs", "student admission", "implementation of basic educational programs" and "educational and extracurricular work with students," which deprives the risks of specific issues [9: 27–32].

At the same time, the study of crisis situations in the field of education, in addition to theoretical generalizations, is just beginning. We consider it necessary to determine for the basic subjects of potential crises in the field of education the target groups of the public, the desired communication strategies for behavior, and the strategies for overcoming the crisis, using the example of specific cases of crisis situations that have arisen over the past 5 years, to see how the crisis was realized and leveled in digital and physical reality, and to offer anti-crisis and post-crisis tools specifically for the presented type of crisis. In this publication, we will designate all these aspects as "harassment" crises.

II. RESEARCH

The data collection method was an information audit, which made it possible to analyze the dynamics of the "harassment" crisis in the field of education for those basic subjects whose situations received the strongest response in the digital environment. In addition to collecting empirical material with the help of an information audit, we used a typological analysis and a modeling method with the following algorithm: a) target groups of the public of the basic subject; b) his chosen strategy for responding to the crisis; c) a desirable strategy, if it does not coincide with the one actually implemented (consciously or spontaneously); d) anti-crisis action tools that were and/or were not implemented in a crisis communication situation; e) the necessary post-crisis actions of the basic subject.

During the indicated period, a lot of crisis situations related to harassment were presented in the digital environment, but in the field of education, two became the most resonant in terms of the scale of the information field.

Moscow State University and the case of Professor Knyazev (May 2020)

The analysis of the information field was carried out for January–November 2020 using the Medialogy system. A total of 366 messages were found with the context "harassment, harassment, university, university."

TOP-10 informational occasions (by media index)

1. The lawyers of a Moscow State University student who accused a teacher of harassment demand his dismissal.

2. "He asked to get a candy out of his pocket": students told the incredible story of the teachers at Moscow State University.

3. The Ministry of Education and Science responded to a letter from Moscow State University students about harassment.

4. One of the girls who spoke about harassment at Moscow State University retracted her words.

5. Scandal with harassment at Moscow State University: student Masha Loboiko about its consequences

6. Professor Knyazev of Moscow State University admitted to having relations with university students.

7. A professor of philology at Moscow State University resigned after a scandal about sexual harassment.

8. A student at Moscow State University spoke about harassment by the head of the department.

9. How Moscow State University was declared a nest of debauchery

10. The Ministry of Education and Science responded to an open letter from Moscow State University students about harassment.
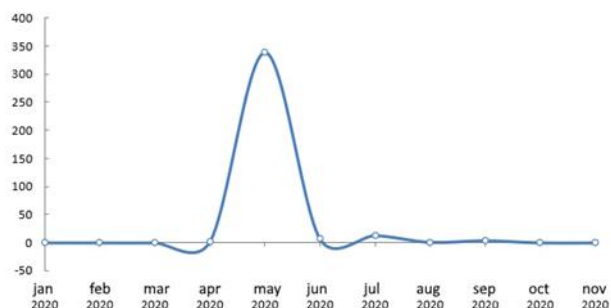


Fig. 1.   Mention dynamics
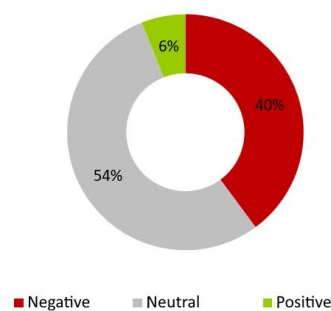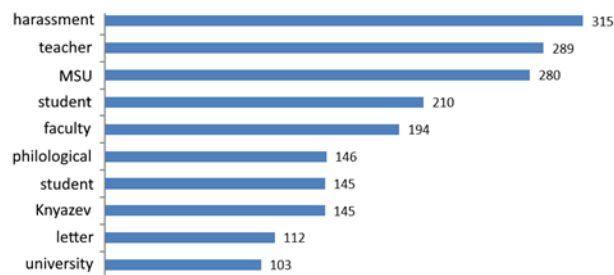


Fig. 2.   The tone of publications



Fig. 3.   Mention by word

As we can see in the list of informational reasons, the situation with harassment towards female students by the professor of the Faculty of Philology, S. Knyazev, not only received fairly wide publicity in the digital environment but also led to his dismissal. And here there is just such a correlation: informational resonance and the dismissal of one's own free will. The anti-crisis communication strategy and tools chosen by the university will be discussed further.

Subject "Russian State Pedagogical University. Herzen" is represented by two cases: a politician and, at some point, a teacher at the Russian State Pedagogical University, Boris Vishnevsky (2019), and a philologist, as well as a political colleague of the first Alexander Kobrinsky (2020, 2021). In the second case, it was the appeal to the court of the person involved in the accusation of harassment and the court decision on slandering journalists in relation to Mr. Kobrinsky that received the greatest resonance in the digital environment. Therefore, more messages (78) are devoted to this.

The analysis of publications for the first case was carried out for a year, from May 2019 to May 2020. A total of 559 messages were identified, with a maximum of 498 in November 2020.

Top 10 informational occasions

1. The head of the Patriot media group explained who actually destroyed Vishnevsky's reputation.

2. A. I. Herzen RSPU is studying the signals in the media about the harassment of Vishnevsky.

3. The complaint of female students about the harassment of Deputy Vishnevsky can reach the Ministry of Education and Science and the Ministry of Internal Affairs.

