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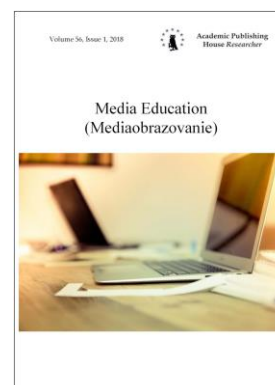
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C O N T E N T S

# Training Based on Imitation of Elements of Television: a New Approach to Organizing Lessons in Education in Pedagogical Universities of Vietnam

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## Abstract

The article analyzes the reform of pedagogical education in Vietnam from the point of view of introducing innovations in teaching disciplines for pedagogical students, particularly in innovations in organizing lessons in Pedagogy, both theoretical and practical discipline. In this sense, the role and objectives of the pedagogy discipline in the training future teachers in accordance with the requirements of the globalization process in the field of education in Vietnam are revealed. To achieve these objectives, it is necessary to develop new approaches to organizing the course of Pedagogy, in which many aspects should differ from the traditional ones, in which training is mainly designed based on presenting educational materials and makes students passive learners. The author of the article has proposed an idea to link the process of teaching Pedagogy with television, in which television programs become examples of organizing the training, i.e. the teacher and students actively participated not only in educational activities, but also in a television program. This educational model was created based on interdisciplinary theoretical and methodological approaches (psychology, pedagogy, sociology, journalism, etc.). When describing the teaching of Pedagogy based on imitation of elements of television, we consider it as an integral system, and the whole process. From the structural and systematic point of view, the author describes the elements of this training model: the purpose, content, methods, means of training, the role of the educator and trainees. From the procedural point of view, the article presents the stages and steps of our learning model: analyzing learning context, writing a pedagogical script, organizing learning process and obtaining feedback from students. The article proposes a general scenario of this type of training, which is based on both pedagogical and television scenarios.

**Keywords**: training, simulation training, TV, television, education, media education, media literacy.

## 1. Introduction

*A brief analysis of the relevance of training based on the simulation of elements of television*

In the XXI century, teacher education in Vietnam is developing in a completely new environment: the scientific revolution, the process of globalization and international integration, the transition to a knowledge society. In this context, new teacher training challenges have been identified, which requires the development of an active teacher model. Teachers are now not just teaching, but should be artists in the classroom. So, here we are talking about the pedagogical art of future teachers. In solving this problem plays a crucial role in the discipline of pedagogy. However,

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the fact is that the teaching of this subject at present in pedagogical universities in Vietnam is still academic in nature and is burdened with the preparation of students for the theory, which develops their professional competence and love for the profession. To solve the problem of innovation teaching Pedagogy in this article we associate the process of teaching Pedagogy with television, one of the rapidly developing media. We have developed a model of training based on simulation of TV elements. In other words, television is now becoming a treasure trove of ideas for the innovation of teaching Pedagogy. This scientific idea can create the following modifications:

First, learning based on the simulation of TV elements will facilitate the teacher and students to interact in a multidimensional interactive environment: between the teacher and students, between students, students with characters through the systematic application of special methods, tools and forms of learning.

Secondly, the organization of teaching Pedagogy on the basis of imitation of elements of television allows you to make the process of teaching this course continuous in a new direction, in which learning becomes closer to the life of students.

Thirdly, the organization of training on the basis of imitation of elements of TV meets modern requirements on diversification of methods, forms of training.

We can say that the relevance and novelty of training based on imitation of elements of television meet the requirements of research of pedagogical science and educational and practical training of teachers today.

## 2. Materials and methods
*Basic terms of the learning model based on the simulation of elements of television*
The main terms of this model of training are such concepts as: training, simulation training, simulation training on the basis of elements of television, pedagogical scenario and the scenario of television programs.

It should be noted that today there are different approaches to the interpretation of the concept of training. In our opinion, training in higher education is a specially organized, purposeful and controlled process of interaction between the teacher and students (Voronin, 2006).

As one of the models of training in higher education, simulation training shows great interest from teachers in the medical, military and technical fields, but in the field of pedagogical education, unfortunately, there is no systematic study of this model of training. As one of the models of training in Higher education, simulation training shows great interest from teachers in the medical, military and technical fields, but in the field of pedagogical education, unfortunately, there is no systematic study of this model of training. In order to reveal the essence of this concept, we turn to the interpretation of simulation training Ershova Angelica Yurievna, a teacher of the Kansk medical College. According to her, simulation training is training in which the student consciously performs actions in a situation that simulates a real one, using special training tools (Ershova, 2015). In this sense, we understand imitation as likening to someone or something, reproducing, repeating, copying. According to the author Ngo Tu Thanh (Ngo Tu Thanh, 2008), the simulation method as a teaching method includes 3 elements: the object of study, the model of the object of study and the result of the study (Figure 1).

Based on the above understanding of the concepts of training and simulation training, we introduced into the literature of pedagogical science the concept of training based on the simulation of television elements, which is understood as a specially designed, organized, educational and cognitive multi-level process based on the simulation of television elements as content, script, format of television works, style of interactive interaction of characters of television programs, expressed by the system of training sessions organized in accordance with the training scenario, which was developed in advance by the teacher.

This learning process is carried out in an interactive media environment, in which the educational and research activities of students are organized according to the format of a television program under the guidance, control and correction of the teacher through a system of practical training tasks. In the context of this training, the interaction between the teacher and the students is not just the interaction between the teacher and the students, but the interaction between the characters of a particular television program.

Teaching Pedagogy based on the simulation of TV elements has the following features:

a) Teaching Pedagogy on the basis of imitation of elements of television is focused on the formation and development of future teachers of pedagogical art as a manifestation of the highest level of development of their pedagogical competencies.
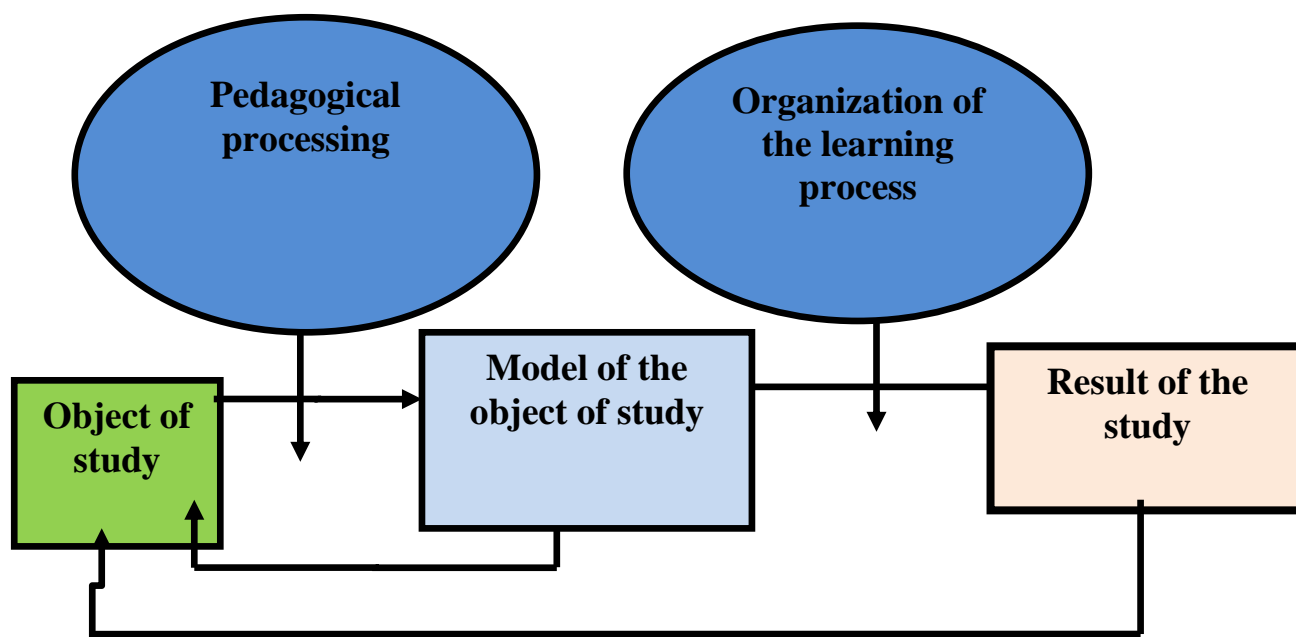


**Fig. 1.** The structure of the simulation method as a teaching method

b) The purpose of the training is divided into the objectives of the training topics, which are developed on the basis of the following bases:
- Course objectives, objectives of each section, Chapter of the discipline of Pedagogy;
- Graduation standards of pedagogical universities of Vietnam;
- The main competencies that need to be formed in future teachers.

c) The content of training should be selected from specific topics, which are determined by the following principles:
- The theme of training should be both public and scientific;
- The theme should help the formation of pedagogical art in students;
- When mastering a particular topic, it is easy for students to conduct different types of cognitive research activities.

d) Teaching methods are developed on the basis of the ideas of the TV program, so they can be diverse in genre, close to the students, contributing to increasing the fun of learning.

e) In addition to the traditional role of knowledge transfer, the teacher here has new roles in teaching Pedagogy based on the simulation of elements of television:
- Teacher-designer;
- Teacher-editors and writers;
- Teacher-Director;
- Teacher-artists.

(f) The role of students in teaching Pedagogy based on the imitation of elements of television: writers, performers, artists.

(g) Form of teaching Pedagogy based on imitation of elements of television: There is a transition from the class-lesson form of education to the form of television Studio. So, the teacher and students feel not in the classroom, but in some TV Studio, which facilitates their educational load.

The main product of our creativity is a pedagogical scenario. It is pedagogical creativity of the teacher which allows it to provide sequence of the actions and corresponding actions of students in a concrete situation of training at studying of this or that subject. Here, the pedagogical scenario is understood as a purposeful, personally oriented, methodically built sequence of pedagogical methods and technologies to achieve pedagogical goals (Robert, Lavina, 2009: 79).

The essence of pedagogical and television script allowed us to structure the scenario simulation training is based on simulated elements of television as follows (Table 1).

**Table. 1.** General structure of training scenario based on simulation of television elements

*Training theme*
- A.    *The purpose of studying the theme*
- B.    *Keywords*
- C.    *Preparation*
- D.    *Stages of organization of the learning process*

1.Stage 1: Start
- To study the psychological state of students before the lesson
- Warm-up TV games

\* Description of the Description of the scenes

| № scenes | Time | Activity of the teacher | Activity of students |
|---|---|---|---|
| 1 | | | |
| 2 | | | |

*2. Stage 2: Organization of types of educational and research activities of students*
- Organize educational activities aimed at the formation and development of students ' critical thinking ability in the form of television talk shows;
- Organize educational activities aimed at the formation and development of students ' methodological competence in the form of television games
- Organize educational activities aimed at the formation and development of students ' social competencies in the form of different television programs;
- Organize educational activities aimed at the formation and development of students ' individual competencies in the form of various television programs;
*3. Stage 3: Relaxation*
- Removing the Comedy
*4. Stage 4: Get feedback from students in the form of a "TV mail" program"*

### 3. Discussion

*Discussions on the problems of television in education*

Television appeared in the early twentieth century and developed at a hurried rate thanks to the advancement of science and technology and technology, creating an important information channel in social life. The impact of television on human life is reflected in the amount of time people spend watching television. In modern cities the average television is 7 hours and 38 minutes in a day (Semali, 2000: 13).

The result of the analysis and generalization of the literature of media education allows to emphasize the following discussions about the use of television in education.

• *Discussion on the features and genres of educational television*

Features of educational television is analyzed in the books of authors such as: V.P. Mushtaev (Mushtaev, 1985), V.V. Egorov (Egorov, 1986), E.M. Efimov E. M. (Efimov, 1986). O.R. Samartsev's research was about languages, genres of educational television (Samartsev, 1995; 1998). G. Jacquinot and G. Leblanc wrote about the educational television genres (Jacquinot, Leblanc, 1996).

• *Discussion on the theoretical basis of educational television*

The problem of psychological foundations of educational television is reflected in the dissertation of A.A. Stepanov. The purpose of his research is to critically evaluate the theoretical concepts of educational television, on the basis of his and the works performed under his leadership to analyze the features of the technical means and its impact on students, to develop the conceptual apparatus necessary for its further study, improvement and practical application. The most authoritative schools in bourgeois psychology are behaviorism and cognitivism, which arose as a result of the synthesis of the ideas of Gestalt psychology, the theory of the dynamic field

of personality of K. Levin and some ideas of behaviorism (Stepanov, 1973). The pedagogical foundations of educational television are analyzed in the studies of S.R. Feiginov (Feiginov, 1977), V.M. Kuznetsov (Kuznetsov, 1982) and G.V. Redko (Redko, 1993).

• *Discussion on educational functions of educational television*

In 1967, S.N. Penzin for the first time analyzed the possibilities of aesthetic education on television. He studied a new form of aesthetic education, which allows to distribute both films and knowledge about them, to analyze some problems of the methodology and principles of creating the most successful series about cinema, thereby making the first attempt to identify the specific features of television propaganda of cinema and to prove that of all the existing ways of educating moviegoers, television can now become the most effective (Penzin, 1967). Further, it is necessary to emphasize the study of V.V. Ksenofontov on the function of Communist education of television (Ksenofontov, 1976), the study of V.A. Monastyrsky (Monastyrsky, 1979), G.Ya. Vlaskina (Vlaskina, 1985), A.V. Fedorov (Fedorov, 1994) on the function of aesthetic education of television.

## 4. Results

We created a model of lessons in pedagogy was applied in a large group of students (98 students) in Hanoi national university of education of Vietnam in the study of 7 topics of pedagogy. Before and after the experiment, we asked students to perform tasks to assess the development of 4 groups of students' competencies (critical thinking competence, methodological, social and individual competencies). When evaluating a student's work, a point-rating system (10 points) is used (Table 2).

**Table. 2.** Indicators in percent of students of the experimental group, achieved levels of competence before and after the experiment

| Points | *Critical thinking competence* | | *Methodological competence* | | *Social competence* | | *Individual competence* | |
|---|---|---|---|---|---|---|---|---|
| | Before the experiment | After the experiment | Before the experiment | After the experiment | Before the experiment | After the experiment | Before the experiment | After the experiment |
| Less than 5 points | 54.1 % | 0 % | 65.3 % | 0 % | 29.6 % | 0 % | 0 % | 0 % |
| From 5 to 6.4 points | 39.8 % | 4.1 % | 34.7 % | 1.0 % | 67.3 % | 18.4 % | 63.3 % | 2.0 % |
| From 6.5 to 7.4 points | 6.1 % | 78.6 % | 0 % | 85.7 % | 3.1 % | 33.7 % | 36.7 % | 45.9 % |
| From 7.5 to 8.4 points | 0 % | 17.3 % | 0 % | 13.3 % | 0 % | 48 % | 0 % | 52.1 % |
| From 8.5 to 10 points | 0 % | 0 % | 0 % | 0 % | 0 % | 0 % | 0 % | 0 % |

In addition, we also conducted a survey to measure the level of student satisfaction and obtained the results presented in Table 3.

The high level of satisfaction of students shows that we created a model of classes in pedagogy on the basis of imitation of elements of television strongly positively influences educational motivation and interest of students to the course "Pedagogy". This allows us to confirm the practical importance of this model of training, which expresses our new approach to the design and organization of training in higher education, where the teacher and students are not only the teaching and learning, but also the personalities of television programs. It should be noted that the educational motivation of students is one of the most important criteria for the quality of

education. We hope that our model of education will be applied not only in the course "Pedagogy", but also in the courses of other disciplines in higher education, which will make learning in it become more diverse and effective.

**Table 3**. Percent of students by satisfaction options

| *The level of satisfaction* | *Percent of students* |
|---|---|
| High | 67 % |
| Average | 33 % |
| Low | 0 % |

## 5. Conclusion

1. The Idea of training on the basis of simulation of television is based on the connection of the idea of using elements of television in education with the theory of simulation training (Bank, 1998; Meyer, Nguyen Van Cuong, 2013; Zeigler, 1979);

2. The Results of our study allowed us to solve a theoretical problem that has not yet been fully studied in pedagogical science. It is a question of innovation of pedagogical process in the direction of imitation of elements of TV that promotes the solution of a practical problem of increase of quality and efficiency of training of pedagogical shots by means of training in Pedagogics in pedagogical universities in Vietnam.

## References

Bank, 1998 – *Bank, J. (*1998). Handbook of simulation, Wiley-InterScience.

Efimov, 1986 – *Efimov, E.M.* (1986). Schoolchildren about television. Moscow, 160 p.

Egorov, 1986 – *Egorov, V. V.* (1986) . Television and school: problems of educational television. Moscow: Pedagogy, 152 p

Ershova, 2015 – *Ershova, A.Yu.* (2015). Formation of clinical thinking of students by means of simulation technologies. [Electronic resource]. URL: http://www.informio.ru/publications/id1725/Formirovanie-klinicheskogo-myshlenija-studentov-posredstvom-imitacionnyh-tehnologii

Fedorov, 1994 – *Fedorov, A.V.* (1994) . Preparation of students of pedagogical universities for aesthetic education of schoolchildren on the material of screen arts (film, television, video). Taganrog: Taganrog State Pedagogical Institute 384 p.

Feiginov, 1977 – *Feiginov, S.R.* (1977). Pedagogical bases of interaction of television and school in Communist education of teenagers. Ph.D. Dis. Moscow.

Jacquinot, Leblanc, 1996 – *Jacquinot, G., Leblanc, G.* (1996). Les genres televisuels dans l'enseignement, Paris: CNDP-Hachette education.

Ksenofontov, 1976 – *Ksenofontov, V.V*. (1976). Television as a factor of Communist education of schoolchildren. Ph.D. Dis. Moscow.

Kuznetsov, 1982 – *Kuznetsov, V.M.* (1982). Didactic foundations of University educational television. Ph.D. Dis. Moscow.

Meyer, Nguyen Van Cuong, 2013 – *Meyer, B., Nguyen Van Cuong* (2013). Modern theory of learning (The basis for updating goals-content and methods of learning). Hanoi pedagogical University Press.

Monastyrsky, 1979 – *Monastyrsky, V.A.* (1979). Artistic education of senior schoolchildren by means of television in extracurricular work. Ph.D. Dis. Moscow.

Mushtaev, 1985 – *Mushtaev, V. P.* (1985). Art Lessons: Essays on educational television. Moscow: Pedagogy, 104 p.

Ngo Tu Thanh, 2008 – *Ngo Tu Thanh* (2008). Simulation method in teaching technical disciplines. *Journal of science and technology development*, 11 (10): 114-125.

Penzin, 1967 – *Penzin, S.N.* (1967). Some problems of theory and practice of television propaganda of cinema. Abstract of the Ph.D. Dis. Moscow.

Redko, 1993 – *Redko, G.B.* (1993). Didactic bases of application of teaching television in teaching of physics in secondary school. Abstract of the Ph.d. Dis. Odessa.

Robert, Lavina, 2009 – *Robert, I.V., Lavina, T.A.* (2009). Explanatory dictionary of terms of conceptual apparatus of Informatization of education. Moscow.

Samartsev, 1995 – *Samartsev, O.R.* (1995). Television in the education system. Ph.D. Dis. Moscow.

Samartsev, 1998 – *Samartsev, O.R.* (1998). Television. Personality. Education (Essays on the theory of educational television). Ulyanovsk: 6-74.

Semali, 2000 – *Semali, L.M.* (2000). Literacy in Multimedia America. New York – London: Falmer Press, 243 p.

Stepanov , 1973 – *Stepanov, A. A.* (1973). Psychological bases of application of television in training. Ph.D. Dis. Leningrad.

Vlaskina, 1985 – *Vlaskina, G.Ya.* (1985). Aesthetic education of high school students by means of television and radio. Ph.D. Dis. Moscow, 205 p.

Voronin, 2006 – *Voronin, A.S.* (2006). Dictionary of terms in general and social pedagogy. Yekaterinburg, 135 p.

Zeigler, 1979 – *Zeigler, B.P.* (1979). Methodology in systems modelling and simulation, Oxford, New York, United States of America.
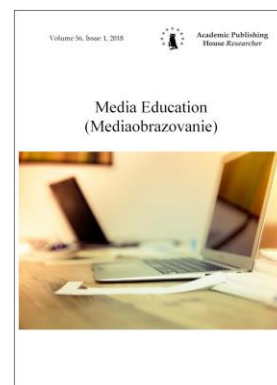
# The Organization of Ecological Education of Per-school Children by Means of Media Literacy Education: Theory, National Policy, Scientometrics and Vectors of Development

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**Abstract**

Modern world presents a system of digital segments of life that require theoretical consideration, experimental testing and forecasting. According to J.R. Heckman's theory, pedagogical community appears to be interested in investment attractiveness of preschool childhood problems. The duality of digitalization, media education and ecologization of young adults' lives has become the field for scientific search of the article. At present, the Russian Federation is experiencing a new digital impulse, which entails research into the impact of information and media technologies on the sociocultural and educational activities of all participants of educational relations.

Thus, from the standpoint of theory, national policy and scientometrics the article attempts to consider the phenomenon of environmental education of preschool children in the context of psychological, pedagogical, organizational and methodological opportunities of media education. The aim of the research lies in the identification of guidelines for the development of environmental education of preschool children in the media of kindergarten. To solve this goal, the article presents a historical and pedagogical analysis of the development of media education and its role in the formation of ecologically oriented consciousness of preschool children. The leading research method is scientometrics (webometrics and bibliometrics). The authors analyze and comment on professional discussions of domestic and foreign researchers about environmental and media education. Special attention is paid to the scientometric prognostic analysis of the documentary data on the environmental education of children on the base of media resources. The research directions of the problem of childhood ecologization study in a new sociocultural media reality are presented. The results of the study allow to form the concept of current state of children environmental education, its meaningful implementation in preschool educational organizations with the focus on media education opportunities.

**Keywords:** environmental education, media education, preschool children, pedagogical conditions, preschool educational organization.

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## 1. Introduction

Both environmental pedagogy and media pedagogy, environmental education and media education almost simultaneously arose more than half a century ago under the aegis of UNESCO and a number of other specialized organizations of the UN family, European and other national institutions. These institutional platforms are an alloy of several branches of scientific knowledge at the intersection of the natural sciences and the humanities, education and communication, otherwise, they are also systematically and complementary oriented towards the formation of an environmental and media culture of the individual and society. Their importance is growing critically in the conditions of the information society, knowledge societies, as well as permanent growth of environmental problems.

According to UNESCO normative documentation, media education is recommended to be implemented in the national curricula of all states, in the system of preschool, additional, non-formal and lifelong education. The idea completely coincides with the provisions of the Concept of long-term socio-economic development of the Russian Federation for the period until 2020 and the State Program of the Russian Federation Of the Federation "Development of Education for 2013-2020", that highlights the necessity of media education in connection with the need to implement information in public life and telecommunication technologies. The documents state the need for non-formal and informal education development, as they present the concept of media education (Demidov, Fedorov, 2015; Minbaleev, 2007).

One of Russian authoritative scientists I.V. Wagner argues that the development of youngsters' ecological culture in the information society, as well as the intensity of informatization, greatly enhances the influence of the media on the processes of upbringing, socialization, and personality development (Wagner, 2012). The development of a specific communicative culture, different personal characteristics and sociocultural experience formation forwarded and became a basis of fundamentally new generation – the media generation. The erosion of educational boundaries under the influence of the media may soon lead, and in a number of issues had already led to the superiority of the media in influencing the development of the individual, including its cognitive sphere, and education resulting in a change of its essence and structure. The way to provide the positive nature of this process is to accelerate the development of the information space of childhood, focused on environmental values, creating conditions for the development of the information and environmental culture of the person, which, as an internal regulator of the subject's actions, can become the most reliable guarantor of environmental and information security, harmonizing relationships between human and nature (Pomerantseva, Syrina, 2017).

I.V. Wagner established the basis for scientific and applied understanding of the development and implementation of environmental education and children's education in terms of information era.

The scientific director of the Russian school of media literacy education A.V. Fedorov (Fedorov, 2005, Fedorov, 2009, Fedorov 2011; Ryzhikh, 2011), as well as other authors of the Russian and foreign schools of media pedagogy, film education and communication laid the theoretical foundations of media education and the use of forms and methods of media education in raising children in institutions of general, preschool and additional education of children, as well as the training of pedagogical specialists.

Modern digital economy intensified the duality of environmental education and media education. The implementation of means and methods of media education form the outlook and culture of using new technologies that will operate in the format of the development of artificial intelligence, robotics, the Internet of things and smart home will be formed, starting from awareness and understanding energy saving efficiency, energy security and energy efficiency, ethical and legal aspects of ecology with access to environmental philosophy of society and relations, following in the stead of democracy and tolerance (Balabas, 2012).

National policy in the areas under consideration received a new impetus with the signing of the Decree "On National Goals and Strategic Tasks of the Development of the Russian Federation for the Period until 2024" (Decree..., 2018) and its national projects. Indeed, environmental education and media education should become a connecting link and create a synergistic effect, which links together major structural elements of the national projects "Healthcare", "Education", "Demography", "Culture", "Housing and Urban Environment", "Ecology" and "Digital Economy" in the format of education for all or life-long education, starting with preschool age.

A landmark of Decree No. 204 implementation is the necessity to create opportunities for self-development and reflection of talent, giftedness of each person, starting from the period of preschool childhood. It is well known that investments in childhood are 5-6 times higher than the effectiveness of investments in the education and upbringing of children in general educational institutions and educational organizations of higher education.

In the framework of the article, the phenomenon of environmental education of preschool children (3-7 years) is studied. According to Russian researchers of preschool education (T.S. Komarova, S.N. Nikolaeva, N.A. Ryzhova, N.N. Kondratyeva, etc.), preschool age is the most sensitive period for building the foundation of a continuous environmental education of individual, including one based on the development of feelings of citizenship and patriotism, orientation on respect for the nature of a small Motherland, reflected in native speech, songs and music, poetry and prose, animation, film and television (Komarova et al., 2018).

In this regard, the issue of comprehensive harmonious development of a preschool-age personality through the prism of children's environmental education is being updated. In our opinion, during national projects and global ratings, the time of assessing the quality of life, we consider it quite advisable to consider the reflection of the problems of environmental education of children in domestic pedagogical literature for 2018–2019.

It is important to notice that publications on environmental education of preschool children can form benchmarks for the development of this phenomenon in accordance with the formation of innovative tools for teaching and raising children in the new sociocultural and informational reality. We emphasize that current possibilities of media resources allow us to make this analysis significantly qualitative and practical one. In pedagogical scientometrics, it is considered quite full-fledged to use the publication stream of articles over two years as a representative sample of documents for analytical and theoretical research. This time sample is representative and reflects the vectors of further development of the investigated problem in various planes.

At this conjuncture, the need for a system-active connection between the declarative, state, public and procedural knowledge of preschool children about themselves and the world around them becomes an urgent one. The basis of its realization lies in practical self-realization of children daily life, which ensures the social and professional development of the younger generation in digital and media realities. The described connection can be provided in various types of children's activities in the field of ecology, which stipulates the inclusion of various institutions in solving urgent environmental problems facing modern preschool education.

In our opinion, the problem of environmental education of pre-school children seems to be the most relevant research field for specialists in various spheres – teachers, psychologists, biologists, ecologists, geographers, chemists, sociologists, and etc. The environmental education system has unique resources, the use of which reveals the talented and creative personality of each child.

### 2. Materials and methods

In order to study the microflow of pedagogical literature on environmental education of preschool children in more detail, a comprehensive technique was developed, including bibliometric and webometric methods. Formed as an independent scientific direction in the 1960s and based on the ideas of A. Prichard, bibliometry was immediately integrated into various different sciences – sociology, psychology, pedagogy, etc. However, bibliometry became especially popular and widely known in the 1980s, which was due to the rapid growth of science, the search for new methodological development vectors, and, as a result, the increase in document flow, which required statistical methods to study and predict problems of scientometrics.

It should be noted, that the application of the bibliometric method offers fairly easily accessible flows of secondary information that are presented in various information databases (for example, the electronic platform of the Scientific Electronic Library: https://elibrary.ru/defaultx.asp). In addition, the other distinguishing feature of the bibliometric method is that it provides quantitative data to the researcher, who can identify trends in the development of a particular issue, and give some long term predictions. This fact is an important necessity and effective element in the development of media and pedagogical strategic science in a new reality.

The study of the microflow of pedagogical literature on environmental education of preschoolers required another scientometric method to be used – webometrics. This method includes:

• the use of so-called web-based tools for studying publications (impact factor of the journal, number of citations per article, etc.);

• analysis of the website of the journal / proceedings of the conference where the article is published;

• analysis of the list of references and so on.

Thus, the scientometric methods for studying the documentary stream of pedagogical literature on environmental education of preschool children – bibliometry and webometry – in our opinion, fully reflect the innovative vectors of the ecologization of childhood and media education in line with new directions in the development of the preschool education system. In addition, the researchers relied on a systematic approach when taking into account the requirements of the Federal State Educational Standard of preschool education and additional education of children.

## 3. Discussion

Environmental education of preschoolers is not just a trendy direction in pedagogy. The environmental education of preschool children is the education that forms the ability of a child to understand and love the world around and take care of it. Nature expands the opportunities for aesthetic, patriotic, moral education. Communication with nature enriches the spiritual sphere of a man, contributes to the formation of positive moral qualities. Introducing nature to preschoolers is an important way of educating preschoolers in terms of environmental culture. Human existence is impossible without knowledge of nature and love for it. It is important to lay the foundations of environmental education from early childhood, as the main personality traits are laid in preschool age.

Ecological education of preschool children is one of the fundamental problems of the theory of education and it is of paramount importance for educational work. A lot of outstanding thinkers and educators of the past attached great importance to nature as a mean of raising children: J.A. Komensky saw nature as a source of knowledge, a mean for developing mind, feelings and will. K.D. Ushinsky was in favor of "leading the children into nature" strategy, in order to inform them of everything accessible and useful for their mental and verbal development. The ideas of introducing nature to preschool children were further developed in the theory and practice of Soviet preschool education. I.D. Zverev proposes to consider environmental education as a continuous process of education, upbringing and personality development, aimed at the formation of a system of knowledge and skills, value orientations, moral, ethical and aesthetic relations that ensure the person's environmental responsibility for the state and improvement of social environment. G.A. Yagodin repeatedly pointed out the worldview nature of environmental education.

The scientist emphasized that environmental education is the education of a person, who is a citizen of the Universe, capable of living safely and happily in the future world, without undermining the foundations of development and life of future generations. S.N. Nikolaeva believes that the formation of the principles of ecological culture is the formation of a consciously correct attitude to nature in all its diversity, to the people who protect and create it on the basis of its wealth, material and spiritual values (Tretyakov, 2017).

Since the 20th century, Russian witnessed an increase in the practice of preschool education especially in the field of environmental education. Partial programs of environmental education were developed and demanded ("We Are Citizens of Earth" A. Veresova, "I Am a Man" S.A. Kozlova, "Our Home Is Nature" N.A. Ryzhova, "Young Ecologist" S.N. Nikolaeva and others). At the same time leading specialists in preschool education developed regional program materials and held conferences on environmental education. It is proposed to consider kindergarten as a "standard of ecological culture" (T.V. Potapova). The result of the study was a contradiction between the diversity of the search for researchers and practitioners in the field of environmental education of children and the lack of generalizing methodological works systematizing domestic and foreign experience (Sarycheva et al., 2017).

The first foreign tutor who made a significant and systematic contribution to the development of environmental education for children was J.A. Komensky. He was a contemporary of the formation of the experimental sciences and sincerely welcomed the penetration of man into the secrets of nature, which, in his opinion, is a reflection of God himself. J.A. Komensky studied nature and made attempts to create "Pansophia" – an encyclopedia of knowledge about nature and

society, which in fact laid the foundation for the development of foreign and domestic environmental education. In his opinion, the basis of the child's environmental education should be organized in the form of mother's school – to foster a sense of love for nature in the family. Environmental education of children in the family and society was considered in the writings by J.-J. Russo and J.H. Pestalozzi (Veselovsky et al., 2018).

Modern approaches to the development of ecological education of children are reflected in the works of M. Montessori. The development of the child, according to W. Bronfenbrenner, is considered as a process taking place in active interaction with his environment. Environmental aspects of the child's psychosocial development were also presented by E. Erickson.

Foreign researchers of environmental education in the modern media environment note that environmental education acts as a guarantor of harmonization of person's successful life. Thus, L. Barraza is convinced that preschool organizations play an important role in shaping positive attitude to the environment (Barraza, 2012). The culture and the positive spirit of the kindergarten are the channels of a positive respect for children by the environment, which affect the formation of environmental knowledge and ecological culture. The researcher cites results that showed a great difference between educational institutions with a strong focus on environmental research and preschool organizations without environmental policy. Thus, according to L. Barraza, it is necessary to develop effective environmental tools in the media space of a preschool organization in order to increase environmental awareness among all participants of educational relations.

In addition, A. Pleshakova, considering the binary educational system of Germany, combining media resources and practical aspects of training of educational subjects, notes the effectiveness of such training (Pleshakova, 2019). The undeniable benefits of this approach include the ability to respond quickly to the challenges of globalization and transformation in the digital world. In this regard, in the opinion of the researcher, it is very important to introduce sociocultural and historical practices of the formation of the dual system, including for the sphere of preschool education with a view to its successful modern functioning.

Educational visualization is thoroughly studied in the works of A. Zakharova, Ye. Wechter and A. Shklyar. Scientists believe that at this stage educational environment design for the system of preschool education one of the most important problems is the creation of effective visualization tools for the collection, organization and analysis of educational information (Zakharova et al., 2019). In researchers' opinion , it is necessary to create conditions for the use of visualization tools to assess the design of educational environments, that will allow to develop the necessary tools for dealing with a large amount of educational information, as well as in case of their change or accumulation.

The purposeful use of visual perception for the organization of educational activities creates prospects for visualization tools when working with large volumes of information (big data). One of the mechanisms for resolving this issue may be media education.

Necessary to highlight the phenomenon of media education as a properly formed, qualitatively new paradigm of national education (Bykasova et al., 2019). Modern media literacy education in Russia is the most important platform for cultural, economic, social, ethno-confessional development of the individual, therefore it is important to develop it in the context of modern pedagogical theory and practice. Digital technologies are mechanisms for creating a disciplinary matrix that serves as the basis for training, education and upbringing people of a new type that meet the requirements of modern society. The cornerstones of the development of a new paradigm in Russian preschool education lie in the use of advanced technologies in teaching, the enhancement of subject's susceptibility, updating the practice-oriented nature of education, change of individual epistemological potential, design of mechanisms for diversification and modernization of media education that determines the degree of influence of the mediated product on the implementation of the educational strategy.

S. Krucsey notes that there are numerous laws of media education. According to Australian Law, legitimate activities in the field of media education are spelled out in the corresponding regulatory legal document, which highlights pedagogical context as well. The main distinguishing feature of this legal act is emancipation, that is, the dominance of the liberating concept of education, which is obliged to the ideas of enlightenment. Media education is used in a holistic sense, encompassing both the so-called traditional media and new media, including the Internet. Critical reflection and creativity, individual and social responsibility are highly important. The ultimate goal of applying the opportunities of media education is the formation of the universal competencies of a

citizen of multimedia (Fedorov, 2019; Fedorov, Levitskaya, 2018; Gálik, Gáliková Tolnaiová, 2015; Kačinová, 2018; Krucsay, 2017; Petranová et al., 2017; Šupšáková, 2016).

M. Imeridge believes "media education as a complex professional structure that provides understanding of socio-cultural, economic and political features of mass media functioning, reflecting their desire and ability to be carriers of media standards in educational environments of various levels" (Imeridze, 2016). The author substantiates the model of media competence in the framework of the educational process aimed at developing culture of social media, preparing a person for safe and effective interaction with modern media, including traditional (print, radio, cinema, television) and innovative (computer-mediated communication, Internet, mobile telephony) forms with the development of information and communication technologies; understanding types of media and their impact on people and society.

According to researchers from de Jaen University, modernity needs methodology to promote the development of media competency among pedagogical community, which should fulfill the requirements for teaching and raising children (Ortega-Tudela et al., 2015).

Specialists from University of Oviedo (Spain) and Technological University of Mexico argue that modern globalized media community with an unprecedented technological development of education, needs to adapt their educational models and programs for training teachers and raising children and youth. The formation and development of media competency must be implemented through transversal training and ecosystem development models of all educational organizations.

Dealing with society that uses media every minute, it is necessary to determine the relationship between users and the media. Based on the study carried out by Spanish scientists, the relationship between theory, practice of media education and new forms of educational development is inextricable. Besides, there is a need to build new communication formats in various educational planes, including the conditions of environmental education (Ramarez-Garcia, Gonzalez-Fernandez, 2016).

The research team from China believes that the development and formation of a new functional toolkit of media education is necessary in the context of increasing informatization of modern society, the need to create unified information space, the emergence of new competencies that a modern person must master, the increase of requirements for qualifications and professional activities of an information citizen; the need to establish the strategic goal of turning the country into a world intellectual state with a predominant development of disparate intellectual and knowledge-based material industries (Chen at al., 2017).

An example of the presented theoretical models in Russian practice of preschool and further education can be the experience of the Center for Cultural Initiatives "Sretenie" ("Candlemas") that has presented cultural and educational multimedia project "The Seasons" (Circle of the Lord's Summer), containing 700 poems from 94 authors of the 17th-20th centuries, from Simeon Polotsky to Joseph Brodsky, who are presented in poetic form and describe the state of domestic nature, flora and fauna, divided into seasons. Poems from the anthology are read by famous artists. The site antologia.xxc.ru also hosts hundreds of paintings of Russian landscape and miniatures of spiritual painting. The resource also presents dozens of original animated films created by the director I. Komladze. The Seasons by P. Tchaikovsky performed by the famous Russian pianist A. Gindin and traditional chants performed by the Patriarchal Choir of the Cathedral of Christ the Savior were selected for musical accompaniment of poems. The original music for the project was written by composer A. Viskov.

Environmental education at preschool stage is at its beginning, although environmental knowledge gained in childhood will help the child navigate the surrounding reality, correctly understand it, treat it carefully, especially through the means of media literacy education.

Due to the fact that the article focuses the attention of pedagogical community on the disclosure of the phenomenon of environmental education of preschool children based on scientometrics, it is worth looking at a brief review of current areas of scientometrics.

Modern researchers in the field of scientometrics (M.A. Akoev, O.V. Kirillova, V.A. Markusova, O.V. Moskaleva, V.V. Pislyakov, etc.) believe that the development of this scientific direction should take into account the achievements of various sciences and technologies. Thus, scientometrics should attract new methods, technologies and forms of scientific communication from other fields of activity for effective development and forecasting.

The analysis of reports at such international scientific and practical conferences as: "Education and training of young children", "Scientific school of educational systems management

of T.I. Shamova", "Pedagogical science and modern education", etc. shows that professional pedagogical community needs high-quality scientometric research of pedagogical trajectory, information forecasting through scientometric analysis of Russian and foreign scientists' works.

Currently, a significant array of studies, theories, systems, models of development and organization of environmental education of preschool children has been accumulated in pedagogical theory and educational practice. However, in our opinion, any sociocultural reality and informational reality needs a new understanding and functional disclosure of ecologically oriented activities of modern preschool educational organizations.

Let us turn to the results of studies that deal with issues of personality development in a new reality. The articles of T.P. Afanasyev, T.S. Komarova, N.S. Kramarenko, T.N. Melnikov, G.P. Novikova, L.T. Potanina, N.A. Ryzhova, A.S. Moskvina, S.N. Nikolaeva and others (Afanasyeva, Novikova, 2016; Komarova at al., 2011; Kramarenko, 2011; Melnikov, Potanina, 2017; Nikolaeva, Ryzhova, 2018; Moskvina, 2017) emphasize new directions of personality development in changing reality. The network paradigm of the development of a preschool child personality deserves special attention, since it is being realized in the context of digital economy and knowledge society where all participants of educational relations need to find new forms and methods of the socio-ecological system of pedagogical activity of early childhood education.

The substantive foundations of environmental education of preschool children, as a rule, should be based on regulatory legal documents at the federal level (Constitution of the Russian Federation; federal laws: On Environmental Protection, On Education in the Russian Federation; State Program "Development of Education" (2018–2025)); Decree of the President of the Russian Federation "On National Goals and Strategic Tasks of the Development of the Russian Federation for the Period until 2024", Federal State Educational Standards and many others. Despite the great number of documents, their main task is to build a holistic, continuous environmental education of the 21st century personality.

An important factor can be found in clause 7 of the list of instructions of the Prime Minister of the Russian Federation addressed to the Ministry of Natural Resources of the Russian Federation based on the results of the National Projects – Implementation Stage forum held in April 2019, which involves the preparation of the Ministry of Education of Russia, the Russian Ministry of Education and Science, and the governor of Nizhny Novgorod Region G.S. Nikitin (the head of the working group of the State Council of the Russian Federation in the direction "Ecology and Natural Resources"). It contains proposals for the formation of environmental culture among the population, Vyshen level of environmental education of citizens, including those referring to the need to implement appropriate additional educational programs in pre-school educational institutions, educational organizations, professional educational institutions and educational institutions of higher education.

The Federal State Educational Standard for preschool education addresses the phenomenon of environmental education through the experimental and research activities of children. So, "for children of preschool age (3-8 years) – a series of activities, such as playing, including a role-play games, games with the rules and other types of games, communicative (communicating and interacting with adults and peers), research (research of objects of the surrounding world and experimenting with them), as well as the perception of fiction and folklore, self-care and basic household work (indoors and outdoors), construction from various materials, including designers, modules, paper, with native and other material, visual (drawing, modeling, application), musical (perception and understanding of the meaning of musical works, singing, musical rhythmic movements, playing children's musical instruments) and motor (mastering the basic movements) forms of child activity should be implied"(Federal..., 2013).

The structure of children's experimentation consists of the following elements: statement of the problem that needs to be solved; goal-setting (what needs to be done to solve the problem); hypotheses (search for possible solutions); testing the hypothesis (data collection, implementation); analysis of the result (confirmed or not); formulation of conclusions.

Summing up, studies of modern scholars and regulatory legal documents stress the need to create a new type of interaction between socially significant systems, the development of the theory and practice of sustainable development on the basis of multimodal integrated approach of the social environment in the dialectic space.

Thus, the scientometric analysis of the problem of environmental education of preschool children is an important direction in the development of pedagogical theory and educational practice in the discourse of media education.

## 4. Results

Having started the scientometric study on the problem of preschool children environmental education in the electronic information database of Scientific Electronic Library, we designated a search query on the topic, stating time interval from 2018 to 2019.

In total, we found 291 publications of various types:
- scientific article (75 % of the total microflow of pedagogical documents);
- review article (20 % of the total microflow of pedagogical documents);
- collections of materials of international scientific and practical conferences, monographs (5 % of the entire array of documentary stream on the research topic).

Thus, we see that most publications are scientific in nature and published in such authoritative scientific journals as: *Bulletin of pedagogical innovations, Preschool education, Bulletin of Chechen State Pedagogical Institute, Science and school, Problems of modern teacher education, Modern problems of science and education* and so on.

We consider it very advisable to focus on the scientific article "Environmental education for sustainable development. Analysis of fundamental regulatory documents", published in the journal from the Approved List of Higher Attestation Commission"Preschool Education" in 2018. This article was written by prominent theorists and practitioners of environmental education of preschool children in modern Russia – S.N. Nikolaeva and N.A. Ryzhova (Nikolaeva, Ryzhova, 2018).

Theresearchers examined the phenomenon of environmental education of citizens of the Russian Federation for the development of their environmental awareness and environmental culture. In addition, researchers pay attention to the first stage of the educational ladder of personality – the stage of preschool education, where much attention should be paid to environmental education and the new directions of its organization in preschool educational organizations in modern Russia. Along with this, S.N. Nikolaeva and N.A. Ryzhova describe the problematic places for the implementation of the Federal State Educational Standards of Higher Education, preschool educational organizations and standards and regulations (SanPiN) in terms of the organization of environmental education, the educational effect of which is not always possible to achieve in all domestic kindergartens and organizations of additional education for children. The attention of the pedagogical community and the social sector is also drawn to ecological climate in preschool organizations and organizations of additional education for children with an orientation on the conditions of sustainable development.

Ergo, Federal State Education Standard for Pre-school Education orientates participants of educational relations on the need for expansion of the experience of positive interaction of preschool children with the outer world, the acquisition of experience in environmental activities, the formation of the foundations of ecological culture.

Thus, the issues of environmental education of children are reflected in various articles and monographs, as we have seen when conducting the scientometric study.

It is important to note that a significant part of the articles has an overview scientific practice-oriented nature and is published in collections of materials of Russian and international conferences. For example, in the following:
- Actual issues of continuity of preschool and primary education;
- A problematic and informational approach to the implementation of modern education methods: issues of theory and practice;
- Professionalism of the teacher: essence, content, development prospects;
- Modern childhood: psychological and pedagogical support for the family and the development of education;
- Language and current problems of education, etc.

It is important to focus attention on the activities of the Department of Theory and Methods of Preschool and Primary School Education of the International Academy of Pedagogical Education Sciences, headed by the Head of the Department of Preschool Education of Moscow Region State University, Professor of the Department of Aesthetic Education of Preschool Children of Moscow Pedagogical State University Prof. Dr. T.S. Komarova and Professor, Leading Researcher at the Institute for Educational Development Strategy of the Russian Academy of Education, Rector of

the Institute for the Development of Educational Technologies Prof. Dr. G.P. Novikova. This Department holds the majority of scientific and practical conferences related to the phenomenon of childhood and the unleashing of the potential of each child, which corresponds to the Decree of the President of Russia No. 204 of 05.07.2018.

Particularly noteworthy is the activity of the Department of Preschool Education of Moscow region state university, which annually holds an international scientific-practical conference "Environmental Education and Early Childhood Education: Problems and Development Prospects", the results of which are reflected in the eponymous collection of works and highlighting innovative vectors of the development of the ecologization system childhood in the new environment. In the future, it is planned to organize network conferences and create the Association of Ecologists and Teachers of the Russian Federation to develop the ideas of environmental education and the formation of civil society in the context of sustainable media development.

Along with this, it can also be noted that most pedagogical publications on environmental education of preschool children were published in Moscow, which is due to objective reasons. Firstly, Moscow is a city of federal significance, accumulating preschool practice. Secondly, the main centers of training the personnel for the system of preschool education are concentrated in Moscow. And, thirdly, metropolitan specialists are building innovative vectors for the development of preschool education in the context of new ideas that define a new vision of the problem of the sphere of preschool childhood.

In addition, consideration is given to the essence of media education in the environmental paradigm in preschool childhood.

Thus, on the basis of scientometric research, it should be noted that media education is currently advisable to divide into the following main areas, taking into account the specifics of preschool education:

1) media education of future and current professionals – journalists (press, radio, television, Internet), filmmakers, editors, producers, etc.;

2) media education of future and current teachers and educators at universities, pedagogical institutes, pedagogical colleges, universities and colleges in the field of culture (primarily in the preparation of library specialists for work in children's libraries) in the process of continuing education of teachers of universities, colleges and schools in courses on media culture, environmental culture, film and media education;

3) media education as part of the general education of schoolchildren and students studying in schools, colleges and universities, which, in turn, can be integrated with traditional disciplines or autonomous (special, optional, circle, etc.) disciplines;

4) media education in institutions of additional education for children and leisure centers (youth creativity centers, scientific and technical creativity of children and youth, extracurricular activities centers, art schools, aesthetic and artistic education centers, community clubs, sports schools, etc.);

5) remote media education of preschool children and parents¸ schoolchildren, students and adults, all participants in the educational process of children, using television, radio, the Internet system (here media criticism plays a huge role) – this is actually an informal education;

6) independent / continuous media education throughout life – in fact, this is an informal education (Fedorov, 2009; Demidov, Tretyakov, 2016).

Based on the results of scientometric research, we found that the active development of high information technologies at the beginning of the 21st century and their impact on society and personality gave rise to many new questions related to a number of phenomena, the study of which is only possible within the framework of existing methodological positions (for example, the choice as the "living environment" of the self-realization of the Internet environment with all its features and in its various manifestations). One of the new directions in the development of post-non-classical science, which can provide new methodological support in solving this problem, is the development of a network paradigm.

Talking about its essence, we note that the concept of "network" is interpreted differently. However, despite the variety of interpretations, the researchers agree to determine its essence. The network has a branched structure, which has many interconnected and equivalent paths, and covers all spheres of society. As T.A. Kravchenko mentions, network technologies are currently being actively developed, which are characterized by a number of features: the basis of networks is

the communication of individuals; a network exists as a specific environment where participants can interact; something new arises in the network, which is a product of its functioning (this is the main ontological property of the network); products generated by the network are virtual and can be relatively independent; the network is non-hierarchical, has a branched structure and is more similar to a rhizome. (G. Deleuze and F. Guattari as a network mean a rhizome formation that does not have a central core, but has a branched structure. From the authors' point of view, in a broad sense, the concept of "rhizome" can be applied to the description of the modern world, which is characterized by the absence of centralization and symmetry). In addition, these features of networks are manifested in all spheres of human activity (education, economics, political and spiritual sphere) (Kramarenko, 2011).

Thus, in this context, media education is a vivid and understandable resource for all examples, permeating all spheres of society and exerting influence on them.

### 5. Conclusion

Based on theoretical and analytical studies, we may conclude that the media space of a preschool educational organization as a factor in the formation of the foundations of the ecological culture of the personality of a preschool child will be more effective if:

1. A model has been developed for the formation of the foundations of the ecological culture of the personality of a preschool child in the media space of pre-school educational organization;

2. A partial educational program has been developed for the formation of the foundations of the ecological culture of preschool children in the media space of pre-school education;

3. There are guidelines for educators on the formation of the foundations of the ecological culture of preschool children in the media space of early childhood care.

The novelty of the study cited in the article lies in the theoretical and analytical understanding of the publication activities of Russian teachers, so we consider it appropriate to develop a scientific and methodological support for the educational process of forming the foundations of the ecological culture of a preschool child in the media space of pre-school education.

So, on the basis of a polyaspect scientometric analysis of the problems of environmental preschool children in the pedagogical literature for the year 2018 and 2019, we made a number of final vectors of development.

The enlarged thematic areas of modern environmental education of preschool children can be considered:

• education of humane attitude to nature (moral education);
• formation of a system of environmental knowledge and ideas (intellectual development);
• development of aesthetic feelings (the ability to see and feel the beauty of nature, to admire it, the desire to preserve it);
• participation of children in feasible activities as looking after plants and animals, protecting nature.

The effectiveness can be reached when all of these areas are integrated in one session. Without bringing children closer to nature and its wide use in the educational work of a modern preschool educational organization, it is impossible to solve the problems of the comprehensive development of preschool children - mental, intellectual, aesthetic, moral, labor and physical.

Gamification is another important aspect of the ecological space of a preschool organization. The main goal of environmental education as a means of developing preschool children is the formation of the principles of environmental culture, namely, the correct attitude of the child to the environment and so on.

Thus, an extremely active scientific interest has focused on capabilities of each child (giftedness, talent, abilities, etc.), including the sphere of environmental education. We believe that a creative personality can develop in terms it is enriched with knowledge and skills. The formation of environmental education among preschool children is a leading factor in national security and the democratization of Russian society.

In conclusion, we should emphasize that modern high-quality educational media resources may serve as a universal mean of forming and updating the academic content of environmental-friendly education of children in the media discourse. In our opinion, it is necessary to prepare a new module program on environmental education of children in the media space, which will

improve the quality of preschool education, the involvement of children in the civil information society and knowledge societies.

### References

Afanasyeva, Novikova, 2016 – *Afanasyeva, T.P., Novikova, G.P.* (2016). Modernization of the mechanisms of innovative activity of preschool educational organizations: a monograph. Yaroslavl-Moscow: Chancellor, 388 p.

Balabas, 2012 –*Balabas, N.N.* (2012). On the problem of the linguistic picture of the world and the concept. *Language, literature and translation in a sociocultural context*. Cheboksary: 126-132.

Barraza, 2012 – *Barraza, L.* (2012). Environmental Education: A Comparison between English and Mexican children. *Environmental Education Research*, 8: 171-186.

Bykasova et al., 2019 – *Bykasova, L.V., Vovchenko, N.G., Krewsoun, M.V.* (2019). Modern transmedia products architecture. *Media Education*, 2: 216-223.

Chen et al., 2017 – *Chen, F., Gorbunova, N.V., Masalimova, A.R., Birova, J.* (2017). Formation of ICT-Competence of Future University School Teachers. *Eurasia journal of mathematics science and technology education*, 8: 4765-4777.

Decree..., 2018 – Decree of the President of the Russian Federatio*n* (2018). On national goals and strategic objectives of the development of the Russian Federation for the period until 2024. [Electronic resource]. URL: https://rg.ru/2018/05/08/president-ukaz204-site-dok.html

Demidov, Fedorov, 2015 – *Demidov, A.A., Fedorov, A.V.* (2015). Non-formal, informal education and media education: politics and practice for the development of critical thinking and the formation of personal information security. *Information field of modern Russia: practice and effects*. Kazan: 475-481.

Demidov, Tretyakov, 2016 – *Demidov, A.A., Tretyakov, A.L.* (2016). Centers of ethical and legal information and media education based on the school library – an innovation in the implementation of the Federal State Educational Standard and infrastructure for the development of the information and legal culture of children and youth. *Media Education*, 2: 21-33.

Federal..., 2013 – Federal State Educational Standard for Preschool Education (2013). [Electronic resource]. URL: https://rg.ru/2013/11/25/doshk-standart-dok.html

Fedorov, 2005 – *Fedorov, A.V.* (2005). Media Education and Media Literacy. Taganrog, 150 p.

Fedorov, 2009 – *Fedorov A.V.* (2009). Media Education: Yesterday and Today. Moscow, 234 p.

Fedorov, 2011 – *Fedorov, A.V.* (Ed) (2018). The use of media education in parenting. Taganrog, 232 p.

Fedorov, 2019 – Fedorov, A. (2019). Schools and universities in audiovisual media: experts' opinions. *Communication Today*, 10 (1): 110-122.

Fedorov, 2019 – Fedorov, A. (2019). The Heritage of Yuri Lotman, Umberto Eco and Vladimir Propp in the context of media literacy education. *Media Education*. 2019. № 2: 243-248.

Fedorov, Levitskaya, 2018 – Fedorov, A., Levitskaya, A. (2018). Mass media literacy education in modern Russia. *Media Education*, 2: 6-23.

Gálik, Gáliková Tolnaiová, 2015 – *Gálik, S., Gáliková Tolnaiová, S.* (2015). Influence of the internet on the cognitive abilities of man. Phenomenological and hermeneutical approach. *Communication Today,* 6 (1): 4-15.

Imeridze, 2016 – *Imeridze, M.* (2016). Implementation of the experimental model of future teachers' media education competence formation. *Science and Education*, 1: 102-106.

Kačinová, 2018 – *Kačinová, V.* (2018).Media competence as a cross-curricular competence. *Communication Today,* 9 (1): 38-57.

Komarova et al., 2011 – *Komarova, T.S., Antonova, A.V., Antonova, T.V., Belaya, E.B., Bratukhina, M.N., Brykina, E.K., Zatsepina, M.B., Kramarenko, O.K, Kulanina, I.N., Maksimova, S.I., Petrova, V.I., Ryndina, O.A., Khalezova, N.A., Shpikalova, T.Ya.* (2011). Artistic and aesthetic activity as the basis for the comprehensive education of the child. Moscow: Moscow State University M.A. Sholokhov, 251 p.

Komarova et al., 2018 – *Komarova, I.I., Demidov, A.A., Komarova, T.S.* (2018). The partial program of preschool education "What is good and what is bad" is an innovative educational product for the preschool education system. *Integration of media education, legal education and legal informatization in conditions of a modern school*. Moscow: 304-331.

Kramarenko, 2011 – *Kramarenko, N.S.* (2011). The problem of self-realization in the light of the network paradigm of personality development. *Bulletin of the Adygea State University. Series 3: Pedagogy and Psychology*, 4: 40-45.

Krucsay, 2017 – *Krucsay, S.* (2017). Media education in Austria: competence, communication, autonomy. *Comunicar*, 28: 111-120.