4. Vishnevsky: a lustful teacher and a destructive politician?

5. Vishnevsky's victims must prevent the repetition of the story of the murderer Sokolov.

6. The State Duma and the Federation Council spoke about measures to protect students from harassment by teachers.

7. Vishnevsky uses connections within Herzen University to protect himself from a sex scandal.

8. The opposition media are promoting an information campaign in defense of Vishnevsky, according to one manual.

9. The Herzen Russian State Pedagogical University confirmed the loss of the post of teacher by Vishnevsky.

10. A well-known femme activist supported the girls who complained about Vishnevsky's harassment.
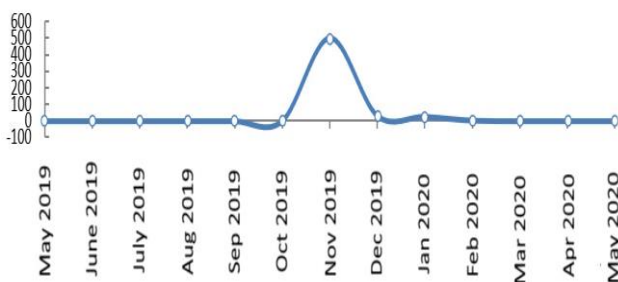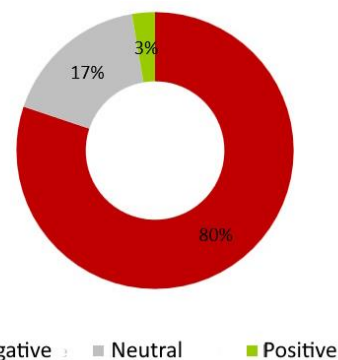
Fig. 5.   The tone of publications
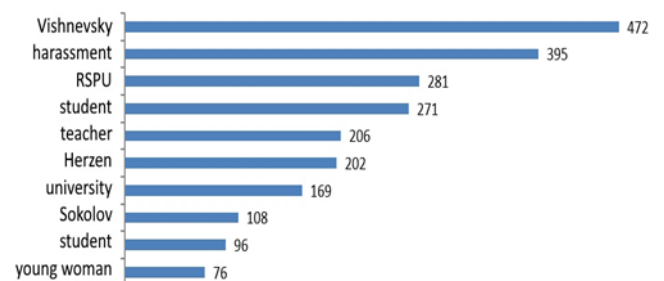
Fig. 6.       Mentions by word

### Case "Alexander Kobrinsky"

Top news stories in 2020 (by media index and reach)

1. "The Kholod" edition published an investigation about the St. Petersburg 53-year-old professor Alexander Kobrinsky and the St. Petersburg Summer School on Russian literature.

2. Brilliant professor. Students accuse Alexander Kobrinsky of unethical behavior and harassment.

3. In RSPU them. Herzen decides the fate of another perverted professor Alexander Kobrinsky

Top news stories in 2021 (by media index and reach)

1. A court in St. Petersburg ordered the Kholod journalist to pay 300,000 to former deputy Kobrinsky because of a text about harassment of female students.

2. Former Russian State Pedagogical University Professor Kobrinsky filed a lawsuit against the Higher School of Economics and Kholod because of a material about harassment of female students

3. Philologist Kobrinsky, accused of harassment, wrote a statement to the police against a Republic journalist

4. Vishnevsky: Kobrinsky's criticism was not the main reason for Yabloko's exclusion from the party

5. How the "BDSM professor" from "Yabloko" whipped students, politicians and journalists

Fig. 4.   Mention dynamics
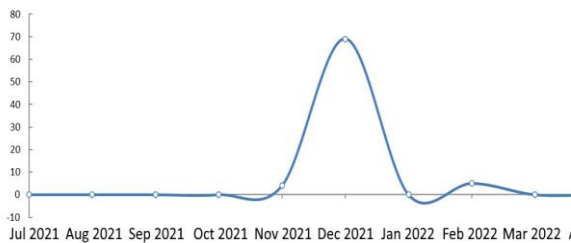
Fig. 7.   Message dynamics

Note that the first event had a very small response (the resonant article was published on November 18, 2020), then there was an information silence until the summer. The largest number of mentions came in August 2021, when messages appeared in the information field about the lawsuits of Y. Kobrinsky against journalists who wrote about the event in 2020. A note on Kholod was published in November 2020, and a year earlier, Alexander Kobrinsky resigned from the Russian State Pedagogical University. Herzen because of anonymous statements received by the management from alleged students about his obscene behavior. Mr. Kobrinsky filed a lawsuit against Kholod and Narodny Novosti in December 2020.
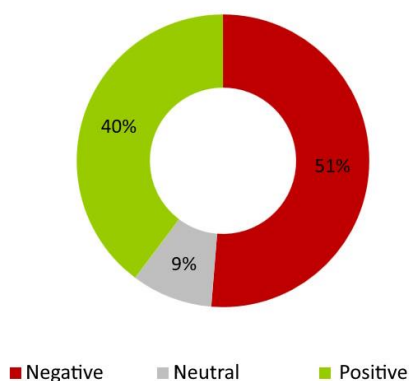


Fig. 8.   The tone of publications
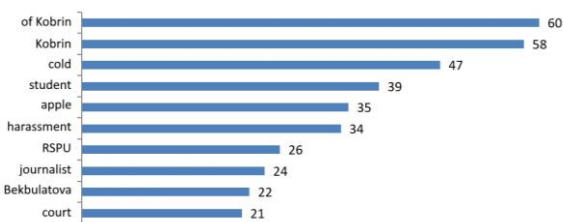


Fig. 9.   Mentions by word

Conclusions that can be drawn from the results of the information audit:

1. In the modern digital environment, any relatively public person (in this case, politicians to a greater extent, teachers to a lesser extent) must be prepared for a reputational crisis and have an algorithm for getting out of it, like those basic subjects, organizations, or parties with which they are affiliated.

2. On the one hand, the topic of harassment became mainstream at a certain moment, but due to the specifics of Russian society, it does not have the same destructive reputational weight as in Europe and the USA. That is why, as it seems to us, the "harassment" crisis does not receive that

level of information in the Russian media. In two out of three cases, we see that the possible culprit of the crisis quits of his own free will, and only in one is he fired.

3. Accurate statistics on harassment in Russian society are not provided, since it is very difficult to determine the actual number of "victims", given that they rarely speak openly about what happened to them, and those who do speak are not always so. But from time to time, high-profile scandals pop up in the information field, which, we repeat, do not have any destructive reputational effect.

4. As a result, the situation remains either within the content of social media or in publications with small coverage and a low media index, since harassment is a peripheral topic for Russian media if the person involved in it does not have a serious public status (and even if it does, as it was, for example, in the situation with State Duma deputy B. Slutsky). At the same time, we are considering here undoubtedly personal cases, and we cannot measure and reflect the impact of this crisis on the reputation of structures affiliated with them at all.

Let's designate the main target groups of the public of universities as PR subjects:

Domestic public: students, faculty, and other employees of the university, university management.

External public: applicants, their relatives; parents (guardians) of students; government departments; media; and partner organizations (research centers, potential employers for students, sponsoring companies, etc.). In the type of crisis presented, others are also interested, which is not typical for the community as a whole: the public, following the agenda of harassment and actively discussing high-profile cases; law enforcement officers responding to the most resonant cases of harassment; representatives of predominantly non-state media writing on topics of the social agenda, focusing public attention on cases of harassment.

If we talk about communication anti-crisis strategies that can be used in these crisis situations, then judging by the results of the information audit of Moscow State University in the case with Knyazev, he basically (apparently unconsciously) chose the strategy of absence or distancing, which in anti-crisis PR is often called the "ostrich position ". The same strategy was broadcast by the Russian State Pedagogical University in the case with Kobrinsky, especially since the professor had already resigned from the university by that time. But in the case with Vishnevsky, the basic subject carried out or imitated the implementation of the strategy of acceptance and adaptation, that is, he indicated that this could be, conducted an investigation, and in the end, as a result of the investigation, declared that nothing had happened.

It seems to us that in a crisis situation of this type, these strategies are the most appropriate. "Absence" and "distancing" only indicate that the basic subject does not interact with his public groups, and, with a certain number of precedents, this can affect his reputation. As we wrote above, undoubtedly, this type of crisis in modern Russian society is not destructive for the reputation of the university as a whole, but with a certain set of factors for a basic subject on a smaller scale than Moscow State University and RSPU, such cases can be critical. At the same time, in any case, a constant reputational audit is required in the communication support of the activities of the university, including an analysis of the impact on its reputation of crisis situations involving its individual representatives.

What crisis communication tools were used by the PR subjects we analyzed in these crisis situations? As we have already said, the only case that allows us to analyze the communication tools used by the subject is the case with Vishnevsky [10, 165-168]. Of the possible outcomes in this type of crisis, the university (conditionally, based on what got into publications in the media) applied such measures as an internal investigation (a survey of students and employees), resolving the issue of dismissal. It is difficult to say how much this is enough due to the specifics of the crisis (its intimacy and closeness).

What other tools should be, in our opinion, at least applied in this case:

- collection of documented violations,

- apologizing (the format is possible from a press conference to a personal meeting of the management with the victims),

- assistance to victims, especially psychological.

It is interesting that in the absence of anti-crisis actions of the basic subject in the situation with Kobrinsky, information about such actions is posted on the Internet in the St. Petersburg branch of the Yabloko party. The working group met with the author of the material and the "affected" girls. The authors of the report stated that they could not refute the information in the Kholod article and could not find any reason to consider the information provided by the girls to be false. Party representatives propose to work out the mechanisms of internal culture in the party. In particular, they recommend adopting a document banning "rudeness, rudeness, swearing or harassment when communicating with party colleagues", holding events within the party on corporate ethics, and "creating or improving existing infrastructure (for example, an ethics commission)" [11].

As the practical experience of the authors of the article shows, among other things, the algorithm of anti-crisis actions in the basic subjects in the field of education is absent in almost any type of crisis. Therefore, today it is necessary to both form this algorithm, implement it, work it out, and offer post-crisis action tools for such a crisis as "harassment/harassment". Some of the tools we offer were identified at a brainstorming session in November 2022 by students, and to a greater extent by students of the specialty "Advertising and Public Relations" at St. Petersburg State University of Economics, who are one of the parties potentially involved in this crisis.

1. Determination of an authorized person at the university level who controls the inappropriate behavior of students and staff / teachers, including sexual harassment.

2. Adoption at the university of rules (code, etc.) prohibiting improper behavior of all potentially possible parties to the crisis.

3. An anonymous social media poll about the experience of suffering from harassment.

4. A psychiatric commission for teachers, which would also take into account inclinations towards harassment (and after the case of 2019 with Associate Professor Sokolov, this was updated).

5. Provision by the university of free psychological assistance to students, including in situations of harassment.

6. Providing special treatment for the victim, for example, a different schedule of classes and a change of teacher, if she depends on him.

7. Creation of a confidential communication channel so that victims can report what happened.

8. The session and exams can be taken with two teachers (one is an observer, the other is an examiner) in order to avoid any separate ways of passing.

9. Create an office for a "student", where he can talk about his problems without worry and fear, including harassment by teachers, since this is often hushed up for fear of getting additional problems in their studies.

10. Creating guides: how to behave if you encounter a problem, where to go, etc.

11. To improve the system of countering harassment, invite a psychotherapist who works with cases of harassment.

12. Work for future generations: creating animated informational content for children "It's impossible", attracting children's opinion leaders, telling through them and interesting content what harassment is; creation of social advertising.