Melnikov, Potanina, 2017 – *Melnikov, T.N., Potanina, L.T.* (2017). Act as the highest level of development of the value-semantic sphere of personality. *Herald of the Moscow State Regional University. Series: Pedagogy,* 1: 21-28.

Minbaleev, 2007 – *Minbaleev, A.V.* (2007). The role of media education in the formation of the information and legal culture of modern youth. *Media Education*, 1: 12-16.

Moskvina, 2017 – *Moskvina, A.S.* (2017). Features of interpersonal relations of modern elementary schoolchildren. *Humanitarian Space*, 2: 210-214.

Nikolaeva, Ryzhova, 2018 – *Nikolaeva, S.N., Ryzhova, N.A.* (2018). Ecological education for sustainable development. Analysis of fundamental regulatory documents. *Preschool education*, 1: 4-12.

Ortega-Tudela et al., 2015 –*Ortega-Tudela, J.M., Camara-Estrella, A.M., Diaz-Pareja, E.M.* (2015). Service learning as a tool to enhance future teachers' media competence. *Cultura and Educacion*,2: 440-455.

Petranová et al., 2017 – *Petranová, D., Hossová, M., Velický, P.*(2017). Petranová, D., Hossová, M., Velický, P. (2017). Current development trends of media literacy in European Union countries. *Communication Today*, 8 (1): 52-65.

Pleshakova, 2019 – *Pleshakova, A.Yu.* (2019). Germany's dual education system: the assessment by its subjects. *Education and Science*, 5: 130-156.

Pomerantseva, Syrina, 2017 – *Pomerantseva, N.G., Syrina, T.A.* (2017). Features of the formation of foreign language sociocultural competence by means of mass open online courses. *Azimuth of scientific research: pedagogy and psychology*, 4: 167-170.

Ramarez-Garcia, Gonzalez-Fernandez, 2016 – *Ramarez-Garcia, A., Gonzalez-Fernandez, N.* (2016). Media Competence of Teachers and Students of Compulsory Education in Spain. *Comunicar,* 49: 49-57.

Ryzhikh, 2011 – *Ryzhikh, N.P.* (2011). Use of media education in parenting. Taganrog: Taganrog State Perdagogical Institute, 232 p.

Sarycheva et al., 2017 – *Sarycheva, L.V., Sen, N.I., Syrina, T.A.* (2017). Correspondence of information and communication technologies of the competence of higher schoolteachers to the requirements of a professional standard. *World of Science*, 3: 23.

Šupšáková, 2016– *Šupšáková, B.* (2016). Media education of children and youth as a path to media literacy. *Communication Today,* 7 (1): 32-51.

Tretyakov, 2017 – *Tretyakov, A.L.* (2017). Ecological and legal education of students in the context of the implementation of the State program "Patriotic education of citizens of the Russian Federation for 2016-2020". *Bulletin of the Academy of Children and Youth Tourism and Local History*, 1: 16-24.

Veselovsky et al., 2018 – *Veselovsky, E.D., Gaskin, V.G., Demidov, A.A., Karakchieva, I.V., Komarova, I.I., Ledenev, Yu.P., Marshava, L.A., Sitnik, V.G., Tretyakov, A.L., Shingarkin, M.* (2017). Network interaction of NPOs in ensuring the environmental rights of citizens: a monograph. Moscow: Citizen, 120 p.

Wagner, 2012 – *Wagner, I.V.* (2012). Education in the context of globalization: European priorities (for example, Germany). Saarbrucken: Lambert, 93 p.

Zakharova et al., 2019 – *Zakharova, A.A., Vekhter, E.V., Shklyar, A.V.* (2019). The applicability of visualization tools in the meta-design of an educational environment. *European Journal of Contemporary Education*, 8: 43-51.
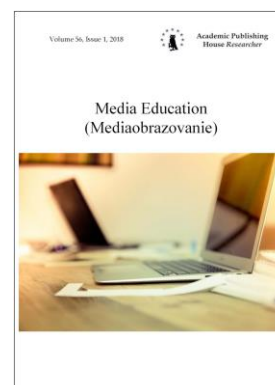
# Analysis of the State of Practice-centred Teaching and Learning about Media at Slovak Schools – Selected Examples of Good Teaching Practice

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## Abstract

The objective of this study is to present research findings on the state of application of practice-centred teaching and learning about media at Slovak schools. The basis is the analysis and description of its curriculum status in the main stages of the development of media education at schools in the context of content reforms up to the present (2008, 2011, 2014/15). The focus is on examining the practice represented by 38 examples of practice-oriented media education at primary, lower and upper secondary education in Slovak schools over the period 2014–2019. By means of qualitatively-oriented methodological design applying content analysis and the deductive procedure, the method of implementation and didactic system of this teaching (topics, goals, methods, organizational forms, principles, material and technical means) are ascertained. In accordance with the core principles of German action-oriented concept of media education, the bases of which have been applied, the special focus is to investigate the application of reflexive-practical media work as a tool of learning about media in the process of practice-centred teaching and learning about media.

**Keywords:** practice-centred teaching and learning about media, good teaching practices, Slovak schools, media education, media competence, reflexive-practical media work

## 1. Introduction

Practice-centred teaching and learning about media (Kačinová, 2015a) is a concept of media education centered on practical or reflexive-practical knowledge and acquirement of media in the reshaping action of the learner. This type of learning involves developing the pupil's conativo potential in interacting with media, which become the object of targeted learning, as well as tools of self-expression of the subject (through creative media creation) in a participatory-communication media process set in a social context. In the learning process, with the assistance of media, developmental changes in the personality qualities of an individual could happen (emphasis is on practical skills, but also the cognitive and social-affective dimension), and the student, using media, could become a functional player in the development or transformation of his/her own personality and the surrounding reality. This type of teaching and learning corresponds to the action-oriented concept (Baacke, 1997; Tulodziecki, 1997; Schorb, 2009), pragmatic or practical model of media education (Fedorov, 2011), the "learning by doing" concept (Petranová, 2011; Vrabec, 2013; Vránková, 2004). The bases of pragmatic pedagogy, Dewey's theory of "learning by doing" and

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"experiential learning" or the category of action-oriented learning enshrined in the concept of communicative competence and media competence (Baacke, 1996), are behind this practice.

Practice-oriented media education has found significant application in the theory and practice of national education systems (Directorate..., 2014; Fedorov, Levitskaya, 2019; Hartai, 2014; Petranová et al., 2017). Similarly, in Slovak conditions, it is a widely used and an attractive concept for the educational agents due to its action-participatory and experiential nature. This has been proven by research into educational practice in the field of integration of media education into education system at Slovak primary and secondary schools (Kačinová, Kolčáková, 2013a, b). A framework for its application in Slovak schools has been provided since 2008, when media education was introduced as a compulsory cross-curricular topic in the Slovak *"Model curriculum of media education as an optional subject"* in the 5th-9th year of primary schools and 1st–4th year of eight-year grammar schools (Kačinová, 2008). At the same time, productive learning about media is enshrined in all core curricula, The National Educational Programmes (NEPs) and their annexes of 2008, 2011, 2014/2015, which regulate compulsory education at Slovak general education schools. However, these documents did not emphasize the above forms at all grade levels, it happened to a greater extent after 2011 (Kačinová, 2015b). They specified two recommended ways of media education: productive and receptive (Adamcová, 2011a; Adamcová 2011b). The productive form is defined in detail at the level of lower secondary education. Document "*Media Education. Cross-Curricular Topic. Annex ISCED 2. The National Educational Programme*" defines the required development of pupils' psychomotor skills: active use of media in the communication process, production of their own media contributions exploiting their creative potential, skills in operating technical equipment and new media technologies, ability to cooperate with other media creators in the communication process (Adamcová, 2011b: 3; Kačinová, 2008: 129). The methodological recommendations for fulfilling the objectives of the cross-curricular topic of media education (Biziková, 2015a: 1), which set out the outcomes for the individual grade levels, accentuate the development of analytical and critical media competence, more aware perception of media by students in relation to their own lives and their impact on their own personality and society. Competence in the production, control and use of media are subsequently considered "*also an important part*" of the goals and recommended outcomes of media education.

Despite greater didactic support for the media education process in recent decades, Slovak teachers are currently lacking teaching aids and methodological materials with suggestions and demonstrations of how to implement various forms of media education into the learning process: survey "*School, Teacher and Media Education*" (Biziková, 2015b), especially the practical form. The International Media Education Centre (IMEC) at the Faculty of Mass Media Communication UCM in Trnava, has set up several projects to collect the best examples of the teaching and make them available to educators in both printed and electronic form. Through the organization of the competition entitled "*Best Examples of Good Practice in the Teaching of Media Education at Primary and Secondary Schools*" (2014/2015, 2015/2016, 2018/2019), examples have been gathered and teachers have acquired two methodological guides (a third is under preparation). These examples have been the subject of our research.

### 2. Materials and methods

The analysis, evaluation and description of the state of practice-centred teaching and learning about media at Slovak schools were primarily based on the analysis, comparison and synthesis of professional debates on the topic. Taking into account the curricular perception of media education as a compulsory cross-curricular topic according to the National Educational Programmes, we focused on the analysis of incorporating this topic in the context of school practice. This is represented by examples of good practices in the teaching of media education at Slovak primary, lower and upper secondary schools during 2014-2019. With its descriptive and explanatory purposes as a part of a systematic examination of the level of media-educational practice in Slovak schools through the analysis of examples of good practices (Kačinová, 2015b; 2016), this research uses a qualitative methodological design.

The following research questions were formulated:

1. How is practice-centred teaching and learning about media implemented in Slovak schools? What can be said about the context of its position in the teaching, topics, goals, methods, organizational forms, principles, material and technical means?

2. Is any practical work with media use for the reflective cognition of media?

In accordance with the professional discussions (chapter 3), the overall objective, was to find out whether there is, in the implemented practice-centred teaching and learning about media at Slovak schools, any intersection between two paradigms of media education (critical and productive) in the form of reflexive practical work with media. We focused on the qualitative content analysis of practice-oriented examples (case studies) of so-called ´good practices´ of the teaching of media education at the selected primary and secondary schools. The meaning categories – units of content analysis represent characteristics or principles of action-oriented teaching and learning about media based primarily on professional approaches (Anfang, 2001; Roll, 2006; Schell, 1989; 2009; Schorb, 1998; 2009; 2010; Tulodziecki, 1997). At the same time, in accordance with the research questions, the categories of analyzed documents which were selected – teachers' applications for the "*Best Examples of Good Practice in the Teaching of Media Education at Primary and Secondary Schools*" (structured and published in Kačinová, 2015; Kačinová, 2017). In the third year they have not been published. Applying the deductive procedure, the research data were assigned to the categories presented in Table 1.

**Table. 1.** Categories for the analysis

| Name of good practice | Identification |
|---|---|
| Initial situation | Context of the teaching activity/output: (a) as an integrated part of subjects, (b) as an integral part of a separate subject (compulsory, optional), (c) within a circle, (d) a separate project, (e) in another form; specification of the level of education, grade level, hour duration. |
| Annotation | Characteristics of topics, the specification of learning objectives as required learning outcomes: (knowledge, abilities, attitudes, skills, competences); the principal mode of activity: receptive, productive. |
| Description of implementation | Detailed definition of the methodological procedure of the pedagogue in achieving the set learning objectives in the individual stages of teaching, or methodological description of the process of pupil product formation; specification of organizational forms (classified in the context of teaching concepts: frontal/class teaching; group and cooperative; individualized and differentiated; in different environments, e.g. excursions; projects; homework); teaching methods (combination of rating criteria – source of knowledge and activation of pupils: verbal (monologic, dialogical, written work; work with textual materials); demonstration; practical; activating (discussion, situational, role playing, didactic games, problem-solving) (Maňák, Švec, 2003; Skalková, 2007); specific tasks/assignments for pupils. |
| Material and technical means of teaching activity | Teaching, methodological resources, technical aids that teachers use in the activity and its preparation, including their own (presentation, questionnaire, worksheet, textbook and others. |
| Evaluation and contribution of teaching activity | Description of the benefit of the activity for the pupil/student, school, school surroundings, recommendations for other teachers, possible difficulties. |
| Documentation | Description of the benefit of the activity for the pupil/student, school, school surroundings, recommendations for other teachers, possible difficulties. |

The research sample:

Through the three years of the competition, IMEC obtained 52 examples, of which 38 examples focused on the productive, practice-centred concept were selected and analyzed. The selection and inclusion of the teaching activity in the sample was conditioned by its educational objectives and outputs. Furthermore, the selected outputs of the examples of practice-centred teaching about media-websites of the selected projects, selected pupils´ media products – were analyzed.

### 3. Discussion

Developing the skills to act with media understood as creating and communicating their own media products and expressing the individual through the media is part of both traditional and newer models of media competence corresponding to the nature of societies of the last decade – information and networked societies (Aufderheide, 1993; Baacke, 1996; Ferrés Prats, Piscitelli, 2012; Livingstone, 2004; Schorb, 1997; Theunert, 1999; Tulodziecki, 1997).

In his model, B. Schorb (Schorb, 2010: 259) summarizes the approaches of the German action-oriented model and defines, as one of the dimensions of media competence, *media-acting* (Medienhandeln) perceived as *media-mastering* (Medienaneignung), *media utilization* (Mediennutzung), *media participation* (Medienpartizipation), *media creation* (Mediengestaltung). Other approaches consider instrumental abilities related to the application of media and media management - the ´media usage´ dimension, ´application competence´ (related to the use of tools) and ´operational competence´ (related to the creative and productive use of media that have expanded user expression) or as the case may be ´media design´ (Aufenanger, 2009: 3). The media competence model by J. Ferrés Prats and A. Piscitelli (Ferrés Prats, Piscitelli, 2012: 79-82) set in the context of digital participatory culture, presents as one of the basic required dimensions *Production and dissemination processes* encompassing the practical capabilities of the individual's work with media. At the same time, the area of expression including its indicators is, in addition to the area of analysis, an integral part of every other dimension of media competence (Languages, Technology, Interaction Processes, Ideology and Values, Aesthetics). The professional approaches also show the predominance of action-related dimensions in media competence models and the tension in defining media competence goals resulting from the relationship of critical competence (reflection and assessment of media content) and instrumental competence (Aufenanger, 2009).

Changes in the technological conditions of media, as well as the nature of the digitized culture conceived more globally as ´era of prosumidors´, in which an individual, in addition to consumption, produces and disseminates media content, also significantly influence the current process of media education. Thus, media education is much more production-centred due to the reduced cost of media production and easier access to its distribution. At the same time, this corresponds to the nature of the an era that is rich in opportunities for media as a means of creative expression (Hoechsmann, 2012: 31). However, this practical focus, which has expanded in recent years, may be associated with fears of reductionism in media education stemming from its instrumental and technological perception, when media education is mistaken for the so-called ´technical capacity to use the media´ (Gutiérrez, Tyner, 2012: 32), though even in the process of using it as a means of creation and sharing. Or, as the case may be, associated with the fear of losing the reflexive-critical dimension of media education, stemming from the heritage of critical mass media theories or critical hermeneutic tradition of reading (Hoechsmann, 2012: 31), analysis and interpretation of media texts (Vránkova, 2004), or its cultural dimension. The critical and cultural dimension implies "make creative media work meaningful and satisfying to the learner" (Bachmair, Bazalgette, 2007: 84). Thus, not every media production is media education.

The result of the educational process may be the media product itself, or it may be the result of the media learning process. In order to fulfil the aims of media education, conceived as the teaching and learning about media, media creation should become primarily a tool for understanding aspects of media reality, media production processes, expressive-aesthetic and technological ways and possibilities (including limits) of expression through different types of media. This, in part, is ensured by the media-productive process in which the students participate, but to a greater extent practical media work, enriched with (critical) reflection (Kačinová, 2016: 103).

According to F. Schell (Schell, 2009: 13), the addressees of active media work experience media products as something done and doable and in the actual creation of texts, sounds, images, they can also grasp the manipulative possibilities of media with the senses. However, critical assessment of media products and reflection of how they are used is not an automatic process. In the process of active work with media it is necessary to focus on the analysis and criticism of the media. The active work with media allowing reflection, analysis and criticism of the media (Schell, 2009) or "reflexive-practical work with media" (Schorb, 1998: 17) thus represents the central didactic method of conveying the knowledge of media in the action-oriented concept of media pedagogy. In its context, the acting with media as a process category is perceived principally as a reflexive-practical acquirement of media.

Consequently, (acting with media) is understood as processing the areas of social reality with the help of media, it means self-acting treatment of media and their use as a means of communication (Schorb, 2010) and social action (Tulodziecki, Grafe, 2012). F.J. Roll (Roll 2006: 17), including the approaches of G. Anfang (Anfang, 2001: 12) and F. Schell (Schell, 1989: 34), summarizes the intentions of practical action-oriented media education: education for self-empowerment (emancipation), gaining authentic experience, creating conditions for the development of media competence, clarifying media supply and structure, facilitating independent and critical media contact, promoting social participation and social competence, promoting technical competence, bridging the knowledge gap, dealing with personal living space themes, promoting the perception of one's own interests and needs, enhancing creative potential and self-confidence. Action-oriented learning, exemplary learning, group work, (re)creating authentic experience, mediating communicative competence and media competence are teaching principles and thus a methodological framework for this process (Schell, 2009: 10).

## 4. Results

The analysis of teaching examples shows that practice-centred teaching and learning about media is carried out at Slovak schools at all grade levels of primary, secondary schools providing general education (grammar schools), as well as secondary vocational schools such as business and services, arts and industry, even woodworking. In accordance with the ways of implementation of media education defined in the National Educational Programmes as a cross-curricular topic of education for primary, lower and upper secondary education (2014/2015) (Štátny vzdelávací program. Nižšie stredné vzdelávanie – 2. stupeň základnej školy, 2015: 10), it is implemented in practice:

a) as integrated part of the subjects: informatics, Slovak language and literature, art and culture, music education, art education, civics, national history, history, English language, information sources, personal finance management, graphics;

b) as part of an independent compulsory and optional subject of media education;

c) in the circles: media, media-journalism, film production, school television, school magazine;

d) in stand-alone projects (especially Security Week organized by the Orange Mobile Foundation on the Internet).

The prototype of educational activities aimed at supporting practical teaching (learning) of pupils about media are projects focused on the creation of school digital media: school newspapers, school radio, school online television, school web or Facebook page, blog, news agency, commercial or poster, or other media genres (school television, radio news), documentary films. These correspond to the so-called ´journalistic model´ of product-oriented concept of action-oriented media pedagogy (Röll, 2006), or journalistic-oriented media production (Tulodziecki, 1997). The essence is to know the basics, procedures, technical and expressive means of print, television, radio, multimedia journalism, film production, advertising production and apply them in the production of their own individual or collective media output. By creating authentic experiences, students learn about how media perform the tasks of preparing, processing, and publishing products, i.e. as staffers, text editors, language proofreaders, graphic designers, presenters, screenwriters, cameramen, directors, actors, sound engineers, editors, video creators and other media professions. In particular, the aim is to develop the following capacities of the students:

- operative skills (as a sets of technical skills needed to use the technologies and media; include motor, perceptive and interpretative skills),

- creative skills (based on the operative skills with introducing of originality and innovation through existing discursive symbolic repertoires),

- communicative skills (sum of operative, creative and social),

- semiotic and cultural skills (capacity to use and act with the semiotic codes and cultural conventions) (Pérez Tornero, Varis, 2010: 82-83).

The fact that teaching is carried out in active contact with other objects of life reality (Anfang, Uhlenbruck, 2009) is in accordance with the bases of action-oriented teaching and active work with media. The development of the students' capacity thus occurs in symbiosis with the knowledge of the social environment which becomes the subject of exploration and processing in the media outcome. In the case of the learning activities it was primarily the school environment and its

activities, but also the wider environment (for example, during a homeland excursion) as well as the specific topics of the students' realities. These are elaborated hereunder.

Some teaching examples were of cross-media nature (an activity aimed at creating several media products in one project), or they combined several concepts of media rendering. For example, there was a project where they actively worked with a school radio, a music studio recording their own CD, they made and edited short films on themes of "positive aspects of the media" (Borbélyová, 2017; Gondová, 2017). CD and film creation is a typical example of ´fictional-oriented media creation´ (Tulodziecki, 1997) which is a means of expressing the desires and imaginations of a young person. A common feature of several projects was the perception of productive work as an instrument of media acquirement in conjunction with articulation of the students' interests and themes (Anfang, Uhlenbruck, 2009). This concerned the selection and method of processing the themes of media products, as well as the active work of students in groups according to the liking of a particular medium.

Students' communication skills were developed by letting them present their products on media platforms e.g. by presenting a CD on a local radio, placing articles in a local newspaper, disseminating recordings, videos, movies via the school's web or Facebook page or Youtube channel to the public, or through a school radio advertising campaign (attempting to sell advertising time for a symbolic price (Kinka, 2015: 16). Examples that were subject to content analysis presented pupils' products to the public in collaboration with the mass media (mostly local) only to a lesser extent. In comparison with foreign countries (Germany, Austria, Netherlands, USA, etc.), in Slovakia there are no institutions such as open channels or channels providing education and further education and the mass media do not provide special broadcasting for such purposes. However, the possibility of publishing products to students and teachers is provided by the project of the national news agency "*TASR to Schools*" and its web platform "*www.skolske.sk*" – the first school news website and another news website "*TERAZ.SK*". The presentation of pupils' products is also possible in the national competitions: audiovisual and multimedia production of children and youth "*Zlatá Klapka*", amateur film production "*Cineama*", amateur photographic production "*Amfo*", journalist competition of high school students and university students "*Štúrovo pero*" (school magazines, journalistic contributions, electronic magazines), animation "*Animofest*". In particular, animation is considered by teachers to be an instrument for the active entry of children into the art, film, and multimedia industries, a tool for developing their media literacy, as well as for learning to actively and meaningfully use digital technologies in a creative way (Gondová, 2018: 2). It is applied already at the first grade of primary schools as one of the forms of active work with the media (in the form of animated video clips).

In some of the product-oriented learning activities, their educational objectives, mostly cognitive or socio-affective, directly reflected an evaluative potential in relation to the medium on which the students were focused. For example, in the context of school television, the following pupils' capacities were developed: media orientation, to understand the influence of the media, to understand and process reality into a news article, to critically assess the choice of information that should be of interest to viewers as well as others related to the actual creation of media texts. As part of the development of evaluation judgment and socio-affective competence, they learned to assess the ethics of the broadcast, reject an offensive media contribution, and overall responsibility for the contribution created (Kokavec, 2015: 20-21). Or the approach was in the form of pupils´ radio, aimed at educating a 'critical listener', capable of distinguishing the appropriateness of broadcast contributions, as well as the formation of a media professional capable of evaluating the school's actions and selecting the most up-to-date of them and broadcast them according to the listener's interest (Píšová, 2015a: 52). Advertising, perceived in the context of a "marketing move targeted at children" or an assessment of its veracity, intentions and persuasive or manipulative effects, has become an appropriate subject of the students analysis and criticism (Belanová, 2015; Píšová, 2015b). The pupils' independent outputs in the form of their own advertising posters or spots were preceded by a demonstration and analysis of the problem (through the documentary "*Consuming Kids: The Commercialization of Childhood*; USA, 2008, or current ads), followed by a reflection through a controlled discussion, a pupil questionnaire or a role-play in which the students performed a well-known commercial that were prepared by them in a group. Their creation was consequently the result of critical processing of the topic. It took the form of creating their own advertising products, which are not often displayed in commercials or "anti-advertising" placed in a common padlet (on-line notice board) published on the school's website. In addition to

the actual implementation of anti-advertising, pupils clarified what they intended to express with the advertisement and why it is nonsense. The outputs are an example of a public student protest against the persuasive impact of commercials and advertising and the expression of an independent emancipated attitude to the problem. An important element of learning was to stimulate pupils´ mutual cooperation in the production of outcomes, whereby the project applied the principles of cooperative or group learning.

The analytical-reflective approach to the media as a subject of learning in the context of productive learning activities resulted, in addition to specific educational objectives, from the characterized methodological design and teaching process as identified in the following examples:

1) The application of cooperative learning as a form of learning in the interaction group process, which is a tool for developing social and communication skills, but also to use higher-level reasoning strategies and build complete and complex conceptual structure in students (Johnson, Johnson, 1999: 73) in relation to the subject of learning;

2) The application of project teaching and learning is directly linked to the pragmatic pedagogy of J. Dewey and W.H. Kilpatrick, the concept of "learning by doing", the project method, and product-oriented students projects. It belongs to the preferred ones in the context of teaching with a view to enabling a practical-productive problem-oriented process: i.e. observational-explorative, focused on situation, life reality and interests of pupils using cooperative forms of work (Grecmanová, Urbanovská, 1997). This is related to the application of the relevant teaching methods. In terms of duration (Valenta, 1993), teachers used short-term projects (several hours to a day), medium-term (one week up to one month), long-term (several months to the whole school year), this form was used in addition to the classical lesson (45 minutes and more), trips, excursions to the media;

3) The application of activation teaching methods, especially the discussion of a problem: interview, discussion, brainstorming, Q&A, research, situational, role playing, didactic play; at the same time, typical methods for the receptive form of media education were also applied by teachers.

Other methods used in the individual phases of practice-centred teaching were: demonstration (demonstration and observation of subjects, activities related to media production), written works (scripts, journalistic texts, short stories, etc.), work with texts (media, teaching), practical (training of instrumental and practical skills to deal with diverse media technologies and information and communication technologies: take pictures, shoot, record, cut, edit, download, etc., training of production skills), monologic (explanation, narrative, lecture) by a teacher or invited specialist (psychologist, media staff);

4) The reflexive phase of teaching placed during or (mostly) at the end of the lesson – results from the above and other teaching concepts as well as the postulated didactic approach according to the teaching phases: evocation - exposure - reflection. It should purposefully allow pupils to reflect on their experience, for example through questions focused on description of experienced feelings, clarification of the preferred activity in terms of interest, as well as the educational benefits of activities in terms of usefulness and novelty of the knowledge. At the same time, it took the form of clarifying the acquired knowledge by the students, or directly the form of activity evaluation – e.g. in the case of a created film in the form of new ideas for its improvement, pointing out errors in the film (Gondová, 2017: 33).

Other cases of educational activities were an example of reflexive-active work with media, where the media became primarily a tool for processing the given areas of social reality. The objects of reflective cognition were related to learning objects according to integration into the subject. In the context of history teaching, for example, the aim was to show, in a creative way (provided that the sequence of historical facts and events is preserved) a self-understanding of historical themes through a media product (short video films including the writing of the script) and to demonstrate to their peers. Pupils posted amateur videos on YouTube (Bernoláková, 2015). In civic education, secondary school students recorded a news report, processed and published a video of simulated "fictional elections" organized to practice civic participation of students (Hazuchová, 2015).

The specific object of processing social reality through active work with media was the media itself, its factors or influences, which became the subject of analysis, critical reflection or (as the case may be) fulfilled protectionist intentions. This corresponds to the concept of media education in the Slovak curriculum, which from the beginning has a strong protectionist orientation. The occurrence of projects combining productive-protectionist-critical intentions is therefore no

exception in the context of school practice and good examples of teaching practice in Slovakia (Kačinová, 2015). These types include examples of productive teaching practice, the focus of which is protection from the media (mostly digital), and the media become a means of expressing this educational intention. An example are media products such as movies, video clips, internet magazines on the traps or risks of cyberspace, internet addiction, threats to communication in a virtual environment, and online shopping risks. In these cases, the communication of the pupil's output has the character of "instruction" or the enlightenment of others, or it is connected with peer learning (older pupils instruct the younger about the pitfalls of social networks). The benefits of projects for pupils are also defined as follows: "they know the pitfalls of social networks, they know how to use the Internet safely, they know the term "cyberbullying" and they can protect themselves against it" (Pňačeková et al., 2015: 25). At the same time, in the case of protectionist orientation it is not always a defensive approach, but is in the nature of "progressive protectionism". The aim of such projects is to highlight the positive aspects of digital media, such as: the issue of safe behaviour on the Internet (through a poster, leaflet, board game) as a way of preventing the negative phenomena associated with their use (Minarovičová, 2017). Possibly also to point out the media as tools for helping people in various situations, especially in an emergency, in protecting their health (through an instructional film - video) (Borbélyová, 2017).

The examples of good practice of the Secondary Technical School Svidník, the winner of the last two years of the IMEC competitions, are a prototype of the principles of practice-centred teaching and learning about media. Their first project, in the sense of the motto of reflexive-practical media pedagogy, or action-oriented teaching and learning about media (Schorb, 1998), *"Media Education: From Passive Consumers to Active Creators"* (2014–2016), was carried out in cooperation with partner schools from Portugal, Italy, Greece and Spain under the Erasmus + KA2 project. Its intention was to implement practical media education in secondary schools through the creation of an online "bank" of teaching materials, lesson plans, pupil outcomes - the *European Media Education Lab* (EMEL) website (http://www.europeanmediaeducationlab.com/). An important aspect was their "universality" or "transnationality" with the possibility of their use in the school curricula of the countries concerned (Stredná priemyselná škola Svidník, Erasmus + KA2 From Passive Consumers to Active Creators, 2014-2016). The aim of the project was based on *NCTE* - The Code of Best Practices in Fair Use for Media Literacy Education: "Making media and sharing it with listeners, readers, and viewers is essential to the development of critical thinking and communication skills. Feedback deepens reflection on one's own editorial and creative choices and helps students grasp the power of communication." (Code..., 2018; EMEL, 2014-2016)."

*The lesson plans on Media Education*" created correspond to five media forms (Video recording, Photography and images, Texts and articles, Radio and podcasting, Advertising). In the category Advertising there is an award-winning example - implemented in the environment of Slovak secondary school – *"Internet – my smart friend"*. It is an example of effective implementation of reflexive-practical media teaching, where the active work with media connected to pupils' interests develops their critical thinking towards the media as a topic of social reality and articulates their own attitudes in the process of participation in media communication. In a learning activity integrated in the teaching of English and Graphics, the 3rd year students of Graphic Design and Fashion, in group and cooperative lessons, designed and created an advertising education campaign entitled *"There is more to the internet than Facebook"* pointing to the Internet as an inexhaustible source of individual self-education and personal growth. At the same time, it aimed to divert young people's constant attention from the Facebook social network and focus it on websites and resources on the Internet that are useful and interesting to them. The areas of interest, on which the campaign's advertising products (advertising spots and advertising posters) were focused, were selected by students: music, movement (dance, sports), communication, foreign languages and skills development. The contribution of the project was to stimulate a critical reflection of the prevailing influence of Facebook on the daily life and experiencing of a young person, which was mainly stimulated by a productive process. Furthermore, students gained practical knowledge about the creation and mission of "educational advertising campaigns" and their impact on the change in human behaviour (Kocurová, 2017: 10). In addition to the practical-critical orientation of the activity, its protective impetus is evident. By publishing student media products on the site (partly), on the project activity page http://mediaerasmus.weebly.com/educational-campaign.html, as well as in the Teachers'

Methodology Guide (fully) students were involved in the process of public media communication of the topic.

Another international project *"Erasmus+KA2 „Filmmaking journey: From scratch to screen"* (2017-2019), (website https://filmmakingerasmus.weebly.com/), which is the main coordinator, continues the activities of this school focused on practice-centred teaching and learning about media. Its goal is to „develop filmmaking digital skills of students and teachers by creating program of filmmaking basics and producing short films around the five core concepts of Media education and literacy" (Filmmaking journey: From scratch to screen, 2017–2019) in line with the CML concept. Students are specially trained in the use, creation and distribution of film video as a means of communicating with the outside world with a specific focus on media literacy. Topics (media literacy topics) of the international student film competition were current topics of media / digital education: Social media, Cyberbullying, Sexting, Gender in media, Consumerism in media, Ethics in advertising, Stereotypes in Media, Body image/Beauty in the media, Internet safety, Digital citizenship, Digital literacy, Fake news / The news industry, Reality TV. Three teams of Slovak pupils (eight pupils in all) of the 3rd year prepared films during the lessons of vocational subjects and English. Their output – films on the alienation of young people and the weakening of their social relationships due to hyperconnectivity (*"Stone", "Disconnected"*) are an example of the application of practice-centred learning about media where creation of own products serves an individual to cope with the area from his/her own life reality in the form of critical self-reflection (Schorb, 2009).

The message of the films communicates the young man's protest over the "domination" of the digital media and the need for effective self-regulation of media consumption to the benefit of consolidating his immediate social ties. Multiple presentation of outputs for different target groups at local and international levels is also an example of young people's participation in public discourse on a culturally and socially relevant and important topic and includes an emancipatory impetus. Winning an award for the output in the above mentioned project competition as well as the screening of "Stone" at the 21st Greek Children and Young People's Film Festival Olympia in front of participants from 30 European countries enables pupils to experience success, which is typical of this form of practical teaching and contributes to the development of young people's positive self-esteem and self-confidence (Schorb, 2009: 105; Šeďová, 2009: 789). The secondary aim of this project, including other examples of projects, was to create a positive and supportive environment for the development of social skills of students: cooperation, assignment of roles in team work, negotiating goals, meeting agreed deadlines, etc. (Kocurová, Sopková, 2018: 2). These resulted from the applied concepts of teaching and fulfilment of specific cross-curricular objectives.

The school carried out the partial practical activities with the material-didactic support of FMK UCM who provided a digital television studio, editing room and also educational activities of film production for educators and pupils in the form of workshops. The cooperation of schools with the external environment in terms of technical support of practice-centred teaching about media is not an exception in Slovakia.

The examples of the analyzed teaching practices have shown that schools usually have basic technological and instrumental equipment (PCs, laptops, tablets, cameras, cameras, tripods, microphones, amplifiers, speakers, mixing desks, burners, data projectors, interactive whiteboard, printer, scanner, etc.) and software such as Windows Movie Maker, Microsoft Office Picture Manager, Photoshop, Easy Photo Editor, Audacity, Lame Wordom, Video Editor, Hue Animation, Pinacle Studio, Corel Draw, aTube Catcher, Nero, KaraFun. However, they lacked expert technology and, in particular, rooms. The existence of editing studios, purpose-built television, radio or graphic studios in schools is rather an exception. In Slovakia, there are also no special institutions focused on school support for active work with media – so-called "media (or multimedia) centers". However, educators know how to be creative. For example, as part of a selected project activity, a provisional recording study was established with the help of a professional in the classroom used for the lessons of another subject. The cooperation with external experts (from universities, regional and public media) is also carried out in order to ensure the necessary education of teachers (not all of them have it). It takes the form of seminars, lectures, workshops at schools, or excursions in an external environment. The aim of the KEGA project No. 010UCM-4/2018 *„Material and didactic support of the teaching of media education through the media training center at FMC UCM"* supported by the Grant Agency of the Ministry of Education of the Slovak Republic (2018 – 2020) in cooperation with the partner institution of the Faculty of

Communication in Navarre, is to enable the creation of an environment for implementing practice-centred teaching about media through the creation of a training media center with practical educational courses in full-time and on-line form (e-learning course) for pupils and teachers.

## 5. Conclusion

In accordance with the research questions we conclude that one of the traditional and current trends in media education or pedagogy perceived in our study as practice-centred teaching and learning about media is applied in the educational practice at Slovak primary and secondary schools in the complexity of its implementation according to the core curricular documents (National Educational Programmes). The prototype of its implementation is the area of school media creation where pupils acquire knowledge of journalistic procedures, while their outputs are participatory in nature and are part of the broader communication and promotion strategy of the school – its activities, to which pupils contribute by their activities. The didactic system of the above mentioned teaching uses more effective educational concepts (project, problem-solving, cooperative teaching) and their didactic principles, methods and forms (research question No.1).

At the same time, they contribute to the implementation of practical teaching enriched with critical reflection of media production. The analysis of the examples has also shown that practical work with media is becoming a dual tool for reflective and critical learning about a) the media with which pupils work directly in the classroom (it is the object of the classroom) or b) the media as a subject of social reality which, through reflexive-active work with the media, become a special object of cognition (research question No.2).

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## References

Adamcová, 2011a – *Adamcová,* I. (2011a). Mediálna výchova. Prierezová téma. Príloha Štátneho vzdelávacieho programu ISCED 1. Bratislava: ŠPÚ. [Electronic resource]. URL:http://www.statpedu.sk/files/articles/dokumenty/statny-vzdelavaci-program/medialna_isced1.pdf. 02.08.2019.

Adamcová, 2011b – *Adamcová,* I. (2011b). Mediálna výchova. Prierezová téma. Príloha Štátneho vzdelávacieho programu ISCED 2. Bratislava: ŠPÚ. [Electronic resource]. URL: http://www.statpedu.sk/files/articles/dokumenty/statny-vzdelavaci-program/medialna_isced2.pdf 02.08.2019.

Anfang, 2001 – *Anfang, G.* (2001). Computer in der Kinder-und Jugendarbeit. Ziele und Kriterien für die aktive Medienarbeit mit Multimedia. Erlebniswelt Multimedia. Computerprojekte mit Kindern und Jugendlichen. München: KoPäd: 9–18.

Anfang, Uhlenbruck, 2009 – *Anfang, G., Uhlenbruck, G.* (2009). Medien selber machen bildet – Aktive Medienarbeit. Medien bilden – aber wie? Grundlagen für eine nachhaltige medienpädagogische Praxis. München: Kopaed: 105-110.

Aufderheide, 1993 – *Aufderheide, P.* (1993). Media Literacy. A Report of the National Leadership Conference on Media Literacy. Washington, D.C.: Aspen Inst., 1993. [Electronic resource]. URL: https://files.eric.ed.gov/fulltext/ED365294.pdf. 10.06.2019

Aufenanger, 2009 – *Aufenanger, S.* (2009). Media Competence Approaches in Germany - Discourses of media competence in Germany and Europe. Universität Mainz: AG Medienpädagogik/Institut für Erziehungswissenschaft. [Electronic resource]. URL: https://www.academia.edu/4433352/Aufenanger_media_competence_Germany_Europe. 10.07.2019

Baacke, 1996 – *Baacke, D.* (1996). Medienkompetenz – Begrifflichkeit und sozialer Wandel. Medienkompetenz als Schlüsselbegriff. Bad Heilbrunn: Klinkhardt: 113–121.

Baacke, 1997 – *Baacke, D.* (1997). Medienpädagogik. Tübingen: Niemeyer, 105 p.

Bachmair, Bazalgette, 2007 – *Bachmair, B. Bazalgette, C.* (2007). The European Charter for Media Literacy: meaning and potential. *Research in Comparative and International Education*, 2 (1): 80–87.

Belanová, 2015 – *Belanová, S.* (2015). Ako reklama vplýva na dieťa. *Príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách: metodická príručka pre učiteľov*. Trnava: FMK UCM: 7–8.

Bernoláková, 2015 – *Bernoláková, L.* (2015). Dejepis kreatívne a moderne. *Príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách: metodická príručka pre učiteľov*. Trnava: FMK UCM: 59–60.

Biziková, 2015a – *Biziková, Ľ.* (2015a). Metodické odporúčania k napĺňaniu cieľov prierezovej témy mediálna výchova. Bratislava: ŠPÚ. [Electronic resource]. URL: http://www.statpedu.sk/files/articles/nove_dokumenty/ucebnice-metodiky-publikacie/medialna_vychova_odporucane_vystupy.pdf .30.07.2019.

Biziková, 2015b – *Biziková, Ľ.* (2015b). „Škola, učiteľ/ka a mediálna výchova": analýza výsledkov dotazníkového prieskumu. Bratislava: ŠPÚ. [Electronic resource]. URL: http://www.statpedu.sk/files/articles/nove_dokumenty/ucebnice-metodiky-publikacie/skola_ucitel_a_medialna_vychova.pdf. 30.07.2019.

Borbélyová, 2017 – *Borbélyová, E.* (2017). Košík za život. Dobré médiá. Príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách: metodická príručka pre učiteľov. Trnava: FMK UCM: 34–35.

Code..., 2018 – *Code of Best Practices in Fair Use for Media Literacy Education* (2018). *NCTE*. [Electronic resource]. URL: http://www2.ncte.org/statement/fairusemedialiteracy/.31.07.2019.

Directorate..., 2014 – *Directorate-General for Communications Networks, Content and Technology* (2014). Study on the current trends and approaches to media literacy in Europe. Brussels: European Commission. [Electronic resource]. URL: https://publications.europa.eu/en/publication-detail/-/publication/4815621e3057-4be5-96a4-cfd013d879a5/language-en/format-PDF/source-77154575.2019.08.02.

EMEL, 2014–2016 – *EMEL* (2014–2016). [Electronic resource]. URL: http://www.europeanmediaeducationlab.com/.2019.07.31.

Fedorov, 2011 – *Fedorov, A.* (2011). Modern media education models. *Acta Didactica Napocensia*, 4 (1): 73–82. [Electronic resource]. URL: http://adn.teaching.ro/ .2019.08.10.

Fedorov, Levitskaya, 2019 – *Fedorov, A. Levitskaya, A.* (2019). Synthetic Media Education Model Used in Commonwealth of Independent States (CIS). *Media Education*, 59(1): 30–36. DOI: 10.13187/me.2019.1.30 .2019.08.13.

Ferrés Prats, Piscitelli, 2012 – *Ferrés Prats, J. – Piscitelli, A.* (2012). La competencia mediática: propuesta articulada de dimensiones e indicadores. *Comunicar*, 19 (38): 75–82. DOI: https://doi.org/10.3916/C38-2012-02-08.2019.07.10.

Filmmaking journey, 2017-2019 – *Filmmaking journey: From scratch to screen,* (2017-2019). [Electronic resource]. URL: https://filmmakingerasmus.weebly.com/.2019.06.31.

Gondová, 2017 – *Gondová, A.* (2017). Škola ťa dobehne. *Dobré médiá. Príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách*: *metodická príručka pre učiteľov*. [CD-ROM]. Trnava: FMK UCM, 31–33.

Gondová, 2018 – *Gondová, A.* (2018). Svieť nám stromček jagavý -animovaný videoklip. Prihláška do súťaže: Najlepšie príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách. IMEC - FMK UCM.

Hartai, 2014 – *Hartai, L.* (2014). Report on formal media education in Europe (WP3). EMEDUS. Brussels: European Union. [Electronic resource]. URL: https://eavi.eu/wp-content/uploads/2017/02/Media-Education-in-European-Schools-2.pdf.2019.08.14.

Hazuchová, 2015 – *Hazuchová, S.:* Fiktívne voľby. *Príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách: metodická príručka pre učiteľov*. Trnava: FMK UCM: 54–55.

Hoechsmann, 2013 – *Hoechsmann, M.* (2013). Mediating Pedagogy and Practice with Media Literacy 2.0. *Educación Mediática & Competencia digital: Ludoliteracy, creación colectiva y aprendizajes. II Congreso Internacional*. Barcelona: 31–36.

Grecmanová, Urbanovská, 1997 – *Grecmanová, Urbanovská* (1997). Projektové vyučování a jeho význam v současné škole. *Pedagogika,* 49 (1): 37–45.

Johnson, Johnson, 1999 – *Johnson, D.W. Johnson, R.T.* (1999): Making cooperative learning work. *Theory Into Practice.* 38(2): 63-73. DOI: https://doi.org/10.1080/00405849909543834. 2019.08.08

Kačinová, 2008 – *Kačinová, V.* (2008). Učebné osnovy voliteľného predmetu Mediálna výchova pre 5. – 9. ročník ZŠ a 1. - 4. ročník osemročných gymnázií. *Vzorový školský vzdelávací program pre 2. stupeň ZŠ –ISCED 2*. Bratislava: ŠPÚ: 127–140.

Kačinová, 2015 – *Kačinová, V. (ed.)* (2015). Príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách: metodická príručka pre učiteľov. Trnava: FMK UCM, 178 p.

Kačinová, 2015a – *Kačinová, V.* (2015a). Teória a prax mediálnej výchovy: Mediálna výchova ako súčasť všeobecného školského vzdelávania. Trnava: FMK UCM, 253 p.

Kačinová, 2015b – *Kačinová, V.* (2015b). Teoretické koncepcie mediálnej výchovy v reflexii pedagogickej praxe. *Megatrendy a médiá: Mediálna farma I.: transformácia mediálnej záhrady : mediálne a marketingové hry oligarchov: zborník z vedeckej konferencie*. [CD-ROM]. Trnava: FMK UCM: 141–178.

Kačinová, 2016 – *Kačinová, V.* (2016). Produktívne zameraná mediálna výchova ako súčasť výučbového procesu na slovenských školách. *Megatrendy a médiá 2016: Kritika v médiách, kritika médií I: médiá a gramotnosť: médiá a kreativita*. Trnava: FMK UCM: p. 93–106.

Kačinová, 2017 – *Kačinová, V. (ed.)* (2017). Dobré médiá. Príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách: metodická príručka pre učiteľov. [CD-ROM]. Trnava: FMK UCM, 91 p.

Kačinová, Kolčáková, 2013a – *Kačinová, V. Kolčáková, V.* (2013a). Súčasný stav začlenenia mediálnej výchovy do obsahu vzdelávania na stredných školách na Slovensku: záverečná správa z výskumu. Trnava: IMEC FMK UCM, 38 p.

Kačinová, Kolčáková, 2013b – *Kačinová, V. Kolčáková, V.* (2013b). Súčasný stav začlenenia mediálnej výchovy do obsahu vzdelávania na stredných školách na Slovensku: záverečná správa z výskumu. Trnava : IMEC FMK UCM, 35 p.

Kinka, 2015 – *Kinka, M.* (2015). O čom snívam. *Príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách: metodická príručka pre učiteľov*. Trnava: FMK UCM: 14–16.

Kocurová, 2017 – *Kocurová, D.* (2017). Internet – môj múdry priateľ (vzdelávacia reklamná kampaň). *Dobré médiá. Príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách*: metodická príručka pre učiteľov. [CD-ROM]. Trnava: FMK UCM: 8–11.

Kocurová, Sopková, 2018 – *Kocurová, Sopková* (2018). Súťaž krátkych filmov na témy mediálnej gramotnosti. *Prihláška do súťaže: Najlepšie príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách*. IMEC - FMK UCM.

Kokavec, 2015 – *Kokavec, M.* (2015) Školská televízia ZŠ Gašpara Haina v Levoči. *Príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách*: metodická príručka pre učiteľov. Trnava: FMK UCM: 20–22.

Livingstone, 2004 – *Livingstone, S.* (2004). What is media literacy? *Intermedia*, 2004, 32 (3): 18–20. [Electronic resource]. URL: http://eprints.lse.ac.uk/1027/. 2019.08.18.

Maňák, Švec, 2003 – *Maňák, J. Švec, V.* (2003). Výukové metody. Brno: Paido, 2003.

Minarovičová, 2017 – *Minarovičová, D.* (2017). Drevári v akcii. Dobré médiá. *Príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách*: metodická príručka pre učiteľov. [CD-ROM]. Trnava: FMK UCM: 14–19.

Petranová, 2011 – *Petranová, D.* (2011). Základné smery mediálnej výchovy a ich charakteristika. *Mediálna výchova pre učiteľov stredných škôl*. Trnava: FMK UCM: 193–197.

Petranová et al., 2017 – *Petranová, D., Hossová, M. Velický, P.* (2017). Current development trends of media literacy in European Union Countries. *Communication today*. 8 (1): 53–65.

Pérez Tornero, Varis, 2010 – *Pérez Tornero, J.M. – Varis, T.* (2010). Media literacy and new humanism. Moscow: UNESCO Institute for Information Technologies in Education. 136 p. [Electronic resource]. URL: https://unesdoc.unesco.org/ark:/48223/pf0000192134.2019.08.17.

Píšová, 2015a – *Píšová, A.* (2015a). Povedzme to všetkým. *Príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách*: metodická príručka pre učiteľov. Trnava: FMK UCM: 52–53.

Píšová, 2015b – *Píšová, A.* (2015b). Čo nám rozprávali veci a ako sme „reklamovali." *Príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách*: metodická príručka pre učiteľov. Trnava: FMK UCM: 11–13.

Pňačeková et al., 2015 – *Pňačeková, E. Trojanová, T. Matejová, J.* (2015). Ne-otrávené jablká na internete. *Príklady dobrej praxe výučby mediálnej výchovy na základných a stredných školách*: metodická príručka pre učiteľov. Trnava: FMK UCM: 25–26.

Röll, 2006 – *Röll, F.J.* (2006). Methoden der Medienpädagogik. *Methoden und Konzepte medienpädagogischer Projekte: Dieter Baacke Preis- Handbuch 1*. Bielefeld: GMK: 10-28.

Schell, 1989 – *Schell, F.* (1989). Aktive Medienarbeit mit Jugendlichen: Theorie und Praxis. Opladen: Leske & Budrich, 239 p.

Schell, 2009 – *Schell, F.* (2009). Aktive Medienarbeit. Grundbegriffe der Medienpädagogik – Praxis. München: KoPäd Verl.: 9–13.

Schorb, 1997 – *Schorb, B.* (1997). Vermittlung von Medienkompetenz als Aufgabe der Medienpädagogik. Medienkompetenz im Informationszeitalter. Bonn: ZV Zeitungs-Verlag, Service, 63–75.

Schorb, 1998 – *Schorb, B.* (1998). Stichwort: Medienpädagogik. *PEDOCS* : *Zeitschrift für Erziehungswissenschaft,* 1(1): 7–22. [Electronic resource]. URL: https://www.pedocs.de/volltexte/2011/4497/pdf/ZfE_1998_01_Schorb_Medienpaedagogik_D_A .pdf 2019.07.19.

Schorb, 2009 – *Schorb, B.* (2009). Handlungsorientierte Medienpädagogik. Grundbegriffe Medienpädagogik. Praxis. München: Kopaed, 209: 101–106.

Schorb, 2010 – *Schorb, B.* (2010). Medienkomptenz. Grundbegriffe Medienpädagogik. München: Kopaed: 259–261.

Skalková, 2007 – *Skalková, J.* (2007). Obecná didaktika. Praha: Grada, 322 p.

Štátny..., 2015 – *Štátny vzdelávací program. Nižšie stredné vzdelávanie – 2. stupeň základnej školy.* (2015). Bratislava: ŠPÚ. [Electronic resource]. URL: http://www.statpedu.sk /files/articles/dokumenty/inovovany-statny-vzdelavaci-program/svp_nsv_6_2_2015.pdf 2019.07.29

Stredná..., 2014-2016. – *Stredná priemyselná škola Svidník, Erasmus + KA2 From Passive Consumers to Active Creators* (2014-2016). [Electronic resource]. URL: https://www.spss vidnik.sk/sk/projekty/projekty-eu/from-passive-consumers-to-active-creators/ 2019.06.31

Šeďová, 2009 – *Šeďová, K.* (2009). Mediální pedagogika. *Pedagogická encyklopedie*. Praha: Portál: 787-791.

Theunert, 1999 – *Theunert, H.* (1999). Medienkompetenz: Eine pädagogische und altersspezifisch zu fassende Handlungsdimension. *Medienkompetenz. Grundlagen und pädagogisches Handeln*. München: Kopaed: 50–59.

Tulodziecki, 1997 – *Tulodziecki, G.* (1997). Medien in Erziehung und Bildung. Grundlagen Und Beispiele einer handlungs- und entwicklungsorientierten Medienpädagogik. Bad Heilbrunn: Klinkhardt, 300 p.

Tulodziecki, Grafe, 2012 – *Tulodziecki, G., Grafe, S.* (2012). Approaches to Learning with Media and Media Literacy Education – Trends and Current Situation in Germany. *Journal of Media Literacy Education* 4(1): 44–60. [Electronic resource]. URL: https://digitalcommons.uri.edu/cgi/viewcontent.cgi?article=1082&context=jmle.2019.08.14.

Valenta et al., 1993 – *Valenta, J. et al.* (1993). Pohledy. Projektová metoda ve Škole a za školou. Praha: IPOS ARTAMA, 60 p.

Vránková, 2004 – *Vránková, E.* (2004). Mediální výchova – kriticko-hermeneutická větev. *Revue pro média. Časopis pro kritickou reflexi médií*. 4(8). [Electronic resource]. URL: http://rpm.fss.muni.cz/Revue/Heslar/medialni_vychova-kritherm_vetev.htm 10.05.2019.

Vrabec, 2013 – *Vrabec, N.* (2013). Mediálna výchova: teoretické východiská a trendy. Trnava: FMK UCM, 111 p.

# Dr. Strangelove Vs Dr. Gusev: The Evolution of the Image of a Scientist in American and Soviet/Russian Cinematography on the Cold War

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## Abstract

This article examines how American and Soviet/Russian cinematography presented a 'scientist' during the Cold War and in the works about that period. The article presents a comparative analysis of the films from both countries that focus on a 'scientist'. The analysis demonstrates that scientists/scholars have been depicted as both subjects and objects of ideological and political confrontation of the Cold War period. While American cinematography focused on the image of a 'mad scientist,' in the Soviet cinematography scientist is more of an intellectual. Some American films used the grotesque 'mad scientist' (e.g. Dr. Strangelove) to highlight the ultimate danger of nuclear catastrophe, and Soviet films used intellectual scientist conversations (e.g. Dr. Gusev) for the same purpose of warning about the dangers of a nuclear age). We trace gradual growing similarities of the cinematography of both countries: scientist becomes to be presented in a less confrontational way as both countries become aware that scientific cooperation is vital for the prevention of the world nuclear war and global conflict.

**Keywords**: mad scientist, intellectual, ideological confrontation, the Cold War, American cinematography, Soviet/Russian cinematography.

## 1. Introduction

The topic of the image of a scientist in the ideological confrontation of the two systems during the Cold War has not been sufficiently studied in the Russian academic literature. Most of the studies of the ideological confrontation in the Soviet years, while solid in some respect, often bore the stamp of time and were distinguished by a certain engagement and ideological cliches. Nevertheless, in the recent years a number of high-quality publications that touch upon this very interesting problem emerged (Fedorov, 2010; 2013; Knysh, 2007; Pavlov, 2015; Riabov, 2015; Stent, 2015). In present article, we contribute to this emerging literature.

## 2. Materials and methods

The article uses Soviet/Russian and American films on scientist during the Cold War and reviews of leading film critics. We also examine a special academic literature on the relationship between science, politics and cinema during the Cold War.

## 3. Discussion

J. Nye Jr. refers to a film as the vital instrument of building 'soft power' (Nye Jr., 2004: 255-70). G. Almond pointed out that film is an important instrument of forming a political culture

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(Almond, Verba, 1963). As we demonstrate in this paper, both American and Soviet/Russian cinematography have both shaped and have been shaped by the corresponding international, political and social processes in the respective countries and on the global scale.

The interest towards scientific research and scientists stems from both the specifics of the political, social and psychological atmosphere of the Cold War, and the public's fear of the possible consequences of the use of weapons of mass destruction, the weapons that emerged as a result of the scientific and technological revolution. In the middle of the 20th century, science turned not only into a productive force, which determined the pace of economic, social and political development of modern states, but also into a source of constant tension associated with the growth of alarmist sentiments, into an arena of sharp confrontation between various political and ideological systems, and further to confrontation of science and politics, science and culture (Batalov et al., 2009: 16). One can add to this the fears of losing public and government control over the activities of not only individual scientists (primarily related to nuclear physics), but also over the development of certain areas of science that could cause irreparable damage to humanity (biology, chemistry, neuropsychology) (Ben-David, 2014; Graham, 1991; Matizen, 2009).

The cinematography of both USA and USSR (later Russian Federation) attempted to address those issues, albeit in different ways. According to A. Fedorov, from 1949 to 1986 in Hollywood more than 90 films about the Cold War of various genres were released – from comedies and blockbusters to thrillers and science fiction sagas (Fedorov, 2010). V. Matizen proposed an interesting classification of different types of scientists and one can quite clearly identify these characters within the framework of American (as well as Soviet) cinema (Matizen, 2009). There is a "Mad Scientist." Matizen noted that: "in the largest cinema database (imdb.com) the phrase "mad scientist" is present in the annotations of more than three hundred films and is more common than the word "scientist" itself" (Matizen, 2009). It is curious that in the period when science became a mass profession and included hundreds of thousands of scientists working often in large scientific teams, American cinematography preferred the individual image of a lone scientist, often contrasting scientist with society, hence the references to "crazy professor" ("mad scientists", "mad professor") (Danilin, 2015; Knysh, 2007).