## III. CONCLUSION

Our study allowed us to identify target groups of the public, communication strategies, and communication tools for anti-crisis and post-crisis responses to this type of crisis for the sphere, primarily higher education, as "harassment/harassment". An analysis of the most notable cases in the Russian digital environment over the past five years has shown that there is usually no conscious anti-crisis response to events on the part of universities; mainly the strategy of absence or distancing is used, implying the absence of any actions on the part of the basic subject. This, in our opinion, is also due to the fact that this type of crisis is not perceived in modern Russian society as something serious that significantly affects reputation. In addition, the correlation between the reputational crisis of the company's hotel employees and the reputation of the company as a whole has not yet been established, despite the obvious desire to postulate their relationship as a sum or totality.

The difficulty of this study lies, in our opinion, not only in the fact that the "harassment" crisis is not given as much importance in reputation management as it could at the present time, but also in the secrecy of information, often its anonymity, and sometimes its unreliability. It is difficult to say what the vector of further development of the Russian society in this direction will be, but our further research is related to the most frequent types of crises in the educational environment and the technologies and tools to overcome them.

## REFERENCES

[1] Emelyanov S.M. Upravlenie riskami i krizisnymi kommunikaciyami v svyazyah s obshestvennostyu: uchebnik i praktikum [Risk management and crisis communications in public relations: textbook and workshop] / S.M. Emelyanov, – SPb.: Izd-vo SPbKETU (LETI), 2022. – S. 22-23. (in Russian)

[2] Blek S. Pablik rilejshnz. Chto eto takoe? / Per. s angl. [Public relations. What it is]– M.: MT Press, 2003. (in Russian)

[3] Nyusom D., Skott A., Turk Dzh. Eto PR. Realii pablik rilejshnz. [PR. Realii public relations]. M., 2007. 590p. (in Russian)

[4] Uilmer, R., Sellnau, T., Sidzher, M. Effektivnaya krizisnaya kommunikaciya: ot krizisa k vozmozhnosti [Effective Crisis Communication: From Crisis to Opportunity] – H.: Izd-vo Gumanitarnyj centr, 2011. - PP. 25-26.

[5] Lerbinger O. The crisis manager. – Routledge, 2012. P. 30–33.

[6] Coombs. T. Ongoing crisis communication. Planning, managing, and responding. Thousand Oaks: Sage Publications, 2007. P.64-66.

[7] Gavra D.P., Bykova E.V. Krizisnye kommunikacii v stroitelnom biznese: bazovye principy i prikladnye aspekty in Rossijskaya shkola svyazej s obshestvennostyu [Crisis Communications in the Construction Business: Basic Principles and Applied Aspects in Russian School of Public Relations]. 2016. - T. 8. - S. 102. (in Russian).

[8] Zakharova A. V. Crisis Communications in Education: a Typology of potential Crises / A. V. Zakharova, E. Y. Karmalova, A. D. Krivonosov. - DOI 10.1109/ComSDS55328.2022.9769163. - Text : direct // Proceedings of the 2022 Communication Strategies in Digital Society Seminar (2022 ComSDS), St. Petersburg, 13 Apr. 2022. - St. Petersburg : IEEE, 2022. – P. 38-42.

[9] Agarkov G. A., Sukhikh V. S., Bessonov D. A., Yurieva L. V. Features of building a risk management system in federal universities of the Russian Federation // University management: practice and analysis. No. 6 (100) 2015. P. 109-117.

[10] Zakharova A.V., Karmalova E.Y. Krizisnye kommunikacii v cifrovoj srede i reputaciya vuza (na primere kejsov RGPU im. Gercena, svyazannyh s harassmentom) // Kommunikacii v usloviyah cifrovoj transformacii : sbornik materialov VI Mezhdunarodnoj nauchno-prakticheskoj konferencii [Crisis communications in the digital environment and the reputation of the university (on the example of cases of the Herzen State Pedagogical University related to harassment) // Communications in the conditions of digital transformation : a collection of materials of the VI International Scientific and Practical Conference. St. Petersburg, November 29-30, 2022] / edited by prof. A.D. Krivonosov. – St. Petersburg : Publishing House of Spbsetu, 2022. C.165-168. (in Russian)

[11] Doklad rabochej gruppy po ocenke i verifikacii stati «Blistatelnyj professor» v otnoshenii A.A. Kobrinskogo i po situacii, slozhivshejsya i po situacii, slozhivshejsya v SPb RO «Yabloko» posle dannoj publikacii // Doklad: annaboevaa — ZhZh (livejournal.com) 9 iyunya 2021 g.) [Report of the working group on the evaluation and verification of the article "The Brilliant Professor" in relation to A.A. Kobrinsky and on the situation that has developed and on the situation that has developed in St. Petersburg RO "Yabloko" after this publication // Report: annaboevaa — LJ (livejournal.com ) June 9, 2021] (in Russian)

# Web 3.0 Credibility: Principles for Ranking Media Sources

Alexey V. Gorodishchev
*Department of Modern Languages and Communication*
*National University of Science and Technology "MISIS"*
Moscow, Russian Federation
ORCID 0000-0003-2224-3794

Anna N.Gorodishcheva
*Department of Advertising and Cultural Studies*
*Reshetnev Siberian State University of Science and Technology*
Krasnoyarsk, Russian Federation
ORCID 0000-0003-4330-2802

Dana O. Baigozhina
*Department of Teleradio and Public Relations, Journalism and Political Science*
*L.N. Gumilyov Eurasian National University*
Astana, Kazakhstan
ORCID 0000-0003-3329-4589

Georgy P. Kovalev
*Department of Aircraft*
*Reshetnev Siberian State University of Science and Technology*
Krasnoyarsk, Russian Federation
email georg1n19@yahoo.com