An infamous example of a mad scientist on the American screen is Dr. Strangelove, a former Nazi who moved to the United States (*Dr. Strangelove or How I Learned to Stop Worrying and Love the Bomb* (1964) by S. Kubrick) (Kubyshkin, Heed, 2018). Dr. Strangelove endorses his invention – the nuclear bomb – to advocate for cleansing of the human race, while his invention eventually leads to the end of the world due to a human error. Often in the image of the bearer of absolute Evil, features of actual scientists can be detected. For example, Dr. Strangelove is a frank parody of the German designer of ballistic missiles V. von Braun and the American physicist E. Teller. These kinds of characters were supposed to cause fear in the Cold War conflicts (Zhemchugova, 2016).

Another example of a mad scientists in American films is Dr. Hoenikker – an eccentric character who does not think about the consequences of his scientific experiments for humanity, from the film by N. Hawley's *Cat's Cradle* (2013), based on the Cold War era novel by C. Vonnegut. Finally, mad scientist, the bearer of evil, is sometimes depicted as a cosmopolitan character without a specific nationality (Dr. No from the film of the same title – the first of the Bondian novel by J. Fleming (1962), or Dr. Evil (Douglas Powers) – a double parody of both James Bond himself and his antagonist – super hero O. Powers in a series of comedy films by D. Roach (1997–2002).

In the Soviet cinema, an example of a mad scientist would be an engineer Peter Garin, from the adaptations of the novel by A.N. Tolstoy's *Hyperboloid of Engineer Garin* – a film by A. Gunzburg (1965) and a television version of L. Kvinikhidze (1973). Peter Garin uses his invention, hyperboloid, to take over the financial and political power, eventually failing to the group of revolutionaries who capture his own invention. Mad Scientist type was generally not typical for the Soviet cinema (engineer Garin is more of an exception). While the character that is called "Shurik" in the popular comedy by L. Gaidai *Ivan Vasilievich Changes the Profession* (1973) fits the stereotype somewhat, he is 'mad' in a lovable way not in the destructive way of a 'typical Mad Scientist."

While in the Soviet Union, cinematography rarely depicted Soviet scientists as 'mad,' in Soviet Union as in the USA during the Cold War, there was an interest in a classical works that depicted mad professor. An interesting example is the attention to the main character of the novel by R. Stevenson *The Strange Case of Dr. Jekyll and Mr. Hyde* (1886), which has been repeatedly

filmed in various versions. The period under review includes an American film, shot by C. Jerry in 1968 and a Soviet film by A. Orlov (1986).

Directly opposed to the 'mad scientist' is a "true scientist." The true scientist is looking for 'the truth' and his/her work is based on humanistic principles rather than world supremacy ideas. American cinematography of the Cold War period lacks the images of a "true scientist." "True scientist" only emerges in the US cinema after the end of the Cold War, including, the brilliant mathematician (real figure) D. Nash *A Beautiful Mind* (2001) and Harvard Professor R. Langdon from the films *Da Vinci Code* (2006) and *Angels and Demons* (2009), all films by R. Howard.

In Soviet cinema, "The True Scientists" character was masterfully recreated in a series of biographical films about Russian scientists and inventors from N.I. Pirogov and I.P. Pavlov to I.S. Michurin, created in the mid 1930 – early 1950's (Zudina, 2011; Knysh, 2007). "True scientist" is also a type of nuclear physicists D. Gusev and I. Kulikov from *9 days of one year* by M. Romm (1962). Despite the veiled nature of the scientific problem that the heroes of the latter film are working on, the topic of the atomic bomb is one of the main topics in the dialogs of physicists Gusev, Kulikov and their colleagues. Dr. Gusev is working on the nuclear bomb and, contrary to Dr. Strangelove, does not like the idea of the bomb, only agreeing to continue his work on it as the bomb can provide a security for his country. The latter films were reflective of an official Soviet idea that science is supposed to be leading to progress and scientific cooperation.

The image of a professor which was much more widespread in the USSR – an eccentric, devoted to science and sometimes quite critical of the realities of the surrounding reality, though generally loyal to the socialist system, include Professor Polezhaev from the *Baltic Deputy* by I. Kheifets, A. Zarhi (1937) or Professor Preobrazhensky from the film adaptation of M. Bulgakov's novel *Heart of a Dog*, filmed by V. Bortko (1988). Professor Preobrazhensky acts as a kind of humanized version of Frankenstein, modifying human nature and transforming the homeless dog Sharik into a marginal human being but, after seeing what consequences this change brings about, reversing the results of his experiments. Sometimes in benevolent stories about Soviet scientists unforeseen collisions arose, as in the film *The Error of the Engineer Kochin* (based on the play by Sheinin's brothers), directed by A. Macheret (1939), but the erring scientists and specialists were quickly reformed by the Soviet security services.

The image of the Soviet scientist, opposing the Western way of life and resisting attempts by foreign intelligence to recruit him/her, was quite common in the Soviet cinema in the 1970s – 1980s. A vivid illustration can serve as a popular series *The Fate of the Resident* by V. Dorman (1979-1986). In this four-part film, Soviet physicists involved in the development of secret rocket weapons staunchly counter the efforts of Western intelligence agencies to recruit the young and talented physicist V. Borkov and to persuade academician Nesterov to collaborate.

Overall, films in both countries, demonstrated the desire to politicize scientific activity. It was especially noticeable in the context of the arms race and the ideological confrontation of the Cold War, when the role of scientists and science as a whole has grown immeasurably and science has become an important resource of international and domestic politics (Danilin, 2015). Scientific discoveries most directly affected the process of political decision-making, including in local and global crises. *Doctor Strangelove...* by S. Kubrick came out in 1964, right after the Caribbean crisis, which put the world on the brink of a nuclear catastrophe (Pavlov: 2015).

The ideological reasons explains largely the fact that in the period of Cold War, Soviet scientists portrayed in Hollywood often look like passive performers, victims of the machinations of international terrorists and criminals. Examples can be found in the many of James Bond films. At the end of the Cold War, S. Spielberg in *The Kingdom of the Crystal Skull* (2008) in a semi-parody form portrayed the Soviet woman – scientist – anthropologist Irina Spalko (Kate Blanchett) as a person who is striving to know the absolute truth encrypted in the message of aliens and who is ultimately crashed. To some extent, Spielberg ridiculed the stereotypes and cliches of Western propaganda about the destructive nature of Soviet science, which sought prove not only the superiority of social engineering, but also the ability to know the essence of man and the mechanisms of his management (the possibility of creating a kind of socialist Frankenstein), even if it requires the help of aliens.

For the American viewer, the interpretation of the Soviet scientist as a carrier of destructive force that poses a threat to American democracy and the entire American value system has constructed that dense curtain of misunderstanding and alienation, bordering on hostility, the basis of the psychology of the Cold War, which A. Stent wrote about in her book (Stent, 2015).

American cinematography extensively uses one of the key elements of American popular culture – the idea of 'frontier' – the border between civilized and wild not only in the films directly showing the Wild West but also in many other films, for example, about Soviet Union/Russia, international security in general (Pushkina, 2017).

It is interesting to note that in the midst of ideological battle, there have also been several films that present different politically neutral types of the scientist. In adventure and comedy films, the image of the "Scientist – an Adventure Lover" was popular. This is, for example, the archaeologist Professor G. Jones from films about Indiana Jones by S. Spielberg (1981-1989) or the comic character in *The Nutty Professor* by D. Lewis (1963), remake made by T. Shadyak in 1996. Another type, the "Practitioner" type exemplified by engineer Cyrus Smith from the film adaptations of the novel *Mysterious Island* by J. Verne. It is worth noting the remarkable similarity of this image of "Practitioner" scientist (exclusively in a positive way) as a technocrat of progressive views, both in the first Soviet film adaptation of the novel by J. Verne by E. Penzlin in 1941 and in the American version of the novel by C. Anfield (1961) (Staples, 1971: 116).

In the context of political changes in the Soviet Union in the mid-1980s, a new topic emerged in the USA – Western support for Soviet scholars-dissidents fighting authoritarianism and seeking to enter the Western scientific community with the best intentions, for example, to prevent a war between the two countries. A typical example is the film adaptation of D. Le Carré's spy novel *The Russian House* (*Russia House*, 1990). It is interesting that *Russia House* was the first Hollywood film entirely shot in the USSR.

While the cinematography of the Cold War period has depicted the horrors of a nuclear conflict (Heed, Kubyshkin, 2019: 250-258), the theme of global responsibility of science as a whole as well as the responsibility of an individual scientist is becoming very noticeable in the Soviet cinema in the latter period of USSR. A. Tarkovsky's *Solaris* (1972) and *Stalker* (1979) represent scientists as members of a single international community who jointly attempt to solve global problems. This trend is also visible in films by Konstantin Lopushanski *Letters of the Dead Man* (1986) and *Visitor to the Museum* (1989). Later, another confirmation of the desire of now Russian filmmakers to rethink the role of science in ideological and creative confrontation in an arms race was the documentary cycle of the Russian director E. Dubrovsky *The Brotherhood of the Bomb* (2005-2007), which revealed many details of a fierce rivalry between USA and USSR in creating weapons of mass destruction that were previously unknown. In the American cinema we can note the type of "Scientist-Prophet" emerging, exemplified by the meteorologist Jack Hall from *The Day After Tomorrow* by Roland Emmerich (2004), where scientist warns humanity about the consequences of technological changes and the global warming.

#### 4. Results

In our comparative analysis of American and Soviet/Russian cinematography on the Cold War and their representation of a 'scientist' we found out that films in both countries, often politicize scientific activity. This took place in the context of the arms race and the ideological confrontation of the Cold War when science was both influencing and being influenced by international and domestic politics. The analysis demonstrates that scientists/scholars have been depicted as both subjects and objects of ideological and political confrontation of the Cold War period. While American cinematography focused on the image of a 'mad scientist,' in the Soviet cinematography scientist is more of an intellectual. Some American films used the grotesque 'mad scientist' (e.g. Dr. Strangelove) to highlight the ultimate danger of nuclear catastrophe, and Soviet films used intellectual scientist conversations (e.g. Dr. Gusev) for the same purpose of warning about the dangers of a nuclear age). We trace gradual growing similarities of the cinematography of both countries: scientist becomes to be presented in a less confrontational way as both countries become aware that scientific cooperation is vital for the prevention of the world nuclear war and global conflict.

#### 5. Conclusion

To sum up, we found out that there has been a significant role that filmmakers have played in the propaganda during Cold War. They have participated in political and ideological struggle by the inclusion of the characters from the scientific community to highlight dominance and advantages of one political and ideological system over another. The image of a scientist in the cinema of the 1950s – 1980s developed from an abstract villain with dark intentions to a character who skillfully mastered powerful tools of influence on politics, economy and security and who has been strictly

opposed to his/her political and ideological opponents. The prevailing discourse in politics but also art in the Cold War era reflected "Us" versus "Them" approach, including prejudices and negative emotions against "the other." As Cold War progressed though, one can also find, the desire to understand the opponent (adversary) and find a mutually acceptable form of cooperation as this seems to be the only way to avoid, ultimately, a universal catastrophe.

## 6. Acknowledgements
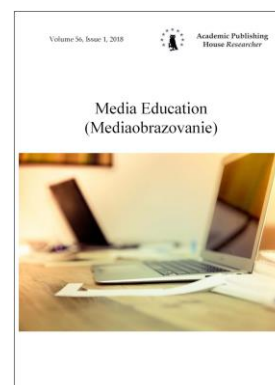
## References

Almond, Verba, 1963 – *Almond, G.A., Verba, S.* (1963). The Civic Culture: Political Attitudes and Democracy in Five Nations. Princeton University Press, 574 p.

Batalov et al., 2009 – *Batalov, E.Ya., Zhuravleva, V.Yu., Khozinskaya, K.V.* (2009). "Roaring Bear" in the "Wild East". Moscow: Rosspen, 384 p.

Ben-David, 2014 – *Ben-David, J.* (2014). The Scientist's Role in Society: A Comparative Study. Moscow: NLO, 344 p.

Danilin, 2015 – *Danilin, P.* (2015). Representation of Russians in American Cinema. [Electronic resource] URL: http://www.cis-emo.net/ru/news/danilin-predstavlenie-russkih-v-amerikanskom-kinematografe

Fedorov, 2010 – *Fedorov, A.V.* (2010). Russian Image Transformation on the Western Screen: From Epoch of Ideological Confrontation (1946-1991) to Modern Time (1992-2010). Moscow: ICO Information for All, 2010, 202 p.

Fedorov, 2013 – *Fedorov, A.V.* (2013). Western Screen: Authors and Stars (Notes From the Last Century). Moscow: Direct-Media. 388 p.

Graham, 1991 – *Graham, L.* (1991). Science, Philosophy, and Human Behavior in the Soviet Union. Moscow: Politizdat. 480 p.

Heed, Kubyshkin, 2019 – *Heed, T., Kubyshkin, A.I.* (2019). Armageddon: Comparative Images of the Nuclear Conflict between the United States and the Soviet Union in American Cinema. *Science Journal of Volgograd State University. History. Area Studies. International Relations.* 24 (5): 250-258.

Knysh, 2007 – *Knysh, N.A.* (2007). The Image of a Scientist in Cinematography of the Late 40s and Early 50s. [Electronic source] URL: https://cyberleninka.ru/article/n/obraz-uchenogo-v-hudozhestvennom-kinematografe-kontsa-1940-h-nachala-1950-h-godov

Kubyshkin, Heed, 2018 – *Kubyshkin, A.I., Heed, T.* (2018). Media and Cold War: Comparative Perspective. *Media Education*, 56 (1): 139-144.

Matizen, 2009 – *Matizen, V.* (2009). "Mad Scientist" in Cinema. [Electronic resource] URL: http://lebed.com/2009/art5499.htm

Nye Jr., 2004 – *Nye Jr., J.* (2004). Soft Power and American Foreign Policy. *Political Science Quarterly,* 119 (2): 255-70.

Pavlov, 2015 – *Pavlov, A.* (2015). Five Films Revealing the Image of a Scientist in Popular Culture. [Electronic resource] URL: https://postnauka.ru/faq/52029

Pushkina, 2017 – *Pushkina, D.B.* (2017). International Security in Contemporary Films On Armed Conflicts. *Cinema and Capital. Materials of the VI International Scientific Conference of the Center for Economic Culture Research.* St. Petersburg: St. Petersburg State University.

Riabov, 2015 – *Riabov, O.V.* (2015). "Soviet Enemy" in the American Cinema of the Cold War. [Electronic source] URL: https://www.kino-teatr.ru/kino/art/kino/4188/

Staples, 1971 – *Staples D.* (1971). The American Cinema. Voice of America Forum Series. Washington, DC, 1971, 421 p.

Stent, 2015 – *Stent, A.* (2015). Why Don't America and Russia Hear Each Other? Moscow: Mann, Ivanov and Ferber, 452 p.

Zhemchugova, 2016 – *Zhemchugova, O.* (2016). The Evolution of the Heroes of Mass Cinema of the USA and the USSR/Russia. [Electronic resource] URL: http://e-notabene.ru/ca/article_20781.html

Zudina, 2011 – *Zudina, A.A.* (2011). Science and the Image of a Scientist in Soviet cinema (1928–1986). *Social Sciences and Modernity*, 5: 167-176.

# Post-Truth as a Main Feature of Modern Media Landscape and Primary Concern of Media Education

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**Abstract**

Post-truth is increasingly in demand among scholars, journalists, and ordinary people all over the world. That is why it may be no accident that in 2016, the Oxford Dictionary named it a word of the year. Based on the wide range of available interpretations of post-truth, the author formulates his own definition of this phenomenon as a part of existing media and political landscape: post-truth is first and foremost an attribute of contemporary media and political reality the essence of which is that facts are replaced with subjective, emotional, and sometimes false statements. An inference is made that in order to successfully combat negative effects of a post-truth media environment (i.e. disinformation, misinformation, fake news, manipulation, etc.), joint efforts of both institutional and non-institutional subjects are needed. These are (but not limited to) nonprofit organizations focusing on debunking false information, governmental agencies supporting media education programs and developing relevant legislation, and media community monitoring the way professional ethical standards and norms are abided by. However, efforts of governmental and non-profit organizations, as well as the part of professional media community most committed to ethic norms, would not be enough to withstand negative effects of a post-truth age unless the audience itself develops media literacy skills.

**Keywords:** post-truth, media studies, fake news, disinformation, manipulation, mass media, media literacy, media education.

## 1. Introduction

Scholars analyze various aspects of modern media systems nowadays. Among other things, they discuss trustworthiness of the news, decline in objectivity while covering political process, ideological bias and partisanship in relation to different media outlets. Usually, these issues are considered within the context of subject-object interaction where the audience serves as a target for intended politically motivated influence by mass media and structures behind them. In recent decades, relatively new notions to describe the current situation in the field appeared. Post-truth, fakes, fake news, prank, trolling, fact-checking, verification are arguably the most commonly used among them.

On the one hand, these neologisms are quite important as they allow scholars to clearly define the actual situation in the world of media. On the other hand, they are obviously far from being understood unambiguously: there has not been an unequivocal approach to them within scholarships so far. Toward that end, this article aims at bringing together interpretations already

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existing within the Russian and foreign media studies. Apart from this, possible way to withstand post-truth consequences will be proposed.

## 2. Materials and methods

Having analyzed more than hundred media research papers that are the most often quoted in both Russian and foreign academia, I picked out those of them that raise an issue of a post-truth era. Then, special attention was given to quite rare attempts of defining this phenomenon and explaining its ramifications. With the help of comparative method, existing approaches were juxtaposed and contrasted. The most meaningful and clear elements were then borrowed for my own approach.

I also gave careful perusal to scholarship on certain ways to confront media manipulation. As a result, I extracted those of them usually mentioned in this regard and put them in a central place of my own study.

At last, I bore in mind media literacy concept that served as an ultimate context for my research. If one is media literate, he or she is less vulnerable to fakes, disinformation, and stuff like that. To that end, numerous definitions of media literacy were also examined (Fedorov, 2015; Fedorov, Levitskaya, 2016; Zhizhina, 2016). For the purposes of this study, I define media literacy as an ability to find information amidst a deluge of media messages, to critically interpret and analyze it, to check its credibility and – if necessary – to create their own short media texts.

## 3. Discussion

For a start, post-truth – a notion that is in demand all over the media academic community (or, at least, its political communication part) – should be considered. Moreover, to some extent, it embraces the majority of other terms mentioned above. In 2016, the Oxford Dictionary named it a word of the year and defined it as an adjective "relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief" (Word ... , 2016).

Since then a handful of texts have sought to further describe and explore the notion, moving beyond its initial definition. Some scholars deem post-truth to be "a shorthand for strategic constructions and distortions by all parties in political communication" (Temmerman et al., 2019: 1). Others underlie that within a post-truth media environment "facts are deemed as malleable and subservient to beliefs, and indeed, can be strategically deployed to serve beliefs" (Garland, 2018: 347). In a sense, post-truth inaugurates a radical departure from political spin that signals the crisis in political communication characterized by a growing public distrust in government and the democratic process.

There are also attempts to put post-truth in a broader context. Sengul sees it through the lens of populism, democracy, and political style (Sengul, 2019: 88-101). D. Buckingham stresses the importance of teaching media literacy in a post-truth age (Buckingham, 2019: 213-231). I would rather add that not just teaching but also tuning media literacy programs to take into account a post-truth reality is of crucial importance today.

It is worthy of note that not only post-truth phenomenon itself is given treatment by scholars, but its connections with other notions and processes as well. More often than not, it is examined in conjunction with fake news (Farrow, Moe, 2019: 272-287) and propaganda (Boyd-Barrett, 2019: 87-91). Oddly enough, some scholars reject the term "post-truth", in favor of propaganda. They believe that "post-truth tends to be utilized as an evaluative term of contemporary political public discourse, as articulated by specific politicians, predominantly through social media". Taking the field of information management as its starting point, their approach underlines the diachronic character of persuasion efforts through information management, understood as propaganda in the public sphere. In contrast to post-truth, so the argument goes, propaganda encapsulates both the diachronic character of information management in the public sphere and the ground-breaking transformation of the process of personal opinion expression, initially described by the spiral of silence model, through the emergence of new interactive media (Poulakidakos et al., 2018: 367-368). To my mind, post-truth and propaganda do differ from each other so significantly, that none of these notions can replace another. The former is meant to describe the current situation in media sphere, while the latter is just one of the ways of spreading information among the audiences; not to mention the fact that propaganda at its broadest (i.e. other than information,

especially false information, that a government or organization spreads in order to influence people's opinions and beliefs) is not necessarily detrimental to society.

Needless to say, sometimes scholars try to delineate the impact that post-truth (as well as fake news) narratives have on political, institutional, and social levels. In most cases, such influence is rather harmful (Deligiaouri, 2018: 313-315). As far as reasons of the current situation are concerned, the general consensus is almost reached that some of the responsibility for public manipulation certainly rests with those who present false or artificial information as real (McDermott, 2019: 220-222). Apart from fake news producers, the current political environment (i.e. political polarization driven by mostly ideological, but sometimes also financial, motivations) and technological platforms (like Google or Facebook) are also blamed for the rise of a post-truth era (Tandoc et al., 2019: 680-684).

Having said that, we should admit that relative success of fakes' promoters depends on, at least in part, universal psychological processes that often make audiences vulnerable to things that are not true. According to McDermott, "people often weigh emotional feelings more heavily than abstract facts in their decision making" (McDermott, 2019: 218). Put differently, not only those who disseminate false information, but also those who are susceptible to it allow a post-truth media environment to emerge, escalate, and persist.

In fact, the audience is usually given full consideration within studies on post-truth and fake news. Among other things, the effects of elite discourse about fake news on the public's evaluation of news media are analyzed (Van Duyn, Collier, 2019: 29-31); attempts to evaluate the size of the online fake news consumers are made (Nelson, Taneja, 2018:3720-3721); and the way audiences grapple with pervasive ambiguity as they navigate their media and communication resources is explored (Wenzel, 2019: 1987-1990). In terms of media education, the latter seems to be of crucial importance. How residents cycle between verifying information and disengaging from news to relieve stress, as well as possible pathways to resolve ambiguity are arguably the most urgent issues in the whole field nowadays.

One of the easiest way (even though not necessarily the most efficient one) to solve this problem is to rely on government interventions and sanctions for fake news creators and sharers. In this sense, there is a hypothesis that individuals' support for such measures was stronger if they believed that fake news influenced both other people and themselves (Baek et al., 2019: 301-302). However, my point is that fact-checking may well be more effective treatment for this social tribulation.

In recent years, fact-checking as a main issue of media studies has grown in popularity. Sometimes, it is examined within the context of relationship between media literacy and fake news as one of the challenges that misinformation represents in the Internet age (Lotero-Echeverri et al., 2018: 295-316). Research on journalists' perception of fact-checking has also become quite common (Mena, 2019: 657-672). Some scholars go further and aim at exploring the role of information format (print vs. video) and tone (humorous vs. nonhumorous) in shaping message interest and belief correction in the context of political fact-checking (Young et al., 2018: 49-75). Others argue that "strong social connections between fact-checkers and rumor spreaders encourage the latter to prefer sharing accurate information, making them more likely to accept corrections" (Margolin et. al., 2018: 196). At last, ingenious attempts to check how fact-checkers check are also worth mentioning (Lim, 2018).

The way post-truth and its ramifications are treated by Russian media scholars is also worthy of note. Having analyzed a wide range of existing approaches to this phenomenon, I can argue that there is a large variety of different interpretations ranging from sophisticated philosophical to applied political insights into the nature of post-truth.

To illustrate, Chugrov thinks that post-truth "reflects a kind of postmodern reality, distorted state of conscience within which stereotypes have lost their grip on reality. In a post-truth world, emotions replace facts, fakes substitute for news, thus constructing specific political discourse and alternative reality" (Chugrov, 2017: 42). He likens it to some context, modality, or situation, enabling spreading false information and facing no consequences for that. Within such relativistic context, no matter whether news is true or false. The only point of importance is that it should correspond to both emotional mood of the audience and political goals of the communicator.

Volodina considers post-truth from a political science angle. She argues that post-truth implies implementation of a so-called emotional media discourse when truth is of little importance. At the same time, the scholar identifies post-truth with political culture within which discourse

abounds in frequent appeals for emotions and stubborn disregard of the facts that refute false statements (Volodina, 2017: 59). To my way of thinking, post-truth cannot be equated with political culture. Whereas the former describes general way of perception of mass information, the latter is a kind of indicator of the level of awareness and attitude to politics (including value-based, behavioral, worldview, and some other aspects) pertaining to a certain individual, social group, or the whole society.

Ivanova interprets post-truth in a mixed political and communicative way. She is convinced that it denotes a new tendency and a method of public conscience manipulation when emotions prevail over facts; it also reflects the way people percept the world (Ivanova, 2017: 156). Sharing the second part of this idea, I cannot agree with the first one. Essentially, post-truth is not a tool of manipulation. Rather, it serves as media environment that fosters the spread of such manipulation.

At last, the most categorical (to some extent, even judgmental) approach to post-truth was offered by Zholud. He defines it as a "new disease", "social tribulation", and "one of the most significant global crises of our age encompassing political, social, and cultural spheres and, consequently, mass media domain" (Zholud, 2018: 117-122).

Clearly, media scholars nowadays study post-truth quite broadly. Postmodern reality, distorted state of conscience, certain context, situation, destruction and transformation of social and political reality, new tendency, a tool of public conscience manipulation, the way people percept the world, global crisis of our age, new disease or social problem – to name but a few existing designations of the phenomenon. In my view, post-truth is first and foremost an attribute of contemporary media and political reality the essence of which is that facts are replaced with subjective, emotional, and sometimes false statements. It is also worth mentioning that this is a relatively new phenomenon, even though some scholars (Waldrop, 2017; Fuller, 2018) trace it back to the faraway past.

It is hard to deny that some post-truth elements took place in ancient times. That said, I suppose it was not until fairly recently that it has formed as a tangible phenomenon – ever since the Internet and up-to-date information technologies' deep penetration in everyday life. In this sense, key factors conducive to entrenchment of post-truth are new media that turned into a kind of channels of distributing manipulations, fakes, and propaganda, as well as technologies simplified dissemination of false information and thus disorientation of the audience.

Why do I place emphasis on the new media and Internet technologies? Back in the day, in the age of traditional or "old" media, there were ways to disseminate false information and use manipulative techniques too. However, it was not on this scale as it is nowadays. As a result, there have not been any reasons to speak about post-truth until recent times. Only after the emergence of social networks, messengers, and various technological platforms (as a rule, easily accessible to the public), all this has taken a different turn.

Not least because of this, so-called filter bubbles became a widespread phenomenon. The author of this term – Pariser – defines it as the intellectual isolation that can occur when websites make use of algorithms to selectively assume the information a user would want to see, and then give information to the user according to this assumption. A filter bubble, therefore, can cause users to get significantly less contact with contradicting viewpoints, causing the user to become intellectually isolated (Pariser, 2011: 37). Besides psychic setup, individual filter bubbles' formation is also due to mechanisms of personalized information search and special services of tuning to tastes, interests, and favors of the audiences used by search engines. Ultimately, a human being ends up in a sort of intellectual isolation that impedes getting alternative information.

Apart from factors mentioned above, some other roots of post-truth are worth listing. Keyes stresses the role of postmodern philosophy with its relativity that, among other things, trickles down to moral principles. Consequently, alternative ethic is formed that allows humans not to regret lying; "alternative", "personal", and other variants of the "truth" come into existence (Keyes, 2004: 43).

Perhaps a so-called "crisis of fact" has also played a role in the emergence of post-truth politics. According to Davies, to focus on recent, more egregious abuses of facts is to overlook the ways in which the authority of facts has been in decline for quite some time. Newspapers might provide resistance to the excesses of populist demagogy, but not to the broader crisis of facts. The problem is the oversupply of facts in the 21st century: there are too many sources, too many methods, with varying levels of credibility, depending on who funded a given study and how the eye-catching number was selected (Davies, 2016).

It is obvious that we should not underestimate the influence of the main stakeholders in a post-truth world. Ball argues that these are politicians (in a post-truth era, it becomes easier for them to win power), public relations companies, and IT-corporations (they make money out of engineering and selling software) (Ball, 2017). As in the case of traditional media, it is important to note that, say, politicians have always been trying to apply certain manipulative techniques, populism, and disinformation in order to win, use, and keep power. But only after such information technologies had become full-fledged, their aspirations to do it got to be as strongly marked as they are now.

As far as IT-corporations' impact on establishing post-truth principles is concerned, it seems to be rather substantial. It is quite hard to judge to what extent Google or Facebook's influence is intended and purposeful here (to their credit, both companies take steps to withstand disinformation and fakes). However, the fact that their activity and products to some degree are instrumental in promoting post-truth principles is beyond doubt.

### 4. Results

What are the main hazards of post-truth politics? Why does it attract so much attention in recent years? Having analyzed a great deal of research on this issue, I have noticed that often it is taken for granted – in most cases, scholars agree by default that post-truth comes laden with detrimental effects on the society but do not give them an articulate description. In the meantime, I think such effects need to be separated to discuss them fairly.

On a global scale, all transformations in media sphere caused by post-truth politics can well lead to tectonic changes in the whole world order. In particular, it may result in depreciation of freedom of speech that, in its turn, can cause the erosion of the institute of free election and crisis of many democratic procedures and – in the long run – system of international security in general.

Davies puts the same idea a bit differently. "Facts hold a sacred place in Western liberal democracies. Whenever democracy seems to be going awry, when voters are manipulated or politicians are ducking questions, we turn to facts for salvation. But they seem to be losing their ability to support consensus" (Davies, 2016).

Other harmful consequences remain possible too: cleavages in regard to views between "us" and "them", difficulties in holding productive dialogue within society, exploding the reputation of mass media, politicians, experts, total distrust and – at the same time – uncritical attitude to news sources perceived as "friendly" to your own views, to mention but a few.

The upshot of all these is a kind of vicious circle. Post-truth itself is in part a result of underdeveloped media literacy skills. However, one of its consequences implies that such skills degrade even further: by indulging in individual filter bubbles, retiring into their own media environments, and building invisible barriers between themselves and streams of "alien" information that does not fit into existing frameworks, a human being becomes more vulnerable to manipulations and distortions of all sorts.

In my opinion, all this unequivocally points to the fact that to develop media education is of crucial importance in a post-truth era. I am convinced that only through purposeful cultivation of relevant competencies we have a chance to neutralize various harmful effects of the phenomenon under discussion. Determined efforts to cope with this problem should be made not only by the audience but by mass media as well. The press should thoroughly control the way journalists abide by professional ethic norms and codes. If the fourth estate does not fight against manipulations and fake news they produce, it will inevitably exacerbate the current situation. And no attempts to inoculate people against detrimental post-truth effects through disseminating media literacy principles will be enough.

Unfortunately, as media educators, we cannot compel journalists and politicians to respect their own ethic norms. The only way we can affect the situation is to come up with some practical recommendations on how to withstand manipulations and spread them among as many people as possible. In media scholarship, there are many good tips on distinguishing true news from fakes. Here I would like to recap the most important of them.

Firstly, it is necessary to take account of the media outlet we get information from, i.e. to what extent it is known, authoritative, competent, and reliable. Secondly, everyone should understand that one of the key functions of a heading is to grab reader's attention. Therefore, the narratives of the news and the headline do not necessarily match up. Thirdly, author's argumentation needs to be critically analyzed in terms of its consistence and political partisanship.

Fourthly, if situation so requires, one can check authenticity of photos and pictures (there are special services for that over the Internet), as well as accuracy and correctness of facts, figures, and citations. Fifthly, sometimes it is quite useful to explore linguistic features of the media text – labels, metaphors, comparisons, epithets etc. used by its author. Sixthly, the source of information (i.e. where the journalist gets it from) is also quite indicative. If it is anonymous, it should set off alarm bells at the very least. And lastly, it always pays to bring into correlation facts and arguments presented in a media message, on the one hand, and your own common sense and life experience, on the other.

It should be noted that throughout the Western world there is a growing number of Internet sites fixating on fact-checking. The most high-profile of them are factcheck.org, madiamatters.org, newsbusters.org, politifact.com, propublica.org, snopes.com, sunlightfoundation.com etc. Most of these primarily non-profit structures specialize on debunking fakes in a certain spheres (i.e. politicians' speeches and statements, stories of liberal or conservative media, candidates or state officials' business affairs). It is also quite revealing that established mass media begin to employ specialists responsible for checking the facts and data contained in stories that are about to be published or aired. Strictly speaking, this is more verification than fact-checking. However, this terminological elaboration is not very important in this context and does not refute the fact that such type of activity is on the rise nowadays.

Worthy of separate attention is the Dutch experience of struggle against fake news. There is the first "legal factory of fabricated news". They purposely invent fakes, set them off through the Internet, and, unlike all other manipulators and liars, debunk them after a while in order to teach the audience how to deal with such type of content. By reading these fakes, one can get to know what was wrong with them and how not to fall for a similar scam next time (Hoe..., 2019).

In Russia, fact-checking practice is still in its infancy. Interestingly, Ministry of Foreign Affairs was one of the first institutions that have launched such service. There is a special tab on its site – "Published materials that contain false information about Russia" – where fake news or disinformation concerning Russia and its politics are presented on a regular basis (Published materials..., 2019). Sometimes, M. Zakharova, Director of the Information and Press Department of Russian Foreign Ministry, posts similar messages on her personal pages on social networks. A few specialized fact-checking sites analogous to those in the United States and Europe have appeared in Russia in recent years.

## 5. Conclusion

One way or another, all these ways of fighting against spreading false information in the long run are aimed at fostering media literacy skills among people. The more often fakes are debunked, the more skeptical the audience's attitude to the deluge of media messages becomes. And I believe that a grain of salt, in its turn, is an essential element of media literacy: unless getting accustomed to taking media texts with a pinch of salt, one cannot be immune from fakes and manipulations of different sorts.

It goes without saying that there is no need to cast doubt on everything. There are facts and events that are obvious. However, it is absolutely necessary when and if more or less complicated, disputable, and controversial issues are concerned. Politics is one of such spheres. Having no opportunities for obtaining firsthand information about it, people have to look at it from the eyes of journalists that automatically runs the risk of distortion. In this sense I cannot agree with Silverblatt who considers media literacy to be a nonpolitical phenomenon that teaches *how* to think, but not *what* to think (Silverblatt, 2018: 71). Of course, general principles of media literacy do not imply any recommendations on how to feel about certain political forces, ideologies, processes, or media outlets. Instead, they offer general insight into media texts analysis: what is worth paying attention in the first place; how to evaluate its credibility, check facts and authenticity of quotations; why does it matter etc. On this count Silverblatt is absolutely right.

On the other side, even though media literacy does not encroach upon "*what* to think" domain, it is still closely tied to politics. As previously noted, it plays an important role (if not to say "pivotal") in countering disinformation, fakes, manipulations, and other attributes of a post-truth era. Efforts of governmental and non-profit organizations, as well as the part of professional media community most committed to ethic norms, would not be enough to withstand taints and "sins" of a post-truth age unless the audience itself develops media literacy skills.

**References**

Baek et al., 2019 – *Baek, Y.M., Kang, H., Kim, S.* (2019). Fake news should be regulated because it influences both "Others" and "Me": How and why the influence of presumed influence model should be extended. *Mass Communication and Society,* 22 (3): 301-323.

Ball, 2017 – *Ball, J.* (2017). Post-Truth: How Bullshit Conquered the World. London: Biteback Publishing Ltd.

Boyd-Barrett, 2019 – *Boyd-Barrett, O.* (2019). Fake news and 'RussiaGate' discourses: Propaganda in the post-truth era. *Journalism,* 20 (1): 87-91.

Buckingham, 2019 – *Buckingham, D.* (2019). Teaching Media in a 'Post-truth' Age: Fake News, Media Bias and the Challenge for Media / Digital Literacy Education. *Cultura Y Educacion,* 31 (2): 213-231.

Chugrov, 2017 – *Chugrov, S.V.* (2017). Post-truth: Transformation of political reality or self-destruction of liberal democracy? *Polis. Political Studies,* 2: 42-59.

Davies, 2016 – *Davies, W.* (2016). The Age of Post-Truth Politics. *The New York Times.* [Electronic resource]. URL: https://www.nytimes.com/2016/08/24/opinion/campaign-stops/the-age-of-post-truth-politics.html

Deligiaouri, 2018 – *Deligiaouri, A.* (2018). Discursive construction of truth, ideology and the emergence of post-truth narratives in contemporary political communication. *International Journal of Media & Cultural Politics,* 14 (3): 301-315.

Fedorov, 2015 – *Fedorov, A.* (2015). Levels of university students' media competence: analysis of test results. *Media Education,* 1: 48-51.

Fedorov, Levitskaya, 2016 – *Fedorov, A.V., Levitskaya, A.A.* (2016). Comparative analysis of the indicators' levels of students' media competence development in the control and experimental groups. *International Journal of Media and Information Literacy,* 2 (1): 16-37.

Fuller, 2018 – *Fuller, S.* (2018). Post-truth. [Electronic resource]. URL: https://postnauka.ru/longreads/84059.

Garland, 2018 – *Garland, R.* (2018). Is post-truth another word for political spin or a radical departure from it? Evidence from behind the scenes in UK government communications: 1997-2015. *International Journal of Media & Cultural Politics,* 14 (3): 333-350.

Hoe..., 2019 – Hoe maken we onzinon schadelijk? (2019). [Electronic resource]. URL: https://wijzijndrog.nl

Ivanova, 2017 – *Ivanova, E.A.* (2017). Linguistic phenomenon of post-truth within the english language political discourse. *Herald of Chelyabinsk State Pedagogical University,* 9: 154-159.

Keyes, 2004 – *Keyes, R.* (2004). *Post-Truth Era: Dishonesty and Deception in Contemporary Life.* New York: St. Martin's Press.

Koshkarova, Ruzhentseva, 2019 – *Koshkarova, N.N., Ruzhentseva, N.B.* (2019). Forth to truth and back to hoax: post-truth in modern political communication. *Political Linguistics,* 1 (73): 50-56.

Lim, 2018 – *Lim, C.* (2018). Checking how fact-checkers check. *Research & Politics,* 5 (3): UNSP 2053168018786848.

Lotero-Echeverri et al., 2018 – *Lotero-Echeverri, G., Romero-Rodriguez, L.M.; Amor Perez-Rodriguez, M.* (2018). Fact-checking vs. fake news: confirmation journalism as a tool of media literacy against misinformation. *Index Comunicacion,* 8 (2): 295-316.

Margolin et al., 2018 – *Margolin, D.B., Hannak, A., Weber, I.* (2018).Political fact-checking on twitter: when do corrections have an effect? *Political Communication,* 35 (2): 196-219.

McDermott, 2019 – *McDermott, R.* (2019). Psychological underpinnings of post-truth in political beliefs. *Political Science & Politics,* 52 (2): 218-222.

Mena, 2019 – *Mena, P.* (2019).Principles and boundaries of fact-checking: journalists' perception. *Journalism Practice,* 13 (6): 657-672.

Nelson, Taneja, 2018 – *Nelson, J.L., Taneja, H.* (2018).The small, disloyal fake news audience: The role of audience availability in fake news consumption. *New Media & Society,* 20 (10): 3720-3737.

Pariser, 2011 – *Pariser, E.* (2011). The Filter Bubble: What the Internet Is Hiding from You. New York: Penguine Press.

Poulakidakos et al., 2018 – *Poulakidakos, S., Veneti, A., Fangonikolopoulos, C.* (2018). Post-truth, propaganda and the transformation of the spiral of silence. *International Journal of Media & Cultural Politics,* 14 (3): 367-382.

Published materials..., 2019 – Published materials that contain false information about Russia (2019). [Electronic resource]. URL: http://www.mid.ru/nedostovernie-publikacii

Sengul, 2019 – *Sengul, K.* (2019). Populism, democracy, political style and post-truth: issues for communication research. *Communication Research and Practice,* 5 (1): 88-101.

Silverblatt, 2018 – *Silverblatt, A.* (2018). Media literacy and critical thinking. *International Journal of Media and Information Literacy*, 3 (2): 71.

Tandoc et al., 2019 – *Tandoc, E.C., Jr., Jenkins, J., Craft, S.* (2019). Fake news as a critical incident in journalism. *Journalism Practice,* 13 (6): 673-689.

Temmermanet al., 2019 – *Temmerman, M., Moernaut, R., Coesemans, R.* (2019). Post-truth and the political: constructions and distortions in representing political facts. *Discourse, Context & Media,* 27: 1-6.

Van Duyn, Collier, 2019 – *Van Duyn, E., Collier*, J. (2019). Priming and fake news: the effects of elite discourse on evaluations of news media. *Mass Communication and Society,* 22 (1): 29-48.

Volodina, 2017 – *Volodina, L.V.* (2017). Post-truth as an antithesis to veracity in media text. *Contemporary Press within the Context of Communicative Process,* 2 (11): 57-62.

Waldrop, 2017 – *Waldrop, M.* (2017). News Feature: The genuine problem of fake news. *Proceedings of the National Academy of Sciences of the United States of America,* 114 (53): 12631-12634.

Wenzel, 2019 – *Wenzel, A.* (2019). To Verify or to disengage: coping with "fake news" and ambiguity. *International Journal of Communication,* 13: 1977-1995.

Word..., 2016 – Word of the Year 2016 is... [Electronic resource]. URL: https://en.oxforddictionaries.com/word-of-the-year/word-of-theyear-2016

Young et al., 2018 – *Young, D.G., Jamieson, K.H., Poulsen, S., et al.* (2018). Fact-checking effectiveness as a function of format and tone: evaluating FactCheck.org and FlackCheck.org. *Journalism & Mass Communication Quarterly,* 95 (1): 49-75.

Zhizhina, 2016 – *Zhizhina, M.V.* (2016). Media competence as strategic objective of media education: criteria of media competence. *Media Education,* 4: 47-65.

Zholud, 2018 – *Zholud, R.V.* (2018). "A Post-truth Era" in the Western Journalism: Roots and Consequences. *Herald of Voronezh State University. Series: Philology. Journalism,* 3: 119-123.

## Problems of Media discourse, Grammar and Intercultural Communication in *Russian Journal of Linguistics* (Review, *Russian Journal of linguistics*, 2018, No 1, 2, Indexed in Web of Science and Scopus)

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**Abstract**

The article reviews materials published in *Russian Journal of Linguistics* on problems of media discourse, grammar and intercultural communication. The *Russian journal of Linguistics*, 2018, No 1-2 pays attention to many problems of modern linguistics: analysis, especially political media discourse, rhetoric, intercultural communication, language and culture, contrastive linguistics, sociolinguistics, psycholinguistics, cognitive linguistics, pragmatics, grammar, word-formation, intercultural communication, theory and practice of translation. Special importance in *Russian Journal of Linguistics* is attached to media discourse. The expansion of modern linguistics, its interdisciplinariness is an objective phenomenon, which causes, however, criticisms associated with the use of "drifting" from one area of scientific knowledge to another and therefore insufficiently clearly defined concepts. In the article there were used a descriptive method included methods of observation, intra-linguistic comparison, sociolinguistic and linguopragmatic interpretation. There were also used elements of diachronic analysis and historical retrospection. The specificity of the problem area studied in this work has led to the hermeneutic approach, which is characterized by the emphasized installation on the explanation and interpretation. Within anthropocentric linguistics, questions of how a person affects the language he/she uses, what is the measure of his/her possible influence on the language, what areas in the language system are open to linguocreative activity (which is naturally reflected in the media discourse, and grammar, and intercultural communication) and in general depend on the human factor are actively developed.

**Keywords**: media discourse, grammar, intercultural communication, interdisciplinariness, psycholinguistics, cognitive linguistics, pragmatics, word-formation.

### 1. Introduction

The specifics of the outstanding university in many ways determines the priorities of *Russian Journal of Linguistics*: being international in focus, the journal aimed primarily at the analysis of theoretical and practical issues of intercultural communication, however, pays attention to many other problems of modern linguistics (e.g. the headings of the journal: language and culture, contrastive linguistics, sociolinguistics, psycholinguistics, cognitive linguistics, pragmatics, discourse analysis, rhetoric, grammar, word-formation, intercultural communication, theory and practice of translation). Special importance is attached to interdisciplinary research. The expansion of modern linguistics, its interdisciplinariness is an objective phenomenon, which causes, however,

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criticisms associated with the use of "drifting" from one area of scientific knowledge to another and therefore insufficiently clearly defined concepts.

### 2. Materials and methods

The paper uses a descriptive method that includes methods of observation, intra-linguistic comparison, sociolinguistic and linguopragmatic interpretation. There were also used elements of diachronic analysis and historical retrospection. The specificity of the problem area studied in this work has led to the hermeneutic approach, which is characterized by the emphasized installation on the explanation and interpretation.

### 3. Discussion

The very understanding of interdisciplinariness (Ivanova, Borisova, 2018: 215-222) not only deepens, but its multiple interpretation is possible, for example: 1) the achievement of new knowledge through the integration of several scientific fields and the formation of a new integrative branch of knowledge (transdisciplinariness); 2) the acquisition of new knowledge at the intersection of disciplines (interdisciplinariness); 3) producing new knowledge as a result of the synthesis of diverse studies (multidisciplinariness), and at last 4) the new knowledge as the result of the interaction of several paradigms within the same scientific discipline (polyparadigmatism). Thus, in the article "The Problem of Translation of Religious and Extremist Texts: Forensic-Linguistic Expert Examination" (Borisova et al., 2018: 448-473) there are implemented at least three of possible manifestations of interdisciplinariness: transdisciplinariness (as there is the integration of translation and linguistic expertology), interdisciplinariness (because new knowledge is acquired at the intersection of theory of translation, linguistic expert examination of the text and linguoconflictology) and multidisciplinary approach (synthesis of legal linguistics, discourse study, translation study and intercultural communication theory).

The study of typological diversity of discursive space in the semiotic, cognitive, communicative, cultural aspects is one of the urgent directions of linguistics in the XXI century, which reached the interdisciplinary level of research.

Researchers pay special attention to the modern political media discourse: in the first issue of 2018, four articles are devoted to this problem: 1) Minoo Alemi, Ashkan Latifi, Arash Nematzadeh (Tehran, Iran) *Persuasion in Political Discourse: Barak Obama's Presidential Speeches against ISIS*; 2) Tatiana Dubrovskaya (Penza, Russia), Agnieszka Sowińska (Antofagasta, Chile and Toruń, Poland) *Construction of Categories 'Strength' and 'Weakness' in Russian and Polish Foreign Policy Discourse*; 3) O.A. Solopova (Chelyabinsk, Russia), A.P. Chudinov (Ekaterinburg, Russia). *Diachronic Analysis of Political Metaphors in the British Corpus: from Victory Bells to Russia's V-Day*; 4) Flavia Cavaliere (Naples, Italy) *Discoursive Mechanisms of News Media – Investigating Attribution and Attitudinal Positioning*.

The first article examines the persuasion strategies used by former President of the USA Obama in his two official speeches against the Islamic state on August 7 and September 10, 2014.

The analysis of these speeches is based on the theory of speech acts and pronoun analysis (to determine the inclusiveness and exclusiveness of their meanings). President Obama's intention to justify the air strikes of the US army on the Islamic state zones in Iraq was clearly manifested in the content of the assertives. The first person singular and plural pronoun analysis in terms of inclusiveness/exclusiveness showed the conservatism of Obama's position (in comparison with other US presidents). Regarding agency, language facts indicate that Obama's has taken a conservative stance, relying on the will of American citizens and subordinating his agency to American ideals and power. This is confirmed by the total number of 34 commissives in both speeches of Barack Obama (Alemi et al., 2018: 278-291).

The article "Construction of categories 'strength' and 'weakness' in Russian and Polish foreign policy discourse" (Dubrovskaya, Sowińska 2018: 292-312) aims to identify the discoursive mechanisms of construction of interethnic relations. Based on the speeches of the foreign Ministers of Russia and Poland investigators analyzed the functional value of the categories of "strength" and "weakness" in the construction of international relations in foreign policy practices. It is defined that, although the two categories under consideration are of interrelation, "force" is expressed more explicitly than "weakness", and the axiological component of "force" varies depending on the represented actor, and in the construction of the opposition there involved all the arsenal of

linguistic means. The article demonstrates how the discursive perspective enriches the study of social practices and provides a key to understanding the ongoing social processes.

The article by O.A. Solopova and A.P. Chudinov (Solopova, Chudinov, 2018: 313-337) is written within diachronic linguistic and political metaphorology. The authors are interested in the issues of diachrony and historiographical potential of political metaphor. The article focuses on the determinism of political metaphor by the historical context of the epoch, reveals the dominant metaphorical models, their pragmatic potential, discursive factors that influenced the activation of metaphors and their meanings, in connection with which the article is of interest not only for linguists, but also for a wide range of humanitarians – historians, sociologists and political scientists.

The fourth article in the section, written by F. Cavalieri (Cavalieri, 2018: 338-356), shows a socio-critical interpretation of how storylines of ethnic disputes, being interpreted in media, contribute to inflame racial passions and influence public perception of the issue. Special attention in the analysis of media texts is paid to attribution and evidentiality.

In section "Rhetoric, grammar, word-formation" there is placed the article "Rhetoric, grammar, discourse, homeostasis" by Prof. G.G. Khazagerov, a well-known specialist in rhetoric, a permanent author of the RUDN Russian journal of linguistics. The article compares rhetorical, grammatical and discourse approaches to a language. As in his previous works, G.G Khazagerov attaches special significance to the ability of the system to maintain parameters of its existence within certain limits – to homeostasis. The consistency with which rhetoric deals is based on the category of homeostasis, on the idea of an adaptive system. The consistency of grammar is based on the idea of a controlled system. Grammar deals with the choice of a discrete variant, and rhetoric deals with the construction of continuous metaplasms. The author argues the proximity of discourse and rhetorical approaches, and different interpretations of discourse correspond to different degrees of convergence with rhetoric. The general conclusion is that convergence with rhetoric can deepen the concept of "discourse" and stabilize its investigation. In traditional rhetoric, a successful precedent was fixed in the form of a standard and received a name, which led to an abundance of rhetorical terms, which often did not have a strict definition.

Rhetoric, according to G.G. Khazagerov, "differs from grammar in the most essential features that can differ things in this world: relation to discreteness and continuality, relation to the absence/presence and the nature of consistency. In grammar, we deal with the system and only indirectly – with the interlocutor, and in rhetoric, we are responsible to people directly. Rhetoric reveals deep relationship with the category of "discourse"; rhetoric works in the same field with discoursology. In communication between people, in a natural way the power of controlled systems ends and the area of adaptive, ecological systems begins. It is necessary to take interlocutor into account, whose social status and reputation are important, which are formed outside of the "here and now" of the specific speech act. The reputation of the speaker, his/her status, language image are formed in the course of other speech acts outside of this speech act. Therefore the definition of discourse "text + situation" is not complete.

The article summarizes: grammar and rhetoric deal with systems of different types: controlled and adaptive. The controlled system is connected with the language standard, the second one operates through a system of updated nominations and recommendations, its systematics is based on fuzzy logic and is stabilized by the concept of "homeostasis". A discursive approach to the language phenomena is much closer to rhetorical approach than to grammatical one. And rapprochement with rhetoric can deepen the discursive approach and the notion of "discourse". A language, immersed into life, is a language, immersed into something that tends to self-preservation, has the feature of homeostasis (Khazagerov, 2018: 357-372).

In the same section there is an article by the famous grammarian I.G. Miloslavsky "On fundamental differences between Russian grammars for reception and for products" (Miloslavsky, 2018: 373-388).

In recent years, many linguists (O.G. Revzin, V.A. Plungian, T.B. Radbil, etc.) wrote about necessity of creation of a new Russian grammar. The reason is not only in the tremendous growth of opportunities to attract and investigate very diverse material, in the achievements of corpus linguistics. A popular idea is that the creation of a new academic grammar should be based on a new scientific ideology. It was suggested that the new grammar should be more "soft", tolerant to the norm (Norman, 2016), it should include cultural information (Maslova, 2016), because even in the traditional genre at the present stage of science, the most relevant are the works with

interdisciplinary understanding of phenomena. It is natural to expect from the new grammar movement in the direction (in accordance with general scientific vectors) to expansionism, anthropocentrism and explanation.

Explanation at the grammatical level has always caused great difficulties. But after 1980 there were many works that shed light on the nature of grammatical meanings. With anthropomorphic categories A. Wierzbicka (Wierzbicka, 1997), Corbett (Corbett, 2000; 2012), O. Lyashevskaya (Lyashevskaya, 2004) could explain non-trivial, "whimsically casual" numeric forms of a noun.

The category of verb transition is associated with the development of property relations (Epstein, 2016); Russian impersonal sentences often become the object of ethnogrammar (A. Wierzbicka, D. Tarlanov and so on), etc.

It is well known that "Russian grammar"-80 has become a fundamental list of formal paradigms. It is possible to find in it an information about all the atypical forms of accidence, but semantics and especially pragmatics of grammatical forms are still not realized and not presented. Grammar, created at a new level of the development of linguistics – i \n its cognitive and anthropocentric paradigms – is the main task of our time. Therefore, the ideas presented by one of the most authoritative grammarians of our time Professor I.G. Miloslavsky on the pages of Russian journal of linguistics about principles of creating a new grammar is extremely important.

In his opinion, the Russian grammar (as well as dictionaries) should not only provide information about the language, but also give clear answers to the questions that arise during speech activity. Grammar should help make to choose in the text the appropriate meaning of word form in reception, and also to choose means of linguistic expression adequate to the idea during production. The purpose of receptive grammar is not limited to the traditional school and university grammatical analysis; the purpose is to provide a complete and accurate identification of the author's objective and subjective content, which is in these word forms, phrases, sentences, statements. Grammar for productive speech acts, in terms of meaningful specifications for their implementation with language means, finally deals with the same essence, which there opens up, going from words, idioms, phrases, sentences, and statements, grammar to speech-receptive action.

Language, combinable characteristics, which, as a rule, are not essential for the reception, provide adherence to language norms during producing the statement and thereby facilitate communication for the addressee (and complicate it for the addresser). These ideas correlate with the ideas of the plurality of grammars by V.B. Kasevich. Compare the statement that in addition to the natural requirements of completeness, consistency of grammar, its synthetic nature (balance in terms of taking into account existing theories), it is necessary to clearly understand the prescriptive nature of grammar for the speaker/writer; but, along with this, there should be developed descriptive grammars, it means grammars primarily for the listener/reader (Kasevich, 2016: 30). Special thematic issues of *Russian Journal of Linguistics* are devoted to the most urgent problems of science of the XXI century.

Thus, twice (in 2015 and 2018) the journal represented problem of discoursive expression of emotions. Foreign scientists took part in the 2018 issue. The issue opens with an introductory article "Language and emotions: a discourse-pragmatic perspectives" (Alba-Hues, Larina, 2018: 9-37). The authors note that in the XX century linguistics was mainly engaged in the study of the referential function of the language and linguistic code. The language was understood as an abstract and logical tool for working with factual information, and the fact that the language is inseparable from emotions was not taken into account. And only by the end of XX century, it became obvious that pragmatic (emotional) aspects of communication should become the object of linguistics (in its broad sense), and thus linguistics made the so-called "emotional turn". A new interdisciplinary field, which combines psycholinguistics, cognitology, linguopragmatics and cultural linguistics, is called the linguistics of emotions, or emotiology. The thesis that emotions influence mental, verbal and nonverbal human activity and permeate all levels of the language became the axiom of the new interdisciplinary direction.

The highlight of the issue was the article by A. Wierzbicka "Emotions of Jesus", which analyzes the Manifesto of Christianity – Sermon on the Mount and raises the question of the translatability of emotional concepts, in particular the concept of "anger". There are many lines devoted to anger in the Bible: "being angry, do not sin: the sun will not go down in your anger", which can be understood as "do not keep anger in the soul, do not push it deep into, and

immediately find out the reason and investigate angry feelings. In theory, anger, like any other feeling, itself can be neither "right" nor "wrong." Violent actions or damage to property as expressions of anger are harmful.