*Abstract*—**The search for reliable sources during the analysis, preparation and decision-making on the information publication has become resource-intensive with the evolution of the digital era. The proposed automated fact and partial distortion, forgery, falsification checking systems have low scores of accuracy and explain ability applied to social media. Involving people in the verification makes the process more accurate, but leads to delays. Automatic ranking framework of search engines is based on the parameters of reputation, image, information release time, consistency, without taking into account the role of the primary source and its attributes. In the course of the study, we show that work on AI is far from complete and human intervention is necessary at all levels of training, since automatically collected parameters and data are not enough at the current stage of AI development.**

*Keywords—credibility, the information theory, media ranking, factchecking, digital verification, digital ethics, explainability*

## I. INTRODUCTION

With the advent of the era of digitalization and the growing influence of the Internet, the speed of news dissemination and the availability of information have increased dramatically, which has given rise to the problem of selecting the necessary information for publication. The problem is faced not only by journalists or the media, but also by bloggers, advertisers, marketing and PR specialists. Information chaos has destroyed traditional business models of information processing, provoked distrust in the media, and made author sites, the blogosphere, "people's encyclopedias" (such as Wikipedia), and, more recently, artificial intelligence as the main news generator, the main source of information. Traditional options for quality news checking have given way to instant feed, viral reposting, and painstaking sampling of scandalous, sensational, and catastrophic information [1].

The search and verification of information has turned into a certain quest, in which the one who has time to quickly check and present high-quality material will become the opinion leader. However, validation is not always a validation test. Recently, this has also been a check for compliance with propaganda, marketing scenarios, or simply emotional warm-up technologies. Therefore, the concept of information reliability acquires new facets and shades that require research in the light of new digital realities. To improve the accuracy of AI interpretation of data, individuals will intervene in the AI development vector by performing deep cleaning and elaboration of the existing data in the global information space. The success of this intervention will be measured by the improvement in the accuracy of AI interpretation of data, as evidenced by a decrease in the number of incorrect or unreliable outputs. The intervention is achievable through the collaboration of individuals with expertise in data cleaning and elaboration and AI developers. The accuracy of AI interpretation of data is crucial for the reliability of AI outputs and their impact on various fields, such as healthcare, finance, and education.

## II. METHOD

The data in this study consisted of qualitative data obtained through observation and supported by literature studies. The data collection method is described as follows. Qualitative data were collected through observation. Observations were made on related social media (VK, Meta, WeChat, Telegram), newsletter, magazines websites, news aggregators (using feedspot, pressgazette, apple, ipsos ranking lists, allsides media bias lists), search engines servers (Google, Yahoo, Yandex, Bing). The literature study was conducted by searching for references from books and journals related to this research. Also, we use automated data collection methods for receiving additional data for the research.

## III. DISCUSION

In dictionaries, the term "reliable" is interpreted as corresponding to reality, accurate, authentic. Reliability is the correspondence of information to reality, the absence of direct lies or silence about important details. From a philosophical point of view, reliability is a form of existence of truth, justified in some way (for example, by experiment, logical proof). Objectivity is the independence and balance of the presentation of information, the absence of bias or external influence in a journalist or publication. The publication will be reliable and objective if it adequately reflects the most important elements of reality and the essential interrelationships of facts [2]. The reliability of information can also be judged based on the characteristics of the source of that information. If he is trusted, then they trust the information he provides, and therefore accept this information as reliable [3]. At the same time, "independence from default" or "outright lies" have become from subjective to objective aspects of information. The freedom of action of the author is reflected in the ability to appear "objective/biased, true/false, honest/dishonest,

responsible/irresponsible, etc." according to the principle of reliability, it is necessary to single out ideal characteristics in information - factuality, objectivity and neutrality, as well as characteristics of the external information field - political or marketing bias, sensationalism, clickbait, etc. Such an attitude towards information is characteristic of traditional journalistic technologies for evaluating information, but is not accepted neither for bloggers nor for readers. The advent of new generation information services has seriously changed the principles of information evaluation. The search engine results began to be perceived as the hierarchy of information most relevant to the request in terms of reliability. And if you need to find something, then both the creator of information and its consumer work together, because the consumer (reader) endows the information with their own meanings and lets it into the network with new content: "in various communicative situations, the degree of reliability varies from reflecting reality in a modified form, simplified to false, distorting factual information " [2].

Speaking about the adequacy of the work of search engines and their readiness for web 3.0, we can only talk about partial compliance with realities. Since we have witnessed a partial or complete adaptation of search engines to the opinion of users. The examples we can see both at Google in Search engine evaluator instruction 2022 [4] and Microsoft [5] before buying ChatGPT, used the Letor dataset [5]. What if, in another case, the search also included the work of the Search engine evaluator, which analyzed the pages in the search results and ranked them according to the task, query match, region, language, the ability to provide results in several languages, etc. Nevertheless, the main parameter of the relevance of the request to the issuance remains open even now, datasets are created for various purposes, which in the future it will be possible to give for training neural networks [6]. It should be borne in mind that modern search engines also provide information based on behavioral models [7]. After the user selects, the page ranking and their ranking change.

Moreover, the system automatically assigns the rank of "reliability" of the resource depending on the time of existence, user reviews, but it does not analyze the source of information and, as a result, Wikipedia is now considered one of the most authoritative sources, although it is a publicly accessible resource for change [8].

Nevertheless, it is the ability to influence the relevance of the issuance and control over the information flow on the part of the user that are the main criteria for entering the era of Web 3.0 and higher versions. At the moment, users determine the reliability of information, focusing solely on the algorithms of issuance in the search engine, which still depend more on site and content optimization, i.e., we still get that the sites that are best optimized for the car get into the top of trust, bypassing the original source of information [9].