Tenacity in anger, its permanent presence in heart, when person lives in constant annoyance and anger is harmful, too. Jesus equates hostility to a crime: evil feelings are destructive to the soul, in anger people often insult each other. Anger is a feeling, an emotion that is not a sin, but it is a danger that it can lead to. Anger opens the door to outpouring evil that has accumulated in the heart. Many places in the Bible say that a person has power over this feeling, he/she can allow it to go out, or, more pleasing to God, to extinguish anger in him/herself: everyone should be quick to hear, slow to speak, slow to anger, as anger of a person does not create the truth of God. That is, person's anger will never lead to righteousness.

Many researchers – theologians, historians, writers, including Leo Tolstoy, believed that the commandment "do not be angry for no reason, in vain" was subjected to later inclusions. At first it was just "not be angry". In the process of editing the sermon, the text was distorted.

By the V century, the word εικη was inserted into the original unconditional statement, meaning "useless" or "without cause". Naturally, the original and the modified version represent different moral axioms. The scientific pathos of A. Wierzbicka's article is: in order to truly understand the teaching of Christ about "anger", it is necessary to go beyond individual words of a particular language – Aramaic source, Russian "anger", English "anger", Greek orgizomai, etc. It is important to try to formulate simple sentences using universal words, that is, words that have exact equivalents in all the languages. The natural semantic metalanguage developed by the author allows to replace direct formulations like "What did Christ say about anger?" with more subtle questions, which make it possible to get more accurate and meaningful answers (Wierzbicka, 2018: 38-53).

In the article by the theorist of emotive linguistics V.I. Shakhovsky "Cognitive matrix of emotional-communicative Personality" (Shakhovsky, 2018: 54-79) there is shown the direction of scientific thought to the modern understanding of "linguistic personality". If until the 70-s of the XX century emotions were completely excluded from the sphere of linguistic attention, in the anthropocentric paradigm emotions were investigated as the center of human personality. The pathos of the article is in affirming the communicative importance of the emotional component in the structure of linguistic personality.

As V.I. Shakhovsky wrote in his earlier work, in the beginning, there was not a Word, but an Emotion, because in the basis of primary and secondary nominations always, from the very beginning there lay human emotions, not yet of Homo loquens, but already of Homo sentiens (Shakhovsky, 2008: 10). V.I. Shakhovsky prove the need for a new term "emotional and communicative personality".

Currently, we can talk about the formation of a new interdisciplinary direction of linguistic research – linguistics of emotions, or emotiology. This term has already entrenched in the Russian scientific discourse. Emotiology is based on the concepts and theories of emotions: philosophical, biological, cognitive, psychological, social, neurological, informational, educational, functional, existential, etc. (Shakhovsky, 2008: 21). Thus, linguistics of emotions is interdisciplinary in nature, as it crosses a number of paradigms of modern linguistics and science in general – communicative, cognitive, pragmatic, discursive, cultural, etc.

According to researchers emotions have both universal and specific features: every person, regardless of the nationality and the native language, experiences the emotions, but the manifestation of emotions, their expression, functions, pragmatic meaning, vector direction, etc. have their own characteristics, which are realized in discourse and form communicative ethnostyles, the study of which will help to reduce ecological risks, to avoid communication interference and failures in different types and genres of intercultural communication.

In his article George Lachlan Mackenzie (Amsterdam, Netherlands) examines the discoursive functioning the words *sentiment* (mood) and *confidence* (trust), meanings of which in media texts on finance is peculiar and does not coincide with the standard use. Based on the analysis of the Hong Kong Financial Services online corpus, it is found that although the words *sentiment* and *confidence* in common use are very different and have different valencies, they are often used as synonyms in financial discourse. And the way these words are used indicates the role of emotions as a decisive factor in the process of making a decision by investors (Mackenzie, 2018: 80-93).

Francisco Yus (Alicante, Spain) in the article "Attaching Feelings and emotions to Propositions. Some Insights on Irony and Internet Communiation" tells how emotions are linked to the propositions in an ironic and Internet discourse. Although emotions are generally not propositional, they play an important role in the possible interpretation of the respective propositions.

Although emotions are generally not propositional, they play an important role in the possible interpretation of the relevant propositions. That is, non-positional emotions are important for communication not only when they can be a part of a possible interpretation (the addressee's emotional attitude), but also when they involuntarily flow from the act of communication (what the author calls "affective effects" – "emotional effects") (Yus, 2018).

A comparative study by A.A. Gornostaeva (Moscow, Russia) is devoted to ironic metaphors in discourse of Russian, British and American politicians. The author defines the conceptual spheres, which most often become the sources of modern metaphors, and comes to the conclusion about the high frequency of ironic metaphors in the modern political discourse. The author defined specific, culturally determined features of the use of metaphors in the Russian, English and American political discourse (Gornostaeva, 2018: 108-125).

Emotional prosody is analyzed in the article by K. Sancho-Guind (Madrid, Spain). The author investigates the alert about the risks and clarifies how the National Transportation Safety Board of the United States of America (NTSB) has emotional impact on consciousness and behavior of the people to prevent risks. An electronic corpus of more than 500 instructions on the mortal danger in aviation transport (for the period 2010-2015), published annually on the website of NTSB was involved for analysis. According to the author, the emotional prosody used by the NTSB relies more on rhetoric than on vocabulary, and narrative strategies of accentuation and speech representation play a key role (Guinda, 2018: 126-143).

S. Kaul de Marlageon writes about new trends in communication between media stars and the audience. The author characterizes the concept of *extimacy* as a form of intentionally aggressive relations used to promote Ego of the speaker through a kind of exhibitionism – notification of the details of his/her own intimate life (this was absolutely unthinkable just a few decades ago) (Marlangeon, 2018: 161-174).

In addition to scientific articles, *Russian Journal of Linguistics* regularly publishes a chronicle of scientific life, including scientific reviews, information about conferences and scientific projects. Chronicle section is characterized by intellectual urgency and informational saturation.

In the review of T.V. Kharlamova on the monograph by T.V. Dubrovskaya, E.K. Reva, E.A. Kozhemyakin (Dubrovskaya et al., 2017) it is noted that the interdisciplinary nature of the study allows to link together the social context and discursive practices, as well as to understand the mechanisms of construction of interethnic relations and show their representation in a variety of language material. The involvement of the conceptual apparatus of various sciences does not lead to an imbalance; on the contrary, the authors managed to organically combine the achievements of sociology, political science, law and linguistics (Kharlamova, 2018: 480-488).

In the review of N.L. Chulkina on the monograph by I.A. Bubnova, I.V. Zykova, V.V. Krasnykh, N.V. Ufimtseva (Bubnova et al., 2017) it is emphasized that the reorientation of linguistics to interdisciplinariness requires a serious "reset" from researchers, i.e. the need to change the view of the object of study and to revise the methodology of linguistics, the center of which is the "Homo loquens" (Chulkina, 2018: 200-209). Among other tasks, authors write about the prospects of psycholinguistic studies of the Homo loquens formation as a person who is able to resist manipulation and behave in accordance with his/her own system of life orientations in different situations.

Information about the conference "European Philology and Societal Issues" (Donauwörth, Germany, 29 September – 1 October 2017) is presented by Joachim Grzega (Germany). Philological disciplines, especially borderline, interdisciplinary areas of Philology are becoming more practice-oriented, they are actively involved into the discussion and solution of vital social problems.

In the review by S.V. Ivanova and A.S. Borisova, devoted to the 3-d Annual Firsova Readings (Moscow, Russia, 14-15 November 2017), it is noted that the plurality of areas of modern linguistics, research interdisciplinariness became the main subject of the International scientific and practical conference "Linguistics Today: from Interdisciplinariness to Transdisciplinariness", which was held under the auspices of the RUDN University on November 14-15, 2017.

The conference was attended by 150 scientists from leading universities and linguistic research centers. Linguistic pragmatics as a transdiscipline was discussed in the report of Gunter Senft (Max Planck Institute of Psycholinguistics, Nijmegen, Netherlands). Modern pragmatics draws its data and conclusions, not limited to the study of traditional European languages and languages of North America (Ivanova, Borisova, 2018: 215-222).

According to Arto Mustajoki's report (Helsinki University, Helsinki, Finland) linguistics is exempt from reductionist interpretation of communication processes. They cannot be adequately analyzed only within linguistic categories, they require a broader – multidisciplinary – approach and methods. The driving forces that determine the process of communication can be comprehended only when taking into account a variety of factors: linguistic, sociological, cultural, mental, cognitive.

O.A. Leontovich addressed to the special manifestation of interdisciplinariness (Volgograd State Socio-pedagogical University, Volgograd, Russia), she analyzed the positive and negative consequences of transformations in the process of intersemiotic translation of Russian classic literature into the "language" of domestic and foreign cinematography and stage works. Interest to this view of interdisciplinariness is due to the importance of artistic and semiotic problems in modern science.

International scientific conference "India and Russia: Cross-Cultural Synergy" which took place on 22-23 February 2018 in Delhi was dedicated to a memorable date – the 70th anniversary of the formation of the Department of the Russian language in Delhi University and the 70-th anniversary of the establishment of diplomatic relations between India and Russia. The reports focused on interdisciplinariness and comparative research in the field of language and literature, methods of teaching Russian as a foreign language and Russian literature in India, teaching Hindi in Russia, as well as problems of modern translation studies.

### 4. Results

Moving the focus of linguists' attention from the issues of internal structure of the language to its pragmatic aspect caused the importance of a whole complex of problems of linguistic influence. In modern linguistics, with its anthropocentric focus, the attention is concentrated on all the circumstances of the formation, development and functioning of linguistic units and categories, including social circumstances. Traditionally, the problem of social conditionality of the language was studied in two aspects: 1) the social differentiation of the language in connection with social stratification of society; 2) social conditions of the language development and functioning.

The process of social determination of the language can be investigated on different levels of social and socio-ethnic structure – from nations and classes to the primary level – the speech act, analyzed in the context of the social situation.

Today, linguistic-cultural sphere of scientific research becomes prospective, it is focused on the identification of the essence of the relationships between language, ethnic mentality and culture.

Linguoculturology proceeds from the recognition of the fact that three phenomena – language, mentality and culture – are organically linked, suggest each other, none of them can be excluded and none of them can be considered as dominant one. The subject of linguistic Culturology is a language as the realization of the creative principle of the human spirit, as a reflection of the cultural values of the ethnic community. The central problem is the study of the language picture of the world, specific to each language group, which is the objectification of the mental picture. The main task of linguoculturology is the modeling of knowledge about the material and intangible objects of culture of an ethnic group through a comprehensive analysis of its language and vocabulary. A person creating a language and created by a language is in the center of the language theory by A. Wierzbicka (Wierzbicka, 1997).

Her anthropocentric approach to lexical and grammatical semantics makes it possible to reveal those deep characteristics that form the native speaker's idea of this or that object or situation of the world. On the basis of the differences that are found in the system of personal names, employees for treatment, A. Wierzbicka investigates intercultural differences: in the culture represented by the English language, the manifestation of emotions in personal relationships is not encouraged, and in cultures represented by Russian and Polish languages, on the contrary, expression of strong emotions is encouraged. The language, according to the concept of

linguoculturology, actively participates in all the most important moments of cultural creativity – the development of the world representation, their fixation and subsequent understanding.

In the era of classical ("humanitarian") culture, such as Renaissance, people realized that scientific, philosophical or religious values were higher than the values of everyday life or entertainment. Today, media create conditions in which the value of information about an important scientific discovery becomes equal to the value of information about the release of a new chocolate dessert. According to A. Moles (Moles, 1973), advertising is the most important source of formation of "mosaic" culture.

The expansion of the linguistic research context (its appeal to the external pragmatic situation, to cognitive processes, psychological, sociocultural rules and strategies of speech understanding and generation) is associated not only with the actual scientific significance of the phenomena under consideration, but also with fundamental changes in the social order in modern conditions. Standardized metaphors, replicated by media, become for the average native speaker a form of interpretation of the world, and in turn, linguistics helps to answer this questions.

Within anthropocentric linguistics, question of how a person affects the language he/she uses, what is the measure of his/her possible influence on the language, what areas in the language system are open to linguocreative activity (which is naturally reflected in the media discourse, and grammar, and intercultural communication) and in general depend on the human factor is actively developed. The study of the typological diversity of discoursive space in the semiotic, cognitive, communicative, cultural aspects is one of the important issue of linguistics of the XXI century, which reached the interdisciplinary level of research.

## 5. Conclusion

Today, in the context of globalization, there is a problem whether national cultures can become so close and can form single world culture. Along with linguistic imperialism, the most important component of cultural imperialism is media one, or informational "media imperialism". This term conveys the unequal value of informational interaction, in which the dominant influence on the world media space is exerted by strong leading countries. The expansion of English-language mass culture (which is manifested, for example, in the fact that many popular projects of Russian television are analogues of famous Western TV shows; these are the TV games *Field of Miracles, Guess the Melody*, etc.) is inevitably accompanied by a reduction in the share of the national media product in the domestic market.

There are three answers to this question. According to the first one (radically globalist point of view) national cultures will increasingly converge, forming single common culture. There is another approach (moderately globalist one), according to which such a convergence will occur, but at the same time there will be an oppositely directed process, so with an increase of commonality in culture, own national cultures will remain. Finally, there is an anti-globalist view that globalization only reinforces the demonstration of differences between cultures and can cause conflict between them. Many scientists believe that globalization not only does not make the world common and its culture universal, but on the contrary, creates a "new world of new worlds". It is clear that globalization is a complex process; on the one hand, the processes of globalization link distant local communities and contribute to their transformation through the intensification of global social relations; and on the other hand, the same processes increase the pressure on the regional cultural identity. Globalization can increase the number of identical cultural forms. The main postulate of modern linguistics is considered to be expansionism, because linguistics is looking for answers to its questions outside the actual linguistics, borrowing the methods of analysis inherent in other areas of knowledge. New knowledge can be obtained at the intersection of sciences, and then interdisciplinary research can be formed on its basis. In modern Philosophy of science there are three stages of the development: disciplinary science, the research at the intersection of science and interdisciplinary research. The development of communicative Linguistics in the second half of the XX century meant the exit of the science about the language from the crisis and return to problems about a person, that is, the recognition of its humanitarian essence.

The study of media communication is a further development of anthropo-oriented language learning, as a result not only the linguistic new knowledge can be obtained, but also new knowledge in the field of related sciences about a person. Linguistics in the anthropocentric paradigm gets a new stimulus, new goals and prospects for the application of its efforts to the study of language communication. Today, advanced study of "a person in the language" is unthinkable without taking

into account the study of the problems of media communication. Linguistics has developed clear criteria of elite linguistic personality. We think that an important feature (obligatory, necessary, but, of course, not exhaustive, insufficient one) of the elite linguistic personality is the possession of the entire arsenal of linguistic means that will enrich media communication, which has a huge impact on the speech behaviour of society as a whole.

Thus, review of the *Russian Journal of Linguistics* shows that in many parameters – the importance of discussed problems, the breadth of the material and the level of its presentation – this edition is close to the canonical ideal of a scientific linguistic journal that deserves international interest. "The subject of linguistics steadily extends, and no linguistic problem disappears. … The trivial image of the spiral is still valid" (Alpatov, 2015: 14). The modern *Russian Journal of Linguistics* analyzes scientific problems on top of the spirals.

## 6. Acknowledgements

## References

Alba-Juez, Larina, 2018 – *Alba-Juez, L., Larina, T.* (2018). Language and Emotions: a Discourse-pragmatic Perspectives. *Russian Journal of Linguistics*, 22 (1): 9-37.

Alemi et al., 2018 – *Alemi, M., Latifi, A., Nematzadeh, A.* (2018). Persuasion in Political Discourse: Barak Obama's Presidential Speeches against ISIS. *Russian Journal of Linguistics*, 22 (2), 278-291.

Alpatov, 2015 – Alpatov, V.M. (2015). What and How Linguistics Studies. *Questions of Linguistics,* 3: 7-21.

Borisova et al., 2018 – *Borisova, A.S., Kargasekova, J.V., Nikishin, D.V.* The Problem of Translation of Religious and Extremist Texts: Forensic-Linguistic Expert Examination. *Russian Journal of Linguistics*, 22 (2): 448-473.

Bubnova et al., 2017 – *Bubnova, I.A., Zykova, I.V., Krasnykh, V.V., Ufimtseva, N.V.* (Neo)psycholinguistics and (psycho)linguoculturology: New Sciences about Homo Loquens. Moscow: Gnosis, 2017. 390 p

Cavaliere, 2018 – *Cavaliere, F.* (2018). Discursive Mechanisms of News Media – Investigating Attribution and Attitudinal Positioning. *Russian Journal of Linguistics*, 22 (1), 338–356.

Chulkina, 2018 – *Chulkina, N.L.* (2018). Review of I.A. Bubnova, I.V. Zykova, V.V. Krasnykh, N.V. Ufimtseva (Neo)psycholinguistics and (psycho)linguoculturology: New Sciences about Homo loquens. Moscow: Gnosis, 2017. 390 p. *Russian Journal of Linguistics*, 22 (1): 200-209.

Corbett, 2000 – *Corbett, G.G.* (2000). Number. Cambridge: Cambridge University Press. 2000. 358 p.

Corbett, 2012 – *Corbett, G.G.* (2012). Features. Cambridge: Cambridge University Press, 322 p.

Dubrovskaya et al., 2017 – *Dubrovskaya, T.V., Reva, E.K., Kozhemyakin, E.A.* (2017). Political, Legal and Mass media Discourse in terms of Discursive Construction of Russia's Interethnic Relations. Moscow: Flinta: Nauka, 248 p

Dubrovskaya, Sowińska, 2018 – *Dubrovskaya T., Sowińska A.* (2018). Construction of Categories 'Strength' and 'Weakness' in Russian and Polish Foreign Policy Discourse. *Russian Journal of Linguistics*, 22 (2), 292-312.

Epstein, 2016 – Epstein, M.N. (2016). From Knowledge to Creativity. How Humanities Can Change the World. Moscow, *Saint Petersburg*: Center for Humanitarian Initiatives, 480 p.

Gornostaeva, 2018 – *Gornostaeva, A.A.* (2018). Ironic Metaphors in Political Discourse. *Russian Journal of Linguistics*, 22 (1): 108-125.

Guinda, 2018 – *Guinda, C.S.* (2018). The Emotional Prosody of U.S. Fatal Air-Accident Dockets Online: Risking Risk Communication? *Russian Journal of Linguistics*, 22 (1), 126-143.

Ivanova, Borisova, 2018 – *Ivanova, S.V., Borisova, A.S.* Linguistics Today: from Interdisciplinariness to Transdisciplinariness (The 3-d Annual Firsova Readings. Moscow, Russia,14-15 November 2017). *Russian Journal of Linguistics*, 22 (1): 215-222.

Kasevich, Menshikova, 2016 – *Kasevich, V.B., Menshikova, Yu.B.* (2016). Plurality of Russian Grammars. In *Proceedings of the International Scientific Symposium "Russian grammar"* (Moscow, 13-15 of April, 2016). Moscow: State Institute of the Russian Language named after A.S. Pushkin: 26-28.

Kharlamova, 2018 – *Kharlamova, T.V.* (2018). Review of Dubrovskaya T.V., Reva E.K., Kozhemyakin E.A., Yaroslavtseva Y.F., Arekhina D.V. (2017). *Political, Legal and Mass media Discourse in terms of discoursive construction of Russia's Interethnic Relations*. Moscow: Flinta: Nauka, 2017. 248 p. *Russian Journal of Linguistics*, 22 (2): 480-488.

Khazagerov, 2018 – *Khazagerov, G.G.* (2018). Rhetoric, Grammar, Discourse, Homeostasis.

Lyashevskaya, 2004 – *Lyashevskaya, O.N.* (2004). The Semantics of Quantity in Russian. Moscow: Languages of Slavic Culture. 390 p.

Mackenzie, 2018 – *Mackenzie, J.L.* (2018). Sentiment and Confidence in Financial English: a Corpus Study. *Russian Journal of Linguistics*, 22 (1), 80-93.

Marlangeon, 2018 – Marlangeon, S.K. (2018). Fustigation Impoliteness, Emotions and Extimacy in Argentine Media Celebrities. *Russian Journal of Linguistics*, 22 (1): 161-174.

Maslova, 2016 – *Maslova, V.A.* (2016). The Problem of Cultural Information Placement in Grammar. *In Proceedings of the International Scientific Symposium "Russian grammar"* (Moscow, 13-15 of April, 2016). Moscow: State Institute of the Russian Language named after A.S. Pushkin: 47-51.

Maslova, 2018 – *Maslova, V.A.* (2018). Review of V.V. Feschenko (ed.) (2016). *Linguistics and Semiotics of Cultural Transfers: Methods, Principles, Technology*. Moscow: Cultural revolution, 2016. 500 p. *Russian Journal of Linguistics*, 22 (2): 474-480.

Miloslavskiy, 2018 – *Miloslavskiy, I.G.* (2018) About Fundamental Differences between Russian Grammars for Reception and for Production. *Russian Journal of Linguistics*, 22 (2): 373-388.

Moles, 1973 – *Moles, A.* (1973). Socio-dynamics of Culture. Moscow: Progress. 290 p.

Norman, 2016 – *Norman, B.Yu.* (2016). What New Russian Grammar do We Need. In *Proceedings of the International Scientific Symposium "Russian grammar"* (Moscow, 13-15 of April, 2016). Moscow: State Institute of the Russian Language named after A.S. Pushkin: 30-32. *Russian Journal of Linguistics*, 22 (2): 357-372.

Shakhovsky, 2008 – *Shakhovsky, V.I.* (2008). Linguistic Theory of Emotions. Moscow: Gnosis. 416 p.

Shakhovsky, 2018 – *Shakhovsky, V.I.* (2018). Cognitive Matrix of Emotional-communicative Personality. *Russian Journal of Linguistics*, 22 (1): 54-79.

Solopova, Chudinov, 2018 – *Solopova, O.A., Chudinov, A.P.* (2018). Diachronic Analysis of Political Metaphors in the British Corpus: from Victory Bells to Russia's V-Day. *Russian Journal of Linguistics*, 22 (2): 313-337.

Suryanarayan, 2018 – *Suryanarayan. N.* (2018). International scientific conference "India and Russia: Cross-Cultural Synergy"(India, Delhi, 22-23 February 2018). *Russian Journal of Linguistics*, 22 (2): 489-492.

Wierzbicka, 1997 – *Wierzbicka, A.* (1997). Language. Culture. Knowledge. Moscow: Russian dictionaries. 411 p.

Wierzbicka, 2018 – *Wierzbicka, A.* (2018). Emotions of Jesus. *Russian Journal of Linguistics*, 22 (1): 38-53.

Yus, 2018 – *Yus, F.* (2018). Attaching Feelings and emotions to Propositions. Some insights on Irony and Internet Communication. *Russian Journal of Linguistics*, 22 (1): 94-107.

# Ways of Manipulating Public Consciousness with Modern Media: an Analysis of the Russian Regional Publications

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**Abstract**

In the modern world, society is inseparable from democratic processes. At the same time, the media are the guarantor of information support for these processes. Information support is provided by providing information to citizens about events taking place in society, in the country, in the world, including about the political life of the country. Russia has historically developed a system of trust in the print media. This statement is true, if only for those reasons that in the relatively recent past in the territory of most of Russia, only newspapers and magazines were the only source of information.

At the beginning of the XXI century, the media (mass media) play an important and often crucial role in shaping the public consciousness of citizens. The media have both creative and destructive power, which can both consolidate the audience and divide it.

The work of a journalist can be structured in such a way as to primarily influence the opinion of the audience, forming it, and not informing, but this is achieved most effectively due to all the reserves of the language, linguistic norms, ways and methods of means of influence.

The language of modern media is a universal medium for transmitting information, ensuring communication and semantic ties in society, influencing its consciousness and the formation of public opinion, its assessment. Domestic media have the most powerful influence on contemporary Russian public consciousness, largely modeling it. In this regard, comprehension of the essence of manipulation by the mass consciousness, the study of various manipulative techniques and technologies, as well as the development of effective ways to counteract them, are becoming increasingly relevant.

**Keywords:** mass media, manipulations of mass consciousness, manipulative techniques and technologies.

## 1. Introduction

In scientific and modern journalistic literature and in the media, we are increasingly confronted with the term "socio-political manipulation". The authors who describe this phenomenon argue that there are methods and means of influencing a person that allow hidden control of public consciousness for the purpose of socio-political manipulation.

In this way, information is introduced into the public consciousness that is desirable for certain manipulative persons. At the same time, with the help of the media, this is done secretly and imperceptibly, with simultaneous exposure to different people, different ages, with different education, etc. By this, the tasks of socio-political manipulation are achieved and solved.

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The media are a kind of public forum, a public space where the formation of public opinion, dialogue between representatives of various social and political forces takes place.

The purpose of this study is to study the mechanisms of manipulating public consciousness in the Russian regional print media using examples of socially significant publications printed periodicals of the Khanty-Mansiysk Autonomous Okrug-Ugra – newspapers *Local Time* and *Varta* (Nizhnevartovsk).

In accordance with the goal, the following research objectives are defined:

1. Consider the concept of "manipulation" and "manipulation" in the historical and theoretical aspect and characterize the phenomenon of manipulation;

2. To reveal the essence and signs of manipulative influence on public consciousness by modern media;

3. Consider the technologies and mechanisms of manipulation in the media;

4. To analyze the manipulative impact of the texts of these regional publications, to identify the specifics of the implementation of manipulation mechanisms through various linguistic, intertextual means.

Thus, the object of research is domestic print media (in particular, printed periodicals of the Khanty-Mansiysk Autonomous Okrug-Ugra – the newspapers *Local Time* and *Varta* (Nizhnevartovsk)) as a means of manipulating consciousness.

The subject of the research is the technologies and mechanisms of manipulating public consciousness used in the analyzed print media.

## 2. Materials and methods

The theoretical foundations of the study of political manipulation are presented in the works of Aristotle, Demosthenes, Plato, Plutarch, Cicero and other thinkers of antiquity.

N. Machiavelli (Machiavelli, 1990) was a supporter of the use of negative human qualities such as hypocrisy and deceit in politics for the good of the state. According to his teachings, public order is based on hidden political influence.

The cultural and historical background of manipulation, its technologies and mechanisms were considered by T. Hobbes (Hobbes, 1991), G. Schiller (Schiller, 1980), R. Harris (Harris, 2001), G. Pocheptsov (Pocheptsov, 2001), E.L. Dotsenko (Dotsenko, 2000), S.G. Kara-Murza (Kara-Murza, 2008) and others.

K. Marx and F. Engels (Marx, Engels, 1988) wrote about the need to "inspire" the masses with its true interests, which should determine its revolutionary behavior. F. Nietzsche (Nietzsche, 1912) made a significant contribution to the study of the formation of a distorted picture of the world in the mind. H. Ortega-i-Gasset (Ortega-i-Gasset, 1991, 2001) considered hidden control of the masses as part of social control.

In recent years, interest in the problem of the media as a means of manipulating public consciousness has grown significantly: from the point of view of considering the impact of communication on modern social processes and ideology (Grachev, 2000; Grachev, Melnik, 1999, 2002), from attention to the personal and group bases of manipulation (Dotsenko, 2000).

S. Kara-Murza (Kara-Murza, 2001, 2008) considers the features of modern information warfare at the domestic level. I. Dzyaloshinsky (Dzyaloshinsky, 2005) considers manipulation as an instrument of influence on the mass consciousness, which can be used for good or harm. The works of T. Evgenyeva (Evgenyeva, 2007), P. Kirichyok (Kirichyok, 2006), A. Kozyreva (Kozyreva, 2003), K. Markelov (Markelov, 2004) are devoted to the application possibilities and methods of exposing manipulative technologies. The regional aspect of political media manipulation was considered by such authors as V. Shuvanov (Shuvanov, 2005), O. Konovalova (Konovalova, 2003), A. Kiselev (Kiselev, 2007). Political consciousness and people's behavior, depending on the information field created by the media, are considered by A. Grabelnikov (Grabelnikov, 2001), B. Kretov (Kretov, 2000).

Scientific interest in the problem of linguistic influence on consciousness in journalistic activities arose at the beginning of the 20th century. Since World War II, the study of the propaganda methods of the warring socio-political systems began. It should be emphasized until the early 1990s. Russian science almost denied the role of the media in managing public opinion.

The philological aspects of manipulating public consciousness in the texts of the media are investigated in works on linguistics: V.I. Annushkin (Annushkin, 2001), M.N. Volodina (Volodina, 2008), D.B. Gudkov (Gudkov, 2000), T.G. Dobrosklonskaya (Dobrosklonskaya, 2000),

M.R. Zheltuhina (Zheltuhina, 2003), A.A. Maslennikova (Maslennikova, 1999), G.Ya. Solganik (Solganik, 1981), I.G. Kateneva (Kateneva, 2010) and others.

Research Methods: targeted selection of the main sources on the selected topic; the formation of a set of empirical materials based on observation, generalization; analysis of intertextual inclusions and their functions in the text of the publication; media monitoring; content analysis of texts covering significant social events in print media *Local Time, Varta*.

## 3. Discussion

Consider the nature and signs of manipulative impact on public consciousness. Let's define the meaning of the terms "public consciousness" and "manipulation".

M.A. Heveschi (Heveshi, 2001) wrote that "politics considers the mass as the sum of individuals, each of which can be convinced and thereby push to certain political actions", and it is easiest to push political actions by manipulation, as one French proverb says – "a man, like a rabbit, they catch it by the ears" (Oleshko, 2008).

Society, as a collection of millions of people, is divided into various classes, associations, groups that occupy a specific place in social stratification, and although each of these units has its own system of views, sometimes contradictory, there is a phenomenon of social consciousness.

The warring parties in ancient times "tried to use the means of spiritual influence to weaken the morale and fighting power of the enemy, as well as to raise the morale of their troops." This was historically the first form of informational confrontation – informational-psychological support of military and rebel operations.

In their texts, Maya often manipulated historical dates, rulers' life expectancy, astronomical cycles and real events in order to present their ruler in a favorable light, for example, coordinated his date of birth with the date of birth of the illustrious ruler of the past (reincarnation), exaggerated the number of enemies killed.

Plato, in his treatise The State, said that lies, deceit and other means of influencing society are allowed for the public good. He suggests "rewriting" the biographies of the gods so that they do not look in a bad light; substantiates a peculiar method of art, designed to introduce the image of a "good hero" into the mass consciousness. Plato tries to introduce a social myth for the state in the name of the public good, the truth of which must be convinced of all (Plato, 1994).

In the views of the school of Plato, who believed that the ideal type of ruler is a "philosopher on the throne," the "aristocratic" political tradition was quite openly expressed. According to his views, far from all can be "true rulers". The majority of the population is generally not capable of political life.

Sophists believed that you can prove anything. This indicates the relativity of truth and the polysemy of language. The views of the sophists played an important role in the theory of knowledge and in linguistics. According to E. Aronson, sophists were a group of itinerant teachers who gave lectures and wrote the first books of persuasion. These ancient reference books (most of which have been lost) described "typical cases" – arguments and methods that could be used for various purposes related to the need to convince (Aronson, Pratkanis, 2003).

Solon, who carried out his famous reforms in the IV century BC, wrote that each individual Athenian is a sly fox, but when they get together for a meeting, they are a herd of sheep.

Herodotus and Thucydides operated with such concepts as "mass", "many", and reflected on their "arrogance", "ignorance", and "arrogance". It was in Ancient Greece that the speaker Demosthenes was the first to study the mechanisms of political influence on the masses: on their mind, emotions.

Aristotle linked "the mood of the uprising" (their psychological state) with "political unrest and internecine wars." At the first, verbal stage, the person acted as the main carrier and means of communicating information, as the object of influence – the human psyche, which determines the direction of his activity.

Back in the 4th century BC Aristotle singled out those components of the human psyche that are currently the main objects of informational influence – consciousness, will and feelings of a person: "There are three soul forces, the main ones for an act and for truth: feeling, mind, aspiration" (Aristotle, 1983).

Like Plato, Aristotle understands democracy as ochlocracy, i.e., the power of the crowd. In contrast to the thinkers of antiquity, according to M.A. Heveshi, "the humanists of the

Renaissance, speaking of the crowd, had in mind not only ordinary people, not social division, but ignorant people belonging to any class" (Heveshi, 2001).

The Catholic religious philosopher Thomas Aquinas on the basis of the teachings of Aristotle (his worldview laid the foundation for the activities of the modern Roman Catholic church) as early as the 13th century proclaimed the formation of ideology and control of journalism as the most important for strengthening the clergy and state the right of the church.

In the meaning of "control performed skillfully (with dexterity), discreetly (hiding both the purpose of the influence and its character) and with selfish intentions", the term "manipulation", according to scientists, replaced the previously existing term "Machiavellianism" (designation of technology positions, scientific according to the term of which "the end of some justifies citizens by any means").

N. Machiavelli thus developed this principle: "Of all the animals, let the sovereign be likened to two: a lion and a fox. A lion is afraid of traps, and a fox is afraid of wolves, therefore, one must be like a fox in order to get around traps, and a lion in order to scare away wolves" (Machiavelli, 1990).

Let's look at the "Explanatory Dictionary of the Russian Language" S.I. Ozhegova and N.Yu. Shvedova: "*Manipulation*'s, and, f. 1. A complex technique, action on smth. when working with hands, by hand (book). 2. trans. Trick, fraud (disapproved)" (Ozhegov, Shvedova, 2003: 341).

At the moment, the media have the opportunity to manipulate public consciousness. The general democratization of society, the growth of information activity and consumption influenced this. At V.F. Oleshko "manipulation in the media" means "the type of deliberate or situationally determined psychological impact through the media" (Oleshko, 2008: 235).

Of all types of media, television has the greatest impact on the life of modern society. Since the first experimental broadcasts, television has entered every home in economically developed countries. Close interaction with the outside world and social environment is one of the most important conditions for normal human life, and the rapidly increasing volume of incoming information, its content and structure have a great influence on us.

According to the researchers, over time and with the rapid development of information technology, people are increasingly dependent on mass communication. Thus, a peculiar second reality is created – subjective, its influence is almost as great as the influence of objective reality. "Only gods and animals can live outside society", – said Aristotle (Aristotle, 1983). A man is a social being, he is an individual, which means "atom" in Latin, that is, indivisible, but in reality a person arises and exists only in interaction with other people. The process of reading news media texts as a synthesis of interpersonal and mass communication has been repeatedly studied by scientists from different countries (Johansson, 2014; Lee, Tandoc, 2017; Lehmann et al., 2017).

Sociopolitical manipulation – "it is the hidden control of the political consciousness and behavior of people with the aim of forcing them to act or inaction in the interests of manipulators, imposing the will of the manipulator on the manipulated in the form of hidden influence" (Voroshilov, 2001: 447).

In the work of V. Amelin, "Sociology of Politics," political manipulation is considered from the point of view of sociology. As a result, it becomes clear that political manipulation sets itself the task of influencing public consciousness and public opinion. To do this, the following actions are expected:

- introducing into the public mind information of the necessary content, while exhibiting the characteristic features of manipulation;

- the impact on public consciousness and public opinion through manipulation, to achieve hidden intentions, to strengthen their political position (Amelin, 1992: 38).

Proceeding from this, it is confirmed that political life is closely related to political manipulation, because the goal of political manipulation is the acquisition, execution and preservation of power.

The concept of "social consciousness" is a spectrum of certain ideas, views, judgments that exist in society at the moment, acts as a holistic spiritual system that expresses the characteristics of any social group, collective. The most influential institution that is able to shape and model public consciousness is the media.

The external expression of public consciousness, according to some researchers, is public opinion, under which the method of forming mass consciousness and the attitude (hidden or explicit) of various groups of people to events and processes of real life affecting their interests and needs.

So, E.P. Prokhorov draws a figurative model of mass consciousness as an object of journalistic activity, in which such a component as public opinion occupies an important place. The model contains four elements: worldview, worldview, historical consciousness, and public opinion (Prokhorov, 2002: 324). Characterizing public opinion, E.P. Prokhorov writes: "this is a system of understood and appreciated concrete situations of the current life of society reflected in the mass consciousness and the resulting set of ideas about what, in the name of what and how should be changed in reality" (Prokhorov, 2002: 324).

Public opinion in this structure is presented as a system of orientations in modern times, and journalism as an effective way of disseminating these orientations, i.e. the formation of public opinion. Based on all the values of all the components of mass consciousness, it can be argued that they all occupy a significant place in the ideological activity of journalism. Journalism is a means of servicing all components of the mass consciousness, however, the main attention of journalism is still drawn to public opinion. So, on the newspaper page are the most significant headlines of current events. An important role is played by the style of news headlines. According to a study of the effectiveness of news headlines on the Internet (Kuiken et al., 2017), in order to "attract" the reader and make him want to "open" the article, the headings use questions, direct links, numbers, dramatization and a negative emotional tone, font selections are applied. Thus, a panorama of current reality is created. In this connection, the frequency of issuing a newspaper or magazine, television programs and radio programs is regulated.

The formation of public consciousness, the management of people through communication has a huge advantage: there is no need, for example, to carry out reprisals against the opposition, it is much more effective, using the possibilities of information and psychological influence, to direct the masses on the "only right" path than to restore the national economy after civil wars or other internal shocks. Moreover, the information-psychological impact can be directed not only to compatriots, but also to foreign opponents, which can significantly reduce the number of casualties and material costs for military operations (Ponomarev, 2007: 128).

During the information-psychological impact, the population becomes the bearer of the necessary ideology, which makes it possible to fully use the means of production, labor, infrastructure for the purpose of organizing the impact. To achieve the greatest effect in the psychological subjugation of the masses through the transfer of information, it is necessary to reach the widest possible audience, which is achieved, firstly, due to the technical ability to disseminate information and the degree of its accessibility (comprehensibility).

The creation of an information society, that is, a society managed through information, began with the invention of typography. The relatively cheap way of reproducing information then led to the rapid development of newspaper business. Information became available to more or less broad sections of society, and newspapers thus played the role of the first means of targeted mass information.

Until the beginning of the twentieth century, print media were the main tool for shaping public opinion. As for the correlation of public opinion and public consciousness, it should be emphasized that the latter, due to its nature, lends itself to transformation much more difficult, therefore, the main role books first played in the formation of public consciousness. But in order to gather information from a book or newspaper, you must be able to read. Consequently, an illiterate audience could not be involved in the process of obtaining information. The picture changed dramatically with the advent of radio - the first truly massive means of informing the population, when almost any person got the opportunity to freely absorb the ideas of the organizers of the information impact.

After the Second World War, the television era began – a fundamentally new phase in the development of technologies for the formation of public consciousness, and until now television is the most powerful means of informational and psychological manipulation of the masses. The amount of information acquired by a person depends on the number of sensory organs involved in the process of obtaining information. The success of television is that in this process, in addition to the organs of hearing, the organs of vision are involved, through which a person receives the lion's share of information.

Television was the most popular means of mastering information, and it was with its appearance that the information society was formed. Broadcasting capabilities make it possible to transmit the maximum amount of information in the form in which it is most easily absorbed, having the greatest impact (Pocheptsov, 2001: 656).

Thus, in modern society, a person is exposed to the simultaneous influence of the print media, radio and television, and therefore, the manipulation of public consciousness. It is almost impossible to hide from information flows, no matter where the object of their influence is. A major role in this regard was played by the invention of portable and car radios and televisions. It's extremely difficult to navigate a huge amount of information, because a person does not always have the opportunity to verify the accuracy of the information received. Sometimes he has no choice but to take the proposed information on faith, which can contribute to the formation of ideas that have nothing to do with the true state of things.

First of all, the danger of falling under the influence of manipulators by the public consciousness through the media exists in relation to young people. Active interaction with digital content contained in electronic media and increasingly becoming a translator of social and political news on social networks is especially characteristic of young readers. A young news reader actively interacts with content. It is motivated by an interest in obtaining situational information against the background of "preliminary" knowledge (Karnowski et al., 2017).

As scientists have proved, in accordance with various personal interests and educational activities, young people are more active than adults in finding the necessary information, and more often - not in traditional media, but through news applications on smartphones or social networks. They are more likely to comment on news, share information with friends, use creative formats (Internet memes, etc.) (Cortesi, Gasser, 2015).

In the formed information society, not only a specialist in the field of communications, information and social technologies needs to master media literacy and protection skills from manipulative techniques and technologies that are used in the media, but also an ordinary – especially young – recipient of information. At the same time, according to Maria Claudia Cuc, a young man should "develop his communication skills, critical thinking, develop his responsibility, tolerance, develop his aesthetic sensitivity and use his own experience, connecting with experience and social reality" (Cuc, 2014: 68). The actualization of the positive self-concept and the continuous growth of cognitive individual activity contributes to everything mentioned above (Florescu, 2014).

Thus, the leading role of journalism in socio-political life can be both the nature of the impact on decision-making by various social institutions, and the nature of the impact on the world of consciousness and the direction of behavior of the mass audience and the individual. This determines the significance of journalism as the "fourth power".

Modern Russian media use various technologies and tools to manipulate public consciousness. Russia has historically developed a system of trust in the print media. This statement is true, if only for those reasons that in the relatively recent past in the territory of most of Russia, only newspapers and magazines were the only source of information.

One of the ways of manipulating public consciousness is language manipulation, which involves a type of manipulation carried out by selecting and using the resources of a language in communication, taking into account the features of its structure and functioning.

Language manipulation is a secretive (unconscious by the addressee) application by the addressee of the possibilities of the language in order to transform the cognitive-psychological system of the addressee, impose a certain idea of reality, attitude to its elements and, ultimately, change its behavior in the interests of the manipulator.

The language of the newspaper seems to be a productive sphere in the field of influencing public consciousness and forming public opinion. Skillful use of the language allows you to influence other people. Language is one of the key components from which the internal models of the world are built. The gift of speech is a unique asset of man. The outstanding psychiatrist S. Freud, for example, believed that words are the basic tool of human consciousness and, as such, are endowed with special power.

Unlike other types of influence, the influence with the help of linguistic means is characterized by "greater secrecy, a process of argumentation unconscious for the recipient, the absence of obvious psychological aggression, veiled focus on the result of the impact."

Classifying manipulative technologies in the media, I.M. Dzyaloshinsky distinguishes the following groups of methods of manipulation in the media: the use of social control mechanisms; actualization, transformation or formation of mental and mythological constructs; actualization of value-emotional representations; information space management; the use of psychological automatisms; the use of psychological and persuasive logical tricks.

Consider the possible means and techniques of language manipulation, starting from the classification of I.M. Dzyaloshinsky (Dzyaloshinsky, 2005: 32-53).

Firstly, the use of various logical tricks at the expense of language resources (implications are meanings that are not literally expressed in speech acts by sentences, words and phrases, but are derived using certain interpretation procedures; presuppositions are part of the content of the statement, which, according to the speaker is known to the listener and/or is a condition of his meaningfulness, that is, a condition for the possibility of his assessment as true or false; distortion of the thesis, incorrect comparisons, unfounded generalization, etc.).

Secondly, the use of psychological tricks ("double-entry bookkeeping", "reading in the hearts", arguments "to the public", "to fear", "to the individual", rhetorical questions, etc.), unlike logical ones, are not aimed at convincing by forming an impression of the validity of judgments, but at influencing on the level of feelings.

Thirdly, the use of figures of speech (metaphors, metonyms, synecdoche, etc.). Thus, a metaphor is an important linguistic tool in manipulating public consciousness. "A metaphor is a transfer of a name from one subject to another based on their similarities. However, linguists define a metaphor as a semantic phenomenon caused by the imposition of an additional meaning on the word's direct meaning, which this word becomes main in the context <...> Among other tropes, the metaphor takes the main place, it allows you to create a capacious image based on bright, often unexpected, bold associations. "

This expressive path touches upon "primarily the mechanism of associative thinking of the recipient, and allows to achieve significant savings in intellectual efforts. It gives rise to a stable image that arises in the mind every time the word associated with it appears" (Dzyaloshinsky, 2005: 43).

The use of metaphors for manipulative purposes, as a way of expressing estimates and the status version of an argument when proving a certain point of view, characterizes the method of metaphorization.

Metaphorization is one of the favorite techniques in newspaper journalism. Because, as notes L.A. Gavrilov, "as a result of metaphorization, a capacious and expressive image is created, with which certain associations are associated in the public consciousness. Subsequently, this image can be actively used in media texts, causing the necessary reaction of the audience" (Gavrilov, 2011).

Fourth, the manipulative effect at the expense of linguistic means (syntactic, lexical-semantic, derivational and morphological-semantic means). For example, vocabulary can be evaluative and connotated, contain a direct peremptory indication of a mistake or flaw, which may have a subjective nature. For example, the so-called medical vocabulary, which belongs to the group of euphemisms, is often used to describe military operations or to cover an anti-corruption topic. In general, the use of this type of vocabulary in modern newspaper media is no longer news, but a peculiar stylistic feature of the newspaper text.

The maximum impact on the reader is provided by an assessment expressed in disguise. If the opinion is presented openly and emotionally, it can be perceived as a private point of view, and determines the reaction of the recipient. At the same time, it is impossible to deny the obvious fact that vivid and emotional author's images can be well imprinted in the reader's memory and model his attitude to certain events. Therefore, we can say that the important in the process of the influence of the language on the consciousness is the emotional, or emotional and evaluative value.

Fifthly, one of the ways to manipulate public consciousness with linguistic means can be a language game.

E.M. Beregovskaya in the book "The principle of organizing text as a game moment" relies on the vision of a language game by Ludwig Wittgenstein, that is, agrees with the view that one cannot speak about a language outside the context of an action. E.M. Beregovskaya writes: "The language game is omnipresent and diverse. It penetrates into all spheres of human life, from the everyday sphere, where it exists in the form of a walking joke or simply in the form of echoing, to an advertising slogan, newspaper feuilleton, oratory and poetry. The language game is omnipresent because it has mastered all language levels – phonics, word formation, vocabulary, syntax" (Beregovskaya, 1999: 32).

E.A. Zemskaya in "Russian colloquial speech" expresses the opinion that the language game in colloquial speech is used primarily to achieve a comic effect (Zemskaya, 1983: 172).

However, it should be understood that achieving comic speech is far from the only function of the language game in both colloquial and written speech. For example, a language game can be

used to increase the emotionality of speech or its imagery, for a more accurate transmission of thought, for accentuated accents, etc. Due to the inclusion of information in the context of the game, the textual situation looks new, which, of course, is important for the communication process. After all, the new is connected with the departure from boring formulations, monotony; and everything new and interesting is easier to remember. Unusual speeds up the speed of reaction, simplifies perception. Getting into non-standard textual conditions, the known acquires unexpected nuances and enriches itself in a semantic sense. As a result, thanks to the language game, a certain new, transformed reality is formed, and this reality is characterized by a free attitude to the language with great respect for it, because, as you know, without knowing the norms, it is impossible to violate them purposefully.

In this reality of the language game, standard models, language stamps are destroyed, which leads to the achievement of the goals set for the journalistic text, in the first place – to attract attention, memorability, conviction – as a guarantee of further formation of opinion.

Intertextual referral as a strong manipulative marker can be used in the position of the title, and then indirectly extends to the subtext of the entire article. So, for example, introducing some historical parallel in the title of the article, the author can take advantage of the external similarity of the two objects being compared, situations, to replace one phenomenon with another. Such a substitution, as a rule, initiates in the reader a ready-made complex of associations, emotions and connotations, set by the journalist. Also, the introduction of such false historical parallels intertextually introduces the idea of a confrontation between two civilizations, two peoples. Some headings are a "remake" of famous phrases, expressions, proverbs, which can be regarded as an intertextual game (Markov, 2011: 223).

By "intertextuality" we mean the property of all verbal texts, which manifests itself in the formal presence of one text in another in the form of marked quotes, allusions, and other intertextual inclusions. A journalist using quotes, allusions, puns based on proverbs, sayings, winged expressions and other intertextual elements in his materials should be aware that such an inclusion will be realized only if this knowledge turns out to be common for the author and for the recipient. Thus, "quotation of thinking" as a property of intertextuality implies a corresponding response from the reader.

Among intertextual inclusions, we will distinguish between "allusion (from lat. Allusion – a joke, a hint) – a hint at a historical event, everyday and literary fact, presumably known to the reader, and reminiscence (from Latin reminiscentia – memory) – not a literal reproduction, involuntary or intentional, of other people's structures, words that leads to memories about another work". For example, intertextual elements referring to fiction will be considered an allusion.

One of the important properties of updating intertextual means in a journalistic text is the effect on the recipient and his conviction of the correctness of his position. In accordance with this, the strategy of language manipulation is to build, taking into account the peculiarities of the communicative situation, the general project (or scenario) of the speech effect, designed to produce a certain perlocutionary effect and, ultimately, achieve the planned result.

The latent effect can be carried out not only due to the already considered features of speech perception, but also through the actualization in the mind of the object of a certain content known to the manipulator, but not directly mentioned.

Similarly indirectly updated content, to which the manipulative device is directed, can be previously formed in the human mind patterns of thinking and behavior, reality model, value system, experience, linguistic picture of the world, stable images, automatisms, stereotypes, attitudes and other mental and cognitive formations.

At the moment, the development of communications has advanced tremendously. Information has become the main mass product in modern society, the information society. A person consumes it on a massive scale, mostly without even thinking about it. But it is precisely in view of this mass character that the modern rational person needs to understand the principle of this process, otherwise his consciousness risks simply being discriminated against by the flow of low-quality information.

In the context of attacks on the public consciousness of low-quality manipulative information and the creation of a "media ecosystem", the role of information literacy is growing in society; in particular, researchers pay special attention to the fact that vigilance, alertness in the perception of news should be caused by an unknown source of information, the narrative nature of the news,

emotional responses when evaluating news messages in various media platforms (Albright, 2017). Perhaps it's for the sake of caring for their informational and psychological safety that users turn to sources of quality information, preferring, as recent studies have shown, to receive news from professional sources with a high degree of reliability compared to the fried news of suspicious media sites and social networks (Pearson, Knobloch-Westerwick, 2018).

Recently, the media have become an essential tool for implementing political strategies in the information market. This is more pronounced in states where the government or other political actors can not only inform the population about the goals and values of their policies, but also actually impose certain stereotypes of power on the public.

The closest connection between the media and politics is gained during periods of election campaigns. During this period, people are convinced by informing and reasoning about the various qualities of political opponents. At the same time, there is competition among various media in the struggle for attention and trust of the audience.

General principles for attracting the attention of media audiences lie on the surface (Kharitonov, 2008: 198):

1. Priority, importance (real and imaginary) and attractiveness of the topic for citizens (media reports often mention problems associated with natural, technological and environmental disasters, actions of terrorist organizations, as well as all information related to the threat to the life and health of citizens) .

2. Eccentricity of the facts (media coverage of the ordinary everyday life of society and the country is not so attractive as reporting on extreme events, such as hostilities, major car accidents with a large number of casualties, crashes of civilian aircraft, violent crimes. Some media believe that negative information is a sensation).

3. The novelty of the facts (when new news appears, they immediately get into the media. This applies to both positive news, such as successes in the development of regions, the end of major social construction projects, the results of economic development, and negative news, such as the emergence of refugees as a result of local military conflict, an increase in the number of illegal workers, etc.).

4. Political success (on this principle, news is transmitted on a positive side. The successes of political leaders and parties or the entire state are highlighted).

5. High public status (the media are trying to ensure that a comment on an event is received from persons holding high public status, while the news increases in popularity and is considered plausible).

Following the media on the above principles, which seek to attract attention, worsens the quality of the information provided, makes the information superficial and devoid of a deep analytical assessment.

Analyzing the principles by which the media attracts an audience, one can also trace the use of manipulation techniques, such as the use of frightening topics and messages, one-way negative valve, one-way positive valve, distraction method, use of authorities (influence groups), additional evidence, publication of opinions ordinary participants in the conflict.

Thus, depending on the goals set, the media can use manipulation methods to solve both their tasks and the tasks of political structures. Moreover, in most cases, the media themselves decide what news or news to bring to the public, while political topics are often covered not by the choice of media leaders, as the modern market society dictates.

In the work "Manipulation of consciousness" S.G. Kara-Murza (Kara-Murza, 2001) submits that the media do not consider it important to fulfill their main function of delivering reliable information to the masses, and often distort it under the interests of political structures. For the most part, the media are guided by the main goal – to receive any benefits, whether it be upgrading ratings or high fees of customers.

In the same book, he identified the main ways to achieve the media of their selfish goals, namely, methods of manipulating consciousness. Kara-Murza divided them into three groups: "language of symbols", "language of images" and "other sign systems". The first and second groups are used quite actively, while the second is partially used: it includes numbers, sounds and smells, and for technical reasons, modern media have not yet learned to use smell as a means of manipulation.

Consider following S.G. Kara-Murza the most typical for Russian media methodological methods of manipulation.

Manipulation through metaprograms is a person's habits, systematically repeated sustainable elements of his behavior. They rely on perceptual filters. Metaprograms used for media manipulation:

1. Classification of the world by... Getting information is in the various interests of people. Those, each for himself in a political event selects the information he is interested in, for example, the place of the event, the participants of the event, the meaning of the event, the chronology of the event, etc.

2. The size of the generalization. Information is obtained by a general idea or by focusing on details.

3. The focus of comparison. Getting information is sorted by general similarities or differences, which affects the perception of certain political events.

4. Focus of power. A person evaluates an event based on his personal point of view or the opinions of others.

Manipulative psychotechnologies:

1. Using frightening topics and messages. Fear ensures the unity of society and stimulates the adoption of the opinion of a leader.

2. The use of contrast. Information is transmitted against a background of contrasts, as a result of forming an opinion on the political situation it will take the necessary form.

3. Simplification of the problem. Information about the political situation is transmitted in a simple form, it does not have analytical estimates. In this case, the psychological need of a person is used to get a simple answer to your question.

4. Mockery. It is mainly used in the information war against political competitors by ridiculing their ideas and views.

5. The right to choose. When applying this type of suggestion, drawing intonation to the person's attention to the reaction that they want to provoke, full freedom of choice is offered. The subtlety lies in the fact that when listing alternatives, the voice slightly changes when the response is pronounced that is most preferred to the communicator

Manipulation through the management of information flows or information environment (optically, first of all, the methods of "filtering the information flow". The essence of the methods is to restrict a person's access to the information he receives):

1. Information "shutter". Information about a political event is blocked even if the information is not confidential.

2. One-way negative valve. Information appears with a negative comment, and has no other interpretations.

3. One-way positive valve. The information appears with a positive comment, and has no other interpretations.

4. Open valve. A large flow of various information arrives, impossible for processing and assimilation, as a result, a person ceases to understand what is happening.

5. Two-way open valve. Several large flows of various information arrive, impossible for processing and assimilation, with opposite value judgments, as a result, a person ceases to understand what is happening. The uncontrolled use of this method can lead to a deep domestic crisis and a split in society.

6. Temporary selector. Information comes in special time modes. These include, depending on the goal: "shock" information (emergency reports, sensations, etc.); episodic mode ("accidental information leakage", more often used for misinformation); periodic mode – usually to create sustainable addiction (advertising, broadcast on television).

7. Multi-link selective valve. Combined presentation of information. Combines all of the above methods. In this case, multilayer information is used, including neutral information, a block of positive information, a block of negative information, in which the specified information is included in an episodic fragment.

8. Umbrella. The transmitted informational message does not reach the intended consumer.

9. The funnel. The transmitted informational message is neutralized by the combined action of other messages.

10. The wheel. The substitution in the mass consciousness of one message for another by highlighting it with more important priorities.

11. Replacement. Doubt is not an informational message, but a source of information.

12. Selective selection of information. The transmitted informational message consists of the necessary facts that are beneficial for the psychological information impact.

13. The method of distraction. The transmitted informational message is presented in the most sensational form in order to divert the attention of the audience from significant, but objectionable to political structures.

14. The method of creating facts. It is possible to create facts in a less laborious way: it is only necessary to convey real plausible, real implausible and invented plausible facts in a news compilation – doubts that fall into the second category are debunked quite easily, and facts of the third category penetrate consciousness automatically.

15. Advance use of a predicament or problem. The method consists in using a question or problem that is difficult for the other side, with the simultaneous preparation of a propaganda event in order to provoke the other side to actions unfavorable for him.

16. The method of an objective approach. It consists in the selection of facts and skillfully commenting on them – by eliminating some little-known facts or adding them.

17. Informational noise. Many other materials are added to the basic information. At the same time, "noise" is created by an abundance of ambiguous comments and opinions, interpretation of facts by complex theoretical calculations, and abstruse speeches by narrow specialists. As a result, the main topic is lost in a continuous stream of messages unrelated to each other, which quickly and in large numbers fall upon the audience.

18. Leaks of classified information. Information is transmitted about the alleged political actions of the authorities, which organize its transfer. This is done with the aim of sensing public opinion on a particular political issue. In the event of a negative reaction, public opinion undergoes additional processing in order to prepare it for a certain political action. And if the reaction is extremely negative, then the authorities always have the opportunity to "refute" the sensational information by declaring it "Idle inventions of journalists."

19. The use of misinformation. Disinformation is used, as a rule, at the moment of making some important decision, and when the truth is known, the purpose of disinformation will already be achieved.

In addition, for the purpose of sociopolitical manipulation in the media, social control mechanisms are used (using authorities (influence groups), the "Just Like Everyone Like Us" technique, additional evidence and coercive propaganda); logical tricks built on a deliberate violation of the basic laws and rules of formal logic, or, conversely, on their skillful use for manipulation purposes by an insufficiently informed opponent; methods of rational manipulation (pseudological conclusions, affirmative statements, selection of arguments, comparison of positions of the parties, comparison of expert opinions, causal analysis of events, reasoned refutation, results of opinion polls, expert commentary on opinion polls, publication of opinions of ordinary participants in the conflict, forecasting).

In addition to the listed manipulative tactics, the techniques presented by N.V. Demyanenko:

1. "Labeling" opponents and "using nicknames" to ridicule or inculcate a negative attitude towards the subject. The researcher claims that this technique has a long-lasting effect and "labels" can take root for many years.

2. "Creation of negative associations", in which a certain, existing in the mind of the subject, negative image is superimposed on the image of the opponent.

3. "Creating counter-associations" is the opposite of "creating negative associations", aimed at creating a positive image of the manipulator.

4. "Appeal to specific facts and documents" implies the tendency of most people to blindly trust statistics and stamped papers.

5. The technique of "strangulation in a friendly embrace" implies endowing an opponent with positive qualities that he does not have, so that, by lulling his vigilance, he can strike (Demyanenko, 2012: 20-27).

Note that the manipulation of public consciousness at the initial stage of its formation was considered as a necessary and effective way to exercise control over the activities of the people in order to prevent riots within the country, as well as harmonious rallying of people to improve living conditions. However, current trends in manipulating public consciousness raise concerns about the emergence of an impersonal, mechanized society without a soul and individuality, without its own will, as is often described in utopias. Such a way of life may be easier for the existence of mankind, but it deprives life of meaning, since life without vivid sensations becomes boring and meaningless.

The development of the media has had a huge impact on the effectiveness of the use of information and the improvement of technologies for managing public consciousness. The media plays an important role in the formation of public consciousness in modern society, and, accordingly, in the construction of social reality. Changing the information space, in turn, leads to the formation of a single global media environment and artificially created social reality. An important role in this process is played by various methods of manipulation.

**4. Results**

As a result of the analysis of the manipulation techniques that are most characteristic of regional mass media, such as the newspaper *Local Time* and *Varta* (Nizhnevartovsk), it can be concluded that most of the methodological methods mentioned above are viewed when transmitting information by data Media, and this can serve as the fulfillment of the task of socio-political manipulation.

In order to understand the target settings of a particular media and to use certain methods of manipulation to solve certain problems, it is necessary to characterize the most important typological features of the printed periodicals of the Khanty-Mansiysk Autonomous Okrug-Ugra that we analyze – the newspapers *Local Time* and *Varta* (Nizhnevartovsk). We structure the typological features of publications in tables and analyze the methods of manipulation in the studied media.

Typological aspects of the newspaper *Local Time* are presented in Table 1.

**Tab. 1.** Typological aspects of the newspaper *Local Time*

| Purpose of the publication | Information service for citizens of the Khanty-Mansiysk Autonomous Okrug – Ugra on the events of the socio-political life of the region and the city. |
|---|---|
| Concept | Coverage of current events of the socio-political, cultural and sports life of the region in the context of editorial policy – active participation in social events in the region, following the motto "Every point of view has a right to exist. Truth is extracted from the difference of views ". |
| Audience | From 16 years old |
| Type of press | Bulk |
| Founder | Government of the Khanty-Mansiysk autonomous okrug; Duma of the Khanty-Mansiysk Autonomous Okrug; the editors of the newspaper *Local Time*. |
| Territorial characteristic | Socio-political regional newspaper |
| Categories | Front page, National News, Picture of the day, City, District, Politics, Economics, Oil, Construction, Housing and Public Utilities, Education, Medicine, Society, Culture, Sports, Law and Order. |
| Frequency | 5 times a week |
| Volume | 12 bands |
| Format | A3 |
| Circulation | 8400 copies |

The wide popularity of this media in the city of Nizhnevartovsk allows us to describe the nature of the impact on the consciousness and emotions of a large number of readers. Publications were selected by the continuous sampling method, only journalistic materials were considered.

Consider the use of technology of socio-political manipulation in the periodical *Local Time* in order to influence the mass consciousness and the formation of a certain public opinion.

All methods and techniques for manipulating the reader's attention in the headings *Local Time* can be conditionally divided into speech and non-speech. Speech includes lexical, word-building, morphological, syntactic, stylistic techniques used with a manipulative purpose in the headings. To non-speech – graphic, semantic and informative techniques. A language game can be used at all levels.

It should be noted that the first page of the publication was made with the maximum use of various techniques to attract the reader's attention: in the center there is a bright collage, as a rule, representing well-known political figures of the country in an unexpected perspective. By the way,

this is another manipulative trick of the weekly, which forms a negative perception of the image of power in the reader. Such illustrations are always made in bright colors, as a rule, red color and its shades are used. This color is known to cause emotional stress, agitation, and aggression.

As with any print publication, the title occupies the most powerful, accentuating position. This is what the reader immediately pays attention to. Therefore, the headings and subheadings of the materials are characterized by increased expression. They should, as they say, "catch the eye", attracting the attention of the reader to the material.

Contrast is used as an inclusion in the text of a manipulative psychotechnological method. Information is transmitted against a background of contrasts, as a result of forming an opinion on the political situation it will take the necessary form.

For example, in the article "It's time to relax at home" (07/19/2016, No. 71, author M. Subbotina), the method reports on an event of a military-political nature – an attempted armed coup in Turkey on July 16, 2016. This informational message has subtext which contains the main idea of the article about the temporary impossibility of a trip of Russian tourists to this country by order of the Ministry of Transport of the Russian Federation. The article also reports on the difficulties that tourists expected when leaving for their homeland, about the long wait at the airport.

The following is an idea of a more relaxed and intimate vacation within the region with references to various centers, exhibitions, bases, travel agencies, etc. The conclusion is made: "And for this you do not have to go to distant lands. So it's time to relax at home. "The amazing is always there, you just need to discover it for yourself, and then Ugra will present many pleasant surprises." Here, the information comes in using coercive selection of words and sentences to stimulate the desired behavior, to encourage the choice of places of rest within a certain region, i.e. through coercive propaganda.

The inclusion of public opinion from social networks about the article "It's time to relax at home" can also be considered a stimulating method of manipulation. Obviously, this public opinion poll has an accent point in the general plan of the article and gives the largest persuasive effect.

The article consists of 4 parts created by the fragmentation method, i.e. the information flow, in fact, is divided into separate fragments that are not related to each other, as a result of which the audience is not able to form a correct and complete picture of the world:

1. General information about the armed coup in Turkey.

2. Presentation of the difficulties encountered by tourists with their return to their homeland.

3. A story about the tourist programs of the region, about outdoor activities within Nizhnevartovsk, Ugra.

4. The inclusion of the views of ordinary people from social networks about an attempted armed coup in Turkey.

As a result, consumers of information cannot concentrate on one thing, isolate the main idea from all that they have learned.

A fragmented method of manipulation is also present in other publications of this media and pursues the same goal – information consumers cannot concentrate on one thing, isolate the main idea from all that they have learned: "Step towards the world" (02.17.2015, No. 27, author A. Mironova) – the signing of the Minsk Treaty and issues related to the charge of involvement of Nadezhda Savchenko in the murder of Russian journalists.

As the analysis of publications showed, the method of including a quote or commentary of a media person, public figure, an authoritative person known in the region, as well as using a poll, opinions of ordinary citizens, rating indicators, statistics, are the most preferred methods of manipulating public consciousness in a regional newspaper *Local Time*.

For example, in the note "Putin will not give Russia a grudge" (02/06/2015, No. 24, author N. Evsina), information about the work of deputies is cited against the background of information coverage of events in Ukraine and the sanctioned behavior of the West regarding accession of Crimea to Russia.

"United Russia" in the region, their special opinion on this matter and the authoritative status of the head of the Russian Federation V. Putin are emphasized, the results of a rating survey among citizens of the region are contained: "According to a survey conducted in January this year, 79.2 % of Ugra residents trust the president of the country. This once again confirms that no sanctions and other problems that arise with the filing of the West are not terrible for the Russians. This makes us stronger, we rally around our leader, as we know well: Putin will not give Russia a grudge".

The closest connection between the media and politics is gained during periods of election campaigns. During this period, people are convinced by informing and reasoning about the various qualities of political opponents. At the same time, various media compete in the struggle for attention and trust of the audience.

Quite often, a publication covering political events in a region introduces a technique for introducing into the text opinions or quotes of authoritative people or groups known to the target audience. Such influence groups can include well-known political figures, cultural figures, church representatives, famous actors, business leaders, teachers of higher and secondary educational institutions, etc.: "Natalia Komarova headed Ugra" (09/15/2015, No. 36, author T. Shironina) (Metropolitan Pavel Khanty-Mansiysk and Surgutsky and the chief scientific consultant of the autonomous institution of scientific and Analytical Center for Rational Subsoil Use, Honored Geologist of Russia S.G. Kuzmenkov). Thus, the principle of manipulation is traced – attracting attention due to the high public status of commenting individuals and highlighting the political success of the leader in their comments.

We also note the language methods of manipulating public consciousness in the publications of the newspaper *Local Time*. For example, in the publication "The deputy's chair is vacant," the expression "Who's new?" (01/27/2015, No. 19, author N. Evsina) is an allusion and appeals to the famous phrase from the song "The Sword Song" by E. Krylatov and Yu. Entin, which was performed by A. Mironov in the movie "Property of the Republic". This intertextual turn is not entirely appropriate in this context and does not emphasize the concept "that the new deputy should work not for his own image for the next elections, but for the good of the city", however, in this game form, a method is used to draw the reader's attention to the topic of elections of an individual, a new person to be chosen. In this regard, we note that a journalist using quotes, allusions, puns based on proverbs, sayings, winged expressions and other intertextual elements in his materials should be aware that the implementation of such an inclusion will happen only if this knowledge is common for the author and for the recipient.

Thus, as one of the most popular and enjoyed the attention of the readership of the publications "Local Time", naturally, it uses various methods and technologies of manipulating public opinion, which can be classified as direct and hidden.

By the nature of the perception of the subject (that is, the reader), the media exposure technologies existing in the weekly can be divided into propaganda and techniques that involve the use of a dialogical form. Depending on the tasks set by the addressee of the information, compositional and substantial manipulation is carried out on the pages of the printed weekly, the peculiarity of which is its multi-level and multi-layer nature. In this regard, manipulative methods and techniques can only be distinguished artificially, in the text they are interconnected and interact with each other.

Typological aspects of the newspaper *Varta* are presented in Table 2.

**Table 2.** Typological aspects of the newspaper *Varta*

| | |
|---|---|
| Purpose of the publication | Information services for citizens of Nizhnevartovsk, Ugra, the Tyumen region and the Urals Federal District |
| Concept | Publication of information and analytical materials covering the events in the city of Nizhnevartovsk, official documents of the federal, district and municipal levels, legislative and regulatory acts; operational release of an information product, instant replenishment of emergency information in the generated number. |
| Audience | From 16 years old |
| Type of press | Bulk |
| Founder | Official publication of local governments |
| Territorial characteristic | City |
| Frequency | 5 times a week |
| Volume | 8 bands |
| Format | A3 |
| Circulation | 9000 copies |

Established 27 years ago as the official publication of local government, the newspaper *Varta* remains a reliable supplier of a quality product in the information services market of Nizhnevartovsk, Ugra, the Tyumen Region and the Urals Federal District.

During its activities, the publication has gained extensive experience in the execution of the most complex orders. Among the clients of the editorial office, in addition to the main customer (the Duma and the City Administration), for many years there have been regular partners in the oil sector enterprises, construction organizations, representatives of small and medium-sized businesses, public associations and individual Vartovites.

The newspaper is distinguished by high professionalism of staff, scrupulousness and punctuality in the implementation of tasks. To do this, there is a phased quality control system in the production process, starting from the development of technical specifications with subsequent coordination with the customer of the texts themselves and the pages drawn up to the optimal output of the material among other information products, including the time.

A distinctive feature of *Varta* (its visiting card) is the speed in processing and submitting information. The editorial staff is able to instantly concentrate and print out emergency information that has already arrived at production even when the issue is formally closed (signed).

The high professionalism of the team has been confirmed many times at the most prestigious competitions, both among journalistic skills, and among specialists in the field of design and layout. Among the journalists of the editorial board there are specialists who are well versed in narrow areas of life (from housing and communal services and construction to education, child custody and culture).

The publication is also distinguished by the important fact that all official documents of the municipality are published here, which leaves no questions for our regular subscribers, among which are ordinary citizens, public organizations, and informal associations, and representatives of the opposition.

In light of the objective reasons on the information market, when print media circulations tend to zero, Warta retains a significant weight among reading Vartovites. The circulation of the newspaper almost invariably remains one of the highest in Ugra and the Tyumen region. An additional bonus to the main content is the adapted version of the newspaper on the "VKontakte" page and the electronic issues of *Varta* on the official website of the publication.

Consider the use of sociopolitical manipulation technologies in the Warta periodical in order to influence the mass consciousness and form a certain public opinion.

Manipulation in the publication is most often hidden, implicit. The study shows that the arsenal of hidden methods of manipulating this media today is quite diverse.

One such technique is the method of supplying material. We are talking about the reception of "crushing", which can be identified already when viewing the first page of the newspaper (in particular, its layout). So, on the first page you can see the announcement of materials of various topics and degrees of importance. As shows observation, the first page of the publication has a collage character: on the right is the material under the permanent heading "Pervonapervo", on the left is the announcement of the issue. It is worth paying attention to what materials are presented as the most significant. As a rule, these are publications that address the problems of politics, economics, housing and communal services, education, that is, issues that are most relevant to the readership. The announcement contains materials that occupy an insignificant place in the issue itself (very often these are short notes). This is one of the manipulative techniques, the essence of which is to "hook" the reader with some sensational event, and then the so-called effect.

"Deceived expectations": the title of the article and the reader's expectations do not match. However, the material is already read, which is what its creator needs. The technique of special arrangement of material on the *Varta* pages is associated with this technique.

Often, materials devoted to a serious topic coexist with frivolous, entertaining information. On the one hand, this is connected with the process of demassization and segmentation of modern media, as each publication seeks to find its own audience. On the other hand, this tactic can also be considered as a method of manipulating public consciousness: placing entertainment material (or most often advertising) next to serious and problematic ones, journalists seek to distract the reader.

Language manipulation in this media deserves special attention. It has already been noted that the language of the media is able to influence the economic, social and cultural aspects of life, as well as form the linguistic consciousness of a person. On the pages of the weekly, language

manipulation is implemented, first of all, at the lexical and syntactic levels. One of its manifestations is speech aggression, which in the publication is presented in explicit and implicit forms. At an explicit level, speech aggression and language manipulation are carried out through the use of lexical means of the Russian language, expressing a negative assessment (invective, stylistically reduced, profanity, aggressive metaphor, etc.). At an implicit level, they are realized through the use of words and expressions with an unreconciled context of ambiguity, cynical irony, euphemisms, passive voice, etc.

The affirmative statement method is present in articles where the journalist makes various statements presented as a fact, and it is understood that these statements are self-evident and do not require evidence. However, these statements can be both reliable and not, i.e. fully contain a subjective assessment of the author of the material.

For example, in the article "And they have gas. And with us?" (01/26/2016, issue 12 (6596), author A. Lbov) it is postulated that citizens after the speech of the Governor of Ugra N. Komarova in Nizhnevartovsk on the problems of urban order received the necessary productive dialogue with the authorities:" People, satisfied with the answers of Natalia Komarova, there were much more." This conclusion is preceded by a number of contrasting assessments of what is happening: "The Vartovites, of course, were satisfied. Although not all ...", "During the event, shouts were often heard from the audience. People demanded that they give them the opportunity to ask out of turn or speak out, or even just make a booth", "Many Vartovites left the meeting place with the governor satisfied. The answer is received and the procedure is clear ...".

The opinion of ordinary meeting participants, who form the image of the governor equally with the author of the article, as a calm and restrained person, whose leadership qualities normalized the excitement in the hall, is also summarized.

The method "The same as everyone like us", whose main function is to instill confidence in a political leader by psychologically approaching the image of one of everyone who is experiencing the same difficulties, is present in the following articles: "The same as everyone like us" (01/26/2016, Issue 12 (6596), author A. Potekhin): "I also know this: you get up in the morning, and your hair freezes to the wall. Because everything cooled down during the night, and it is cold", – the governor said and asked to approach the issue calmly, without unnecessary emotions"). This method can be used through the prism of political leader's involvement not only in problems of a private and general nature, but also with a party of a certain relationship with people from the common people, mention of origin, place of birth, with the unconditional linking of this mention to the topic of the article: "They live here people with whom he worked, was friends, with whom he made plans for the prospects of the city". All this has a wide emotional response among citizens and causes a certain degree of confidence, the realization that the problems are close to the politician and he knows them quite closely.

A metaphor as a way to create a vivid image for controlling the reader's imagination when activating patriotic feelings, for example, is present in the expression "The oil heart of Nizhnevartovsk" (article "Two days in my hometown" (03/15/2016, issue 44 (6628), authors L. Podroikova, A. Churbanova): "Oil flows through the veins of our city, for which many years ago the current old-timers and pioneers came here". Here the formed image is associated with the political actions of the politician-hero of the article and is intended to cause certain associations in the public mind: "And in the life of the chairman of the Duma of Ugra, Boris Khokhryakov, there was a stage directly related to oil production".

Intertextual inclusions in Warta publications are most often found in heading complexes, are allusions or reminiscences, and appeal to lines from famous songs ("Fascists, I couldn't sleep" from 06/20/2015, issue 119-120, author L. Podroikova), sayings , proverbs, winged expressions, idioms. "The district helps us build and live" (08/15/2015, issue 168, author A. Lbov) – reminiscence on lines from the famous song "Peppy March" to the words of V. Lebedev-Kumach (1936), which represents the author's optimistic view articles on the event, in this case, this is the work of the regional forum of builders. The construction theme is directly associated with the original quote of the famous song in the Soviet Union – "A song helps us build and live" – and sets a certain tonality of the prospects of this event in the eyes of readers, which also underlines the headings "To the sounds of fanfare", "Problems of optimism do not cancel".

Some headings containing an intertextual element in the main text do not reveal it at all, leaving them at the subtext level: "Not with fire and sword, but with word and deed" (06/27/2015, issue 127-128, author A. Zhuravlev) – phraseology "with fire and the sword" does not reveal any

historical allusions, or, for example, direct indications of G. Senkevich's famous novel "Fire and Sword" about the struggle of the Ukrainian Cossacks with Pan Poland in the 17th century.

Thus, as a result of the study, the following main conclusion can be drawn: a special place (which, of course, is connected with the policy of the publication under study) in *Varta* is occupied by propaganda methods of manipulation, in which the reader acts only as an object of persuasion. The main goal of these technologies is to form a certain ideology in the reader, to make him a supporter of his beliefs.

## 5. Conclusion

Thus, the external expression of public consciousness is public opinion. Public opinion in relation to certain situations can be either realistic or illusory, depending on what kind of information (provided by the media) penetrated the citizen's consciousness and served as a source of this or that opinion.

Today, the formation of public consciousness through communication using the methods of psychological influence through the media is becoming the most effective and cheapest way of total control and manipulation both within the state and beyond. However, the individual has a certain space for independent formulation of his own opinion regarding the reality surrounding him - this is his culture. In this case, the level of cultural development of a person should be considered an indicator of the effectiveness of his protection from outside manipulation.

The media have great potential for active influence not only on the perception by citizens of individual political phenomena and events, but also on their attitude to politics as a whole. Both the political passivity of the population in any issue, and its mass activity are directly related to the position of the media in this issue. The role of the media is especially significant during the transitional periods of social development, since without their active work it is impossible to change the political consciousness, value orientations and goals of the general population and achieve mass support for the policy of social transformation.

The media in the life of modern society sometimes play a very dangerous role when they replace their original function of informing the population with the tasks of forming certain views, ideas, opinions.

To date, specialists have developed a significant number of manipulative methods of influencing public consciousness: juggling facts, lying, slander, distorting objective data, hiding and hiding unprofitable information, etc.

As a result of the analysis of the manipulation techniques that are most characteristic of regional mass media, it can be concluded that most of these methods are seen in the transmission of information in many domestic media, and in turn this can serve as the fulfillment of the task of socio-political manipulation .

According to the results of the study, the following main conclusion can be drawn: any print media seeks to use methods of manipulating the consciousness of the population in order to bring their position to the maximum possible number of people.

To understand the target settings of a particular media and to use certain methods of manipulation to solve certain problems, we analyzed printed periodicals of the Khanty-Mansiysk Autonomous Okrug-Ugra – the newspaper *Local Time* and *Varta,* Nizhnevartovsk.

According to the results of the content analysis, it can be argued that the newspaper *Local Time* and the *Varta* of Nizhnevartovsk actively uses manipulations with public consciousness, especially when covering topics such as politics, public life, and crime. The picture of the world presented by these publications on its pages cannot be called complete and objective, it is rather illusory. The basic principles of journalism and the journalistic profession are being undermined.

An analysis of language tools showed that, despite the claims of these publications to the title of objective and independent newspapers, they still use language manipulation tools to achieve a certain effect. The following means of language manipulation are revealed: synonymy, euphemization, syntactic transformations, metaphor, allusion, reminiscence.

Speech tools include lexical, word-building, morphological, syntactic, stylistic techniques used with a manipulative purpose in the headings. To non-speech – graphic, semantic and informative techniques. A language game can be used at all levels.

We note the use of contrast as the inclusion of a manipulative psychotechnological method in the text. The fragmented method of manipulation and the method of including in the article or note a quote or comment of a media person, public figure, an authoritative person known in the region,

as well as the use of a poll, opinions of ordinary citizens, rating indicators, statistics, are the most preferred methods of manipulating public consciousness in regional newspapers.

In these newspapers, most of the articles are supplemented by photographs and illustrations, creating together with the text a single semiotic series. A visual image that quickly and effectively affects the consciousness and subconscious mind sometimes changes the entire content of the article.

By the nature of the perception of the subject (that is, the reader), the media exposure technologies existing in newspapers can be divided into propaganda and techniques that involve the use of a dialogical form.

In general, depending on the tasks set by the addressee, on the pages of *Local Time* and *Varta* compositional and substantial manipulation, a feature of which is its multi-level and multi-layer. In this regard, manipulative methods and techniques can only be distinguished artificially, in the text they are interconnected and interact with each other.

**References**

Albright, 2017 – *Albright, J.* (2017). Welcome to the Era of Fake News. *Media and Communication*, 5 (2): 87–89.

Amelin, 1992 – *Amelin, V.N.* (1992). Sociology of politics. Moscow: Moscow State University.

Annushkin, 2001 – *Annushkin, V.I.* (2001). The style of media speech is the lifestyle of society. *The language of the media as an object of interdisciplinary research. Abstracts of reports of an international scientific conference*. Moscow: Moscow State University: 5–7.

Aristotle, 1983 – *Aristotle* (1983). Works. Vol. 4. Moscow.

Aronson, Pratkanis, 2003 – *Aronson, E., Pratkanis, E.R.* (2003). Age of Propaganda: Mechanisms of persuasion, everyday use and abuse. St. Petesrburg.

Beregovskaya, 1999 – *Beregovskaya, E.M. (1999)*. The principle of organizing the text as a game moment. *Russian Philology: Scientific notes of Smolensk State Pedagogical University*. Smolensk: Smolensk State Pedagogical University: 159-180.

Cortesi, Gasser, 2015 – *Cortesi, S., Gasser, U.* (2015). Youth online and news: a phenomenological view on diversity. *International Journal of Communication*, Vol. 9: 1425-1448.

Cuc, 2014 - *Cuc, M.C.* (2014). The influence of media on formal and informal education. *Procedia Social and Behavioral Sciences*, 143: 68 - 72.

Demyanenko, 2012 – *Demyanenko, N.V.* (2012). The use of manipulative technologies in the media as a real problem. *Russian Academic Journal*, 19 (1): 20-27.

Dobrosklonskaya, 2000 – *Dobrosklonskaya, T.G.* (2000). Theory and methods of medialinguistics. Abstract of Ph.D. Dis. Moscow.

Dotsenko, 2000 – *Dotsenko, E.L.* (2000). Psychology of manipulation: phenomena, mechanisms and protection. Moscow: Chero; Moscow State University, 344 p.

Dzyaloshinsky, 2005 – *Dzyaloshinsky, I.M.* (2005). Manipulative technologies in the media. *Bulletin of Moscow University*, 1: 32-53.

Evgenieva, 2007 – *Evgenieva, T.V.* (2007). Technologies of social manipulations and methods of counteracting them. St. Petesrburg.

Florescu, 2014 – *Florescu, O.* (2014). Positive and negative influences of the mass media upon education. *Procedia Social and Behavioral Sciences*, No. 149: 349–353.

Gavrilov, 2011 – *Gavrilov, L.A.* (2011). On the function of the influence of the language of mass communication and the language of interpersonal communication. *Vestnik MGU: Series "Linguistics"*, No. 2. Moscow: Moscow State Universities: 23-26.

Grabelnikov, 2001 – *Grabelnikov, A.A.* (2001). Russian journalism at the turn of the millennium: results and prospects. Moscow.

Grachev, 2000 – *Grachev, G.V.* (2000). Information technologies of political struggle in Russian conditions. *Policy*, 3: 151-156;

Grachev, 2000 – *Grachev, M.N.* (2000). The media in the socio-political field. *Bulletin of the Peoples' Friendship University of Russia. Series: Political Science*, 2: 31-40.

Grachev, Melnik, 1999 – *Grachev, G., Melnik, I.* (1999). Manipulation of personality: organization, methods and technologies of information-psychological impact. Moscow: IFRAN, 230 p.

Grachev, Melnik, 2002 – *Grachev, G., Melnik, I.* (2002). Manipulation of personality: organization, methods and technologies of information-psychological impact. Moscow: Algorithm. 284 p.

Gudkov, 2000 – *Gudkov, D.B.* (2000). The functioning of precedent phenomena in the political discourse of the Russian media. *Political discourse in Russia-4.* Moscow.

Harris, 2001 – *Harris, R.* (2001). The psychology of mass communication. St. Petesrburg.

Heveshi, 2001 – *Heveshi, M.A.* (2001). Crowd, masses, politics: historical and philosophical essay. Moscow.

Hobbes, 1991 – *Hobbes, T.* (1991). Leviathan. Cambridge.

Johansson, 2014 – *Johansson, M.* (2014). Reading digital news: Participation roles, activities, and positionings. *Journal of Pragmatics,* 72, SI: 31-45.

Kara-Murza, 2001 – *Kara-Murza, S.G.* (2001). Manipulation of consciousness. Moscow.

Kara-Murza, 2008 – *Kara-Murza, S.G.* (2008). In search of a lost mind. Moscow.

Karnowski et al., 2017 – *Karnowski, V., Kuempel, A., Leonhard, L. et al.* (2017). From incidental news exposure to news engagement. How perceptions of the news post and news usage patterns influence engagement with news articles encountered on Facebook. *Computers In Human Behavior*, 76: 42-50.

Kateneva, 2010 – *Kateneva, I.G.* (2010). Mechanisms and language means of manipulation in media texts. *Abstract of dissertation for the degree of candidate of philological sciences.* Novosibirsk.

Kharitonov, 2008 – *Kharitonov, M.V.* (2008). Advertising and PR in mass communications. St. Petesrburg: Speech.

Kirichyok, 2006 – *Kirichyok, P.N.* (2006). Mass media and information culture of society. Moscow.

Kiselev, 2007 – *Kiselev, A.A.* (2007). Political participation on the Internet: Abstract of Ph.D. Dis. Krasnodar. 25 p.

Konovalova, 2003 – *Konovalova, O.V.* (2003). Development trends of the regional communications system. Rostov-on-Don.

Kozyreva, 2003 – *Kozyreva, A.* (2003). Media: the manipulation or management of public opinion. *Browser*, 6: 103-110.

Kretov, 2000 – *Kretov, B.E.* (2000). Mass media – an element of the political system of society. *Social and humanitarian knowledge*, 1: 101-115.

Kuiken et al., 2017 – *Kuiken, J., Schuth, A., Spitters, M., Marx, M.* (2017). Effective Headlines of Newspaper Articles in a Digital. Environment. *Digital Journalism*, 5 (10): 1300-1314.

Lee, Tandoc, 2017 – *Lee, E., Tandoc, E.* (2017). When News Meets the Audience: How Audience Feedback Online Affects News Production and Consumption. *Human Communication Research*, 43 (4): 436-449.

Lehmann et al., 2017 – *Lehmann, J., Castillo, C., Lalmas, M. et al.* (2017). Story-focused reading in online news and its potential for user engagement. *Journal of the Association for Information Science and Technology*, 68 (4): 869-883.

Machiavelli, 1990 – *Machiavelli, N.* (1990). Sovereign. Moscow.

Markelov, 2004 – *Markelov, K.V.* (2004). Journalism and power: ethics of relationships, reserves of interaction. *Bulletin of Moscow University*, 1: 46-49.

Markov, 2011 – *Markov, E.A.* (2011). Russian media: manipulation or information. Humanities and Social Sciences, 2: 223-231.

Marx, Engels, 1988 – *Marx, K., Engels, F.* (1988). Compositions. V.3. Moscow: Progress.

Maslennikova, 1999 – Maslennikova, A.A. (1999). Linguistic interpretation of hidden meanings. Abstract of Ph.D. Dis. St. Petesrburg.

Nietzsche, 1912 – *Nietzsche, F.* (1912). Full composition of writings. V.1. Moscow.

Oleshko, 2008 – *Oleshko, V.F.* (2008). Psychology of journalism: a training manual. St. Petesrburg: Mikhailov Publishing, 240 p.

Ortega-i-Gasset, 1991 – *Ortega-i-Gasset , J.* (1991). What is a philosophy? Moscow.

Ortega-i-Gasset, 1991 – *Ortega-i-Gasset, J.* (1991). Dehumanization of art. Moscow.

Ortega-i-Gasset, 2001 – *Ortega-i-Gasset, J.* (2001). Rise of the masses. Moscow.

Ozhegov, Shvedova, 2003 – *Ozhegov, S.I., Shvedova, N.Yu.* (2003). Explanatory Dictionary of the Russian Language: 80,000 words and phraseological expressions. Moscow: ITI Technologies.

Pearson, Knobloch-Westerwick, 2018 – *Pearson, G., Knobloch-Westerwick, S.* (2018). Perusing pages and skimming screens: Exploring differing patterns of selective exposure to hard news and professional sources in online and print news. *New Media & Society*: 1-17.

Plato, 1994 – *Plato* (1994). State.Works. Vol. 3. Moscow.

Pocheptsov, 2001 – *Pocheptsov, G.G.* (2001). Communication theory. Moscow: Refl-book. 656 p.

Ponomarev, 2007 – *Ponomarev, N.F.* (2007). Political communications and manipulations. Moscow: Aspect Press.

Prokhorov, 2002 – *Prokhorov, E.P.* (2002). Introduction to journalism theory. Moscow: RIP-holding.

Schiller, 1980 – *Schiller, G.* (1980). Manipulators of consciousness. Moscow: Thought, 326 p.

Shuvanov, 2005 – *Shuvanov, V.I.* (2005). Psychology of advertising. Rostov-on-Don.

Solganik, 1981 – *Solganik, G.Ya.* (1981). Newspaper vocabulary Newspaper vocabulary: functional aspect. Moscow, 112 p.

Volodina, 2008 – *Volodina, M.N.* (2008). The language of mass communication is the main means of informational influence on mass consciousness. *Language of the media*. Moscow: Academic Project; Alma Mater: 5-24.

Voroshilov, 2001 – *Voroshilov, V.V.* (2001). Journalism. St. Petesrburg: Mikhailov Publishing.

Zemskaya, 1983 – *Zemskaya, E.A.* (1983). Russian colloquial speech. Moscow: Science.

Zheltukhina, 2003 – *Zheltukhina, M.R.* (2003). Tropological suggestiveness of mass media discourse: on the problem of the speech impact of tropes in the language of the media. Moscow: Institute of Linguistics, RAS, 656 p.
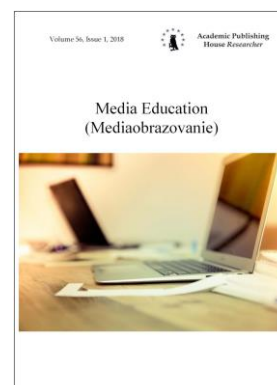
# Peculiarities of Perception of Cartoons by Younger and Older Schoolchildren

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**Abstract**

The problem of determining particularities of the effect of media texts on schoolchildren is relevant due to the active involvement of modern children in the media world. Cartoons are the core product of media consumption in the younger age group, while the mechanisms and methods for determining their developmental potential or psychologically destructive effects on children are under-investigated. The article presents a psychological analysis of animated films on the subject of insomnia: *A Well-Tried Remedy* (*Vernoye sredstvo*) (1982) and Insomnia from the *Mi-Mi-Bear* (*Mi-mi-mishki*) series (2015). The results of a comparative empirical study of the perceptions of the characters of those cartoons by younger and older schoolchildren were described. 44 people participated in the research: young schoolchildren of the second grade (N=21, $\overline{x}$ ==8.4 y/o) and eleventh graders (N=23, $\overline{x}$ = 17.5). It was revealed that cartoons, similar in plot and characters, produce varied psychological effect on younger schoolchildren due to differences in the means of artistic mediation of communicated meanings. Judgment about less critical perception of younger schoolchildren than that of the older ones was empirically substantiated.

**Keywords:** psychological analysis, semantic assessment, cartoon, schoolchildren.

## 1. Introduction

Rapid growth of technology and the integration of people into the world of media today prompt anxiety in both academic environment and general public, giving rise, from teachers and parents, to the demand for psychological knowledge about the nature of the effects of media activity on children and the criteria for assessing psychological fruitfulness or destructiveness of media content for preschoolers and younger schoolchildren, who, according to studies, perceive information communicated by means of a media text in an uncritical manner (Kyshtymova, Trofimova, 2018).

Determining the nature of psychic transformations mediated by the media posed a challenge due to the growing involvement of children in the process of consuming media products, which may "inflict a crushing blow on the subconscious of listeners in an attempt to impose certain course of action unto them, manipulate their physical and mental state, and even imprint something in the soul, bypassing an unflustered critical consciousness, so that the listeners themselves were none the wiser" (Patzlaff, 2016: 10).

Children are the audience most susceptive to media. At the same time, according to the Modern Media Research Institute (MOMRI), 67 percent of children under three years of age and 76 % four to seven years old watch television every or almost every day (Total View, 2016). The core media product for children of younger age group are cartoons. They may serve as a means of

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entertainment, development and education, but they are also capable of misleading a child in real life, promote anxiety and aggression. Thus, it was revealed that children 5 to 12 years old, following suit of aggressive behavior of cartoon characters and carrying that over into the relationship with their brothers and sisters, in fact tried to entertain (Ghilzai et al., 2017). Computing technologies experts, aware of the problem associated with the negative effect of animated products on viewers, are developing classification codes containing algorithms for benchmarking images for violent and non-violent behavior in animated films (Khan et al., 2018). The problem of psychological destruction in modern–day cartoons is hotly debated by psychologists and educators (Ghilzai et al., 2017; Njiiri at al., 2018; Rai et al., 2016; Rajashree, 2015).

Academic and social significance of defining the prospects of psychological creation and disruption of media texts intended for children is undeniable. The importance of understanding the mechanisms of psychological effects of animated products has determined the primary objective of our study.

## 2. Materials and methods

Proceeding from the hypothesis that cartoons with a congenial plot may produce different effect on the audience in the course of perception, depending on particularities of artistic presentation of communicated content, we carried out a comparative analysis of two thematically congenerical cartoons: 1) the Insomnia episode from the *Mi-Mi-Bears* (Animated video, 2016) animated series (directed by A. Mironov) – by virtue of its novelty and active embeddedness in television content (the animated series has been broadcast since 2015 via the Cartoon, Carousel, Tlum HD and Russi – Culture TV channels; the series had been watched 1.7 million times through the YouTube channel alone, not counting the broadcast by television channels and Internet resources); 2) the cartoon *Well-Tried Remedy* (Animated video, 1982) of the 1982, Soyuzmultfilm Film Studio (Director Y. Prytkov) was used as the media text for comparison.

Verification of the hypothetical judgment that cartoons produced a different effect on spectators due to both their explicit, substantial specificity, but also implicit – mediated by the artistic means employed, was carried out using the method of immanent analysis of media products, which was constituted of a 'limited' (not going beyond analyzed texts) analysis of their semantic and formal features (Kyshtymova, 2017).

As a methodological basis of the study, a psycho-semiotic approach had been applied, which afforded us to implement the principle of consistency – to study a media text in the unity of its informative and formal features (Kyshtymova, 2008), and also assumed integration of the methods developed within the scope of different disciplines: literature studies, aesthetics, psychology, linguistics – due to the complex nature of media text.

The cartoons under investigation were thematically congenerical: they were dedicated to the subject of 'insomnia'. M. Weissbluth, a researcher of infantile sleep, noted the centuries-old nature of the problem of infant insomnia, the complexity of its solution and the effect of sleep on the development of children: "unhealthy sleep patterns are becoming one of the causes of school-related problems, such as the Attention Deficit Hyperactivity Disorder (ADHD) and educational retardation" (Weissbluth, 2014: 17). The cartoons under consideration communicated a portrayal of insomnia and different ways to deal with it to an infantile spectator. The protagonist of both films was a Little Bear, whose character was familiar to any child from fairy tales as the one endowed with a stereotyped purport of strength and simplicity.

The plots of the cartoons under consideration were akin. The *Well-Tried Remedy* began with an episode in a winter meadow where a forest orchestra played musical instruments. The character – the Little Bear, could not fall into hibernation in any way: "Well I can't fall asleep for the winter! I keep being distracted on and on!" – he said and went for a walk, to be sure to fall asleep thereafter. Auntie Partridge he met on the way offered the little one to count to a hundred to fall asleep, but that did not help. Then the forest orchestra came to the rescue: a Bunny, a Squirrel, a Mouse and a Beaver. They knew the 'Well-Tried-Remedy' that would help go to sleep, and played the lullaby "Sleep, my joy, fall asleep…", to the sounds of which the little bear fell asleep sweetly.

The Insomnia episode of the animated series *Mi-Mi-Bears* began in the house of the protagonist – Kesha the Little Bear, who couldn't sleep. A clock, an owl outside the window, a snoring chicken, water dripping from a faucet – all handicapped his sleeping. In the morning, he ran for help to his friend Cloudlet (Tuchka). Learning his problem of insomnia, the Cloudlet asked Kesha about what he was doing the day before. The Little Bear recalled that he had been

playing a video game all day. Then the Cloudlet lead him to a pile of firewood, under which, as he said, a remedy for insomnia was resting. Kesha stacked the firewood, but found no remedy. Then he was mowing grass, planting trees, digging holes, painting a fence, trimming a lawn to find the cure for insomnia. He was watering flowers, washing dishes, but did not find what he is looking for through the end of the day. Kesha decided that he would look for the insomnia cure tomorrow, but the Cloudlet said that if one worked well during the day, then insomnia is not a fear at night.

Thus, both films offer good remedies for insomnia: a lullaby or diligence – meaningfully, those were impeccable. Yet the nature of the presentation of the content in the two cartoons was different, which accounted, according to our hypothesis, for their fundamentally different effect on children.

The immanent analysis algorithm suggested investigation of particularities of the cartoons imagery array, verbal presentation of communicated meanings, their dynamic peculiarities and more, determined by the logic of organization of components of a particular media product.

At the first stage of the proposed study, the imagery array of the cartoons under consideration, the presentation of communication models therein, the dynamic peculiarities of the animated world, were analyzed. At the second stage of the study, the peculiarities of perception of the main characters of the cartoons under analysis by younger and older schoolchildren were determined, the semantics of the characters of the films were compared with the semantics of 'Self' of the audience in order to determine the degree of their identification.

### 3. Discussion

Over the past decade, there has been an increase in research into the effect of media on mental and physical health of the younger generation. Professionals focused on studies of the effects of aggressive (Dillon,Bushman, 2017; Zafar, Chaudhary, 2018), sexual (Çetin et al., 2015; Collins et al., 2017) and commercial media content (Kelly et al., 2015) for children and teenagers. Hence, either positive and negative effects of media consumption were distinguished. Resulting from a study carried out on a sample of 200 children aged 5 to 15 years, 31 % of children behaved indecently after watching a cartoon, 34 % became irritable, and 45 % threw things at their parents when they tried to turn TV off (Rai at al., 2016). Academic literature also provided evidence that "the large amount of positive media content, combined with a huge reach and popularity among children and adolescents, gives media immense potential in enriching the lives of children and adolescents" (de Leeuw, Buijzen, 2016: 44). Undoubtedly, positive media content was capable of producing positive effect on spectators (Cingel, Krcmar, 2017; de Leeuw, van der Laan, 2018); however, strict criteria for determining positive or negative potential of media products had not yet been developed. At the same time, professionals used methods such as polling (Cocer at al., 2015; Zafar, Chaudhary, 2018), interviews (Cernikova at al., 2017), experiment (Dillon, Bushman, 2017), as well as analysis of substantive features of content (Habib, Soliman, 2015; Turkmen, 2016; Luisi, 2018).

The most vulnerable audience before the effects of media were children. A number of studies have shown that, from tender age, they were included into the media environment, while the screen time significantly exceeded the one recommended by specialists (Neumann, 2015). Cartoons continued as the core product of media consumption in the younger age group. Academic literature presented evidence that cartoons were one of the strongest factors that influenced modern childhood and took a significant amount of time in children's daily routine (Habib, Soliman, 2015). M.Turkmen (2016), having analyzed 23 animated films that made the highest box-office, came to the shocking conclusion that "'good' characters committed 66.6 % of the violent actions and the target of that violence was mostly other 'good' characters (45.9 % of total actions, or 68.9 % of actions perpetrated by good characters" (Turkmen, 2016: 32). Therewith, content analysis was used as the analysis method, the formal features of the animated presentation were not taken into account. In most countries, there is a rating system for the age-related classification of media products, which basically contemplates analysis of its content. In Russia, the age classifier was the basis of the Federal Law No. 436-FZ of October 29, 2010, where the basis for evaluating products designated for children was an analysis of its subject, genre and content.

The approach presented in the article afforded us to analyze both the substantial features of media content, and also its formal artistic peculiarities that determined the nature of its effect on consumers. That complemented the existing models of media products analysis and afforded us a

more detailed analysis of a particular media product that may damage mental and physical health of a child using implicit methods of destructive influence.

## 4. Results
*Analysis of the cartoon imagery array*

The characters of both cartoons were anthropomorphic animals, which determined their consanguinity to children and simplified speciation processes. The character of a bear presented in Russian fairy tales is good-natured, while 'one of the most common symbolic meanings of a bear was its strength and stamina' (Orel, 2008: 178). The use of the bear's visualization as the main character of the cartoons was not accidental, since it was not only familiar to children from early childhood through fairy tales and traditional plush toys, but also brought the knowledge that the bears fall into hibernation into the foreground, making seamless association with the subject of sleep in the cartoons under consideration.

In the *Well-Tried Remedy* cartoon by Soyuzmultfilm Studio, conventions for depicting character visualizations were minimal – they were drawn in detail, and their emotional states appeared authentic. For example, anxiety of the Little Bear that he may not grow if he did not hibernate in the winter was communicated by a drop of tears rolling down from his eyes. The idea of the connection of sleep with growth was conveyed to small spectators by means available to them. All cartoon characters demonstrated attention and sympathy for the main character – the media communication of that attitude to the little one was important and met age-specific needs of children: "it is very important to shape ideas about the value of empathy with another, mutual assistance, the ability to forgive and understand someone else in childhood" (Smirnova, Sokolova, 2014: 5).

Analysis of the verbal component of the cartoon was carried out using the TextAnalizer computer software created for the purpose. Determined for each film was 1) 'Lexical Density', which was carried out using a formula: $k = V / \sqrt{N}$, where V was the volume of vocabulary, i.e. the number of different words in a text, while N was the length of a text, i.e. the numbers of word usage, 2) the "harmonic center" of the text, calculated according to the 'golden section' formula and representing a segment on the linear length of a text, expressing its substantial dominant (Kyshtymova, 2006; 2008).

The Lexical Density ratio afforded to determine the richness of the text with diverse vocabulary. In the content addressed to children, that indicator determined the level of accessibility of verbally communicated information for them. Great lexical diversity of the cartoon, which lasted a short time and was saturated with visual images, was a factor that enhanced information density and caused an exceedance of infantile cognitive resource, which might have caused non-critical thinking. The Lexical Density ratio revealed in the course of the analysis of the cartoons was 4.44 for the Well-Tried Remedy and 6.47 for Insomnia. That suggested that the meanings communicated by the first cartoon would be better understood by children.

Analysis of the "harmonic center" showed that semantic dominant corresponded to the appeal of the Bunny to the Bear in the *Well-Tried Remedy* cartoon: "Wait for us in your lair" – an important motive of the cartoon was mutual assistance and empathy, while the mainstream theme was friendship, which corresponded to the semantic space significant for a very young spectator. In the Insomnia episode of the *Mi-Mi-Bears* animated series, harmonic center was not revealed.

The Insomnia animated film communicated tense condition of the character who couldn't go to asleep through the images of a dark room and a ticking clock, the owl's hoot outside the window, water dripping loudly from a faucet, a chicken snoring. Realism of visualization of insomnia caused 'contamination' of the audience with the anxiety. For the Insomnia cartoon, a 'force majeure' mode of presentation was in evidence: a large number of brief episodes that change fast, the intensity of characters, the frequency of their movements and their rate of speech, which produced a strong emotional effect on a spectator. That was facilitated by the distorted proportions of the bodies of the visualizations of the main characters: a large head on a small body, a mouth line shifted to the side of the face, or a body in the shape of a square. The moving feature of the 'face' of the cubs was the mouth line, which shifted unnaturally to the one side when speaking, which, should one look for a match in real-life mimic expressions, would correspond a 'crooked smile' – P. Ekman stated that "if one side of a face is crooked more than the other, this is a sure sign of false emotion" (Ekman, 2013: 126). It may be assumed that, due to the mimic particularities of the characters of

that cartoon, it was difficult for a child to sense the true nature of the emotions of the main characters, and that complicated the process of understanding the main motive of the cartoon.

*Analysis of animated presentation of communication*

The world of an animated film is perceived by the small viewer as real, and the model of communication of the characters implemented therein is important as a role model. The analysis showed that in the *Well-Tried Remedy* cartoon, its characters communicated in a benevolent and polite manner. Auntie Partridge gave her advice to the Little Bear to count to a hundred – and he, saying goodbye, went to his house, following her prompt. Having learned about the Little Bear's problem, the bunny demonstrated a reaction of empathy: "The Little Bear needs help!". At the same time, the Little Bear respectfully referred to "You (in plural)" to the Auntie Partridge, and to his peer the bunny in a friendly way of "You (in singular)". The Little Bear often used phrases related to his main problem: "I just can't fall asleep for the winter", "bears should sleep in the winter", "yawn I do, but can't fall asleep", which helped to understand the character's experiences and enhanced the accessibility of information for the little spectator without provoking emotional stress. Furthermore, the understanding of the need to "fall asleep for the winter" marked the pursuit for order, for the implementation of commonly accepted rules.

At the end of the cartoon, the forest orchestra lulled the Little Bear fall asleep to music – a lullaby became a cure for insomnia, in full accordance with the culture model for putting children to sleep. Moreover, classical music by L. Boccherini and V.A. Mozart who, as revealed in the research process, "has a universal relaxing effect, which has a calming effect on children" (Lukyanova, 2018: 65) was organically used the cartoon.

In the Insomnia cartoon, the reason for Kesha The Little Bear having no sleep was his enthusiasm for video games. His friend Cloudlet helped him cope with the problem using a trick – a search for a cure for insomnia, "which was lost somewhere", so as to find it, the Little Bear needed to do a large scope of physical labor. Yet the motive of work was not organic – not associated with creative productive labor. For children of elementary-school age, the concept of labor was at the formative stage, and the attitude to work as a way to fall asleep did not match the level of their actual development. The film demonstrated the ease of labor skills, which distorted the idea of the true nature of physical work. Relations between the characters of the cartoon did not comply with ethical standards, were unceremonious. Kesha woke the Cloudlet up with a loud gong with the first rays of the sun, preventing his friend from getting enough sleep and pursuing only his own interests. The Cloudlet helped the character using cunning, so Kesha did not come to realize the true reason for his insomnia – inactivity, enthusiasm for gadgets. The rational idea of the authors – the 'abandonment of gadgets' in favor of active work outdoors was not communicated to young spectators.

*Analysis of dynamic peculiarities*

Analysis of the dynamic peculiarities of cartoons was needed to understand the mechanisms of their effect on the audience: their pace and rhythm, frame rate that should not exceed the processing capacity of mind, while exceeding its resources may cause psycho-physiological maladaptation (Pronina, 2003).

The Insomnia cartoon of the *Mi-Mi-Bears* animated series was characterized by increased liveliness, a frequent change in the activities of the main character. At such fast pace, it was difficult for a child to grasp the meaning of what was happening on the screen, to understand its cause-and-effect relationships. The "force-majeure" mode of presentation emerged as a device of manipulative influence, causing non-critical perception of the communicated information.

Action in the *'Well-Tried Remedy* cartoon under comparison was unfolding at a leisurely pace, the repetition of the theme enhanced ease of access to information for a child, bringing awareness processes into the foreground.

Analysis showed that cartoons similar in their subject and visualization of characters had fundamental differences in the artistic presentation of the content, and that, according to the hypothesis under consideration, determined their varied effect on the audience. *The Well-Tried Remedy* cartoon did not contain evidence of destruction, while the friendship motive communicated thereby found its way into the domain the child's immediate menticulture, which determined its developmental potential.

*Determination of the perception of cartoons by younger and older schoolchildren*

In the course of investigation, peculiarities of the perception of the main characters of the cartoons in question by the audience, were determined. We proceeded from the assumption that

younger schoolchildren perceived the media text less critically, unlike high school students, while the artistic particularities of the films determined the nature of their effect on the audience.

The study involved junior high school students of the second grade (N = 21, average age 8.4 years) and eleventh graders (N = 23, average age 17.5 years) of Secondary School No. 37 in Irkutsk.

To identify the factors that determined the semantics of cartoon characters, as well as comparing their perceptions by younger and older schoolchildren, dedicated semantic differential method was used. Its scales were generated by means of adjectives, which were obtained using the method of free associations in the process of expert assessment of cartoon characters by ten pediatric psychologists studying Master's degree program of Irkutsk State University: 'friend – stranger', 'pleasant – nasty', 'simple – complex', 'fast – slow', 'wet – dry', 'soft – hard', 'native – alien', 'good – evil', 'sharp – dull', 'right – wrong', 'active – passive', 'beloved – hateful', 'cold – hot', 'strong – weak', 'beautiful – ugly', 'tense – relaxed', 'cunning – simple-minded', 'big – small', 'smooth – rough' ,'joyful – sad', 'expensive – cheap', 'good – bad', 'cheerful – dull'.

Prior to watching the cartoon, the subjects were requested to evaluate the 'Self' incentive according to the given scales in order to better identify the degree of identification of the audience with the cartoon characters. After watching each cartoon, the subjects evaluated its character. Mathematical processing of the obtained data was carried out using the SPSS–23 statistical package. To identify the main evaluation markers, the factorial analysis procedure was used, which was carried out using the maximum likelihood method with varimax rotation. To assess the reliability of calculating the elements of the correlation matrix and the possibility of its description using factor analysis, the Kaiser-Meyer-Olkin criterion (KMO) and the Bartlett's test were used. The significance level of group differences was determined using the nonparametric Mann-Whitney U–test.

Based on the data obtained during the assessment of three incentives on twenty-three scales by forty-four schoolchildren, a 3x44x23 matrix was compiled. Data processing showed that the value of the KMO test was 0.855, thus, it could be assessed as 'worthy'. Bartlett's sphericity ratio was quite high, and the significance level corresponding thereto was 0.000, which indicated the reliability of the calculation of the correlation matrix and that the data were acceptable for factorial analysis.

With respect to the estimates of magnitude of values of each factor, we singled out the five factors that explained the varimax rotation field of 63.076 % of the total dispersion of the variables. We called the first factor 'the factor of kindness', it included the scales of 'good – evil' (0.840), 'good – bad' (0.827), 'right – wrong' (0.756), 'pleasant – nasty' (with a large factor load) 0.666), 'beautiful – ugly' (0.661), 'friend – stranger' (0.656), 'cheerful – dejected' (0.656), 'joyful – sad' (0.645). The second factor - 'emotional consanguinity' amounted to: scales 'native – alien' (0.723), 'smooth – rough' (0.705), 'beloved – hated' (0.678), 'expensive – cheap' (0.666). The third factor was indicated by the 'tension factor', it includes the scales 'sharp – dull' (0.669), 'intense – relaxed' (0.632), 'large – small' (0.610). The fourth 'activity factor' included the scales 'active – passive' (0.852), 'fast – slow' (0.768). The fifth factor – 'simplicity' was composed of the scales 'simple – complex' (0.726) and 'soft – hard' (0.653).

Thus, the attitude to the cartoon characters was determined based on the assessment of their 'kindness', 'emotional consanguinity', 'tension', 'activity' and 'simplicity'. The most loaded were the factors of kindness and emotional consanguinity, which met the basic needs of children.

To identify the specifics of perception of cartoon characters by younger schoolchildren, their semantic ratings were compared with those of high school students. It was revealed that the semantics of the image of Kesha from the Insomnia cartoon among older and younger schoolchildren has statistically significant differences by 3 factors: 'kindness' (p = 0.000), 'emotional consanguinity' (p = 0.010) and 'tension' (p = 0.013).

Younger schoolchildren evaluated Kesha The Little Bear as kinder (F1 = 0.366), emotionally close (F2 = 0.116), and tense (F3 = 0.550), unlike high school students: F1 = −1.095, F2 = −0.480, F3 = −0.163. As one may see, younger schoolchildren perceived the character of Insomnia in a much more complimentary and uncritical manner. The perception of high school students was more adequate – their assessment of Kesha was more consistent with the results of an expert analysis of that image.

Comparison of the semantics of The Little Bear from the *Well-Tried Remedy* cartoon in the groups of younger and older schoolchildren revealed significant differences in terms of 'tension'

factor (F3 = 0.619 and −0.933 at p=0.000) only. The playful, artistically mediated nature of the action communicated in the cartoon was obvious to high school students, so the images of animated characters were perceived by them as relaxed.

The image of The Little Bear was rated highly by all factors in both groups, while only the assessment of high school students could be considered as the result of their conscious perception of the media image. Younger schoolchildren rated the main characters of the two cartoons without significant differences (p≥0.05) by three factors –in their perception, both characters: Kesha and The Little Bear were kind (F1 = 0.366 and 0.464, respectively), emotionally close (F2 = 0.116 and 0.097) and stressed (F3 = 0.55 and 0.61). At the same time, they rated Kesha as the more active one (F4 = 0.592) than The Little Bear (F4 = −0.332), and less simple: F5 = 0.051 than the character of the 'True remedy for insomnia' (F5 = 0.67).