To prove this hypothesis, it is enough to look at the instructions for the search quality evaluator, which clearly states that a person must choose the purpose of the web page and its relevance to the purpose, and only after that evaluate how much this page can harm, even potential harm to a person directly or indirectly [4].

Where the point is extremely important for our research: "The topic could cause harm if the content is not accurate and trustworthy.", i.e., again, a person, according to certain criteria, must decide how much he trusts the information on the page. At the same time, it should be taken into account

that a link to a certain page is also ranked by relevance, and if a person does not initially make enough references to "trusted" pages or, in terms of search results, his page is in low positions. The first criterion of adequacy - the correspondence of the content of the page to its purpose and the depth of the disclosure of the issue - here, few people can compete with Wikipedia. Next, the content creator himself is evaluated in terms of his expertise or life experience, after which there is an assessment of the expertise of the issue in terms of, again, the experience and ability of the content creator to make material on this issue. And the last and most important parameter is the authority for the information placement domain - i.e., by default, half of the resources from the .gov and .edu domains have a high degree of trust. But at the same time, if the author is published on a site that is on the 3rd and further search page, then the checking person may simply not get to this source as a whole and consider it not reliable enough, because it is not in the 'top' of the search results, which means it has a small factor of 'trust' from the audience.

Since the search results can be influenced by certain activities that are partially registered in automatic mode or by a certain team of evaluators, the place in the search can be influenced [10]. It is not necessary to be in the top three for all queries. It is enough to be on the first page, have a "secure" connection on the site, not have signs of a fraudulent site, and put a "signature" of a person with a high degree of trust under the content [11-13].

Naturally, large corporations having substantial resources are able to create entire bot networks and, with a combination of technologies, increase the degree of information disguise as absolutely "reliable," which in turn requires the creation of separate technologies to determine the use of these technologies [14]. All of this sounds good only until the moment when experts who use these technologies do it. Nevertheless, at the time of this writing, there was not a word in the 2022 guideline for the search evaluator of Google specialists about fake technologies or the need to use a pool of tools to identify these facts [14]. Also, the use of these technologies is at the sole discretion of the user.

Which, in turn, brings us to the next stage of the study - as far as users generally understand and agree to use technologies for recognizing the substitution of material made by man for material artificially altered by a machine. The answer is not ready [15].

For example, when searching for our request on the first page for the query "Saving a problem with using Chat GPT," we only received journalistic publications [16] and news from the cycle of how to use this technology for our work, without any academic research. By citing similar pages written in journalistic publications, we once again confirm the existence of a problem. The machine considers the NY Times to be a more relevant source on our issue than the scientific study that we can find at https://ieeexplore.ieee.org/, simply because the audience of the magazine has shared this article more often and more, and the study won't even get close to CNN and NYTimes citation numbers.

However, any artificial intelligence system builds its work on ready-made data that it has been given or not. The same system can be used to recognize fake news by removing this task from users (such as GPT-2 Output Detector Demo [17], Writer AI content detector [18], Content at Scale AI Detector [19], etc.). Only now, the training of this system will be associated with a number of problems in

creating primary characteristics for evaluating deep fake information.

In fact, the system, unlike a person, can check both sources (as an example of an anti-plagiarism system) and citations, cutting off automatically generated works if there are more than 80 percent similarities in constructions and expressions with existing works. Plus, taking into account information on the author, thanks to predictive analytics systems that, while collecting data about a person, can also find characteristic features of constructing phrases and expressing thoughts for a given person. In fact, we should get a system for evaluating "digital" handwriting. But even here there will be fakes, although more complex ones, since the system will have to work with a limited pool of data that a person has already managed to create, which may not be enough for complete "mimicry." As in the case of a clear understanding that when analyzing traffic, we can see when the "cheat" on social accounts is turned on due to a surge, we can also calculate the moment of using artificial systems to improve or fully generate content.

At the same time, we must acknowledge that the act of generating text is not sufficient for assessing the reliability of information, since the generation process relies on pre-existing information. However, if multiple sources reference a single data source, release practically identical material at the same time, and consistently collect news from this source, it can serve as a reliable marker of information. This is especially true if the changes made to the source material are minor or only occur automatically [20]. This phenomenon can be likened to ripples in a pond emanating from a single source. When people encounter information that is referenced by multiple publications, they tend to perceive it as correct without necessarily questioning its accuracy [21].

Another marker of reliable information is the presence of original content in a publication's feed. If a publication only includes third-party information and positions itself as a news aggregator, it should be considered a standard "human" media source with a low trust factor. This discrepancy between the publication's original purpose and the content it provides indirect evidence of its reliability.

When verifying the reliability of information, people can rely not only on the internet and the information available but also on their experience and intuition [22]. Machines, on the other hand, focus solely on facts that they can find and analyze. When attempting to express "feelings," machines choose the most ideal option for a broad audience. However, personalization and individualization of information have not yet reached ideal levels of adaptation since it requires too many resources to tailor to each individual user.

Currently, generating large amounts of information noise is used not only to shape public opinion but also to distract people from "blind spots" [23]. This makes it difficult to evaluate information in terms of integrity and reliability but allows for drawing conclusions and making judgments.

Digital influencers are another factor that affects the integrity and adequacy of information. They can be controlled by their fans through voting and behavior adjustment, but they can also be the source of fake news and disinformation, which can spread rapidly on the internet at a pace that traditional media outlets envy. Fans also actively manipulate and produce information, rather than just observing it [24]. The ability to manipulate the behavior of digital influencers in real-time without the performer's

consent allows for interpreting information to the benefit of influencer owners [25]. Furthermore, any information that can reach half a billion people in the Chinese fan community alone [26] automatically acquires a certain degree of trust, as digital citation and mention factors bring it to the top of search engines through indirect signals, regardless of its reliability.