The absence of significant differences in the perception of the character of the *Well-Tried Remedy* by younger and older schoolchildren according to the criteria of kindness and emotional consanguinity, as well as the significantly higher rating of the visualization of Kesha from Insomnia by younger schoolchildren, afforded us to conclude that the cartoon visualization of The Little Bear was liked by the children intrinsically, regardless of the nature of his presentation.

Comparison of the semantic assessment of 'Self' by younger schoolchildren with their assessment of cartoon characters showed significant (p≤0.05) differences by two factors: 'activity' and 'simplicity'. Children perceived The Little Bear from the Soviet cartoon as more passive (F4 = −0.332) than 'Self' (F4 = 0.4) and Kesha (F4 = 0.592). Significant differences were also found by the factor of 'simplicity': children rated themselves (F5 = −0.403) and Kesha (F5 = −0.051) as more complicated than The Little Bear from the *Well-Tried Remedy* cartoon (F5 = 0.670). At the same time, there were no significant differences in the semantics of the children's 'Selves' and the visualization of Kesha by three important factors: younger schoolchildren regarded themselves as kind, emotionally close and tense (p≥0.05).

Interestingly, the semantics of cartoon characters and 'Self' had significant differences by all five factors for high school students: identification with the characters was not expressed (Table 1).

**Table 1.** Comparative evaluation of the semantics of cartoon characters with the rating of 'Self' in high school students

| Incentive/ Factor | F 1 | F 2 | F 3 | F 4 | F 5 |
|---|---|---|---|---|---|
| Self | −0,356 | 0,840 | −0,001 | −0,359 | −0,782 |
| Kesha | −1,095 | −0,480 | −0,163 | 0,285 | 0,121 |
| The Little Bear | 0,203 | 0,006 | −0,934 | −0,528 | 0,371 |

For high school students, The Little Bear from the *Well-Tried Remedy* cartoon was kinder than 'Self' and than Kesha. The character of the *Well-Tried Remedy* was perceived by them as emotionally congenial, unlike Kesha, but Kesha was much more active than 'Self' and than The Little Bear from the cartoons being compared. Both characters, according to the evaluation of senior school students, were simple, while the youngsters rated themselves as quite complex.

During the study, the subjects answered the question of which cartoon they liked best. In the group of high school students, the *Well-Tried Remedy* was singled out by 70 % of respondents, the Insomnia episode from the *Mi-Mi-Bears* animated series took a liking – 13 %, the remaining 17 % refrained from answering. Younger schoolchildren liked the Insomnia cartoon from the *Mi-Mi-Bears* animated series (76 % of children) better, while 19 % mentioned the *Well-Tried Remedy*, one person refrained from answering.

Thus, an analysis of the results of the study showed that younger schoolchildren, unlike older ones, did not perceive cartoon characters critically, their assessment corresponded to stereotypical ideas about the nature of the anthropomorphic animal traditional for the Russian culture, – a bear. Moreover, they were more likely to identify themselves with the visualization of the Insomnia cartoon character, where manipulation techniques were used, – the image of Kesha seemed more attractive and consanguine to children. The data obtained determined the importance of the formation of psychological media competence in children and their parents – the ability to understand not only informative, but also formal features of cartoons, and evaluate the information communicated by those critically.

### 5. Conclusion

In the course of immanent analysis, fundamental differences in the presentation of the subject of struggle against insomnia in the two cartoons under investigation, were revealed. The *Well-Tried Remedy,* focusing on the peculiarities of infantile perception, communicated values of friendship, mutual assistance and sympathy using vehicles available for the understanding of children. The positive emotional background of the cartoon was supported by appropriate selection of classical music. Insomnia was characterized by the use of means that did not correspond to the age-related peculiarities of children's perception, in particular, the 'force majeure' presentation mode, large 'vocabulary' and the speed of its playback that exceeded the resource of children's comprehension; alarming emotional background of the character's night wakefulness was not appropriate for the age-related characteristics of the target audience of a children's cartoon.

Investigation of the semantic assessment of the images of 'Self', The Little Bear and Kesha demonstrated that the younger perceived the cartoon characters in the same way as themselves, on a larger number of factors and scales. Therewith, the differences in the assessment of two cartoon characters were minimal – the ability to discriminate was not developed in younger schoolchildren. Older school students gave a fundamentally different assessment to the characters of both cartoons and of themselves – their identification with bears suffering from insomnia was not expressed in any of the factors.

A higher rating of the Insomnia cartoon by younger schoolchildren also indicated that, due to uncritical perception, children could not 'retrieve' the negative connotations, what high school students did quite successfully, those who rated the *Well-Tried Remedy* film highly, which showed quite good developmental potential in the process of expert analysis. Manipulative techniques, which, as the analysis had shown, were used in Insomnia, affected younger schoolchildren, as different from the older ones.

The results of the study indicated that the theme of a cartoon, as well as its plot alone, cannot determine the psychological potential of a film. To reveal it, analysis of both the content of a media text and peculiarities of its artistic presentation, was needed.

### References

Animated video, 1982 – A*nimated video Well-Tried* (1982). [Electronic resource]. URL: https://www.youtube.com/watch?v=NwRi84eyig0

Animated video, 2016 – A*nimated video Mi-Mi-Bears* (2016). [Electronic resource]. URL: https://www.youtube.com/watch?list=PLrkKzgyiKOS_HSnzdsm49p4bQfe-w2JDf&time_continue=120&v=ECLKGHjsSDY

Cernikova et al., 2017 – *Cernikova, M., Smahel, D., Wright, M.F.* (2017). Children's experiences and awareness about impact of digital media on health. *Health Communication*, 33(6): 664–673.

Çetin et al., 2015 – *Çetin, Y., Lull, R.B, Çelikbaş, M., Bushman, B.J.* (2015). Exposure to violent and sexual media content undermines school performance in youth. *Advances in Pediatric Research*, 2-6.

Cingel, Krcmar, 2019 – *Cingel, D.P., Krcmar, M.* (2019). Prosocial Television, Preschool Children's Moral Judgments, and Moral Reasoning: The Role of Social Moral Intuitions and Perspective-Taking. *Communication Research*, 46 (3): 355–374.

Coker et al., 2015 – *Coker, T.R., Elliott, M.N., Schwebel, D.C., Windle, M., Toomey, S.L., Tortolero, S.R., Schuster, M.A.* (2015). Media violence exposure and physical aggression in fifth-grade children. *Academic Pediatrics,* 15, 1: 82-88.

Collins et al., 2017 – *Collins, R.L., Strasburger, V.C., Brown, J.D., Donnerstein E., Lenhart, A., Ward L.M.* (2017). Sexual Media and Childhood Well-being and Health. *Pediatrics,* 140: 162-166.

De Leeuw, Buijzen, 2016 – *De Leeuw, R.N.H., Buijzen, M.* (2016). Introducing positive media psychology to the field of children, adolescents, and media. *Journal of Children and Media*, 10:1: 39-46.

De Leeuw, van der Laan 2018 – *De Leeuw, R.N.H., van der Laan C.A.* (2018). Helping behavior in Disney animated movies and children's helping behavior in the Netherlands, *Journal of Children and Media*, 12:2: 159-174.

Dillon, Bushman 2017 – *Dillon, K., Bushman, B.* (2017). Effects of Exposure to Gun Violence in Movies on Children's Interest in Real Guns. *JAMA Pediatrics*, 171.

Ekman, 2013 – *Ekman, P.* (2013). Psychology of lies. Lie to me if you can. St. Petersburg:

Peter.

Ghilzai et al., 2017 – *Ghilzai, Sh., A., Rabia, A., Zubair, A., Shaukat, A., Noor, S.S.* (2017). Impact of Cartoon Programs on Children's Language and Behavior. *Insights in Language Society and Culture*, 2: 104-126.

Habib, Soliman, 2015 – *Habib, K., Soliman, T.* (2015). Cartoons' Effect in Changing Children Mental Response and Behavior. *Open Journal of Social Sciences,* 3: 248-264.

Kelly at al., 2015 – *Kelly, B., Vandevijvere, S., Freeman, B., Jenkin, G.* (2015). New media but same old tricks: food marketing to children in the digital age. *Current Obesity Report*, 4: 37-45.

Khan et al., 2018 – *Khan, M., Tahir, M.A., Ahmed, Z.* (2018). Detection of Violent Content in Cartoon Videos Using Multimedia Content Detection Techniques, 1-5.

Kyshtymova, 2006 – *Kyshtymova, I.M.* (2006). Diagnosis of creativity of high school students by psychosemiotic analysis of their works: "harmonic center" of the text as a psychodiagnostic criterion. *Education and science*, 6 (42): 83-92.

Kyshtymova, 2008 – *Kyshtymova, I.M.* (2008). Psychosemiotics of creativity. Irkutsk: Irkutsk State University.

Kyshtymova, 2017 – *Kyshtymova, I.M.* (2017). Image of a clown in the media narrative: immanent analysis of the media-text and its perception by the youth. *News of Irkutsk State University*. Series: Psychology, 22: 21-29.

Kyshtymova, Trofimova, 2018 – *Kyshtymova, E.S., Trofimova, E.L.* (2018). animated presentation of topic of adulting and age-specific features of its perception. *Baikal Research Journal,* 9, 3.

Luisi, 2018 – *Luisi, T.* (2018). Toys will be toys: gendered interaction frames in the Toy Story trilogy. *Journal of Children and Media*, 1–16.

Neumann, 2015 – *Neumann, M.M.* (2015). Young children and screen time: Creating a mindful approach to digital technology. *Australian Educational Computing*, 30(2).

Njiiri et al., 2018 – *Njiiri, M., Mberia, H., Muchunku, I.* (2018). Foreign television cartoon programs and children's social behavior in Kenya. *International Journal of Scientific and Research Publications*, 8, 5: 101-104.

Orel, 2008 – *Orel, V.E.* (2008). Culture, symbols and fauna. H.: Humanitarian Center.

Patzlaff, 2016 – *Patzlaff, R.* (2016). Media magic about domination over feelings. St.Petersburg: Demetra.

Pronina, 2003 – *Pronina, E.E.* (2003). Psychological examination of advertising. Moscow: RIP-holding.

Rai et al., 2016 – *Rai, S., Waskel, B., Sakalle, S., Dixit, S., Mahore, R.* (2016). Effects of cartoon programs on behavioural, habitual and communicative changes in children. *International Journal of Community Medicine and Public Health*, 3(6): 1375-1378.

Rajashree, 2015 – *Rajashree, S.A.* (2015). Impact of Japanese Cartoons on Primary School Going Children: With Special Reference to Doraemon. *Journal of Humanities and Social Science,* 20, 6:1-9.

Smirnova, Sokolova, 2014 – *Smirnova, E. O., Sokolova, M. V.* (2014). Psychological and pedagogical expertise of cartoons for children and adolescents. *Cultural and historical psychology*,10, 4: 4-11.

The Total View, 2016 – *The Total View* (2016). [Electronic resource]. URL: https://www.totalview.ru/telesmotrenie-v-2016-godu/

Turkmen, 2016 – *Turkmen, M.* (2016). Violence in animated feature films: implications for children. *Educational Process: International Journal,* 5(1): 22-37.

Weissbluth, 2014 – *Weissbluth, M.* (2014). Healthy sleep — happy child. Publication in Russian, the company Alpina non-fiction.

Zafar, Chaudhary, 2018 – *Zafar, A., Chaudhary, U.G.* (2018). Effects of Violence shown in Media on Children: A Study of Parent's Perspective. *Journal of Early Childhood Care and Education*, 2: 61–73.
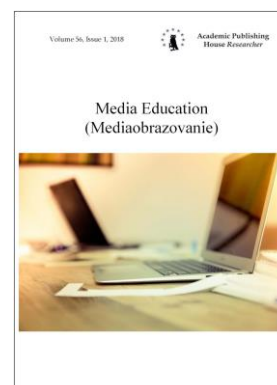
# The Functional Model of Using Visualization and Digitalization for Media Literacy Development in Media Education Process

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### Abstract

Speaking about the media component in organization of education, we consider such a branch of modern science of mass media and mass communication as media education. In the paper the functional model of using visualization and digitalization in modern media education is considered. Visual cognition concept in "media education" is introduced. Visual cognition covers many aspects such as object recognition, attention and search, word recognition and reading, eye movement control and active vision, short-term and long-term memory for long-term memory and visual imagery development. Cognition refers to how an individual acquires and processes information, those who veer toward a visual cognitive style prefer to process visual information rather than verbal information. Several strategies when processing visual data are considered in the study. The phenomenon of media literacy is highlighted in modern media. Visualization is studied as a tool for "packaging" education with media potential. The main attention is paid to visual messages potential in the media. Based on the analysis of different approaches to education, the effectiveness of this potential is assessed in terms of increasing media competence of the student audience, including future journalists, producers, filmmakers and designers who will be taught to create modern print and online media.

**Keywords:** media cognition, visual cognition, media competence, data visualization, data digitalization, media literacy, digital technology.

## 1. Introduction

The 21st century is revealed to the observer's view as an era of endless "explosions and cataclysms" – radical changes in scientific fields and existing scientific worldviews reassessment. It is not surprising that the formation of science is accompanied by numerous conceptual disasters: the seemingly unshakable postulates collapse; many new theories are born, some of which disappear as suddenly as they appear; the conceptual apparatus is rapidly changing, while the introduced new concepts (media education, media literacy, digital competence, cognitive constructs, mental representation, emotional intelligence, visualization etc.) blow up the imagination with their metaphorical ambiguity.

"Media competency is the result, as anticipated, of the convergence of the audio-visual concepts, communication media competency, digital competency, visual cognition, informational competency, and audiovisual competency, among others all" (Buckingham, 2007). Modern times are often described as the era of media application in communication, journalism, education and in

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other spheres of life. Undoubtedly, media play a crucial role in today's information society. However, in public opinion, this influence is often described in categories of negative semantics (manipulation, virtualization of reality, avoiding real life problems, substitution of journalism for propaganda, etc.). Therefore there is an urgent necessity to clarify modern media functions and their role in society, the principles of work, and different spheres of application, advantages and disadvantages. That is why the main goal of our study is to compile a functional model of media education aimed at reaching media competence first and media literacy afterwards. This education process is greatly contributed to by modern popular trends in education, such as data visualization and data technologies. Discussing challenges put forward by modern media, on the one hand, will debunk dangerous myths that have developed around the so-called "media democracy", on the other hand, it will help to neutralize the destructive and harmful influences that can be revealed in the field of mass media.

There are many reasons for such a cognitive approach, as in the media there has been a shift from the verbal comprehension to the visual one. In modern society, the bombardment of visual aids, such as television images, commercials, billboards, posters, computer icons, cell phone smiley pictures, has such an effect that people are becoming less susceptible to the printed word; students can not focus on the text for a long time if it there are no pictures, diagrams, graphs or charts in it. An alarming from the point of view of education is the recent need for media literacy – the ability to analyze, critically interpret and absorb information created and presented using various types of media, the need for such literacy is soaking in the modern information society. It is noted that in recent years there has been a real revolution in science, associated with an interest in the study of visual culture (Mitchell, 1995). This concerns education in the first place and brings to life the need to create auxiliary visual support and visual organization of information for the purpose of media education. This is all about the specifics of the "visual society". Visual reality appears as an information construct, subject to "reading" and interpretation to the same extent as the text lends itself to these procedures. Both "reading" and interpretation of visual information constructs need to be explained and instructed to students, if we want them to comprehend the meaning of them.

Like many other phenomena in the world media should become the subject of education, should be taught and learned in order to reveal their positive semantics. That's where media education and visualization have become inseparable. Thus in our experimental model we use such major blocks as: media, media literacy, media competence, digital competence, education, culture and visualization. Media literacy deals with the culture and lifestyle of students. They enjoy thinking and talking about what is going on in the media. For teachers, it is an opportunity to make students examine how they are influencing and being influenced by popular culture presented by media.

Modern society is characterized by large volumes of information offered by media that people process in order to support progress and sustainable development in science and society. The bulk of information is evolving so fast that a person is no longer able to perceive actual data about the world around and to process all this information using traditional methods. The basis of the 'image of the world' today is not only concepts and semantic fields, but also visual images, schemes and prototypes created by media. People in many cases tend to trust visual information more than other forms of sensory information (Sinnett et al., 2007). The reason why visual information convinces people more can be explained by the role of vision in forming the basis of the biological and socio-cultural existence of people and their past experience (Arcavi, 2003). Therefore, visual information and visualization are part of human life and are valued by people. Visualization is also used in many fields of science as its rational part (Farmaki, Paschos, 2007). Information provided by other areas of human activity can also be expressed in a visual representation that can facilitate the process of understanding. For example, the use of graphical presentations (diagrams, charts, graphs, cognitive maps, mental cards) can help to arrange simply and directly presented educational material difficult to comprehend into schemata (Tappenden, 2005). In a more general expression, all kinds of connections of the studied object can be perceived easier and faster due to visualization. Visual presentations convey information systematically and using interesting and effective methods. Visualization serves an important purpose, such as facilitating learning and teaching. Visually presented information can be apprehended and interpreted, like any verbal text in print. Modern students do not pay attention to boring, hard-to-reach printed texts; rather, their attention will be drawn to colored structural information models and diagrams, cognitive maps and mental schemes, videos or PowerPoint presentations. When comparing different teaching technologies, we can conclude that visual presentation is more effective because of a structured and

systematized form that makes it easy to teach and learn. Such structures are stored in long-term memory, easily accessible and quickly updated if necessary, which contributes to the storage of more information per unit of time and faster and more detailed reproduction of the stored material. "Visualization in training is based on the special properties of mental images as objects of knowledge, expresses the degree of accessibility and clarity of these images for a student. It is based on one of the most important principles of learning – the principle of clarity" (Makarova, 2016).

Visual cognition covers many aspects, such as face recognition, memorizing scenes and objects, attention and search, words recognition, eye movement control and active vision, short-term and long-term visual memory and visual images storage. This kind of cognition relates to the cognitive process (the way a person acquires and processes information), and those who turn to the visual cognitive style prefer to process visual information rather than verbal, acoustic or tactile. There are several strategies that can be used while processing visual information.

Cognition means mental processes, such as sensation, perception; representation, imagination and memory, speech and reflection can also be attributed there. Visual cognition refers to how the brain responds to visual stimuli; in other words, a subjective process, when vision through an objective process becomes an object, word or memory. Before cognition takes place, sensory input must occur - visual. For example, the eye sees a series of lines, shapes, and colors. Only when this information has reached the brain and has been processed, a rounded pottery clay vase or a marble sculpture appears in the inner eye. From the point of view of an outside observer this process may seem extremely simple, but it is not. Visualization involves creation of real or unrealistic images in the imagination and memory. This usually refers to visual images, but may relate to sounds, movements, tactile sensations, taste and smell, whatever is perceived by human senses or arises in human imagination. As any human activity, visualization should be taught and learned.

The answer to such developmental challenges was the birth of an independent scientific discipline and a set of pedagogical and media practices, called media education, the result of which, ideally, should lead to the higher level of media literacy of media consumers or media competence development increase.

Today, media literacy education is developing intensively in many countries, its problems and issues being studied by a number of scientists (Aleksandrov, Levitskaya, 2018; Berger, McDougall, 2013, Cheung, 2009; Fedorov, 2019; Fedorov, Levitskaya, 2018; Förster, Rohn, 2015; Kačinová, 2018; Petranová et al., 2017; Seliverstova, 2016). Media issues in philosophy of media were developed by V.V. Savchuk (Savchuk , 2007), N.N. Sosna (Sosna, 2011), P.M. Stepanova (Stepanova, 2016) and others. An important contribution to the theoretical understanding and creation of history of media was made by D. Bulatov (Bulatov, 2012), D.V. Galkin (Galkin, 2004), K.E. Razlogov (Razlogov, 2011).

Media literacy education regroups the pedagogical approaches and educational initiatives designed to foster the media literacy of individuals. Media education concerns the learning processes and the means to reach that goal. Media literacy concerns the outcomes and objectives of media education but not only: in a broader sense, it's an issue related to social life and culture. «But because today people use so many different types of expression and communication in daily life, the concept of literacy is beginning to be defined as the ability to share meaning through symbol systems in order to fully participate in society» (Hobbs, 2010). We can simply put media education as a process, while media literacy is being its outcome, and digital competence, data visualization are teaching aids.

Data visualization in recent years has gained fame and popularity in a wide variety of fields (Kirk, 2012). The development of many new interactive visualization tools has accompanied growing interest in data visualization, allowing users from a wide range of backgrounds to interactively visualize and share data using digital technologies. In fact, interactive visualizations have the potential to improve user intelligence and enrich teaching process supported by visualizations.

Albert Einstein was known as a visual thinker, but not very many people have really read how he described the idea: "What, in fact, is thinking? When snapshots of memory appear at the reception of sensory impressions, this is not yet "thinking". And when such images form sequences, each of which causes another, it is also not "thinking". When, however, a certain picture appears in many sequences, it is precisely thanks to such a return that it becomes the organizing element for such sequences, since it combines sequences that are not related to one another. Such an element

becomes a tool, a concept. I think that the transition from free association or "dreaming" to thinking is characterized by the more or less outstanding role of "conception" (Dukas et al., 1979).

The image is often subjective in nature as a result of the student's intellectual activity, therefore it does not always objectively reflect the surrounding world, but is a holistic integrated reflection of reality, in which the main categories are space, movement, color, shape, texture, sounds, etc. Visualization is a holistic approach to the world, not divided into separate details, concepts and ideas, but images created through visual operations and the imagination of the perceiver, his previous experience and background knowledge, which is why they are easily understood and remembered for a long time. Visual images do not have to be detailed graphic images (drawings, sculptures or photographs), more often they are abstract schemes, prototypes, frames, diagrams, graphs, charts, cognitive and mental maps. In addition, visualization is associated with the emotional sphere of a person: to remember visual images must be positive; not only perception of real objects in real world around, but also creative thinking becomes a positive experience in individual's emotional sphere. Visualization and digitalization of data are not simply the modern trends, but first of all, useful tools to develop certain skills and competences in education. And as those can be applied for students' comprehension development and long-term memory ensuring in media education as well as in any other type of education, we have included data visualization and digitalization in our model

## 2. Materials and methods

Research materials: visualization in education, development of infographics in education, students' long-term memory developed by presenting teaching materials via media, using media presentation to explain topics difficult for comprehension. Infographics is a portmanteau word made of morphemes 'info' and 'graphics' blended in one word. are graphic of information, data or knowledge intended to present information quickly and clearly. We use this blending to indicate information, data or knowledge visual images for explicit representation promoting comprehension and memorizing due to inborn human ability to see patterns, trends and memorize images better than words and sentences.

Research object is teaching students using infographics first to develop comprehension, then to ensure long-term memory to memorize large volumes of data, and finally to retrieve and to apply in practice large chunks of information when necessary.

The study uses basic methods of cognition: the problem-solution, situational, schema and comparative methods. The assessment approach is applied to the media literacy education problem. Comparative method defines the difference in international media literacy situations, approaches to media education and media literacy in different countries. A schema method shows holistic approach to media literacy teaching, describing its past, present and future.

The main research methods are modeling of education process using infographics in media education to provide understanding, memorizing and information retrieval when needed.

## 3. Discussion

As the result of study, a functional model of using visualization and digitalization for media literacy development in media education process was compiled. With visualization at hand it is easy to introduce several components of media education process in their interaction and interdependence. The blocks represent major concepts in education process, such as media education as the process, media competency and media literacy as this process' results, while visual cognition, data visualization, data digitalization and digital technologies being the tools used to achieve set goals.

In this part of the article we would like to consider several components of the functional model (Figure 1) using media education as main teaching process, media competency ad media literacy as major results of this process, visualization and digitalization as main tools in order to ensure information visual perception, comprehension, memorizing and practical application when needed, all arranged in a simple hierarchical multi-level structure.
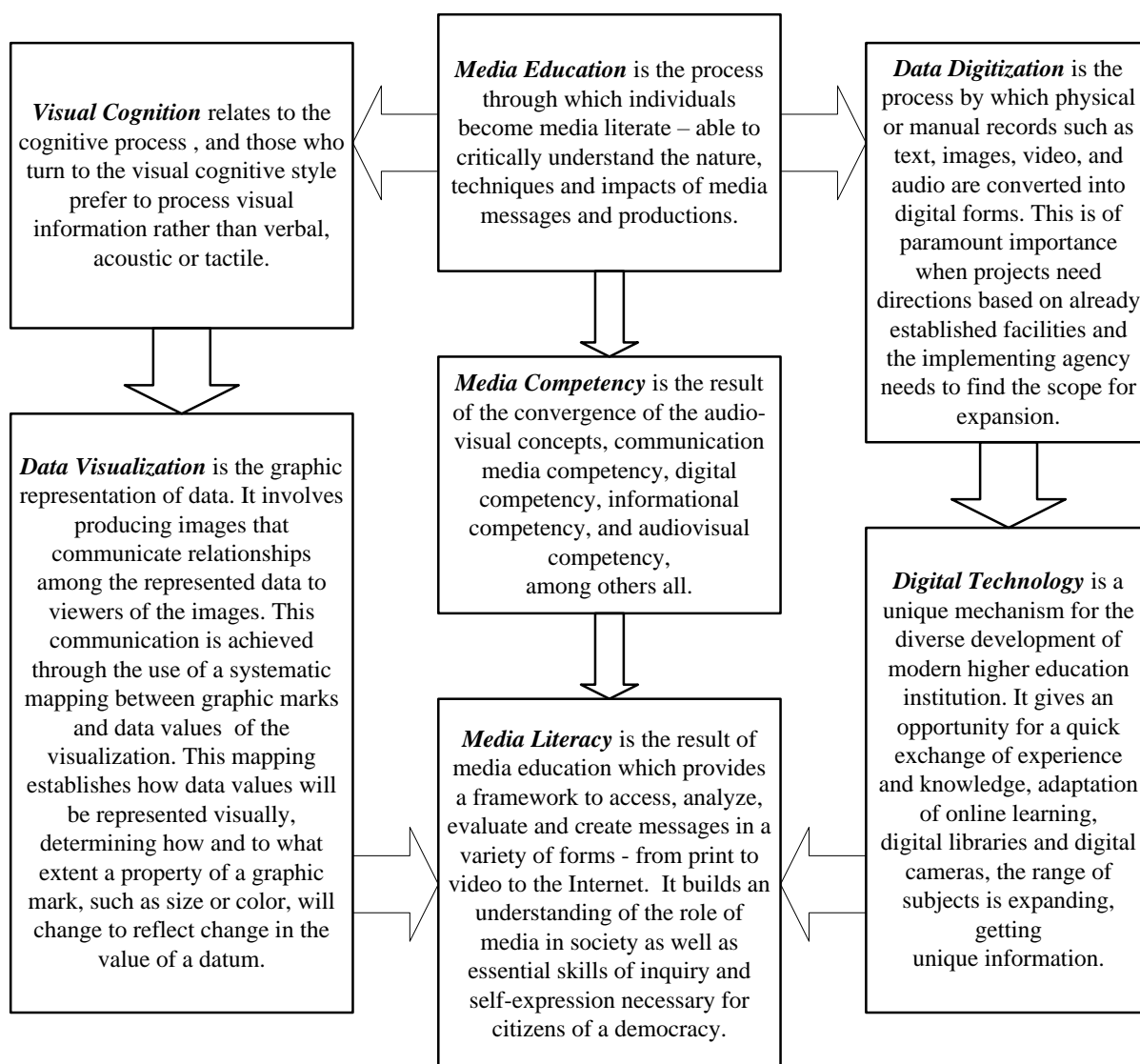
**Visual Cognition** relates to the cognitive process , and those who turn to the visual cognitive style prefer to process visual information rather than verbal, acoustic or tactile.

**Media Education** is the process through which individuals become media literate – able to critically understand the nature, techniques and impacts of media messages and productions.

**Data Digitization** is the process by which physical or manual records such as text, images, video, and audio are converted into digital forms. This is of paramount importance when projects need directions based on already established facilities and the implementing agency needs to find the scope for expansion.

**Data Visualization** is the graphic representation of data. It involves producing images that communicate relationships among the represented data to viewers of the images. This communication is achieved through the use of a systematic mapping between graphic marks and data values of the visualization. This mapping establishes how data values will be represented visually, determining how and to what extent a property of a graphic mark, such as size or color, will change to reflect change in the value of a datum.

**Media Competency** is the result of the convergence of the audio-visual concepts, communication media competency, digital competency, informational competency, and audiovisual competency, among others all.

**Media Literacy** is the result of media education which provides a framework to access, analyze, evaluate and create messages in a variety of forms - from print to video to the Internet. It builds an understanding of the role of media in society as well as essential skills of inquiry and self-expression necessary for citizens of a democracy.

**Digital Technology** is a unique mechanism for the diverse development of modern higher education institution. It gives an opportunity for a quick exchange of experience and knowledge, adaptation of online learning, digital libraries and digital cameras, the range of subjects is expanding, getting unique information.

**Fig 1.** The functional model of media literacy development

Not included in the model, but not less important in media education goals achievement is infographics as a form of graphic and communication design. One of the obvious "gaps" in media education seems to be an underestimation of the media educational potential of the media themselves, which, through the realization of media aesthetic potential, can be a powerful resource for the formation of media competency. This is especially true of the so-called 'new media' and the manifestations of visual perception. Underestimated from the point of view of past media educational efforts, the phenomenon of infographics, which is the form of graphic and communication design today, is most widely used in the media sphere. Infographics can not only organize large chunks of information, but also more clearly show the objects and facts in time and space, as well as predict different trends and interaction.

The need for a systematic study of infographics' media educational potential as one of the most dynamically developing and promising tools for processing, 'packaging' and broadcasting media information by modern media is also due to such a phenomenon as media aesthetics – a phenomenon that developed in the era of visual revolution. Although not studied in full, this media phenomenon is being of a certain interest to researchers. "However, the role of aesthetics in achieving media power is not enough studied. An analysis of the relationship between media policies and the aesthetic regime will allow define as your own specifics of media policies aimed at self-vision and self-justification, as well as new horizons of aesthetics. Aesthetics have its own politics. The acute question is posed about the area that is not given to aesthetics, which it cannot impose on a network of categories, which again testifies to the lack of bridges of extra-aesthetic experience. And vice versa,

that whatever is considered aesthetic, loses the mode of relevance, becoming the normative regime of art or a legitimate page in the history of culture" (Savchuk, 2018).

The goals of media education are focused on students gaining knowledge about communications and media skills: information search, processing, storing and retrieving, training in information perception and comprehension, critical thinking development, ability to understand the hidden meaning of the image or other messages. It is also important to learn how to resist media's manipulation of the individual's consciousness, how to adequately understand media texts, to use different means of communication for creative expression of one's thoughts and ideas. Especially important is the focus on new information technologies use, such as multimedia informational opportunities and the Internet endless resources. Media education is facing new types of problems associated with information systems operation and hypertext learning environments. Media education should create students' systems of information interpretation and organization to achieve independence from the media, make them active participants in communication processes in modern society.

It is generally recognized that visual images are remembered faster than verbal texts, and human memory stores them much better. Visualization is evidence and persuasiveness. Therefore, the human brain processes visual images as priority ones (clear and precise). Visualization "improves understanding, memorizing and decision making, as it uses forms that are clear and easy to perceive, making data accessible and attractive" (Shevchenko, 2015).

Finally, "the interpretation of complex data becomes possible after its visualization, through visualization the information becomes more meaningful, emotional, detailed and fixed hard in the memory" (Shakirov, Safiullina, 2015). It is emphasized that "the human brain loves visual content; by using visualization data are made easier to understand and compare" (Lengler, 2007). Visual images are faster to remember and stored in memory for a longer time. Educational activity in modern school systems is largely based on values, carried by concepts, ideas, laws, words, but there is no appeal to students' emotional and creative spheres. The incentive for introducing visualization into education is the desire to move away from explanatory pedagogy to a constructively new approach to teaching, which involves student and the teacher's active interaction within psychologically comfortable and safe educational environment. Just as logic is based on verbal thinking, so intuition is based on visual thinking. Visual thinking is no less important than the verbal one; moreover, both components of thinking are stronger in unity and interaction.

Rudolf Arnheim offers a possible basis for such visualization in his book "Visual Thinking" (Arnheim, 1980). He explains how visualization becomes an integral part of thought and understanding. He uses examples where awareness processes, structures, and objects often precede or even constitute visibility. This visualization of the inner mind is created through observation and analysis of physical objects or effects, which Arnheim calls 'models of forces', which the observer inevitably interprets based on prior knowledge of the world and past experiences. What future keeps in store for us is complete digitalization in all spheres and especially in education. In the world, where mobile penetration increasing by a billion per year with over 200 million connected to the internet, the potential to digitally educate the masses seems very rich.

In the past years there has been a considerable rise in Digital and Virtual Classrooms at different levels of learning. With evolution of technologies such as cloud, data centers and virtualization there is a huge potential for technology to be integrated with the media education. Advantages can be seen from all points of view. Students consider it as a flexible option allowing them to use individual learning trajectories, to study at personal time and pace. Teachers find it convenient to prepare their learning plans well aided by technology. Teaching becomes more of Edutainment education+entertainment) than hard work, a smoother experience with a perfect combination of personalized assignment packages having a blend of animations, gamification and elaborate audio-visual effects. The usefulness of the digital technology in society and culture is increasing, while these technologies grow and multiply. Visual cognition refers to the way the brain responds to visual stimuli; in other words, the subjective process where the seeing becomes, through an objective process, an object, word or memory. Before cognition can take place, there must be some sort of sensory input —a visual one (Croft, Nevill, 2019).

Visual memory is the process of recalling information a person has seen. This type of memory is often considered different than other types of memory, such as the ability to recall facts or pieces of music. Different people have various degrees of aptitude for this type of memory, and it is

believed to be possible to improve it with practice. Many people believe that this type of memory is important for learning and that deficiencies in visual memory can be related to specific learning disorders like dyslexia or autism. In Temple Grandin's books 'Thinking in Pictures' (Grandin, 2013) and 'The Autistic Brain', she uses the language expertly to explain how visual thinking works. "Words refer to cascades of images, as visual and linguistic systems interact" (Grandin 2006). T. Grandin, autistic herself, has become a University professor and an award-winning writer, whose books explain how to develop visual thinking and to achieve success in learning notwithstanding mental handicaps.

The process of recalling visual information is not as straightforward as many people believe. For example, visual memory can be affected by age, alcohol, or lack of sleep. When a person's brain takes in visual information, it is not stored as a single image or set of images. Information about what the brain sees is stored, but certain areas may be more easily recalled and certain information may be altered in storage. Additionally, memories that are not purely visual may be more vivid or easier to recall, and memories that are not primarily visual may still have image components.

Images are described as some systems, as a result of processing of which certain mental constructs appear in the internal plane of consciousness, they can be of various degrees of generalization: from detailed figurative paintings to diagrams, graphs, maps or abstract schemata. Saying that an image is something special and a word is something generalizing is wrong, words can fix a separate, particular, and images can rise to high degrees of generalization. Until now, the imagery played an auxiliary role in the training system, however, today the requirements of modernity are such that we need to bring visual images "from shadow to light" and give them a second life and a primary role.

Coming back to the problem of media definition let us dwell a little more on the thoughts that are most promising in connection with the technology-oriented and digitalized education. So, modern media (computers and other electronic devices) turn out to become "means of expression", not standing on a par with textbooks, pictures, image and even a movie camera, but heading forward to more progressive and more effective methods of teaching.

## 4. Results

The definition of media as a container for other kinds of media is described in the framework of the so-called functional model. Media not only allows you to more sharply feel your own self in its pages, but also offer ways to expand the very ability of feeling and sensing, and with it a new level of involvement in the world, its development and knowledge.

The human psyche does not form a specific image, but the perception of the world, created by the perception and imagination of the subject, as a rule, it includes personal meanings, other people, the spatial environment and the time sequence of events. The image of the world is also determined by the nature of the actions during which the original image is supplemented, modified until it satisfies the practical needs of a person. The subject, as a rule, seeks an emotionally positive action to model the world in its semantic perspective and integrity. Semantic integrity is an ideal environment, a mental space in which all peculiarities of the world are sketched out from a certain view point and thus acquire a very definite meaning. The picture of the world is a system of generalized views on the surrounding world and the place of the individual in it, the relationship of the individual to the world, as well as what the individual can learn from this general picture of the world (beliefs, socio-political, moral and aesthetic ideals, principles by which material and spiritual events are evaluated).

Visual reality is presented in education as an information structure, which should be apt to "reading" as much as any verbal (written) text and can be comprehended and translated in the same way. Visual reality has long ceased to be perceived as a subordinate operand that complements the verbal text; thinking and imagination clash to serve semantic purposes. For teaching and learning, visual images have undeniable uniqueness of cognitive power and the multi-level structure encoded in it. Having compared various ways of information presentation, we have been made the conclusion about effectiveness and efficiency of visual teaching and learning methods because they contribute to holistic, more structured and systematized data that a student confronts thus facilitating understanding and memorizing. A graphical representation helps the structure and sequence of information to be visualized and understood. In addition, it has already been proven that visualized learning stimulates student's motivation. With an increase in motivational inspiration to study, critical and creative thinking becomes flexible, avoiding

stereotypical patterns, dogmatic thinking and trivial routine. Images, ideas and concepts are combined in a sense; contribute to the formation of logical thinking.

Visual thinking consists of visual operations and allows using a person's ability to see and understand images, and then analyze the data obtained. Accordingly, the task of visualization is the conversion of huge amounts of information into graphic images accessible to human perception when they are connected by one meaning (infographics). This is how visualization is associated with metacognition, which is "stored knowledge about oneself and others as cognitive agents, about tasks, about actions or strategies, and about how all this affects the results of any intellectual behavior" (Flavell, 1985).

Visualization is also a way of exchanging information, which is an alternative way to oral and written communication that prevailed in the past. Currently, there is a "copying of the cultural environment", in which human evolution fully reflected and expressed in written texts, receive audiovisual expression thanks to the media education and digital technologies. Compared to common verbal communication, visualization is a psychologically easier and more capacious, socially more accessible and voluminous, but a less unidirectional and stable form of knowledge structuring. "Teaching experience should provide fair, authentic learning opportunities. Today, more and more students are looking for alternative ways to accomplish tasks, often using innovative technologies, which can provide a real context for learning and the formation of deeper conceptual thinking. ... The use of visualization must maintain consciousness in learning" (Schaffer, 2017). These visualization features form its socio-cultural peculiarities and cognitive functions.

In visualization's communicative function, it is quickly becoming the leading medium of mass communication, suggesting the associated social and regulatory responsibilities. Throughout the world, in various fields of activity, a gradual transition from the verbal component to the visual one takes place: visual images have such an effect that people become lazy to read texts in regular print; but rely on images more than on verbal texts. This once again confirms that visualization haunts humans in life, study and work activities.

With the methodically competent use of visualization methods, students can not only plan their educational process, evaluate results and monitor progress in learning, but also move to higher levels of cognitive activity, mastering subject content. In the process of introducing visualization methods into training, it is necessary to take into account the psychological characteristics of the activity of cognitive mechanisms. Metacognitive experiences are conscious cognitive or emotional experiences that occur during training and apply to any aspect of it.

When visualizing educational content and ways of understanding and memorizing it, it is necessary to take into account various characteristics of a person, types of cognitive abilities of a student, various types of leading sensory moments and, undoubtedly, the ability to be metacognitive regarding their learning. Visual teaching methods, based on the psychological characteristics of the trainees, can solve various development problems: the development of observation, visual memory, creative thinking, creativity, awareness, etc.

The process of thinking using visualization of metacognitive strategies in learning can also be enhanced by expanding the activated types of thinking. (Abakumova et al., 2006) Along with abstract-logical, information visualization allows including mechanisms of visually effective, imaginative, associative thinking, and enhancing the activity of imagination (reproductive and creative).

### 5. Conclusion

In this study, it is tried to determine the level of the effect of visualization and digitalization on media literacy development achievement by following the above mentioned steps and by using the functional model offered.

Degree of development marked problems due to the multilayered nature of the affected aspects, their interdisciplinarity. Necessary disciplinary contexts include both philosophical and aesthetic tradition, modern theories of science and technology, the theory and methodology of modern education, particular aspects of media art and media education. The purpose of this study is reviewing the resources with regard to the effects of visualization, digitalization and cognitive science in media education. In this context, findings of individual studies are combined by meta-analysis and put together as a text. Using the functional model of using visualization and digitalization for media literacy development in media education process will help further research

and practical application in media education development. Thus, the effect regarding the ways of using visualization in gaining media competence and media literacy can be calculated and a general assessment will be made. A study of the aesthetic side of media education and compiling theory of education using new technologies engaged in teaching and learning are among them. But this might become the topic of some other study.

In conditions of dramatic transformations of the media environment due to technological "breakthroughs" (creation of the Internet, emergence of portable gadgets, wireless communications, digitalization of content, etc.), infographics acquire additional previously unknown importance that make it an even more effective way of transmitting information. The combination of the Internet communication properties (multimedia, hypertext, interactivity) with a verbal product (written text, audio and video content) also changes the media consumer's demands, who is constantly heading toward multitasking, increasing activity in arrangement of information, visibility, dominance of game activities (gamification), etc. In this context, new requirements about the visual content of media education – infographics – are being made, it should not only be exciting, but also informative, visual, aesthetically attractive, multi-channel (affecting media consumer through hearing, sight, imagination etc.), and digitalized.

## References

Abakumova et al., 2006 – *Abakumova, I.V., Ermakov, P.N., Makarova, E.A.* (2006). Scheme and background: introjection in heterogeneous semiotic space. Moscow: Credo, 175 p.

Aleksandrov, Levitskaya 2018 – *Aleksandrov, E., Levitskaya, A.* (2018). Technology of Integrated Media Education. *Media Education,* 58 (4): 3-10.

Arcavi, 2003 – *Arcavi, A. (*2003). The role of visual representations in the learning of mathematics. *Educational Studies in Mathematics*, 52: 215-241.

Arnheim, 1980 – *Arnheim, R.* (1980). A Plea for Visual Thinking: *Critical Inquiry,* 6 (3): 489-497.

Berger, McDougall, 2013 – *Berger, R., McDougall, J.* (2013). Editorial Media Pedagogy Research: are we there yet? *Media Education Research Journal,* 1: 5-11. [Electronic resource]. URL: http://merj.info/wpcontent/uploads/2013/01/MERJ_3-2-Editorial.pdf

Buckingham, 2007 – *Buckingham, D.* (2007). Digital Media Literacies: rethinking media education in the age of the Internet. *Research in Comparative and International Education*. 2 (1): 43-55.

Bulatov, 2012 – *Bulatov, D.* (2012) A new state of living: on the issue of technobiological art. Humanitarian Informatics, 6: 95-100

Cheung, 2009 – *Cheung, C.K.* (2009). Media education across four asian societies: issues and themes. *International Review of Education,* 55 (1): 39–58

Crofts, Nevill, 2019 – *Crofts, C., Nevill, A.* (2019). Publishing screen media practice research: evolving processes of contextualisation, peer review and future proofing in *Screenworks. Media Practice and Education.* 20 (3): 283-297

Dukas et al., 1979 – *Dukas, H., Hoffmann, B., Einstein, A.* (1979). The Human side: new glimpses from his archives.

Farmaki, Paschos, 2007 – *Farmaki, V., Paschos, T.* (2007). The interaction between intuitive and formal mathematical thinking: A case study. *International Journal of Mathematical Education in Science and Technology,* 38(3): 353-365

Fedorov, 2019 – Fedorov, A. (2019). Schools and universities in audiovisual media: experts' opinions. *Communication Today*, 10 (1): 110-122.

Fedorov, 2019 – *Fedorov, A.* (2019). The Heritage of Yuri Lotman, Umberto Eco and Vladimir Propp in the context of media literacy education. *Media Education,* 59 (2): 243-248. DOI: 10.13187/me.2019.2.243.

Fedorov, Levitskaya, 2018 – Fedorov, A., Levitskaya, A. (2018). Mass media literacy education in modern Russia. *Media Education*, 2: 6-23.

Flavell, 1985. – *Flavell, J.H.* (1985). Cognitive development, Prentice-Hall, 338.

Förster, Rohn, 2015 – *Förster, K., Rohn, U.* (2015). Media Management Education. Key Themes, Pedagogies, and Challenges. *Journalism & Mass Communication Educator*, 70 (4): 367-381.

Galkin, 2004 – *Galkin, D.V.* (2004) Binary language and virtual discourse: towards the philosophy of digital culture. *Humanitarian computer science,* 1: 30-40

Grandin, 2006 – *Grandin, T.* (2006). Thinking in Pictures. The expanded edition. Vintage Press, 270 p.

Grandin, 2013 – *Grandin, T.* (2013). The Autistic Brain. Houghton Mifflin Harcourt, 304 p.

Hobbs, 2010 – *Hobbs, R.* (2010). Digital and Media Literacy: A Plan of Action (Communications and Society Program). Washington D.C., U.S.A.: The Aspen Institute: 67-94.

Kačinová, 2018 – *Kačinová, V.* (2018).Media competence as a cross-curricular competence. *Communication Today,* 9 (1): 38-57.

Kirk, 2012 – *Kirk, R.E.* (2012). Experimental design. In *Handbook of psychology: Research methods in psychology,* Vol. 2: 3–32. Huboken, NJ: Wiley.

Lengler, 2007 – *Lengler, R., Eppler, M.J.* (2007). Towards a periodical table of visualization methods for management. Institute of Corporate Communication University of Lugano, Switzerland GVE '07 Proceedings of the IASTED International Conference on Graphics and Visualization in Engineering: 83-88.

Makarova, 2016 – *Makarova, E.A.* (2016). Visual culture in educational environment and innovative teaching technologies. *Universal Journal of Management,* 4(11): 621–627.

Mitchell, 1995 – *Mitchell, W.J.T.* (1995). What is visual culture? In *Meaning in the Visual Arts: Views from the Outside.* Princeton, N.J.: Institute for Advanced Study, 207 p.

Petranová et al., 2017 – *Petranová, D., Hossová, M., Velický, P.*(2017). Petranová, D., Hossová, M., Velický, P. (2017). Current development trends of media literacy in European Union countries. *Communication Today*, 8 (1): 52-65.

Razlogov, 2011 – *Razlogov, K.* (2011). World cinema: the history of screen art. Rossian Institute of Cultural Studies. Moscow: Exmo.

Savchuk, 2007 – *Savchuk, V.V.* (2007). Media philosophy. Discipline development. *Proceedings of International scientific conference "Media as Philosophy subject", St. Petersburg State University:* 181-188

Savchuk, 2018 – *Savchuk, V.V.* (2018). Media Policies and Aesthetics. *Bulletin of St. Petersburg State University,* 34 (4): 585-596.

Schaffer, 2017 – *Schaffer, V.* (2017). Enhancing learning to diverse cohorts via immersive visualization. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 21(2): 46-54.

Seliverstova, 2016 – *Seliverstova, L.N.* (2016). Peculiarities of the integration of media criticism and media education in Austria. *Media Education,* 4: 109-126.

Shakirov, Safiullina, 2015 – *Shakirov, A.I., Safiullina, G.R.* (2015). Transformation of journalism in the conditions of "visual turn". *Vestnik of Chelyabynsk State University,* 5 (360). *Philology. Art Criticism,* Vol. 94: 425-431.

Shevchenko, 2015 – *Shevchenko, V.E.* (2015). Visual communications: trends in forms and technologies of information transfer. *Vestnik of Chelyabynsk State University,* 5(360). *Philology. Art Criticism.* Vol. 94: 189-195.

Sinnett et al., 2007 – *Sinnett, S., Spence, C., Soto-Faraco, S.* (2007). Visual dominance and attention: The colavita effect revisited. *Perception & Psychophysics,* 69(5): 673-686.

Sosna, 2011 – *Sosna, N.N.* (2011). Photography and image: visual, opaque, spectral. Moscow: Institute of Philosophy RAS: NLO, 200 p.

Stepanova, 2016 – *Stepanova, P.M.* (2016). Film pedagogy and media education. St. Petersburg, 98 p.

Tappenden, 2005 – *Tappenden, J. (*2005). Proof style and understanding in mathematics I: Visualization, unification and axiom choice. In *Visualization, explanation and reasoning styles in mathematics (Synthese library).* Dordrecht: Springer, 327: 147-214.
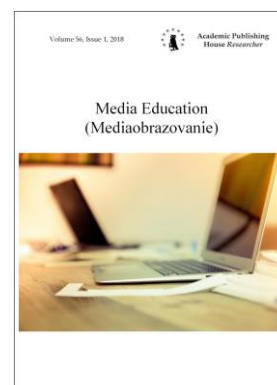
# International Comparison of Media Coverage on the Fukushima Crisis: A Comparative Content Analysis of News Media Coverage in Several Countries

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**Abstract**

The objective of this study is to examine how the international news media has covered the nuclear disaster in Japan and determine the differences in news framing of different international newspapers. Four theories; framing analysis, attribution theory, situational crisis communication theory (SCCT), and the cultural value system of Schwartz have been applied in this research, and eight hypotheses have been deduced. A quantitative content analysis approach has been taken in order to frame and analyze several international news articles published in the newspapers of Singapore, Germany, USA, UK, Japan and India addressing Fukushima Crisis. Out of the eight hypotheses deduced for this research, three were confirmed with restrictions, two were partially confirmed while three hypotheses were rejected. From the eight hypotheses that have been tested, three are confirmed with restrictions, two partially confirmed though also with restrictions, and three rejected, in which one of them under restriction. The study concludes that Schwartz's cultural values are not solely the factor that perhaps could explain the influence within the media system, regarding the difference of media coverage in each country or culture.

**Keywords:** Framing, Fukushima, crisis communication, Schwartz cultural values.

## 1. Introduction

In 2011, the earthquake and tsunami in Japan caused one of the biggest nuclear crises this world has ever faced. The power systems of Fukushima Daiichi nuclear station were immediately knocked down after the massive earthquake and ferocious Tsunami waves hitting Japan. At that time eleven atomic reactors at four different plants were operating, out of which eight units reached to shutdown position within four days. The other three reactors lost power and started meltdown resulting in hydrogen explosions and radioactive emissions from the Fukushima plant, which ultimately forced the local communities to evacuate the area. The accident was rated 7 on the INES scale (Holt, 2012: 1).

The severity of this nuclear disaster can be compared with one of the worst nuclear incidents in history which took place at Chernobyl in former Soviet Union and raised serious questions concerning nuclear security and safety at different plants operating worldwide.

Moreover, the reputation of Japan's government and power plant's operator (Tepco) has suffered significantly within this period. International media have discussed their response to the nuclear disaster at Fukushima as well as they have criticized core elements of its communication strategy. The formal organization of the government's and Tepco's communication was slow and poorly coordinated while the flow of information was not transparent andaccurate (Yilmaz, 2011).

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Therefore, crisis communication carried out in case of Fukushima Daiichi accident can damage the reputation and such flaws in communication can affect how stakeholders interact with the organization (Barton, 2001; Dowling, 2002).

When Fukushima Daiichi disaster happened, the media attention was paid to the actions of Japan government and TEPCO in terms of their immediate response strategy. The media play a crucial role in how distant extraordinary events are constructed, narrated and politically responded (Pantti et al. 2012, Cottle, 2012).

Hence, Fukushima crisis coverage in the media was accompanied by stories about people who had been in danger and buildings which had been damaged. Therefore, this study aims to examine how the international news media covered nuclear disaster in Japan and what were the differences in news framing of different newspapers in these countries, which will contribute in the future development of the crisis communication research.

## 2. Materials and methods

The research is designed to examine cross-cultural framing in the Fukushima crisis case in several chosen country newspapers: Singapore, Germany, USA, UK, Japan and India. For this purpose a quantitative content analysis has been undertaken, with human coding (instead of computer coding) chosen as content analysis methodology.

Aligned to the fact that this research is undertaking several categories from Entman, content analysis is defined as: "Summarizing, quantitative analysis of messages that rely on the scientific method, including attention to objectify/intersubjectivity, a priori design, reliability, validity, generalizability, replicability, and hypothesis testing. It is not limited as to the type of messages that may be analyzed, nor as to the types of constructs that might be measured (Neuendorf, 2002: 10; Neuendorf, Skalski, 2010).

Entman's theoretical framework with four features is app lied to this research, rooting from the codebook building which is divided into sections of: (a) Problem definition (b) Treatment Recommendation (c) Causal Interpretation, and (d) Moral Evaluation. This framework was built solely to answer the empirical questions which follow framing credibility, as stated by Van Gorp, 2005 (in Matthes,Kohring, 2008), "It is extremely difficult to neutralize the impact of the researcher in framing research." By capturing these four dimensions of Entman applied in Matthes and Kohring's framework approach, it is more vividto view the research object, in order to avoid subjectification from the researcher and to avoid the research loophole itself. The reason is (a) Coders are not informed regarding the four dimensions of the coding before the research starts, nor they are informed about the samples, thus it is less subjective. (b) The four dimensions are scrutinized separately, thus according to holistic frames, each data extracted is more reliable and less inter-subjective to oneanother (Matthes, Kohring, 2008).

The four dimensions of Entman are therefore integrated into the codebook to analyze the cross-cultural framing of Fukushima crisis, and to answer the following research questions:

- How did the international media news media frame the Fukushima crisis from March to June 2011?

- What are the differences in media coverage between different countries regarding the Fukushima crisis? This refers to the following aspects of the media coverage:

(a) Problem definition (b) Treatment Recommendation (c) Causal Interpretation, and (d) Moral Evaluation.

Regarding Schwartz's cultural values that had been used as a theoretical reference in this research, seven hypotheses had been built:

H1: Media coverage in countries with cultural emphasis on Autonomy is more likely to attribute the causes of the Fukushima crisis to the internal causes (Tepco) than countries with cultural emphasis on Embeddedness (external).

H2: Media coverage in countries with cultural emphasis on Autonomy attributes responsibility for the Fukushima crisis more often to Tepco/Japanese Government than countries with cultural emphasis on Embeddedness.

H2.1: If Tepco is blamed for the crisis than the organization as a whole will be emphasized in embedded cultures and individual persons (CEO, employees) will be emphasized in autonomous cultures.

H3: Media coverage in countries with cultural emphasis on Autonomy refers less likely to (high) consensus information than countries with cultural emphasis onEmbeddedness.

H4:Media coverage in countries with cultural emphasis on Hierarchy is less likely to refer to negative evaluations of reputation and crisis response of Tepco than countries with cultural emphasis on Egalitarianism.

H5: Media coverage in countries with cultural emphasis on Egalitarianism is more likely to emphasize organizations' (Tepco) compassion with crisis stakeholders than in countries with cultural emphasis on Hierarchy.

H6: Media coverage in countries with cultural emphasis on Harmony is more likely to refer to risks of nuclear energy and less likely to refer to benefits of nuclear energy than countries with cultural emphasis on Mastery.

H7: Media coverage in countries with cultural emphasis on Harmony is more likely to refer to (high) crisis severity than countries with cultural emphasis on Mastery.

The first hypothesis (H1) was formulated with the argumentation that countries with the autonomous cultural background will emphasize more attribution of causes to an internal cause, which is in the case of Fukushima crisis framing, Tepco. Contrariwise, countries with the cultural emphasis of embeddedness will emphasize more on external causes. This statement is also supported by the principal of FAE, with certain exceptions. The reason is, according to the research undertaken by Schwartz (Schwartz, 1999) not all countries which are considered autonomous culture are western countries. In the chart written by Schwartz, there are several Asian countries that could be closely considered as autonomous rather than embedded culture based. These countries are for instance Thailand, South Korea, and most importantly Japan, which is one of the country samples scrutinized in this research. Nevertheless, the empirical findings will later on discuss further regarding the matter.

The second set of the hypotheses (H.2 and H.2.1) was built on the same concept with H1, which is trying to answer the tendency of media coverage regarding attribution of responsibility. H.2.1 differs further regarding the matter with the attempt to scrutinize the tendency of attribution toward persona or the company as a whole.

The third hypothesis (H3) is based on the same principle as the first and second hypothesis, with the base principal of Kelley's covariation, in specific consensus, taken into account of the formulation building.