Additionally, since this information is protected by the law on access to private and personal information, it often cannot be subjected to comprehensive analytics as a whole. However, this is just the beginning of the problems that arise in this space.

## IV. CONCLUSION

The biggest problem that we encountered during the study is the availability of data. Most of the services and sites do not lend themselves to external analytics of user reactions, since the program from the outside sees the site solely as a set of web scripts, without text data that can be analyzed, but allows you to see a rather interesting picture. So, in the case of the ProPublica project (New York Times - NYT), user data is collected on the pages of the publication not only by standard Google analytics, but also additional information is sent separately through the NYT nodes to Microsoft servers (fig.1).



Fig. 1.   Random News Article service links layer

The picture becomes even more interesting when you visit the main page of the project. Here, we already have HTBiD protection nodes, such as an example [27], on all types of pages. User behavior analytics services, like Chartbeat, are also directly connected to the site. Additionally, Amazon and a dozen more services that collect various data become interested in the service visitors (see Fig.2).



Fig. 2.   Homepage newsportal service links layer

We used Gephi software (version 0.9.2) and an additional HTTPGraph module for data analysis and plotting. All other settings were left at their default values.

On one hand, a simple user cannot obtain data about another user. On the other hand, a huge number of services and companies collect large amounts of data about users, which is not surprising news anymore. Each comment is recorded and processed by a separate company or service.

As the Search Engine Assessor or Evaluator has an additional responsibility to check the content for acceptability, not just relevance, the function of content moderation has been added to the standard page ranking. This involves analyzing the tonality and emotional coloring of the content, and not just identifying "bad words and expressions," which only applies to content fixed in time. We demonstrated the scale of generating new content above, and it can only be moderated in manual mode. With the current growth in the number of network users, more content moderation specialists will be required without establishing rules of conduct at a global level. Modern AI cannot yet correctly assess the context and intentions of the user. Although sites and platforms collect enough personal data, they are not able to predict a person's network behavior, such as speech, communication, and aggression, without direct markers.

Most services and sites do not allow external analytics on user reactions because the program from the outside only sees the site as a set of web scripts, without any text data that can be analyzed. However, in the case of project X [28] of an online edition, user data is collected on the publication's pages not only through standard web analytics but also separately through the nodes of the lead publication [29], and additional information is sent to hosting servers and search engines (see Fig.3).
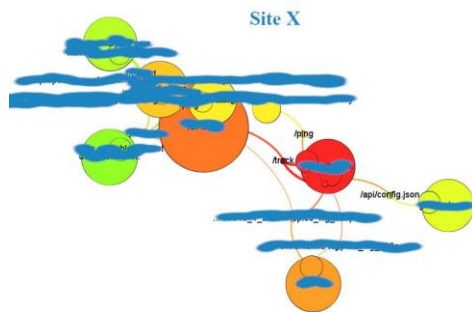


Fig. 3. Standard data chain

The picture becomes even more interesting when you visit the main page of the project. Protection nodes are also present here, and services for analyzing user behavior directly on the site are connected to all types of pages. Additionally, a dozen more services that collect various data become interested in visitors to the service (see Fig.4).
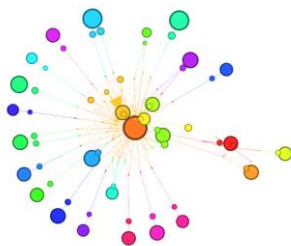


Fig. 4. Services collecting user data

As a result, we can see that now the main marker for the relevance of information and compliance with the request is user-friendliness, with reliability being left behind the scenes. Moreover, the friendliness parameter is measured solely by the reactions of other users. If even AI makes mistakes in public [30], then how many factual mistakes do auxiliary information retrieval systems make by providing users with false information remains unknown. Therefore, at the moment, before discussing the transition to information moderation by users at the "friendliness" level, we need to first address the issue of information reliability, which remains inaccessible to AI and search engines for various reasons. After all, it is clear that AI and machine learning are rapidly changing the landscape of information retrieval and content moderation. However, it is important to recognize that AI is only as good as the data it is trained on and that the accuracy and reliability of the information being presented is crucial for the user experience. As we continue to evolve in this field, it will be necessary for humans to intervene and ensure the quality and accuracy of the data being used.

## REFERENCES

[1] Ch. Ireton and J.Posetti, "Journalism, fake news & disinformation : handbook for journalism education and training," UNESCO, 2018, 122 p.

[2] M.V. Ilyina, "Reliability and objectivity in journalism: the evolution of concepts and challenges of the latest time," Modern journalism in the aspect of deontology , Ed. G.V. Lazutina, I. N. Denisova, I. A. Pankeeva, elease. 4, Moscow, Faculty Journalism, Moscow State University, 2022, pp. 52-63.

[3] E.V. Ustyuzhanina, "The principle of accuracy of information: Problem of the problem," Electronic Appendix to the Russian Legal Journal, 2017, 4, pp. 47-52.