The next set of Schwartz's cultural value categorization is formulated in the next two hypotheses (H4 and H5) which are egalitarianism vs. hierarchy. H4 deals with negative evaluations of crisis response, while H5 deals with compassion.

Mastery countries tend to exploit natural resources, since the basic trait is competence and ambition, while contrariwise harmony countries are trying to take nature as it is and nurture it. Consequently, in accordance with this principle, H6 was formulated by stating that harmony based countries are more likely to be transparent to refer to the risk of nuclear energy. Thus, the same principle follows, regarding media coverage. This formulation is then built further and incorporated in H7, which stated that the media coverage in harmony based countries is more likely to refer to (high) crisis severity than mastery basedcountries (Schwartz, 1999).

### 3. Discussion

*Framing.* Framing is the kind of "scattered conceptualization" and that it "essentially involves selection and salience". In order to completely understand this definition, some of its aspects need to be clarified. Firstly, to make a piece of information salient means to make it more noticeable, meaningful, or memorable to audiences. An increase in salience enhances the probability that receivers will perceive the information, discern meaning and thus process it, and store it in memory (Fiske, Taylor, 1991). "[F]rames, then, define problems – determine what a causal agent is doing with what costs and benefits, usually measured in terms of common cultural values; diagnose causes – identify the forces creating the problem; make moral judgments – evaluate causal agents and their effects; and suggest remedies- offer and justify treatments for the problems and predict the likely effects." These four framing functions can be contained in one single sentence of an article, while another sentence can have none of them and it is not necessary the concrete article to include themall (Entman, 1993).

*Problem Definition.* The problem definition determines what aparticular actor – the "Causal agent" – is doing with what cost and what benefits". This frame element includes both thecentralissueunderinvestigationandtherelevantactors.(Entman, 1993).These two define the central problem of a news story. In our case the problem definition is connected with the

determination of the main topic which a concrete article deals with and the important actors (individuals, institutions or organizations) that play a significant role in the crisis situation (Matthes, Kohring, 2008).

*Causal Interpretation.* The second frame element diagnoses what are the causes for occurring of a certain problem, in the particular case – for the crisis. A causal interpretation is an attribution of failure or success regarding a specificoutcome. (Matthes, Kohring, 2008).

*Causal Attribution theories.* "Attribution theory examines what information is gathered and how it is combined to form a causal judgment" (Fiske, Taylor, 1991).

Individualshave a fundamental need to reduce uncertainty with regard to perceptions of their environment. By trying to attribute certain causes to observed events or behavior, people feel more confident about what they observe. He further developed this theory to two main ideas about how individuals attribute behaviors:

1) When individuals explain the behavior of others, they tend to look for enduring internal attributions, like characteristics ofpeople.

2) However, when individuals try to explain their own behavior, they tend to make external attributions, such as situational orenvironmental (Heider, 1958).

People receive information from multiple observations, and act like scientists by trying to perceive the covariationof an observed effect and its causes, which can vary from certain persons, to entities, or situational circumstances. Upon deciding the causes of an observed effect, people take into account three types of information that influence their judgments; consensus, distinctiveness and consistency (Kelley, 1967).

*The Fundamental Attribution Error (FAE).* One of the biggest observed mediating factors in causal attribution is the correspondence bias, namely the preference for explanations of internal attributes instead of external (Gilbert, Malone, 1995). Sometimes correspondence bias results in the fundamental attribution error (FAE; Ross, 1977). "People tend to think that others are as they act, and the intellectual roots of this tendency are so deep in Western thought"(Gilbert, Malone,1995: 24). East Asians are less likely to show correspondence bias in comparison with Westerncultures (Choi et al., 1999).

*Moral Evaluation.* The moral evaluation presents the attribution of the responsibility frame or who might have moral accountability for an incident and its outcomes (Matthes, Kohring, 2008).

An evaluation can be positive, negative, or neutral and can refer to different objects. Attribution of responsibility requires a specific combination of actors: Actor A (sender of attribution) makes judgments about whether a certain Actor B (receiver of responsibility) is responsible for a specific object (object of attribution). The sender of attribution is an actor who holds someone responsible for something and respectively, the receiver is an actor who is held responsible. The sender and the receiver can be an individual, groups, organizations, as well as institutions (Heider, 1958).

*Treatment Recommendation.* Frames suggest remedies, in such a way that "offer and justify treatments for the problems and predict the likely effects" (Entman, 1993). Treatment recommendations are all types of guidance prescriptions and pieces of advice, given in order to protect relevant actors and to minimize the harm of the current crisis, as well as to prevent the occurring of another comparable crisis. These recommendations can include a call for or against a certain action (Matthes, Kohring, 2008), as in the particular case they are identified as being social, medial, financial, organizational or technological type.

*Situational Crisis Communication Theory (SCCT).* According to SCCT, in organizational crises stakeholders make judgments about whether the organization is responsible for the crisis and its outcomes. The assumption is, the higher the attribution of an organization's responsibility, the greater the damage of its reputation (Coombs, Holladay, 2004). The dimension of personal control/locus indicates if an event's cause is something about the actor and controllable by that actor, therefore it reflects the intentionality of an act. Respectively, external control states to what extent an event is controllable by other actors, while stability refers to whether an event occurs frequently or not. Organizational crisis responsibility is received by stakeholders as strongest when there is perceived personal control over the crisis, there is low external control and the cause is stable, therefore the organization has a history of crises (Coombs, Holladay, 2004).

Reputation in crisis situations can be positively influenced by selecting the appropriate crisis response strategy depending on the situations.  However, SCCT is by no means a flawless remedy

for organizational reputation. Crises are highly complex situations which cannot be reduced to restrict categories, plus since different stakeholders can be involved differently in an organization (for instance public or shareholders) the degree of perceived responsibility and attribution depends on these different views of a crisis (Coombs, 2007).

*Schwartz's Cultural Values*. Values are "conceptions of the desirable that guide the way social actors (e.g. organizational leaders, policy-makers, individual persons) select actions, evaluate people and events, and explain their actions and evaluations". Therefore values appeared to be trans- situational criteria or goals, which are ordered by importance as guiding principles in life (Schwartz, 1999).

These cultural values are the bases for specific norms that tell people what is appropriate in various situations. The value priorities that characterize a society by aggregating the value priorities of individuals. By validating data from 49 nations from around the world, he identified seven types of values, structured along three polar dimensions: Conservatism versus Intellectual and Affective Autonomy; Hierarchy versus Egalitarianism; and Mastery versus Harmony. The cultures can be compared based on these types of values by considering three issues that confront all societies.

The first issue is to define the nature of the relation between the individual and the group and includes Conservatism, Intellectual and Affective Autonomy. Conservatism (or Embeddedness) describes cultures in which the person is viewed as an entity who is embedded in the collectivity and finds meaning in life largely through social relationships, through identifying with the group and participating in its shared way of life (Schwartz, 1999).

The opposite pole of this dimension – Autonomy –  describes cultures in which the person is viewed as an autonomous, bounded entity who finds meaning in his or her own uniqueness, who seeks to express his or her own internal attributes (preferences, traits, feelings, motives) and is encouraged to do so. There are two types of Autonomy, as an Intellectual Autonomy refers to ideas and thought, and the Affective Autonomy –  to feelings andemotions.

The second issue is to guarantee responsible behavior that will preserve the social fabric, meaning that the people have to consider the welfare of others, coordinate with them, and thereby manage the unavoidable social interdependencies. This issue includes the values Hierarchy and Egalitarianism. Hierarchy is based on power differences, relying on hierarchical systems of ascribed roles to ensure socially responsible behavior. The cultural emphasis here is on the legitimacy of an unequal distribution of power, roles and resources (Schwartz, 1999). The alternative pole – Egalitarianism can be described as "cultural emphasis on the transcendence of selfish interests in favor of a voluntary commitment to promoting the welfare of others (equality, social justice, freedom, responsibility, honesty)."

The last issue is the relation of humankind to the natural and social world, as Mastery and harmony is differentiated. Under Mastery one should understand the "cultural emphasis on getting ahead through active self-assertion (ambition, success, daring, competence)". Harmony means accepting the world as it is, trying to fit in rather than to change or exploit it (Schwartz, 1999).

### 4. Results

*H1:* In order to find out the relationship between countries and causes the cross-tabs analysis was conducted for every variable. For this procedure independent variable "countries" was recoded into two groups i.eone into Autonomy – and other as Embeddedness-based (conservative) types of culture. The dependent variables which are needed for testing of hypothesis do not have to be recoded.

In the case of causes of Fukushima crisis connected with Tepco the cross-tab analysis of cultureemphasis on likelihood to blame this electric power company, this part of the hypothesis was rejected: countries grouped as Autonomy-based were likely to attribute to internal causes (3.4 % of the cases) as Conservative countries (3.3 % of the cases). Moreover, Kreskas's Lambda had a value of 0, consequently, it means that there is no  relationship between the variables as well as the Pearson Chi-square had a value of 0.902 (>0.05) so it was not significant, the statistical options of Phi, Cramer's V and contingency coefficient, which measures the association between the country and the causes, had the value of 0.013 that showed weak effect betweenvariables.

The same situation can be seen in relating to technical causes (external), where following to the hypothesis the assumption about the tendency of Conservative countries to more likely referring to external causes than Autonomy-based countries was not confirmed. After the

conducting of cross-tab operation it has become obvious that both countries with a cultural emphasis on Autonomy and Conservative countries referred to technical problems equally (7.2 % and 8.2 % of the cases respectively). Additionally, the value of Chi-square was 0.516 (>0.05) so the connection of variables cannot be considered as significant. The Lambda had again a value of 0 and Phi's, Cramer's V and the contingency coefficient's values of 0 indicates the absence of a relationship.

However, the remaining part of the hypothesis concerning natural problems (external causes) was confirmed. The assumption that embedded countries attribute to external causes of nuclear crisis often than autonomous countries is proved. Cross-tab analysis demonstrates that 47.7 % of cases from conservative countries referred to natural causes while only 39 % of autonomous countries cases attributed to them. Furthermore, Chi-square had a value of 0.004 (< 0.05) that is why variables have a strong relationship. Nevertheless, the meaning of Kruskal's Lambda had a value of 0 while Phi, Cramer's V and contingency coefficient had a value of 0.85 that meant moderate to strong effect between variables. Thereby, with a purpose to check getting data another test was conducted only for this variable in regard tocountries.

**Table 1.** Cultural emphasis and reference to internal and external causes: effects of cultural emphasis on likelihood with ref. of Tepco

| | | | Tepco's causes | | Natural causes | | Technical causes | |
|---|---|---|---|---|---|---|---|---|
| | Not mentioned | Individual level | Organizational level | Not mentioned | Affirmation | Not mentioned | Mentioned | |
| Autono my | 714 (96.6 %) | 20 (2.7 %) | 5 (0.7 %) | 451 (61 %) | 288 (39%) | 686 (92.8%) | 53 (7.2 %) | |
| Embe deddn ess | 412 (96.7%) | 12 (2.8 %) | 2 (0.5 %) | 223 (52.3%) | 203 (47.7%) | 391 (91.8%) | 35 (8.2%) | |
| | | Chi²=0.902 | | Chi²=0.004 | | Chi²=0.516 | | |

Independent T-Test was also conducted to compare the means of the autonomous and conservative countries in a sense of natural causes. The results showed that the articles from the countries with embedded cultures refer more often to natural causes (M=0.48).

In comparison to the countries which emphasis on autonomous values (M=0.39), despite the fact that the articles that analyzed from the second ones were less (n=426) than those from the first group (n=739). Moreover, the t-test was significant as well (0.004).

**Table 2.** T-test between Autonomous/Conservative Countries and Natural causes

| Countries | N | Mean | Std. Deviation | St. Error Mean |
|---|---|---|---|---|
| Autonomy | 739 | 0.39 | 0.488 | 0.18 |
| Embededdness | 426 | 0.48 | 0.500 | 0.24 |

*H2:* Out of 1165 total number of cases, the Japanese government was blamed just 23times for the crisis while Tepco was attributed as a cause of Fukushima disaster 39 times in the coverage of newspapers analyzed.

**Table 3.** Crosstab on Newspapers' attribution to Tepco between autonomous and embedded cultures

| Newspapers'' attribution to Tepco | Autonomous Cultures N=742 | Embedded Cultures N=427 | Total N=1165 |
|---|---|---|---|
| No. attribution | 714 (96.6 %) | 412 (96.7 %) | 1126 (96.7 %) |
| Attribution | 25 (4.4 %) | 14 (3.3 %) | 39 (3.3 %) |

The above table shows that there are a lot of articles without any attribution of responsibility for Tepco. The results for applied Chi-square has shown that there is truly an insignificant difference between countries with cultural emphasis on Autonomy and those with cultural emphasis on Embeddedness (P=2). Due to such a weak value for Chi-square, T-test was not conducted. Therefore, the assumption that media coverage in countries having cultural emphasis on autonomy is more likely to attribute the responsibility for Fukushima crisis to Tepco seems to be falsified.

**Table 4.** Crosstab on Newspapers' attribution to Japan between autonomous and embedded cultures

| Newspapers" attribution to Tepco | Autonomous Cultures N=742 | Embedded Cultures N=427 | Total N=1165 |
|---|---|---|---|
| No. attribution | 716 (96.9 %) | 426 (100 %) | 1142 (98.0 %) |
| Attribution | 23 (3.1 %) | 0 (0 %) | 23 (2.0 %) |

While analyzing the results we found that coverage of newspapers in countries having autonomous cultures actually held the Japanese government responsible for the Fukushima crisis, while in this case, not a single newspaper coverage in embedded cultures attributes responsibility of Fukushima crisis to the Japanese government. Therefore, this part of the hypothesis can beaccepted.

In order to further confirm this hypothesis t-test was also run in order to check the cultural preferences of Embeddedness than to countries with cultural acquaintances towards autonomy.

**Table 5.** Mean difference between autonomous and embeddedness cultures on newspapers" attribution to Japanese government for Fukushima crisis

| Countries | N | Mean | Std. Deviation | St. Error Mean |
|---|---|---|---|---|
| Autonomy | 739 | 0.03 | 0.174 | 0.006 |
| Embedded | 426 | 0.00 | 0.000 | 0.000 |

The hypothesis shows interesting and significant results (0.000) as we came to a conclusion that in the limited number of cases in which Japanese government held responsible for the crisis, only autonomous countries held it responsible for the crisis at Fukushima power plant. Perhaps the reason for it most of the blame game was done from within Japan. Therefore this hypothesis has beenaccepted.

*H2.1:* To test this hypothesis crosstab was run again.

**Table 6.** Cross tabulation on Newspapers" level of attribution to Tepco between autonomous and embeddedness cultures

| Level of blaming of Tepco | Autonomous Cultures N=25 | Embedded Cultures N=14 | Total N=39 |
|---|---|---|---|
| Organizational | 5 (20.0 %) | 2 (14.7 %) | 7 (28.6 %) |
| Individual | 20 (80 %) | 12 (85.7 %) | 32 (82.1 %) |

The above table shows that our assumption in the form of hypothesis has proved to be wrong as we came to a conclusion that in this case coverage of newspaper in embedded cultures were blaming Tepco on an individual level while autonomous cultures were more likely to attribute the responsibility of Fukushima crisis to Tepco on an individual level. Therefore, this hypothesis is also rejected. But, due to a limited number of cases, the given results do not provide a sufficient basis for further elaboration and interpretation.

H3: According to Schwartz's map of cultural values, the countries in this research that can be identified as conservative/embedded, are Singapore and to a lesser extent India, while countries with an emphasis on Autonomy are UK, USA, Japan and Germany. This research has applied Kelley's

covariation principle (Kelly, 1973) dimensions of information: consensus (Do other nuclear power companies have similar crises?), distinctiveness (Does Tepco have other crises apart from this nuclear crisis?), and consistency (Has Tepco had similar nuclear crises in the past?). In this hypothesis media coverage in UK, USA, Japan and Germany is expected to more likely focus on consensus, consistency and distinctiveness information than media coverage in Singapore and India.

The respective dependent variables in the codebook that operationalize this hypothesis did not need to be recoded. The independent variable of the country was recoded into two groups "Autonomy" and "Embeddedness", both of which included their respective countries. Cross-tabs analysis was conducted three times for all variables (consensus, distinctiveness, consistency) in relation to the countries, in order to display the relationship of the two variables in tabular form.

In one of the cases, the cross-tabulation of the effect of cultural emphasis on the likelihood of consensus information, the hypothesis was almost supported by the data: Countries grouped together as Autonomous were less likely to refer to high consensus information (11.9 % of the cases) than Conservative countries (14.3 %). Although the Kruskal's Lambda had a value of 0.003 (almost 0), therefore it implied that there was no relationship between the variables and the Pearson Chi-square had a value of 0.66 (> 0.05) so it was not significant, the statistical options of Phi, Cramer's V and contingency coefficient, which measures the association between the country and the information, had the value of 0.68, which was really close to 0.7, indicating a moderate to strong effect between the variables. Therefore, an alternative test was also conducted only for this variable in connection with the country variable.

**Table 7.** Cultural emphasis and reference to consensus information: Effects of cultural emphasis on the likelihood of reference to consensus, distinctiveness or consistency information (dependent variable)

| N= 1165 | Consensus | | | Distinctiveness | | | Consistency | | |
|---|---|---|---|---|---|---|---|---|---|
| | Not Mentioned | Low | High | Not Mentioned | Low | High | Not Mentioned | Low | High |
| Autonomy | 637 (86.2 %) | 14 (1.9 %) | 88 (11.9 %) | 720 (97.4 %) | 8 (1.1 %) | 11 (1.5 %) | 733 (99.3 %) | 1 (0.1 %) | 4 (0.5 %) |
| Embeddedness | 349 (81.9 %) | 16 (3.8 %) | 61 (14.3 %) | 418 (98.1 %) | 3 (0.7 %) | 5 (1.2 %) | 425 (99.8 %) | 0 (0 %) | 1 (0.2 %) |
| | Chi² = 0.066 | | | Chi² = 0.734 | | | Chi² = 0.555 | | |

The T-Test showed that countries with a cultural emphasis on autonomy are more likely to refer to consensus information (M= 0.010) than countries with cultural emphasis on conservatism (M= 0). Moreover, the T-Test for equality of means was not significant, so the hypothesis that autonomous countries are less likely to refer to consensus information than conservative/embedded countries is rejected.

**Tab. 8.** Mean of consistency information reference: Autonomous and Embedded countries

| | Consistency | | | |
|---|---|---|---|---|
| | N | Mean | Levene's Test | T-Test for Mean Equality |
| Autonomy | 738 | 0.010 | 0.066 > 0.05 | t = 0.920 |
| Embeddedness | 426 | 0 | | p= 0.358 > 0.05 |

In the cases of distinctiveness and consistency, the hypothesis was rejected by the empirical data. The Chi-square value for the cross-tabs of countries in connection with distinctiveness information was 7.34, a value not significant at all (> 0.05) and the Lambda had a value of 0, which means that one variable in no way predicts the other. Moreover, the Phi, Cramer's V and the contingency coefficient had the values of 0.23, which indicate a weak relationship between the two variables (0–0.3). So, the empirical data support the rejection of the hypothesis that countries with cultural emphasis on Autonomy refer less likely to (high) distinctiveness information than

countries with cultural emphasis on Conservatism/Embeddedness.

Finally, The Pearson Chi-square for countries in connection with consistency information had a value of 5.55, which again means it is not significant at all (> 0.05). The Lambda had again a value of 0 and Phi's, Cramer's V and the contingency coefficient's values of 0.32 indicates a moderate relationship. Yet, the effect is too weak, in combination with the rest of the empirical data, so the assumption that countries with cultural emphasis on Autonomy refer more likely to (high) distinctiveness information than countries with cultural emphasis on Conservatism/Embeddedness is also rejected, so the whole hypothesis cannot be confirmed by empirical data.

One possible explanation may lie in the absence of any reference to consensus information from either country group (80.3 % for the autonomous countries, 87 % for the embedded ones). It may be the case that due to the severity and the proximity of the crisis in the embedded countries, the press focused on pressing issues, such as the condition of the survivors or the spread/control of the situation rather than referring to similar crises in Tepco or other nuclear companies.

East Asian cultures, like India and Singapore, the Conservative group of countries, are less likely to show correspondence bias in comparison with Western cultures (Choi et al., 1999).

*H4:* For the aim of the analysis the countries were united in 2 groups – egalitarian and hierarchical countries, as the first one embraced 338 and the second one 831 articles, respectively 28.9 % and 71.1 % of the whole sample.

As the unfavorable assessment of the crises response corresponding to these variables to be outlined, the number of the negative evaluations was counted and a new variable – Negative Crisis Response was formed. This new variable takes values from 0 to 5, as 0 means that none of the abovementioned variables had a negative appraisal and 5 – which they all had. Presuming that a particular country evaluated Tepco's reputation negatively when in the articles is mentioned one or more than one unfavorably assessed variables (e.g. 1, 2, 3, 4, or 5), two further groups were formed called „no negative evaluation" and „negative evaluations", as the first group included the cases when no unfavorable assessment was given and the second one – when negative evaluations  or one or more of the variables werementioned.

The result of running a crosstab with the variables Egalitarian/Hierarchical Countries and Negative Crisis Response showed that most of the analyzed articles did not tend to assign unfavorable assessment of the Tepco's crisis response or they didn't comment it at all (93.5 %), as only 6.5 % gave a negative evaluation of it.

**Table 9.** Crosstab between Egalitarian/Hierarchical Countries and Negative Crisis Response

| 5.7 % of the newspapers of the countries pointed as hierarchical – USA, India, Japan, and Singapore – appraised the organization's reputation negatively in comparison to 8.6 % of the egalitarian ones – Germany and UK. Drawing a conclusion from these data, the expectations were confirmed. | Negative Response | | Total |
|---|---|---|---|
| | No negative evaluation | Negative evaluation | |
| Egalitarian Countries | 309 (91.4 %) | 29 (8.6 %) | 338 (100 %) |
| Hierarchical Countries | 784 (94.3 %) | 47 (5.7 %) | 831 (100 %) |
| Total | 1093 (93.5 %) | 76 (6.5 %) | 1169 (100 %) |

It is interesting to note that when a crosstab with the different countries and not with two groups of them is run, the expectations were again confirmed for all of the countries, except for Japan. Japan as hierarchical culture was expected to be less negative in the evaluation of the organization's crisis response, but the results show that the percentage of unfavorable appraisals in the Japanese articles was higher than those of the other hierarchical countries and also higher than one of the egalitarian ones – UK. The reason behind this could be that the accident has happened

in Japan, so it is more affected by the crisis than the other countries and these results in more judgmental attitude towards the actors who were involved in it.

**Table 10.** T-test between Egalitarian/Hierarchical Countries and Negative Crisis Response

|  | Countries | N | Mean | Std. Deviation | St. Error Mean |
|---|---|---|---|---|---|
| Negative | Egalitarian | 338 | 0.0858 | 0.28048 | 0.01526 |
| Response | Hierarchical | 831 | 0.0566 | 0.23114 | 0.00802 |

The significance index of the Person Chi-square had a value of 0.066, which indicates that the relationship between the two variables is not so significant. The same was valid for the Likelihood Ration (0.073) and the Linear-by-Linear Association (0.066). There were no cells that have expected count less than 5 as the minimum expected count was 21.97. This means a reduction in the test power of the Chi-Square test is not to beexpected.

Cramer's V had a low value (0.054) which means that there is a weak association between the type of country and whether they assessed the organization's response negatively. However, the coefficient was not significant (0.066). It was the same by Phi and Contingency Coefficient.

The crosstab didn't give a clear result, that's why an independent t-test was run. Its goal was to compare the means of the negative coverage of Tepco's crisis response between the hierarchical and egalitarian countries. The results showed that the articles from the countries with egalitarian emphasis refer more often to negative evaluations of the crisis response (M=0.0858) in comparison to the countries which emphasize on hierarchical values (M=0.0566), as the articles analyzed from the first ones were less (n=338) than those from the second group (n=831). However, the t-test was also not so significant (0.066).

From the result of these analyses, we can conclude that the hypothesis could be confirmed but with restrictions.

*H5:*In accordance with the hypothesis, it is expected that egalitarian country – in this case only Germany- shows higher compassion in the crisis response strategy which is represented by the coded media coverage. After the analysis was conducted, the result is contrariwise. The country which has the highest result is Japan (6.5 %) followed by India (5 %). While Germany, which is expected to have the highest percentage, only reach 4 %. Consequently, this could imply that the hypothesis is somehow rejected. However, the chi-square result shows insignificance with a value of 0.2.

**Table 11.** Crosstab between Egalitarianism and Hierarchy on Compassion

|  | USA | UK | India | Singapore | Japan | Germany |
|---|---|---|---|---|---|---|
| Positive | 0 % | 4.3 % | 4.9 % | 5 % | 6.5 % | 4 % |
| Neutral | 0 % | 2.1 % | 1.5 % | 0 % | 9 % | 7 % |
| Negative | 0 % | 1.6 % | 1.5 % | 6 % | 1.2 % | 7 % |

In the second test, Japan reached the highest percentage of neutral response 9 %. However this test was also insignificant, since the chi-square value is 0.3. What is left to answer the hypothesis is then the last test. Nevertheless, once again the same supporting statement was interpreted in this result, which opposed the hypothesis. From all the country samples, Germany is statistically rated as the country with the highest negative crisis response (7 %). Consequently italso implies that compassion was not shown in Germany's media coverage, especiallysince the rate of compassion shown was also remarkably low. Nevertheless, it is essential to also note that the test shows no significance, since the chi-square value only reached 0.7 which also show a preceded limit of error possibility.

Despite the fact that the test might not be reliable, due to (a) insignificant chi-square for all three tests and (b) very low amount of valid data, perhaps it is still possible to relate the result with Ross' FAE. While the hypothesis expects Germany to hold the highest percentage of compassion (positive), and India the lowest (means highest on negative), the result shows contrariwise. India has the second highest compassion shown (4.9 %). Meanwhile Germany, though not significantly different (4 %) is the second lowest to show compassion, and it also shows the worst (negative) compassion (7 %). Now according to Ross (Ross, 1977) it is a Western country which shows the tendency to FAE, which is the tendency to underestimate the role of external factors. This also relates to the result, which is also supported by Choi et al. (Choi et al., 1999 ) who stated that Asian countries (especially East Asians) are less likely to show correspondence bias. On the other hand, focusing on the internal cause, which in this case is Tepco, consequently also means that the result of news framing will most likely expose less compassion ofTepco toward the stakeholder due to a higher probability of criticism toward the companyitself.

Therefore, there is quite a probability if the more valid coding result is to be gathered, that the hypothesis will be at least partially rejected with certain restrictions. The reason is, though the T-test is also insignificant (0.6) with the countries grouped in two (the neutral grouped with negative), the result has no significant difference with the test of individual countries ungrouped. Nevertheless, the result shows that compassion is rather shown in hierarchical countries (M = 0.49) rather than egalitarian (M=0.39). Overall, Asian country samples show higher compassion toward the Western countries, and only Singapore shows a high percentage of low compassion (negative crisis response), though it also shows almost the same percentage of compassion.

*H6:* (Schwartz, 1999) distinguished Harmony from Mastery as the first one refers to accepting the world as it is and the second one emphasizes the assertiveness for changing the world in order to get ahead. Therefore, it can be assumed that countries with harmonious emphasis, where groups and individuals tend to fit harmoniously into the natural and social world and to think environmentally friendly (Schwartz, 1999) will be more likely to refer to the risks of nuclear energy than to benefits. On the opposite, the master countries, seen aiming at keeping the control over the environment and changing the world (Schwartz, 1999), are supposed to emphasize more on the beneficial side of the nuclear energy. Therefore, the coverage from Germany (Harmony) is expected to refer more to the risks and less the benefits, connected with the nuclear energy compared to UK, USA, India, Japan and Singapore(Mastery).

For the aim of the analysis the countries were united in 2 groups – harmonious and master countries, as the first one embraced 151 and the second one 1018 articles, respectively 12.9 % and 87.1 % of the wholesample.

The codebook distinguishes between 5 types of risks of nuclear power – general risks, cancer, birth deformities, reduction of life expectancy and terrorist acts, and 6 types of benefits – general benefits, reduction in air pollution, electricity price stability, reduced reliance on energy imports, diversified energy supply, and jobs opportunities. For the assessment of risk and benefits associated with the Nuclear power – two variables i.e Nuclear Risks and Nuclear Benefits were formed. As there are 5 indicated risks and 6 benefits, corresponding to the nuclear power, these two variables take values form 0 to 5 and from 0 to 6, as 0 shows that none of the abovementioned variables was mentioned and 5 (6) – that they all were. It was assumed that a particular country refers to risks (or benefits) of nuclear energy when in the articles one or more than one risk (benefit) were mentioned (e.g. 1, 2, 3, 4, or 5). Therefore, new groups were formed – "no nuclear risks", respectively "no nuclear benefits" and "nuclear risks", respectively "nuclear benefits". The first groups included the cases when no risks (benefits) were pointed out and the second one – when one or more than one risks (benefits) of the nuclear power were mentioned.

The result of running a crosstab with the variables Harmonious/Master Countries and Nuclear Risks showed that most of the analyzed articles did not tend to connect the nuclear power with risks or they didn't comment it at all (87.7 %), as only 12.3 % of them referred to the above-mentioned risks.

10.7 % of the master countries" articles mentioned one or more nuclear risks compared to 23.2 % for the harmonious one – Germany. Drawing a conclusion from these data the expectation that Germany would refer more to the nuclear risks compared to the other countries was confirmed.

The significance index of the Person Chi-square had a value of 0.000 that means that the test is highly significant and indicates that there is a strong relationship between the two analyzed variables. The Likelihood Ration (0.000) and the Linear-by-Linear Association (0.000) showed the same. There were no cells that have expected count less than 5 as the minimum expected count was 18.60. This means a reduction in the test power of the Chi-Square test is not to be expected.

**Table 12.** Crosstab between Harmonious/Master Countries and Nuclear Risks

|  | Nuclear Risks | | Total |
|---|---|---|---|
|  | No nuclear risk | Nuclear risk | |
| Harmonious Countries | 116 (76.8 %) | 35 (23.2 %) | 151 (100 %) |
| Master Countries | 909 (89.3 %) | 109 (10.7 %) | 1018 (100 %) |
| Total | 1025 (87.7 %) | 144 (12.3 %) | 1169 (100 %) |

Cramer's V had a low value (0.127) which shows that there is a weak association between the type of country and the referring to the nuclear risks. The coefficient was highly significant (0.000). It was the same by Phi and Contingency Coefficient.

The following running of crosstab with the variables Harmonious/Master Countries and Nuclear Benefits showed similarly that most of the analyzed articles did not refer to the benefits of the nuclear power (96.6 %) and only 3.4 % of them referred to the abovementioned benefits.

Looking at the numbers that depict how often the newspapers from the different countries mentioned one or more nuclear benefits, the percentage for the mastery cultures is 3.3 % and for the harmonious one – Germany – 4.0 %. From these data it could be concluded that the expectations are not met, because Germany referred to the benefits of nuclear energy slightly but still more than the other countries.

**Table 13.** Crosstab between Harmonious/Master Countries and Nuclear Benefits

|  | Nuclear Benefits | | Total |
|---|---|---|---|
|  | No nuclear benefit | Nuclear benefit | |
| Harmonious Countries | 145 (96.0 %) | 6 (4.0 %) | 151 (100 %) |
| Master Countries | 984 (96.7 %) | 34 (3.3 %) | 1018 (100 %) |
| Total | 1129 (96.6 %) | 40 (3.4 %) | 1169 (100 %) |

However, Person Chi-Square showed that the test is not significant (0.689). There were no cells that have expected count less than 5 as the minimum expected count was 5.17 which mean that a reduction in the power of the Chi-Square test is not to be expected.

Cramer's V had a low value (0.012) which shows that there is a weak association between the type of country and the referring to the nuclear risks. The Phi and the Contingency Coefficient also supported this conclusion. However, they all were not significant.

In order clearer result to be received, an independent t-test was run aiming at making a comparison of the means of the nuclear risks and benefits between the countries with emphasis on Harmony and those with emphasis on Mastery. The results showed that the articles from the harmonious country refer more often to the risk of the nuclear power (M=0.2318) compared to the mastery countries (M=0.1071), as the articles analyzed from the first one were less (n=151) than those from the second group (n=1018). Moreover, it also showed that Germany refers slightly more to the benefits of nuclear energy (M=0.0397) than the mastery cultures (M=0.0334) with the same observation about the numbers of articles. The t-test was highly significant for the first part of the analysis (0.000) but not significant for the second part (0.708).

**Table 14.** T-test between Harmonious/Master Countries and Nuclear Risks and Nuclear Benefits

|  | Countries | N | Mean | Std. Deviation | St. Error Mean |
|---|---|---|---|---|---|
| Nuclear | Harmonious | 151 | 0.2348 | 0.28048 | 0.01526 |
| Risks | Master | 1018 | 0.1071 | 0.23114 | 0.00802 |

| Nuclear | Harmonious | 151 | 0.0397 | 0.19599 | 0.01595 |
| Benefits | Master | 1018 | 0.0334 | 0.17976 | 0.00563 |

As a result of these analyses we can conclude that only the first part of the hypothesis could be confirmed. There was no proof found that harmonious countries are less likely to refer to the benefits of nuclear energy than master countries.

*H7:* As far as crisis severity is concerned, the variables of the study that operationalize this question are the different effects of the nuclear disaster that were recorded in the newspaper articles (economic, political, health/psychological and environmental effects). Since the hypothesis refers to the dependent variable not only as of simple mention of the crisis, but to the high or low severity, the effects were recorded according to their reference as actual and potential or under the claim of no effect in the press. In their primary form in the codebook, the data was arranged in a nominal scale so it was not ordered but rather allocated todistinct categories. As it has been mentioned in the codebook description section, the values that the effects variables can take range as 0=no effects mentioned, 1=actual effects mentioned, 2=potential effects mentioned, 3=both actual and potential effects measured and 4= claim of no effect.

In order to have a measurable scale of the climax of crisis severity mentioned, the four effects variables were rearranged to an ordinal, almost interval scale (data whose differences between values can be quantified in absolute terms). The new scale had the extreme values of no mention and of actual effect mention, while the values in between range from one extreme to another: 0=no effects mentioned, 1=claim of no effect, 2=potential effects mentioned, 3=both actual and potential effects measured, in which also the value of „actual effects mentioned" was merged. The logic behind this scale is that in any case that an actual effect was mentioned, the crisis severity is considered as high. Afterward, the dependent variable was created by an index of the combination of the four different variables. The index was built by counting how many times an actual effect was mentioned, with possible values from 0 (no actual effect was mentioned) to 4 (four times actual effects were mentioned). Finally, this variable was recoded to the final variable where 1=no mention of actual effect and 2=actual effects were mentioned, so if an actual effect was mentioned, the crisis severity was considered high.

Then, a cross-tabs analysis was conducted, using the modified country and the new variable of actual effects mentioned. Although the hypothesis was verified at the cross-tabs, where the country with emphasis on Harmony was slightly more likely to refer to actual effects (60.3 %) and therefore to high crisis severity, than countries with emphasis on Mastery (59.5 %), the Chi-square value was 0.929, which was not significant at all (> 0.05) and the Lambda had a value of 0, which means that one variable in no way predicts the other.The Phihada negative value of -0.05, indicating a weak negative relationship between the variables, while Cramer's V and the contingency coefficient had the values of 0.05, which indicate a weak relationship between the two variables (0.31 – 0.7).

**Table 15.** Cultural emphasis and reference of actual effects: Effects of cultural emphasis on the frequency of actual effects mentioned in the press (dependent variable)

| N=1165 | No effects were mentioned | Actual effects were mentioned |
|---|---|---|
| Harmony | 60 (39, 7%) | 91 (60, 3%) |
| Mastery | 412 (40, 5%) | 606 (59, 5%) |
| Chi² = 0.929 | | |

The T-Test demonstrated that countries with a cultural emphasis on Harmony are slightly more likely to refer to high crisis severity (M= 1.60) than countries with cultural emphasis on Mastery (M= 1.59).

**Table 16.** Mean of actual effects reference: Harmonic and Master countries

|  | Actual effects mentioned | | | |
|---|---|---|---|---|
|  | N | Mean | Levene's Test | T-Test for Mean Equality |
| Harmony | 151 | 1.6026 | 0.724 > 0.05 | t = 0.172 |
| Master | 1018 | 1.5953 |  | p= 0.863 > 0.05 |

The current hypothesis also allows an alternative way of operationalization, by using the variables of the regions affected by the crisis effects. For all effects in the codebookthe scale of localization ranged as follows: 0=no region mentioned, 1=local level mentioned, 2=regional level mentioned, 3=international level mentioned, 4=global level mentioned, 5=ambiguous but beyond the local level. The idea behind using these variables to build an index and use it as a dependent variable is that if the nuclear crisis is mentioned beyond the local level, then its severity is high because it exceeds domestic limits. Therefore, an index was built out of the four regional variables (region affected economically, politically, health wise/ psychologically and environmentally), where the values of 2, 3, 4 and 5 were combined as one, in order to indicate a beyond local level reference. Then, it was counted how many times a crisis reference beyond the local level was made. Again, the logic was that 0 equals no reference of beyond the local level, while 4 was the maximum times in the scale of references. The final dependent variable was recoded in a way where 1would equal no reference, so it was labeled as "low mention of severity" and 2 equaled all mentions of beyond local references, therefore labeled "high mention ofseverity". Afterward, a cross-tabulation analysis was conducted, where hypothesis was confirmed, as Harmony countries were more likely to mention more frequently beyond local regions affected by the crisis (29.1 %) than Mastery countries (27.4 %).

**Table 17.** Cultural emphasis and reference of beyond local region affected by crisis: Effects of cultural emphasis on the frequency of beyond local level region affected by nuclear crisis (dependent variable)

| N=1165 | Low severity mentioned | High severity mentioned |
|---|---|---|
| Harmony | 107 (70.9%) | 44 (29.1%) |
| Mastery | 767 (75.3%) | 251 (27.4%) |
| $Chi^2 = 0.269$ | | |

Yet, again the Chi-square had a value of 0.269 > 0.05, so it was not significant. In addition, the Lambda was 0 and the negative -0.35 Phi and 0.35 Cramer's V and contingency coefficient values indicate a moderate relationship between the variables. To verify this result, another independent T-Test was conducted in order to compare the means of high crisis severity reference between the two groups of countries.

The result showed a slight difference in the means, which supported the hypothesis (Harmony Mean= 1.2914 > Mastery Mean= 1.2466) and Leven's Test was significant (0.027 < 0.05) However, the T-test for equality of means did not get significant (p= 0.258 > 0.05).

Therefore, the hypothesis that interprets crisis severity as localization, where Harmony countries are more likely to mention more frequently beyond local regions affected by the crisis than Mastery countries can only be confirmed under certain limitations.

**Table 18.** Mean of beyond local region reference: Harmonic and Master Countries

|  | Beyond local level region affected mention | | | |
|  | N | Mean | Levene's Test | T-Test for Mean Equality |
|---|---|---|---|---|
| Harmony | 151 | 1.2914 | 0.027 < 0.05 | t = 1.183 |
| Master | 1018 | 1.2466 | | p= 0.258 > 0.05 |

### 5. Conclusion

This research is undertaken to scrutinize the difference in how each respective country undertakes the media coverage of Fukushima crisis. The basic assumption built afterward is then, how the media coverage in each country depends on several factors, especially the media system and each factor that influences it. However, it is Schwartz's cultural values that had been taken into incorporation instead. Therefore, regarding that (a) the amount of valid data that qualifies to be analyzed is very low and no matter how the analysis result turns out, (b) the power of statistical manipulation might play a role, therefore it is very essential to scrutinize the delicate findings carefully.

Second, as discussed in one of the findings, Schwartz's cultural values may not be built on the same basis. Hierarchy and egalitarianism are compared based on the nature of relationship, mastery and harmony are compared based on self-assertion of the world, while autonomy and embeddedness are compared based on power differences. Though these factors might be a valid factor to differentiate the characteristics of country types, however this might not be the case. The reason is these factors may not be the key factor that has influence toward the media system, nor may it be representative toward the difference in style of the media coverage.

One of the main element of cross-cultural research is representativeness, and not only reliability and validity. Nevertheless, it is the result of the research that may undertake the role of verifying all these matters (Brislin, 1976).

From the eight hypotheses that have been tested, three are confirmed with restrictions, two partially confirmed though also with restrictions, and three rejected, in which one of them under restriction. The first hypothesis is partially confirmed on how embedded countries are more likely having the tendency to attribute to natural causes instead of internal cause (Tepco).

As a matter of fact, according to Schwartz's cultural map (1999) Japan was the source of the issue, thus considered an important part of this research and has a strong tendency of autonomousculture.

Therefore, there are two contradictory statements in this matter (a) According to Choi et al (Choi et al., 1999) Japan as an East Asian country is supposed to show less correspondence bias, which mediates causal attributions (Kelley, 1967). This means Japan, while assessing behavior, is not supposed to underestimate external causes, which is in this case natural causes. Contrariwise, (b) Japan has a strong tendency of autonomy, which tends to attribute more to internal causes. Schwartz's cultural map (Schwartz, 1999) Meanwhile (c) the difference in using the term "autonomy" might also cause undetectable influence toward the result of the analysis. Originally, Schwartz has two types of autonomy: intellectual autonomy, which is explained as "Pursuit of ideas, intellectual directions and rights" and effective autonomy, which is defined as "Independent pursuit of affectively positive experience" (Gutterman, 2005). Furthermore, there is a possibility that Schwartz, during his research, groups Japan as "Confucianism-influenced" countries in which intellectual autonomy was stated as the area that has the largest difference. Consequently, since this statement is not explained further, while on the other hand this research used autonomy in a broader sense, once again, perhaps what could be taken as a more reliable state is the result of the research itself. One possible explanation that could be given is, this group of "Confucianism-influenced" countries has high emphasis on hierarchy and embeddedness,while tends to highly reject egalitarianism. Nonetheless, intellectual autonomy is also stated as the biggest difference within the group (Gutterman, 2005). Therefore, despite the fact that the hypothesis is only partially confirmed, in the end this statement supports the findings, in which Japan also might be an exceptional case since as an autonomy-based culture (along with US, Germany and UK), the test

analysis does not confirm their tendency of attribution to internalcauses.

Despite all the contradiction in the results, however it is still essential to note that the lacking amount of valid data is perhaps one of the factors, whether it is major or minor. Secondly, Schwartz's cultural values are not solely the factor that could explain the influence within the media system, regarding the difference of media coverage in each country or cultures. However, the results could function as a further notice that could be noted on which part of this research could be scrutinized further in future researches.

### References

Brislin, 1976 – Brislin, R.W. (1976). Translation: application and research. New York: Gardner Press Inc.

Choi et al., 1999 – *Choi, I., Nisbett, R.E., Norenzayan, A.* (1999). Causal attribution across cultures: variation and universality. *Psychological Bulletin*, 125(1): 47-63.

Coombs, 2007 – *Coombs, W.T.* (2007). Protecting organization reputations during a crisis: the development and application of situational crisis communication theory. *Corporate Reputation Review*, 10 (3): 163-176.

Dowling, 2002 – *Dowling, G.* (2002).Creating corporate reputations: identity, image, and performance. Oxford.

Entman, 1993 – *Entman, R.M.* (1993). Framing: toward clarification of a fractured paradigm. *Journal of Communication*, 43(4): 51-58.

Fiske, Taylor, 1991 – *Fiske, S.T., Taylor, S.E.* (1991). Social cognition (2nd ed.). New York: McGraw-Hill

Gilbert, Malone, 1995 – Gilbert, T.D., Malone, S.P. (1995). The correspondence bias. *Psychological Bulletin,* 115: 1: 21–38.

Gutterman, 2005 – *Gutterman, A.S.* (2005). Shalom Schwartz's Dimensions of Societal Cultures.

Heath, Millar, 2003 – *Heath, R.L., Millar, D.P.* (2003). A Rhetorical Approach to Crisis Communication: Management, Communication Processes and Strategic Responses. In Millar, D.P., Heath, R.L. (Eds.), Responding to Crisis: A Rhetorical Approach to Crisis Communication: 1-18.

Heider, 1958 – *Heider, F.* (1958). The Psychology of Interpersonal Relations. New York: Wiley.

Holt, Campbell, 2012 – *Holt, M., Campbell, R.* (2012). Fukushima Nuclear Disaster. Congressional Research Service. Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.: 1.

Kelley, 1967 – *Kelley, H.H.* (1967). Attribution theory in social psychology. In Levine, D. (Ed.). Nebraska Symposium on Motivation Lincoln: University of Nebraska Press, 15: 192–238.

Kelley, 1973 – *Kelley, H.H.* (1973). The Processes of Causal Attribution. *American Psychologist*, 28: 107- 128.

Lee, 2004 – *Lee, K.* (2004). Audience-oriented approach to crisis communication: A study of Hong Kong consumers" evaluation of organizational crisis. *Communication Research*, 31 (5): 600-618.

Lee, 2005 – *Lee, B.K.* (2005). Crisis, Culture, Community. *Community Yearbook*, 29 (1): 275-309.

Matthes, Kohring, 2008 – *Matthes, J., Kohring, M.* (2008). The Content analysis of media frames: toward improving reliability and validity. *Journal of Communication*, 58: 258.

McCombs, 2004 – *McCombs, M.* (2004). Setting the agenda: The mass media and public opinion. Cambridge: Polity Press.

McLeod, 2010 – *McLeod, S.A.* (2010). Attribution Theory - Simply Psychology. [Electronic resource]. URL: http://www.simplypsychology.org/attribution-theory.html

Neuendorf, Skalski, 2010 – Neuendorf, K.A., Skalski, P.D. (2010). Extending the utility of content analysis via the scientific method. Paper presented to the Social Science and Social Computing Workshop, University of Hawaii, Honolulu, HI.

Pantti et al. 2012 – *Pantti, M., Wahl-Jorgensen, K., Cottle, S.* (2012). Disasters and the media, Vol. 7. New York, NY: Peter LangPublishing.

Ross et al., 1977 – *Ross, L.D., Amabile, T.M., Steinmetz, J.L.* (1977). Social roles, social control, and biases in social-perception processes. *Journal of Personality and Social Psychology,* 35 (7): 485-494.

Schwartz, 1999 – *Schwartz, S.H.* (1999). A Theory of Cultural Values and Some Implications for Work. *Applied Psychology: An International Review,* 48 (l): 23-47.

Schwarz, 2008 – *Schwarz, A.* (2008). Covariation-based causal attributions during organizational crises: suggestions for extending situational crisis communication theory (SCCT). *International Journal of Strategic Communication,* 2: 31-53.

Schwarz, 2011 – *Schwarz, A.* (2011). Stakeholder Attributions in crises: the effects of covariation information and attributional inferences on organizational reputation. *International Journal of Strategic Communication*, 6 (2): 174-175.

Shaver, 1985 – *Shaver, K.G.* (1985). The attribution of blame: Causality, responsibility, and blame worthiness.

Smith, 1992 – *Smith, C.* (1992). Media and apocalypse: news coverage of the yellowstone forest fires, exxon valdez oil spill, and loma prieta earthquake. Westport, Conn.; London: Greenwood Pub. Group.
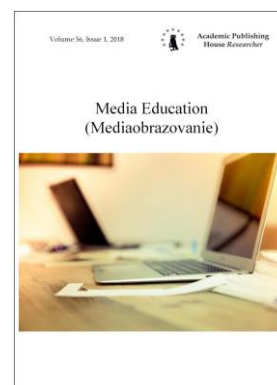
Tewksbury, Scheufele, 2009 – *Tewksbury, D., Scheufele, D.A.* (2009). News framing theory and research. In Bryant, J., Oliver, M.B. (Eds.). *Media Effects. Advances in Theory and Research:* 17-33.

Yilmaz, 2011 – *Yilmaz, S.* (2011). Fukushima nuclear disaster: a study in poor crisis communication. RSIS commentaries: 2.

# Solaris: the Integrity and Expansion of Borders

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**Abstract**

This article analyzes the novel by Stanislaw Lem "Solaris" and the films of Andrei Tarkovsky and Stephen Soderberg, put on it. The current existence of these adaptations clearly indicates the relevance of the issues addressed in the literary work and in the films. At that, they raise the question of the boundaries of the text and of how validly can adaptations be considered as a simple transfer of the novel's content. A comparative analysis of the content in the book and in the films was carried out. Its result was a table of semantic correspondences of three works, on the basis of which the universal characteristics of these works of art and their differentiatingpeculiarities were described. It was concluded that the integrity of *Solaris* is ensured by the event canvas unity. The process of adaptation simultaneously implements the expansion, duplication, modification and replacement of a number of source text elements. The films become accessible to people with various dominant types of perception, which significantly expands the scope of *Solaris's* impact on the collective. The themes stated and evenly presented in the original text, in accordance with the director's concepts, change the degree of their presence and the degree of significance in the film adaptations. The reduction of one of the topics results in the hypertrophy of another one.

**Keywords:** Solaris, Stanislaw Lem, Andrei Tarkovsky, Stephen Soderberg, media space, film adaptation, semantic similarity, text modifications.

## 1. Introduction

The sixty-year history of the Solaris novel existence in the world cultural and media space is so revealing and interesting that it deserves a brief description, which is significant in itself and helps to better focus on the essence of the problem under consideration. Here comes a short list of adaptations.

1961, Poland: the novel *Solaris* by Stanislaw Lem.
1968, the USSR: the television movie *Solaris* by Lydia Ishimbaeva and Boris Nirenburg.
1996, Germany: the chamber opera *Solaris* by Michael Obst.
1972, the USSR:the two-part wide-screen feature film *Solaris* by Andrei Tarkovsky.
1990, the USSR: the two-act ballet *Solaris* by Yuri Chaika.
2002, the USA: the feature film *Solaris* by Stephen Soderberg.
2005, Germany: Solaris, stage play by Aron Kitzig.
2007, the Russian Federation: the performance *Solaris. Inquiry* by Andrei Lyubimov.
2007, the Russian Federation: the radio show *Solaris* by Dmitry Kreminsky.
2009, Poland: the stage production *Solaris: The Report* by Natalia Korczakowska.
2011, Italy: the opera *Solaris* by Enrico Correggia.

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2011, Germany: stage play *Solaris* by Bettina Bruinier and Katja Friedrich.
2012, England: the stage production *Solaris* by Dimitry Devdariani.
2012, Austria: the opera *Solaris* by Detlev Glanert.
2015, Japan: the opera *Solaris* by Dai Fujikura and SaburoTeshigawara.
2015. Germany: live radio drama *Solaris* by Milan Pešl
2018, the Russian Federation: the ballet performance by Yuri Smekalov.
2019, Scotland: the stage production *Solaris* by David Greig.

This chronology points to several important characteristics of the subject under analysis. The interest in *Solaris* from the media space, various artists and groups of spectators is invariably rhythmic and unremitting, which with a high degree of probability allows predicting its persistence in the future. For sixty years, *Solaris* has overcome many linguistic boundaries and the boundaries of various semiotic systems that collectively structure the media space. The transitions of language and semiotic boundaries are always interconnected. On the one hand, both books and films are translated into various languages. On the other hand, the translation of a verbal text into ballet generally removes the question of linguistic differences. Currently, *Solaris* exists as a book, television and feature film, performance and ballet. That is, the original verbal text is transmitted with the help of various types of gestures, music, sounding speech and the whole range of visual means that use fine arts.

This artistic demand and various methods of broadcasting in the media space, constantly increasing in variety, are accompanied by the invariable attention of analysts.Particularly often and in great detail, Lem's novel is compared and contrasted with the films by Andrei Tarkovsky and Stephen Soderberg. Further we will consider what exactly the researchers distinguish in these works of fiction.

## 2. Materials and methods

The methodology involves comparing the texts of various art forms with each other. Despite the fact that such comparisons have constantly been carried out with various successes for a long time, they are often arbitrary and subjective: the exact mechanism for their implementation has not been developed. It should be based on universal units for comparison, which are present in different types of art and at the same time are directly correlated in their formally communicative, semantic and aesthetic functions.

For the present study, there are two such units: characters and scenes. The character here is any actor (person, fantastic creature, animal) directly or indirectly taking part in the story. The scene is a segment of the action, opposed to other segments and characterized by the unity of the actors, the visual series, their location and the semantic complexes that they translate, that is, subjects of conversation or action. In a movie, the scene may coincide with the frame, or may go beyond it. In different ways, characters and scenes exist in all projections of a literary text. They may not be found in decorative or applied art, but *Solaris* has no such projections yet.

The analysis involves three main procedures. Firstly, it is an identification of a set of characters and themes in each of the matched texts. Secondly, it is a comparison of these common sets in terms of the facts of correspondence/inconsistency, similarity/difference, identity/contrast, location and function. Thirdly, it is an interpretation of information obtained as a result of formal comparison. The rigorous implementation of these procedures gives the findings a high degree of evidence. In some cases, the details are also compared.

## 3. Discussion

The first thing that most experts notice is the development of the topic of contacting another being, mind or world. It is based on the "friend or foe" dichotomy, which is a complex mental formation that reflects the ways of perceiving the surrounding reality. Currently, the problem of relations with the Other (a different psychology, culture, value system) is more relevant than ever, since it is precisely "the possibility of contact with the Other that determines where the history of mankind will go" (Kuznetsova, 2009: 143). On the other hand, M. Jordan and J. J. Haladyn argue that in the digital age, defining the boundaries of reality becomes difficult due to the fact that modern man exists simultaneously in two worlds – real and virtual, simulating the real one. At the same time, the act of simulation may contain references not to reality, but to a model that originates outside a specific reality (Jordan, Haladyn, 2010: 253). This is clearly demonstrated by the example of guests modeled by Solaris on the basis of the scientists' unconscious memory.

According to G.M. Kirillov, these phantoms are similar to modern digital holograms due to the high accuracy of the image and the possibility of making a kind of incorporeal contact with them (Kirillov, 2016: 209).

This hyper-reality of simulacra often leads to the appearance of questions related to personal identity, to which humanity has no idea how to answer. No definition of the Other (and, of course, of oneself) is possible without reference to a standard that transcends both oneself and the Other (Csicsery-Ronay, 1985: 9). Some criteria for determining individuality are indicated in the work of V. Tumanov. First of all, it is a personal or autobiographical memory, and all the memories of a person, regardless of what served as their source, are part of his true identity (Tumanov, 2016: 362). This idea is also developed by M. Navrotskaya (Nawrocka, 2010: 103), who says that memory is the essence of man, and he cannot forget his past even among the stars, far from the Earth. Tarkovsky was fascinated by the "mechanics of memory" and believed that dreams were physical processes occurring in the body(Hall, 2011: 3); in his films, memories and dreams are often presented as a whole (McFadden, 2012: 44). He attached great importance to them, so Chris saves and takes with him to Solaris videos made at a time when his wife was still alive. These films are real Chris memories that are more important to him than any other property that he burned before leaving Earth (McFadden, 2012: 49). S. Hall believes that the most exciting and introspective moment of the film is when Hari realizes that she is the physical embodiment of Chris's memory of her (Hall, 2011: 3).The next criterion for determining individuality for V. Tumanov is the stability of character, which is necessary for planning cooperation and avoiding the stress associated with constantly changing social interaction (Tumanov, 2016: 364). Next comes the ability to feel pain and suffer (Tumanov, 2016: 368), experience different emotions and, most importantly, love (Tumanov, 2016: 372). A.S. Temlyakova adds one more to these criteria: awareness of mortality, which distinguishes man from other creatures (Темлякова, 2013: 221).

C.M. Grau (Wolf, Grau, 2014: 117) writes that there are situations when our criteria for identity are incomplete and fall apart. In evidence, he cites the cases of hemispherectomy. Although the surviving person can change significantly, no one considers him a completely different person. It is also generally accepted that if the brain is transplanted into another body, the person will be where his brain is, that is, the brain is more important for establishing identity than the rest of the body. But if two hemispheres of a human brain are transplanted into two different bodies, which of them will a person be then? Although we possess all the necessary information, we cannot give a definite answer to this question. Survival involves identity, and a person cannot be numerically identical to more than one subject. I. Csicsery-Ronay agrees with him, wondering if the identification of Kelvin with an alien at the end of the novel is a confirmation that it is practically impossible to establish where the person ends and the Other begins (Csicsery-Ronay, 1985: 10). Snaut'sutterance about the neutrino systems instability is equivalent to denying Hari's identity. It is understood that not only can one go without a sense of compassion for Hari'sfeelings and emotions, but her very existence is worthless: Hari can be destroyed as an unstable object (Tumanov, 2016: 365). This and other cases of cruel treatment of "guests" makes competent the concept "rights of aliens" proposed by E. Gomel which is based not on humanity, but on inhumanity of the Other (Gomel, 2012: 11).