[4] Google management for assessors, https://static.googleusercontent.com/media/guidelines.raterhub.com/en//searchqualityevaluatorguidelines.pdf

[5] T. Qin , T. Y. Liu, J. Xu and H. Li, "LETOR: A benchmark collection for research on learning to rank for information retrieval," Information Retrieval, 2010, vol. 13, pp. 346-374. https://www.microsoft.com/en-us/research/wp-content/uploads/2016/08/letor3.pdf

[6] Y. Chen, S. Liu, Z. Liu, W. Sun, L. Baltrunas and B.Schroeder, "Wands: Dataset for product search relevance assessment" in Advances in Information Retrieval, Proceedings, Part I, pp. 128-141, April 2022, Cham: Springer International Publishing, [44th European Conference on IR Research, ECIR 2022, Stavanger, Norway, April 10–14, 2022]

[7] J. Zhang, Y. Liu, S. Ma and Q. Tian, "Relevance Estimation with Multiple Information Sources on Search Engine Result Pages" in Proceedings of the 27th ACM International Conference on Information and Knowledge Management (CIKM '18), Association for Computing Machinery, New York, 2018, pp, 627–636. https://doi.org/10.1145/3269206.3271673

[8] C.E. Adams, A.A. Montgomery, T. Aburrow et al., "Adding evidence of the effects of treatments into relevant Wikipedia pages: a randomised trial" in BMJ Open, 2020, vol. 10, No 033655. https://doi.org/10.17605/OSF.IO/K2SP4

[9] R. Ren and J. Xu, (2023). "It's not an encyclopedia, it's a market of agendas: Decentralized agenda networks between Wikipedia and global news media from 2015 to 2020" in New Media & Society, vol. 0(0). https://doi.org/10.1177/14614448221149641

[10] D. Griffin and E. Lurie, "Search quality complaints and imaginary repair: Control in articulations of Google Search. New Media & Society, 2022, vol. 0(0). https://doi.org/10.1177/14614448221136505

[11] J. Bull, "Deep Fakes: AI for Good or Bad? " in Reuben College, 4 May 2022. https://reuben.ox.ac.uk/article/deep-fakes-ai-good-or-bad

[12] J. Botha and P. Heloise, "Fake news and deepfakes: A dangerous threat for 21st century information security," ICCWS, 2020, pp. 57-66. [15th International Conference on Cyber Warfare and Security. Academic Conferences and publishing limited. 2020]. https://doi.org/10.34190/ICCWS.20.085

[13] S. Karnouskos, "Artificial intelligence in digital media: The era of deepfakes," *IEEE Transactions on Technology and Society, 2020*, vol. 1, No 3 , pp. 138-147. https://doi.org/10.1109/TTS.2020.3001312

[14] M. S. Rana, M. N. Nobi, B. Murali and A. H. Sung, "Deepfake detection: A systematic literature review," IEEE Access, 2022, vol. 10,. https://doi.org/10.1109/ACCESS.2022.3154404

[15] M. Chung and J. Wihbey, "Social media regulation, third-person effect, and public views: A comparative study of the United States, the United Kingdom, South Korea, and Mexico," New Media & Society, 2022m vol. 0(0). https://doi.org/10.1177/14614448221122996

[16] K. Huang, "Alarmed by A.I. Chatbots, Universities Start Revamping How They Teach," The New York Times, Jan. 16, 2023. https://www.nytimes.com/2023/01/16/technology/chatgpt-artificial-intelligence-universities.html, M. Elsen-Rooney, "NYC education department blocks ChatGPT on school devices, networks," Chalkbeat, 2023, Jan 4, https://ny.chalkbeat.org/2023/1/3/23537987/nyc-schools-ban-chatgpt-writing-artificial-intelligence, S. M. Kelly, "ChatGPT passes exams from law and business schools," CNN, January 26, 2023. https://edition.cnn.com/2023/01/26/tech/chatgpt-passes-exams/index.html

[17] GPT-2 Output Detector Demo, https://openai-openai-detector.hf.space/

[18] AI Content Detector, https://writer.com/ai-content-detector/

[19] AI DETECTOR, https://contentatscale.ai/ai-content-detector/

[20] S. Koçer, B.Öz, G.Okçuoğlu and F.Tapramaz, "Folk theories of false information: A mixed-methods study in the context of Covid-19 in Turkey," New Media & Society, 2022,vol. 0(0). https://doi.org/10.1177/14614448221142310

[21] S. Choi, "User information processing mechanisms for news quality judgment conformity to professional standards: Comparing combinations of news content/formal cue processing," Journalism, 2022, vol. 0(0). https://doi.org/10.1177/14648849221124528

[22] N. M. Anspach and T. N. Carlson, "Not who you think? Exposure and vulnerability to misinformation," New Media & Society, 2022, vol. 0(0). https://doi.org/10.1177/14614448221130422; J. Fathallah, " 'BEING A FANGIRL OF A SERIAL KILLER IS NOT OK': Gatekeeping Reddit's True Crime Community," New Media & Society, 2022, vol. 0(0). https://doi.org/10.1177/14614448221138768

[23] J. Kunert, M. Brüggemann, J. Frech, V. Lilienthal and W. Loosen,. "You suck it up and you deal with it": Blind spots in investigative reporting and how to overcome them,. Journalism, 2022, vol. 0(0). https://doi.org/10.1177/14648849221146929

[24] H. Jenkins, "Textual Poachers: Television Fans and Participatory Culture," New York:Routledge, 1992.

[25] E. Block and R. Lovegrove, "Discordant storytelling, 'honest fakery', identity peddling: How uncanny CGI characters are jamming public relations and influencer practices," Public Relations Inquiry, 2021, vol. 10, No 3, pp. 265–293. https://doi.org/10.1177/2046147X211026936

[26] C.X. Huang, X.X. Wu and X.J. Tang, "Annual Report on Development of New Media in China," Beijing, China: Social Sciences Academic Press, 2017, No. 8. (in Chinese)

[27] P. Srividya and N. D. Lavadya, "Trust-Enabled Energy Effective Optimal Framework for Detection of Intrusions in the Network Using AI Scheme," 2021.Preprint. https://doi.org/10.21203/rs.3.rs-906210/v1

[28] ProPublica: Investigative Journalism in the Public Interest, https://www.propublica.org/

[29] The New York Times, https://www.nytimes.com/

[30] BBC, https://www.bbc.com/news/business-64576225

# Autors Index

# Contents