Such a concept is a significant problem, since science is limited in the eyes of Tarkovsky, because it perceives the world as a morally neutral object, an impartial entity, awaiting human understanding in a systematic rather than existential sense (McLenachan, 2014: 14). Lem's scientists are unable to think outside the so-called human language and overcome the anthropomorphism inherent in scientific thought (McLenachan, 2014: 15). This is obvious when they try to compile an exact nomenclature for the Solaris polymorphic formations: "tree mountains", "fungoids", "extensors", "mimoids", "asymmetries", "symmetriads" sound like geomorphological terms (Iamandi, 2009: 174). Lem makes no assumption that life elsewhere in the universe will be completely understood by people: there is no reason why it should be (Iamandi, 2009: 178).

At the moment of the actual beginning of the novel, the planet almost completely defeated human science, establishing insurmountable barriers between it and itself (Csicsery-Ronay, 1991: 6). Nevertheless, it turned out that humanity met with a creature willing and able to initiate the type of modeling that can penetrate the heart of sentient beings through mutually constructed communication models (Csicsery-Ronay, 1991: 7). "We are only seeking Man," says Snaut (Lem, 1987: 72) and the ocean sends anthropomorphic phantoms to Solarians. But even the image of a

person, which has no matter or is differently material, becomes not just an epistemological puzzle but a moral problem. Demoralization begins at the point when, in a make-believe way, bloodlessly, in a void, a person murders the thought about another person. Just a thought, a phi-creature… (Balcerzan, Brodziński, 1975: 156).

The main emanation of the planet and, therefore, the means of communication between the ocean and man is Hari. But if it is a device, then, most likely, it is a self-programming one (Csicsery-Ronay, 1991: 6). That is, Solaris was capable of a higher level of modeling (imitation of intelligent organic structures) than people. Hari gradually becomes not only "real", but also almost more real than living characters, because she retains the ability to love and express true emotions (McLenachan, 2014: 19). In addition, she is aware of ignorance of her origin and is capable of self-sacrifice (Csicsery-Ronay, 1991: 6). Hari learns to do without Chris, reason and enter into an argument, that is, behaves independently (Anokhina, 2011: 92). She seems to be developing into a self-regulatory model of a person (Csicsery-Ronay, 1991: 6).

But, as A. Majcher concludes, the more scientists move towards establishing contact, the further they get from it (Majcher, 2015: 147). Only Kelvin decides to land on the ocean, but he does it not because of scientific interests, but of the feelings flared up from a meeting with his beloved (Deltcheva, Vlasov, 1997: 533).

Nevertheless, in our opinion, the statement of G.M. Kirillov, that a scientific look at the nature of the Other leads to the destruction of his originality, as well as the integrity of himself (Kirillov, 2016: 212). Let us recall that such a scientific discipline as intercultural communication was specially designed to ensure effective communication with representatives of other cultures. P. Iamandi (Iamandi, 2009: 174) identifies three stages which Solaris researchers go through for more than a hundred years. At first, they are sure that they can establish contact with the planet and collect the necessary information about it, thereby creating a new science – solar studies (a stage of romantic optimism). Then they collect data, classify them and place them in archives (a consolidation stage). As a result, the Solarists realize that they are faced with a completely incomprehensible and alien mind, which ignores all their efforts (a stage of cynicism).

Compare the described stages with the stages of cultural shock highlighted in intercultural communication, the most famous list of which belongs to P. Adler (Adler, 1975: 16-17). The first stage (an initial contact) is marked by excitement and euphoria; a person is more inclined to similarities, since he has few psychological mechanisms for working with radically new incentives. The second stage (disintegration) is marked by a period of confusion and disorientation; more important is the growing sense of distinction, isolation, and inadequacy to new situational requirements. The reintegration phase is characterized by a categorical rejection of the second culture, because a person is hostile to what he experiences, but does not understand. This phase can become for him a point of existential choice: he can return to the surface behavior and reactions of the contact phase, get closer to resolving difficulties and disappointments, or return home. The analogy is obvious.

I. Csicsery-Ronay (Csicsery-Ronay, 1985: 10-11) believes that there is evidence in the novel that some significant and mysterious contact was established between Solaris and Kelvin. So, Hari can be considered as their joint creation, since her substance is created by the planet, and her form is created by Kelvin's unconscious memory. In addition, the Solarists, having decided that Solaris "read" the images of guests from the dreams of sleeping scientists, encode some of Kelvin's thoughts and broadcast them during the day to "inform" the planet how much suffering these guests cause. The fact that the guests do not appear again after their destruction can be regarded as confirmation that the message was "received". And finally, through the annihilation of guests, Solaris learns about mortality and for the first time experiences the pain of death: "I heard the sound of a piercing scream which came from no human throat. The shrill, protracted howling…"(Lem, 1987: 182).

Chris Kelvin's dream recreating an act of mutual creation – of himself and a woman, both familiar and alien – and their perception of each other, can be recognized as a successful contact. At the moment when they become one, everything begins to crumble, destroying their bodies and causing suffering concentrated in "the distant blacks and reds" (Lem, 1987: 180). It is easy to imagine that this woman was Solaris, a planet with a female name, and each of them somehow inexplicably perceived this process of incarnation through another (Csicsery-Ronay, 1985: 11), and therefore the experienced, "mounting of grief visible in the dazzling light of another world" (Lem,

1987: 180), was mutual. The fingers are also mentioned in a dream, the gentle touch of which created a man and a woman, and which then turn into many worms that destroy their bodies.

The maximum contact with a reasonable ocean, according to R. Deltcheva and E. Vlasov, is achieved in the last scene of the novel, when Kelvin reaches out to the wave and a flower grows out of it, the petals of which become an exact image of his fingers (Deltcheva, Vlasov, 1997: 534). A. Majcher, on the contrary, finds here a symbolic confirmation that the contact is impossible, because the wave did not touch Kelvin, leaving a thin covering of air between him and itself, and the image of the fingers was negative (Majcher, 2015: 147). Although the ocean passionately wanted to learn a new form, it was forced to abandon this idea in order not to violate some mysterious law. It can be assumed that it remembered well the dream and those consequences that entail intimacy. In addition, it soon lost interest in the man, because one of the next waves already indifferently surged from him. One way or another, but in the Tarkovsky film, Kelvin also gives upan attempt to establish interaction with the ocean, which indicates his awareness of the dangers of such efforts.

S. Hall writes that Tarkovsky and Soderberg have different concept of "returning home" after a long and painful journey, which also indicates the difference in their worldviews (Hall, 2011: 2). If in the novel by Lem, Kelvin cannot decide whether to stay on Solaris or fly to Earth, in Tarkovsky's film he returns to his father's house, to his family. While in Soderberg's film, the family is the conventions of marriage for Kelvin, and he reunites with his wife to live with her "in domestic bliss" (Hall, 2011: 5). R. Deltcheva and E. Vlasov clarify that for Tarkovsky the house is not an object of knowledge or development, it is a place of the pristine state of mankind, where one does not need to ask questions about the essence of being, where one can just live. Leaving the house to carry out any mission means dooming oneself to the solution of many problems, that is, upsetting the usual balance and starting to hesitate between extremes, which, in general, happens toSolarists(Deltcheva, Vlasov, 1997: 549). As far as the perception of the Soderberg's film as a poem about love, although it is tempting to see there a moving story about the reunion of two loving hearts in the afterlife, it is much more plausible to conclude that the ending is something less comforting than the usual idea of paradise. This consideration is dictated by the fact that throughout the film it is repeatedly emphasized that Solaris is a completely alien intellect, and it is unreasonable to ascribe noble impulses to it, since it never showed generosity to those people with whom it had previously interacted (Wolf, Grau, 2014: 111-114).

It is noteworthy that S. Hall uses the transliteration of the Russian word *dacha* to nominate the house of Chris Kelvin's father. He believes that the image of the dacha is of particular importance not only for Tarkovsky, but also for the Russian audience (Hall, 2011: 4-5).

T. McLenachan also uses the same word *dacha*, quoting A. Tarkovsky's words that "he preferred to be 'away from the paraphernalia of modern civilization' in a more natural setting such as his *dacha*" (McLenachan, 2014: 13). It is necessary to clarify that the text to which T. MacLenachan appeals does not use the word dacha, but the phrase a country house (Tarkovsky, Hunter-Blair, 1989: 212). In reality, A. Tarkovsky and his second wife owned a one-story stone house in the settlement of Myasnoy, in which they could live all year round. As for the image of a dacha for most Russians, it is rather six to ten hundred square meters of land for growing vegetables and fruits with the simplest wooden structure without amenities for living in the warmer months than brick mansions on plots of land per hectare or more. R. Deltcheva and E. Vlasov also do not find any specific reality of Russian culture in the parental home of Chris Kelvin, considering it as a universal intermediary through which the outside world is perceived (Deltcheva, Vlasov, 1997: 549). They write that Tarkovsky presents the audience with an image of a typical European estate, in the center of which stands an old-fashioned wooden house surrounded by old trees with dense foliage (Deltcheva, Vlasov, 1997: 535).

The whole variety of *Solaris* perceptions arose from the original text. It is it which is the impetus for the appearance of everything else. But not the only one. The verbal text causes the production of music, movement, play. From the point of view of the culture's existence, everything here is more or less clear. The more relevant the text is, the more it is replicated in various ways and at different times. But the translation mechanism itself is fraught with many analytical problems.

The fate of the verbal text falling into the media space may be different. If the text is in demand, it begins to be transmitted and deformed. Translation is not possible without deformation. The more relevant the text, the more semiotic systems are connected to its

deformation. So an actual poem can become a romance, a song or a smash hit, a masterpiece of painting move from a museum wall to a mug, and a living person can become an Internet meme.

Everything is much more complicated with the novel. Theoretically, its translation can also follow the path of simplification and complication. In this case, it seems that one of the main questions is the question of whether the deformation preserves the integrity of the text, whether it preserves the text itself, whether it arbitrarily replaces one text with another. In a situation where the text is saved, the next question is no less important: what exactly ensures the integrity of the text.

### 4. Results

In any literary text, all characters are divided into acting within the framework of the artistic whole and mentioned there. This separation of anthroponymicon is a reliable tool for analyzing deformations occurring in texts. In this case, it allows identifying the general tendency of the shifts taking place in the character sphere. This general trend is a cardinal change in the ratio between the current and mentioned characters. The number of acting characters is increasing, and the number of implied ones is decreasing. So, in Lem's *Solaris* there are 8 acting characters and 59 mentioned persons, mainly scientists who were engaged in the research of Solaris. In Tarkovsky's *Solaris* there are 17 acting characters (except Chris in childhood and extras during the conference) and 1 mentioned. Soderberg's *Solaris* features 12 active characters, a large crowd and 1 mentioned. Such a radical change in the ratio can be considered as a manifestation of the fact that the content is transferred from one type of art (literature) to another one (cinema). And each type of art suggests its own characteristics and dictates its own laws. In addition, the change in the ratio itself is connected with the way a new author reads the original text of *Solaris*. Although it is not always possible to separate one from the other, it is possible to explain the deformations of the text.In any case, for the analysis of the content, it is more important not because of what, but due to what and how the ratio changes. The increase in the acting characters occurs in two ways: the mentioned character goes into the number of active ones or there are completely new characters that are absent in the source text.

In the novel, Chris learns about the pilot Andre Berton, scientists Dr. Archibald Messenger, the chairman of the commission, the chairman of the conference and Trashier from "The Little Apocrypha", to the reading of which he was prompted by the note of Gibarian. In Tarkovsky's *Solaris*, they all become full-fledged characters in the frame. In Soderberg's Solaris, everyone except Berton disappears again, and he is mentioned by Snaut as the man who shot down the ship of the security forces.There appear completely new characters. In Tarkovsky's *Solaris* they are father, mother, Chris's aunt, Berton's son, Chris's niece. In Soderberg's Solaris they are Amanda, two escorts. The emergence of these characters is justified by local attitudes, the arbitrariness of the scriptwriters, the change of thematic accents and the desire of the directors to fill the frames as figuratively as possible, to make them more humanized and, due to this, more understandable.

The change in the ratio is superimposed by changes in the features of permanent characters, those that are present in all texts. There is not a single text with a character identical with respect to another text. Such changes are presented as fundamental and local.Fundamental changes are manifested in the fact that the character changes completely, it is replaced by another character. In Lem's *Solaris*, Gibarian's guest is a huge black woman, in Tarkovsky's *Solaris* she is a girl with a bell, in Soderberg's *Solaris* he is a smart little boy. In Lem's and Tarkovsky's *Solaris* Snaut is a human, while in Soderberg's *Solaris* most of the film Snaut is the guest who killed the real Snautand hid him in the refrigerator. In Lem's and Tarkovsky's *Solaris* Sartorius is a man and in Soderberg's *Solaris* his position in action is replaced by Dr. Gordon, a Negro woman.

Local changes are no less substantial, because they signal significant changes in the characteristics. In Lem's *Solaris* Hari primarily appears as a guest in a dress; in Tarkovsky's *Solaris* Hari– in the form of a portrait in the frame where Chris is burning paper, and then as a guest in a dress and shawl, which refers to Chris's mother; in Soderberg's *Solaris* – in Chris's dream, and then as a nudeguest. Obviously, the amount of clothing on the heroine determines her perception and constructs her place in action.

In Lem's *Solaris*, nothing is said about smoking; in Tarkovsky's *Solaris*, Snaut, Sartorius, and Hari smoke; nobody smokes Soderberg's *Solaris*. In Lem's and Tarkovsky's *Solaris* Snaut is constantly drinking, in Soderberg's *Solaris,* he is constantly sober. The burst of smoking characters occurred in the seventies, when an intellectual or a reflective personality could not be imagined without a cigarette in the cinema. In Lem's *Solaris,* Berton sees just a huge baby on the waves of

the ocean; in Tarkovsky's *Solaris*, Berton says that the baby is a copy of the deceased pilot Fechner's son; in Soderberg's *Solaris* the baby is absent.

In Lem's *Solaris*, Sartorius directly appears in only two scenes: at a videophone meeting and in an experiment with Chris's thoughts. In Tarkovsky's *Solaris*, Sartorius appears in the frame much more often than in the original text: he takes part in several new scenes, speaks out in full detail. In Soderberg's *Solaris*, Dr. Gordon becomes a character who really determines the course of events. So Sartorius from the secondary character becomes the lead. The opposite picture is observed with Snaut, who from the main character in Lem's *Solaris* becomes secondary and almost comic in Soderberg's *Solaris*.

In Lem's *Solaris*, Chris purposefully and independently analyzes Hari's blood and concludes that it consists of neutrinos. In Tarkovsky's *Solaris*, Sartorius arrives at this conclusion in an unknown way and offers Chris to analyze Hari's blood for confirmation. In Tarkovsky's *Solaris*, Chris's father, in the eighth minute of the story, tells Berton: "He reminds me of an accountant preparing an annual report," and that sets Chris's perception. And in Soderberg's *Solaris*, we learn about Chris's analytical abilities nominally, by the principle: if a person is invited to conduct an examination, he is smart. That is, Chris is gradually getting stupider from text to text.

In the source text, Chris is an unconditional analyst by the nature of his actions: he constantly reads books, conducts experiments, ponders and draws conclusions. In Soderberg's *Solaris*, he is a brutal lover hero who is not so much engaged in experiments as sex, fixated on relationships with Rhea and fully complies with the definition Sartorius gave him in Tarkovsky's *Solaris* (02.01.30): "You spend all day lying in bed from ideological considerations. And in this way do your duty. You have lost a sense of reality."

All formal and substantive transformations – Chris from an analyst to a playboy with the intellect of a weightlifter, Sartorius from a secondary character to the main figure and active resonator, Snaut from the main character to a secondary detail – are directly related to the deformations of the scenes and have a single explanation with them. In order to restore, clarify and clearly show the transformation of the content in Tarkovsky's and Soderberg's *Solaris* regarding Lem's novel, we present a complete table of correspondences and mismatches of events or scenes in three texts.

| Lem's *Solaris* | Tarkovsky's *Solaris* | Soderberg's *Solaris* |
|---|---|---|
| | Chris on Earth in the country; enjoys nature and says goodbye to it before flying | Chris on Earth in the city: sits, walks, in a group, calls, rides, cooks |
| | Berton and his son arrive | |
| | Berton's son meets Chris's niece | |
| | Chris and Burton's father speak about Solaris and the house | |
| | Rain | Rain |
| | Scientific conference, Berton's interrogation | |
| Information about Solaris: Chris is reading Apocrypha | Information about Solaris: Chris's aunt is watching a show | |
| | Chris and his father | |
| | Chris's aunt, Berton's son and a horse | |
| | Chris and Berton | |
| | Berton calls and informs that the baby on Solaris is a copy of Fechner's son | |
| | Roads, Bridges and Tunnels of Tokyo | |
| | Chris burns paper, his father and aunt say goodbye to him | |

| | | Invitation to Chris from Gibarian to fly to Solaris and deal with the situation |
|---|---|---|
| Chris's flight and arrival at Solaris, which is in complete disarray and no one greets him | Chris's flight and arrival at Solaris, which is in complete disarray and no one greets him | Chris's flight and arrival at Solaris, which is in complete disarray and no one greets him |
| | A guest in the corridor | |
| 1st conversation with Snaut | 1st conversation with Snaut | 1st conversation with Snaut |
| Chris is alone in the room, takes a shower, reads about Solaris | Chris is alone in the room, leaves his things | |
| Chris in Gibarian's room | Chris in Gibarian's room | |
| A guest is trying to come in | A guest is trying to come in | |
| A letter from Gibarian to Kelvin | A video message from Gibarian | |
| Meeting with a black woman | | |
| Meals and a long 2nd conversation with Snauton the radio station | | |
| Return to Gibarian's room, reading about Shannahan's expedition | | |
| Baby steps in the laboratory of Sartorius, a conversation with Sartorius on the doorstep | Silence in the Sartorius's laboratory, a conversation with Sartorius on the doorstep, adwarf runs out | Silence in Dr. Gordon's laboratory, a conversation with her |
| In the corridor | There is a girl with a bell in the corridor | There is a boy in the corridor |
| 3rd conversation with Snaut | | 2nd conversation with Snaut |
| Warehouses, refrigerators, the corpse of Gibarian and a black woman | Warehouses, refrigerators, the corpse of Gibarian and a girl | The corpse of Gibarian and someone else in the refrigerator |
| | 2nd conversation with Snaut, a girl | |
| In the cabin: reflections and experiment with a calculator | In the cabin: continued recording with Gibarian and the girl | In the cabin: continued recording with Gibarian |
| A dream, the appearance of Hari in the dress. | A dream (sees his mother), the appearance of Hari in a dress and shawl | A dream (sees Rheya), the appearance of naked Rheya |
| An attempt to send Hari into space | An attempt to send Hari into space | An attempt to send Rheya into space |
| 4th conversation with Snaut about guests in the cabin | 3rd conversation with Snaut about guests in the cabin | 3rd conversation with Snaut about guests in the cabin |
| | | Memories of Rheya |
| Hari returns | Hari returns | Rheya returns |
| Hari and the door | Hari and the door | |
| Hari's blood test in the operating room | | |
| Videophone Meeting: Kelvin, Sartorius, Snaut | Snaut, Sartorius, Kelvin and Hari in the laboratory, Hari's blood test | |

| | Chris and Hari watch and discuss Chris's childhood film | |
|---|---|---|
| Night talk with Hari | | |
| Chris reads about Solarisin the library | | |
| 5th conversation with Snaut in the library | 4th conversation with Snout in the cabin – Sartorius's project | |
| A conversation with Gibarian in a dream | | A conversation with Gibarian in a dream |
| Conversation between Chris and Hari after lunch: she realizes her essence | | Conversation between Chris and Rheya, Rheya's memories, conversation between Chris and Snaut. Rheya realizes her essence. |
| | Hari made something to herself | |
| | Night talk with Hari: she realizes her essence | |
| | In the library, Chris, Hari, Sartorius, Snaut talk about a man | Chris, Rheya, Snaut, Gordon talk about destroying guests |
| | 5th conversation with Snaut in the corridor | |
| | Hari and Chris in the library with paintings, memories and the ocean | |
| Hari poisoned herself with liquid oxygen | Hari poisoned herself with liquid oxygen | Rhey apoisoned herself with liquid oxygen |
| | | Gordon offers a way to destroy guests |
| 6th conversation with Snauton a radio station | 6th conversation with Snautin the corridor | |
| | Explanation with Hari | Explanation with Rheya |
| | Snautisrunning | |
| Lab experiment: Chris's thoughts are conveyed to the ocean | | |
| | | Conversation between Rheya and Gordon |
| Chris and Hari read Gravinsky's handbook in the library | | |
| Repeated experiments, no events, dreams – nightmares without detail | | |
| Ocean's excitement | | |
| | Chris has fever and hallucinations: a big scene with his mother | Chris has fever and hallucinations: Rheya in different versions |
| Drunk Snaut in a suit | | |
| MissingHariatnight | | |
| Hari gives Chris sleeping pills in juice | | |

| The disappearance of Hari as a fact | The disappearance of Hari as a fact, told by Snaut | The disappearance of Rheya as a fact, told by her |
|---|---|---|
| 7th conversation with Snaut | 7th conversation with Snaut | Conversation between Chris and Gordon |
|  |  | Detection of Snout's corpse |
|  |  | Conversation among Chris, Gordon and Snaut; he threatens |
|  |  | Chris and Gordon are about to fly away |
| Chris sees a storm in the ocean and realizes that he has no home |  | Chris sees a storm in the ocean |
| 8th conversation with Snaut about god |  |  |
| Chris with Snaut on the old mimoid plays with a wave |  |  |
| Chris stayed on Solaris | Chris ponders whether to stay or return to Earth | Chris imagined a return to Earth, but stayed on Solaris |
|  | The scene "Rembrandt's Return of the Prodigal Son" | The scene "The Creation of Adam" by Michelangelo |
|  |  | Chris gets Rheya |

This table can serve as a basis for a mass of interpretations related to the features of the transmission of aesthetically significant information. For this study, the transformation of the source text content is relevant.

Of the 72 positions fixing the total number of different scenes in the three texts, 14 (19.5 %) certainly coincide, that is, though with deformations, they appear in all texts. Probably, without such an amount of unity, the text would break up into independent texts. At the same time, isolated scenes found in only one text amount to 40 (55.5 %), that is, almost three times more. Consequently, centrifugal forces prevail over centripetal ones. The correlation between common and single scenes, one to three, clearly demonstrates the general tendency not to preserve the source text, but to revise it, deform, change, and use it as an impulse to create an independent work of art. This formal trend is reinforced by what is happening with the content of the source text.

The table clearly shows that the direct translation of the text from one source to another is a rarity. Translation is not a simple change of information carrier when it is saved, but significant deformation of the original information itself. These deformations manifest themselves through the general coordination of topics. In each case, coordination is associated with the behavior of the scenes.There are four main types of this behavior: the scenes are saved, disappear, appear and change their places relative to other scenes. At the same time, there are also particular modifications for each of the types. The originated scenes can change their internal characteristics: volume, implementation environment, number of participants, development details, and position in the general sequence of actions. The scenes that have arisen can develop any real mention in the source text, for example, Hari's conversation with Snaut is not described in the novel, but it is mentioned there. Or these scenes may be an arbitrary addition, for example, all the events on the Earth in Tarkovsky's *Solaris*.

Taken together, the types of scene behavior and their modifications are carried out randomly. But there are many explanations for their parts. Let us consider these motivations.

The narrative time in Lem's *Solaris* is nonlinear: a series of previous events is described much later than their accomplishments. Tarkovsky and Soderberg are constantly striving to straighten out the narrative time, turn it into a clear linear sequence with carefully shown causal relationships between individual segments. This creates new scenes and modifications to existing ones.For example, Lem does not mention Gibarian and Hari at the time of Chris's flight and the

fact of their acquaintance generally becomes known towards the end. Besides, there is no detailed information about Solaris and the Solaris station. Tarkovsky's film begins with the information about Solaris, which, according to Lem's idea, Kelvin is to read much later in various books. InSoderberg's film, Chris is invited to fly to the planet by Gibarian, who says that something is wrong, and the first thing Chris finds out on the station is the death of Gibarian. So the authors strive to make the sequence more obvious and understandable.

Significant details change their location and character. To start with, the first contacts with guests are recorded in various ways. In Lem's *Solaris*, a guest tries to enter Gibarian's room and pulls a doorknob. In Tarkovsky's *Solaris*, the first guest flashes before Chris's talking to Snaut, the second is in Snaut's room, and the third tries to enter Gibarian's room, but simply opens the door with a fixed handle. In Soderberg's *Solaris*, Chris sees a boy in the corridor after a conversation with Gordon. Secondly, in Lem's novel, Kelvin takes a gas gun in his room, in Tarkovsky's one he takes a gun in Gibarian's room, and there is no weapon in Soderberg's version. Thirdly, the readers of the bookare told aboutsome steps in Sartorius's laboratory, there is silence there in Tarkovsky's and Soderberg's adaptations, but a dwarf runs out of it in Tarkovsky's *Solaris*.The next thing that needs to be said is that in the source novel Chris finds a note in Gibarian's room: "Supplement Dir. Solar. Vol.1.:Vot. Separat. Messenger ds aff. F.; Ravintzer: The Little Apocrypha" (Lem, 1987: 29) and a pocket tape-recorder. Tarkovsky's and Soderberg's *Solaris* features a video message. The note, which in Lem's *Solaris* refers to Berton's interview and clarifies the situation, turns out to be superfluous in the remaining texts: in Tarkovsky's *Solaris*, Berton told everything to Chris before Gibarian, in Soderberg's *Solaris* there is no such line.The note that constructs nonlinearity in Lem's *Solaris* is not needed in linear texts. It will only slow down the dynamics of the narrative, which all directors so desperately strive for, constantly increasing it by reducing the length of the frames. Soderberg's *Solaris* has the highest dynamics, so even a gun is extra there. Other details, such as the Hari's shawl in Tarkovsky's *Solaris*, are related to local visual tasks. Finally, the ideological clichés of the time can also be attributed to details. A very revealing picture is observed here: the Polish novel and American film have no ideological cliches. But Tarkovsky's *Solaris,* filmed in the USSR, represent some of them; even science fiction was forced there to serve the cause of socialism.Although, according to D. Salynskii, in the course of work, the film was freed from ideology, and the distribution option is cleaner from it than the working version and script (Salynsky, 2012). In the film, on 02.29.21, during Chris's hallucinations, there is a detail: in his native house, on a chair there is a medical cuvette with soil, sprout and coins, one of which is a jubilee ruble with Lenin's profile. The logic of events suggests that it as a dear object comparable in value to a handful of native earth, visited space together with Chris.

All the above-mentioned transformations of the content in one way or another manifest or reflect translations of the main topics. Let us consider it on the example of science and earth topics that are most contrastingly implemented in the three texts.

The topic of science is extremely unequally represented in these works of art. In Lem's *Solaris*, it occupies at least 50 % of the total volume of the story: Chris gets information about Solaris from numerous books that he constantly reads; most of the conversations among the characters and their actions are directly related to science. As I. Grodź put it, for Lem, perhaps the most important thing in evaluating science fiction is to estimate how seriously and responsibly it takes the first part of its genre name (Grodź, 2015: 162). In Tarkovsky's *Solaris*, a direct connection with science is presented in separate scenes and two general conversations.Though Tarkovsky states that much of Sartorious's work is connected with isolating the regenerative properties in neutrino life-forms, he deliberately refuses to show how this work is being done. Besides, the director basically excludes the viewer from any of the station's more explicit scientific activity. This exclusion can largely be explained by his aversion for the mechanized gadgetry which subjugated science fiction.In contrast to Lem, Tarkovsky put an emphasis on the second part of science fiction's genre name. He did not like science but he was interested in problems he could extract from fiction (fantasy): man, his world and his anxieties. In Soderberg's *Solaris*, the topic of science has been reduced to zero, essentially representing only two of Dr. Gordon's actions; the characters here do not find out and do not analyze anything, they simply strive to adapt to the situation.Following the tradition, S. Soderbergh used the sci-fi premise of Solaris to tell a supernatural romance with a conventional and happy Hollywood ending. There is no need for a consumer of mass culture to bother with the problem of the unicellular protoplasmic sentient Ocean, capable of extracting emotions from the most hidden corners of a person's consciousness.

It is much easier to follow the love line than to delve into the scientific and philosophical pathos, that is, the emotional element decisively began to dominate the intellectual. All the huge analytics about Solaris, brilliant in its power of fantastic insights, which can be considered one of Lem's main artistic discoveries, is gradually reduced to 0 and remains behind the scenes in Tarkovsky's and Soderberg's *Solaris*.

The topic of the Earth is also extremely unequally represented in the three texts and has the opposite dynamics of development. Lem's *Solaris* has virtually no Earth theme: it is implied as obvious and, in fact, updated only twice. The first time, it is touched upon in Chris's conversations with Hari: "We talked about <...> our life on Earth on the outskirts of some great city <...> among green trees and under a blue sky <...> and argued over details like the location of a hedge or a bench" (Lem, 1987: 186). The last time, it is mentioned when Chris decides whether to stay on Solaris. Besides, there are some narrative interjections, which emanate from the inhabitants of the station as afterthoughts.In Tarkovsky's film, this topic becomes one of the prevailing. The first forty minutes of action unfold on the Earth. Sartorius dismissively says that Gibarian "wanted to go to the ground, to the worms." During a physical crisis, Chris raves about the Earth. In the finale there is the Earth. This caused Lem's legitimate disagreement. In Soderberg's film, action also begins on the Earth, and it is constantly present in Chris's thoughts. In Tarkovsky's *Solaris*, the Earth is the home, paradise, cradle and last refuge, it is a coveted goal, and space is the hostile cold place of hard work. In Soderberg's *Solaris,* the Earth is the place of sin, and space is the price of it. In Lem's *Solaris* there is neither the first nor the second contrast, there space is the place of a person's existence, another facet of his life and being, the opportunity to feel like a man, to develop a person in himself, to find a person.

Expanding the Earth's theme from 0 in Lem's *Solaris* to 50 % in the Tarkovsky's *Solaris* is symptomatic because it is the result of several ideological attitudes.For socialist art, the obligatory setting was "we have the best": in the USSR everything is better than in other countries; on the Earth, the projection of the USSR, everything is better than in the rest of space. Socialist art cannot exist without struggle. Space and the Earth, like capitalism and socialism, fight for the souls of people.The mass-oriented socialist art, for a greater degree of clarity, built everything on contrasts; the Solaris Ocean needed the Earth as an antipode. Socialist art in any of its manifestations was oriented toward realism. It was the Earth that became this element of realism. Let's not forget that the film was created in a period of time called by A. Fedorov "A quiet movie whirlpool" (Fedorov, 2018: 85). The Thaw came to an end in August 1968, and the Kremlin film reaction became very tough. Despite this, A. Tarkovsky tried to broadcast ideas inconvenient for official propaganda. For example, among a number of space explorers' photographs one can see American astronauts John Glenn and Neil Armstrongalong with Soviet cosmonauts Yuri Gagarin and German Titov. During the struggle between the USSR and the USA for supremacy in space, such a demonstration can be perceived as strikingly odd (Duffy, 2003)

It is precisely two deformations of the themes: science from 50 % to 0 % and Earth from 0 % to 50 % that determined all the changes in the characters and scenes in Tarkovsky's and Soderberg's *Solaris*.

On the whole, the above factors produce the problem of text interpretations plurality, within which the true / false categories are associated with the background knowledge of a person who is interpreting the text. It makes a viewer approach the explanation of certain facts with greater measure of evidence (Shuneyko, Chibisova, 2019: 127). Next, we consider the main substantive assessments with which the researchers of the three *Solaris* accompany their observations.

M. Nawrocka believes that the novel *Solaris* speaks of the helplessness and loneliness of man in space, the impossibility, despite the desire, to make contact with an alien creature, the powerlessness of science and, finally, human memory (Nawrocka, 2010: 102-103). N. Sfetcu agrees that Lem's book is a philosophical novel dedicated to the nature of human memory, experience and inaction in communication between a person and other creatures. Moreover, he points out that instead, Tarkovsky's and Soderberg's films focus on human relationships (Sfetcu, 2019). E. Sinkovics, in principle, supports N. Sfetcu's judgment, but adds that Lem examined the impossibility of transcoding different cultures and forms of thinking, and Tarkovsky's human relations are meditative, while Soderberg's ones are incomplete and unhealthy ones (Sinkovics, 2013). Yu.O. Anokhina also thinks that the problem of contact with extraterrestrial intelligence is at the center of Lem's novel, but she objects to the fact that in Tarkovsky's film there are highlighted love affairs, since the story of Hari's humanization is much more important (Anokhina, 2011: 92).

Her position is similar to that of E. Gomel, who is convinced that the emotional center of the text is not a connection between a man and a woman, but a relationship between a human and alien (Gomel, 2012: 15). That is why she asks herself and her interlocutors the question: "Do posthuman subjects have human rights?" (Gomel, 2012: 11). This theme is developed by M. Jordan and J.J. Haladyn, who insist that both films demonstrate the effects of blurring the boundaries between people and modeled beings, between reality and its simulation (Jordan, Haladyn, 2010: 253). S. Hall suggests an idea that Tarkovsky's creepy and lonely film immerses viewers in search of adventure and arouses the desire to return home, while Soderberg's film is a poem about lost and dangerously returned love (Hall, 2011).

### 5. Conclusion

In the media space from a single demanded text always arise many other ones. This creates an external contradiction. The new text requires other means, but the semantics of all these means are inherent in the original version. In Lem's novel, all the events, actions, collisions of characters are just a framework to hang a brain game on — a set of analytic insights. But at the same time, his Solaris is a universal text where everyone finds his own aspect and it is this one aspect that he designs to the detriment of the others. Each subsequent text is focused not only on the original, but also on intermediate incarnations. So Tarkovsky's *Solaris* cannot avoid the embodiment of ideological cliches that were not to be found in Lem's novel, and Soderberg's *Solaris* cannot do without rain in the beginning, which was not in Lem's novel. Moreover, the source text is expanded, duplicated and replaced. Priorities are chosen by the artist in his interaction with society. The text adapts to different types of perception. It is made available to people with various dominant types of perception. Due to this, it expands the boundaries of the impact. Media space makes the text context more primitive, as it is aimed at its decoding and popularization. Different types of broadcasts support and renew interest in each other. Spectators read the novel, readers watch movies. The original text is always simplified and never complicated. In each subsequent text, the number of dominant topics decreases. At that, in the cultural space, all these texts act simultaneously. As a result, it turns out that all the topics of the source text are somehow duplicated, developed, and more firmly rooted. As a result of the law of substitution, the reduction of one of the topics in the subsequent text immediately responds to the hypertrophy of another topic. If the source text is thematically reduced, it is immediately supplemented by other topics. The integrity of the text is provided by the event canvas.

### References

Adler, 1975 – *Adler, P. S.* (1975). The transitional experience: an alternative view of culture shock. *Journal of Humanistic Psychology*, 15 (4): 13–23.

Anokhina, 2011 – *Anokhina, Yu.O.* (2011). Solaris: before and after Tarkovsky. *Kinovedcheskie zapiski*, 98: 85–100.

Balcerzan, Brodziński, 1975 – *Balcerzan, E., Brodziński, K.* (1975). Seeking Only Man: Language and Ethics in "Solaris". *Science Fiction Studies*, 2 (2): 152–156.

Csicsery-Ronay, 1985 – *Csicsery-Ronay, I.* (1985). The Book Is the Alien: On Certain and Uncertain Readings of Lem's "Solaris". *Science Fiction Studies*, 12 (1): 6–21.

Csicsery-Ronay, 1991 – *Csicsery-Ronay, I.* (1991). Modeling the Chaosphere: Stanislaw Lem's Alien Communications. In Hayles, N.K. (Ed.). *Chaos and Order.Complex Dynamics in Literature and Science*. Chicago: U. of Chicago Press: 244–262.

Deltcheva, Vlasov, 1997 – *Deltcheva, R., Vlasov, E.* (1997). Back to the House II: On the Chronotopic and Ideological Reinterpretation of Lem's Solaris in Tarkovsky's Film. *The Russian Review*, 56 (4): 532–549.

Duffy, 2003 – *Duffy, R.* (2003). Sculpted in time: Heterotopic space in Andrei Tarkovsky's Solaris [Electronic resource]. URL: https://mspace.lib.umanitoba.ca/bitstream/handle/1993/19847/ Duffy_Sculpted_in.pdf?sequence=1

Fedorov, 2018 – *Fedorov, A.* (2018). Russian cinema: a very short story. *Zhurnal Ministerstva narodnogo prosveshcheniya*, 5 (2): 82–97. DOI: 10.13187/zhmnp.2018.2.82

Gomel, 2012 – *Gomel, E.* (2012). Posthuman Rights: The Ethics of Alien Encounter. In Matos Alves, A. (Ed.). *Unveiling the Posthuman*. Oxford: Inter-Disciplinary Press: 11–19.

Grodź, 2015 – *Grodź, I.* (2015). Hollywoodzka adaptacja *Solaris* Stanisława Lema. Kilka uwagna marginesie filmu Stevena Soderbergha z 2002 roku. *Quart*, 3–4: 158–168.

Hall, 2011 – *Hall, S.* (2011). Light Years to Home: The Restoration of Domesticity in Solaris [Electronic resource]. URL: https://www.academia.edu/674682/Light_Years_to_Home_ The_Restoration_of_Domesticity_in_Solaris

Iamandi, 2009 – *Iamandi, P.* (2009). On Solaris: Exile the SF Way. The Proceedings of the Ovid, Myth and (Literary) Exile Conference, Constanta, 173–179.

Jordan, Haladyn, 2010 – *Jordan, M., Haladyn, J.J.* (2010). Simulation, Simulacra and *Solaris*. *Film-Philosophy*, 14.1; 253–273.

Kirillov, 2016 – *Kirillov, G.M.* (2016). Fantastic world of Solaris: the search for a true self and another. *Tver State University Vestnik. Series: Philosophy*, 3: 208–214.

Kuznetsova, 2009 – *Kuznetsova, E.* (2009). Three "Solaris": from Lem to Soderberg. Science Fiction and Technology (in memory of Stanislaw Lem): Proceedings of the International Scientific Conference. Samara, 139–146.

Lem, 1987 – *Lem, S.* (1987). Solaris. New York: Harvest, 204 p.

Majcher, 2015 – *Majcher, A.* (2015). Does the quality of interlingual translation influence the quality of the intersemiotic translation? On the English language film adaptations of S. Lem's *The Futurological Congress* and *Solaris* in the light of their translations into English. *Journal of Language and Cultural Education*, 3(3): 144–151.

McFadden, 2012 – *McFadden, D.* (2012). Memory and Being: The Uncanny in the Films of Andrei Tarkovsky. *Verges: Germanic & Slavic Studies in Review*, 1 (1): 43–54.

McLenachan, 2014 – McLenachan, T. (2014). Truth is Stranger than Science Fiction: The Quest for Knowledge in Andrei Tarkovsky's Solaris and Stalker. *Slovo*, 26 (2): 8–29.

Nawrocka, 2010 – *Nawrocka, M.* (2010). Frazeologiczne innowacje wy mieniające w powieściach Solaris i Dzienniki gwiazdowe Stanisława Lema. *Poznańskie Studia Polonistyczne. Seria językoznawcza*, 17 (37): 101–112.

Salynsky, 2012 – *Salynsky, D.* (2012).The film by Andrei Tarkovsky "Solaris". Materials and documents [Electronic resource]. URL: https://www.e-reading.club/bookreader.php/1033011/ Salynskiy_-_Film_Andreya_Tarkovskogo_Colyaris.html

Sfetcu, 2019 – *Sfetcu, N.N.* (2019). Stanislaw Lem vs. Andrei Tarkovsky [Electronic resource]. URL: https://www.setthings.com/en/stanislaw-lem-vs-andreitarkovsky/

Sinkovics, 2013 – *Sinkovics, E.* (2013). Az improvizáció és a remake szerves összefonódása műalkotás létrehozásában [Electronic resource]. URL: http://doktori.mke.hu/sites/default/files/ attachment/EDE-ertekezes-KORR%20%281%29-atimod01-3wordoptimized-minimum.pdf

Shuneyko, Chibisova, 2019 – *Shuneyko A., Chibisova O.* (2019). The Mechanism of Contextual Confirmation of the Symbol in the Cinema Language. *Media Education*, 1: 123–134.

Tarkovsky, Hunter-Blair, 1989 – *Tarkovsky, A., Hunter-Blair, K.* Sculpting in Time: Reflections on the Cinema. University of Texas Press, 254 p.

Temlyakova, 2013 – *Temlyakova, A.S.* (2013). "Solaris": a novel and a film. Dialogue space. *Ural's Culture Studies Gerald*, 2: 215–226.

Tumanov, 2016 – *Tumanov, V.* (2016). Philosophy of Mind and Body in Andrei Tarkovsky's Solaris. *Film-Philosophy*, 20: 357–375. DOI: 10.3366/film.2016.0020.

Wolf, Grau, 2014 – *Wolf, S., Grau C.* (2014). Understanding Love: Philosophy, Film, and Fiction. Oxford University Press, 397 p.
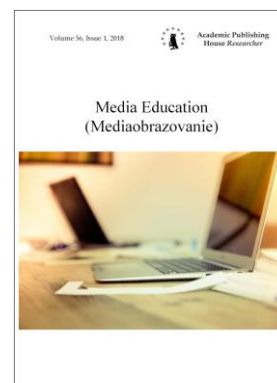
# Professional Socialization of Young People in the Media: Cognitive Modelling

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**Abstract**

The problems of professional socialization of young people and students become ever more topical now. Under the influence of the Internet and media, a youth request is formed to change educational and vocational guidance processes. Changes in professional socialization processes occur both at the level of socialization agents and at the level of socializing persons. The society strongly manifests the need to search and form modern models that provide predictable and orderly interaction within professional socialization. The theoretical-methodological basis of this article is a topological description based on graph theory, which allows determining the relationship between components of the model of professional socialization of youth at the level of concepts (constants). As a method of formalizing the structure, a cognitive model is used, defined in graph theory as a sign digraph. Analytical studies are based on a teaching model based on a double feedback loop. The essence of professional socialization is revealed at the intersection of processes such as adaptation and internalization, at implementation of basic education, professional education and social self-realization processes. The cognitive model is presented as a complex image, including a mental model and an adaptation model. Factor impact integration gives rise to a complex reaction of the professional socialization factor as a node of intersection of simple loops. The cognitive model is a structure for integrating causes and decomposing effects. It allows forming a unified and holistic view of the studied problem of professional socialization of young people and provides the targeted separation of significant knowledge about the situation of professional orientation in the media.

**Keywords:** professional socialization, media education, youth, cognitive modelling, adaptation, internalization.

## 1. Introduction

The problems of professional socialization of young people and students become ever more topical now. Orientation to traditional models, based only on the knowledge of the profession, is clearly not enough for the professional self-determination of young people. At the same time, overcoming traditional models of professional socialization is accompanied by a disordered "scattering" of socialization trajectories of young people under polarization of the society (Kovaleva, 2012). The society strongly manifests the need to search and form modern models that provide predictable and orderly interaction within professional socialization. The processes of this interaction, defined as secondary professional socialization (Berger, Luckmann, 1966), are multi-faceted phenomenon that determines procedures for a person entering the world of a new

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profession, adapting to social and professional environment, integrating with it and subsequent creative internalization (Tarasenko et al., 2016). It is internalization that allows incorporating social norms and values into the inner world of a person, as a result of which social rules become internal for a person to the intent that they are no longer imposed through external regulations, but as if imposed by the person himself/herself, becoming a part of his/her "I". Needless to say that the search for models that are attractive in modern social situations is specified among the most important problems of science and education. Against this background, attempts to increase the efficiency of professionalization processes by incorporating specialized "agents" of socialization in the implemented models are of interest. For example, in (Danilova, 2008) it is suggested to attract the mobilization component of the Internet socialization, in (Nor-Arevian et al., 2017) the emphasis is on game visual models, and in (Genner, Süss, 2017) the media is designated as a key factor of socialization.

Therefore, the objective of our study is development of already tested "agents" of socialization and formation of models of professional socialization of youth in the media on their basis.

## 2. Materials and methods

The theoretical-methodological basis of this article is a topological description based on graph theory, which allows determining the relationship between components of the model of professional socialization of youth at the level of concepts (constants). In this study, a cognitive model is used as such formalization tools, defined in graph theory as a signed digraph (Roberts, 1986). In principle, the cognitive model allows relying in the research process on each person's repertoire of mental models to analyse the observed situation. Similar to the method of perception by samples (stereotypes) noted by M. McLuhan (McLuhan, 2005). Such a model serves as a means for the formation of a unified and holistic view of the problem under study and provides the targeted separation of significant knowledge about the situation. As a result, the analyst receives an initial conceptual model that defines the problematic aspects of the observed situation. Its advantage lies in the fact that it presents the picture as a whole, without losing details, and, at the same time, avoids the cumbersome integration-decomposition procedures and allows the analyst to focus on a holistic situation. We should note a significant simplification of the model verification procedures, because significant factors of the studied conflict situation are integral elements of a holistic target system, the reliability of which has already been determined at the level of serotypes (Gurba et al., 2018).

Such an approach to the use of cognitive models for analysing the problem of professional socialization of young people in the media can be interpreted in the context of the theory of media education as the development of "critical thinking" (Masterman, 2000) or a cultural dialogue based on comprehension, analysis and evaluation of the media text (Fedorov, 2015).

## 3. Discussion

The promotion of the media as an "agent" of professional socialization is associated with its ever-increasing accessibility to young people. Early at the beginning of the twenty first century, M. Prensky (Prensky, 2001) defined modern young people and students as "digital natives" and "digital immigrants". A new type of social individual is being constructed – Homo virtuahs – a person focused on virtuality, on the media (Danilova, 2008). It is currently noted that the media are a key factor in socialization among other main agents of socialization. The data obtained indicate that the repeated exposure to the media has a potential for learning (cognitive, social or cultural skills) and long-term consequences for behaviour and cultivation of the worldview and values (Genner, Süss, 2017). While the main focus is on various aspects of media literacy, for example, organization of personal and professional communication, scalability of media spaces (Hobbs, 2015), study of media socialization based on information about media ecology (Milenkova, 2018), etc.

It should be noted that, in this case, the basic model for promoting the media as an "agent" of professional socialization of young people remains an improved teaching model based on a double feedback loop (Argyris, Schon, 1996), given in the form of a cognitive map in Figure 1.

In the model, the presence of feedback is crucial for the education process, which makes it possible to start a cycle of continuous learning.
The main loop actually implements a cycle of continuous learning based on perception, comprehension and action (Kolb, 1984). But the second loop embeds internalization models in the

education process. Information about the real world not only affects actions - cognitive procedures, but also is capable of changing *mental models* of the subjects of education. Self-adjustment of *mental models* results in a change in *action models*, and then sets actions, i.e. adjusts the education process. The variability of *mental models* is a key to the effectiveness of adjustment to a specific reality in the education process, which is especially important when organizing vocational education systems.
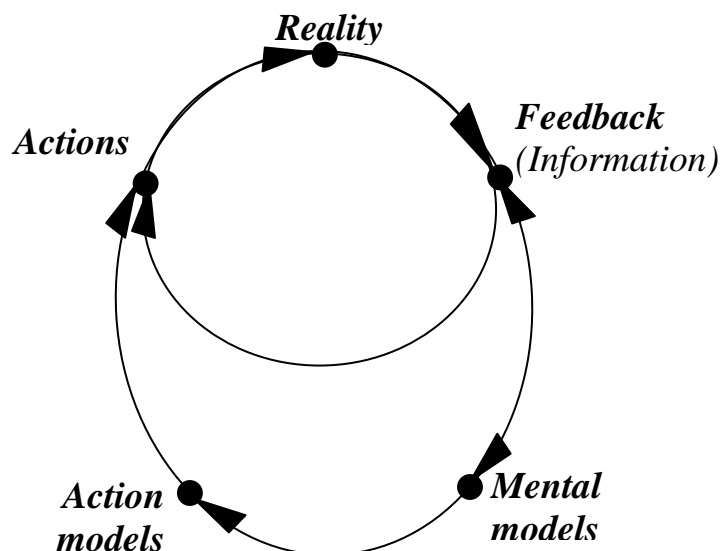


**Fig. 1.** Double feedback loop learning model (Argyris, Schon, 1996)

Casualness of *mental models*, i.e. their cause-and-effect orientation, stimulates a self-change in the loop in a given initial direction. Examples of the formation of this self-change can be observed in the process of self-regulated learning, in which the procedures of cognition, motivation and behaviour are built in accordance with the goals, results of analysis and regulation, and contextual characteristics of the educational environment (De Stasio, 2015). As applied to the media education system, in (Tarasenko et al., 2018) it is shown that one of the effective models is a structure of positive feedback loops based on growth accelerators, for example, interaction accelerators using accompanying (complementary) media texts that enhance the student's communicative or creative abilities.

### 4. Results
The use of the cognitive model of educational cycles based on the double loop of positive feedback in the context of analysis of the problem of professional socialization of young people suggests its complementation and development in accordance with the essential meaning of socialization. The latter is revealed at the intersection of processes such as adaptation and internalization (Kovaleva, 2012), at implementation of basic education, professional education and social self-realization processes (Tarasenko et al., 2016). Based on these attitudes, when constructing a cognitive model of professional socialization of young people, it is necessary to rely on the existing theoretical groundwork for the structural analysis of adaptive systems and the practical experience of cognitive modelling of systems with integration of human mental models in the adaptation loop, including learning models based on a double feedback loop (Serdyuchenko, 2018). The parallel processes of adaptation and internalization reflect the predominantly object nature of interaction of a person and the surrounding community. Social self-realization, however, is already a subjective manifestation of a person, deployment of its essential forces in accordance with the assigned social qualities, and translating their potential into a conscious, goal-directed action (Kovaleva, 2012). The cognitive model reflecting the indicated integrative interaction of the processes of professional socialization of young people is shown in Figure 2.
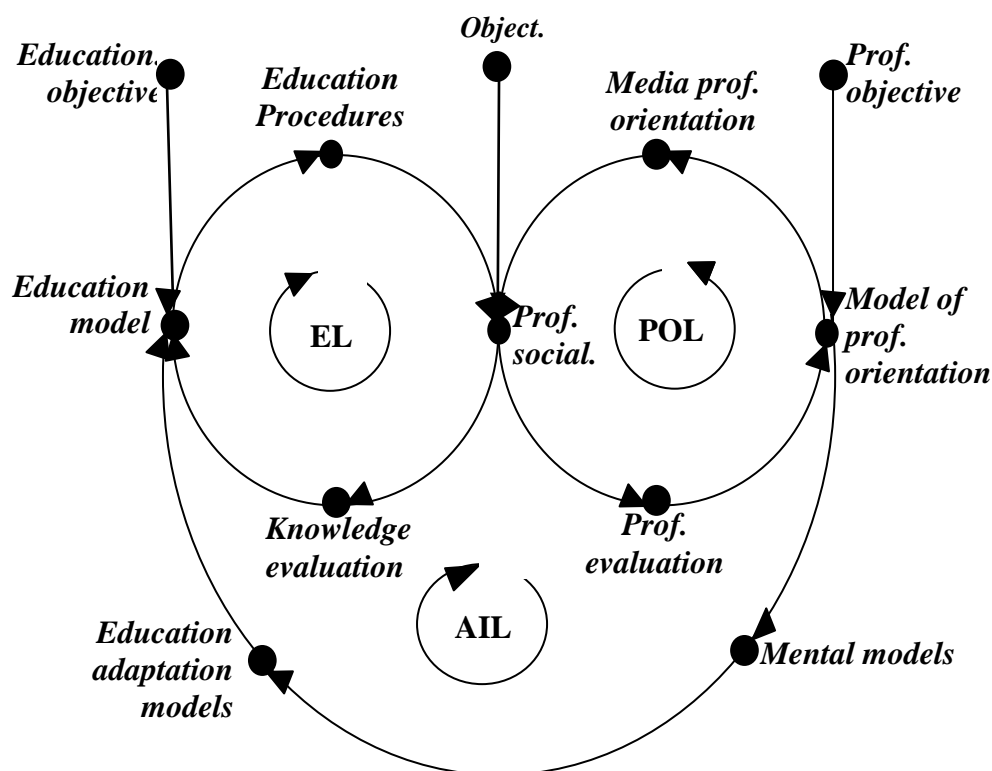
**Fig. 2.** Cognitive model of professional socialization of young people in the media

The processes in the model are generated by three objectives, namely, *Educational objective*, *Professional objective* and, particularly, *Objective* of professional socialization. The concept of *Professional socialization* belongs simultaneously to two loops: the loop of "cyclically continuous education" (EL) and the loop of "professional orientation in the media" (POL). So, already at the initial stage, the situation under study is presented in the form of a more complex image based on a composite "mental model". Factor impact integration gives rise to a complex reaction of the professional socialization factor as a node of intersection of simple loops (Serdyuchenko, 2018). Each simple loop is a ring model with positive feedback and includes a causal chain with a common problem factor - *Professional socialization*. The image ceases to be simple. The double-loop cognitive model is a model of the integration of causes and decomposition of effects.

The basic cycle of EL media training is formed by four factors: *Education model, Education procedures, Professional socialization,* and *Knowledge evaluation*. A change in the value of any factor (increasing or attenuation) will be supported (increased or attenuated) in the positive feedback loop. This is the structure of the active cyclically initiated educational cycle. Thus, an increase in the volume of the *Educational objective* in the format of the *Education model* will entail the build-up of *Education procedures*, i.e. an increase in professional knowledge, which will cause the growth of *Professional socialization* and, accordingly, initiate a high result of *Knowledge evaluation*. Finally, the growth of the latter further stimulates a self-change in the initial direction of the *Education model* factor, i.e. the next educational cycle. The same refers in the POL loop to factors: *Model of prof. orientation, Media prof. orientation, Professional socialization, Professional evaluation*. In it, the launch of a cyclic project, for example, through the growth of the *Professional objective* in the format of the *Model of prof. orientation,* calls for the implementation of procedures of *Media prof. orientation* and increasing of *Professional socialization*. The next factor of *Professional evaluation* on the causal chain again stimulates the further self-change in the initial direction of the factor of *Model of prof. orientation*, i.e. the next cycle of vocational guidance in the media.

However, the most important aspect of professional socialization remains outside the scope, namely, "integration of a person in the sphere of professional activity, consisting of the process of acquisition and reproduction of professional knowledge, norms, values, attitudes, behaviour patterns during the formation of a person as a member of a certain professional community and

aimed at ensuring his/her effective functioning as a professional" (Tarasenko et al., 2016). And this, in fact, is the *Objective* of professional socialization, which should initiate the processes of adaptation and internalization (Kovaleva, 2012). This is where the additional *Adaptation and internalization loop* (AIL) comes from. It includes the concepts of *Mental models* and *Education adaptation models*. In addition to these concepts, the loop shows the *Education model*, *Education procedures*, *Professional socialization* and, further, *Professional evaluation*, *Model of prof. orientation*. All in all 7 factors (only the factor of *Media prof. orientation* is removed from the loop). The loop covers all processes and all intersections. Therefore, it is precisely in it that the global goal of professional socialization is invoked and realized as a decisive phase of socialization, when "formation of a generalized other takes place in consciousness along with establishing the objective reality, and at the same time, the subjective establishing of a holistic identity (Berger, Luckmann, 1966). Thus, a sense of the need for conformity with social and professional norms is developed in the processes of adaptation and internalization of the subject in accordance with the metal model of a particular person formed by the previous experience.

### 5. Conclusion

1. The problems of professional socialization of young people and students become ever more topical now. Under the influence of the Internet and media, a youth request is formed to change educational and vocational guidance processes. Changes in professional socialization processes occur both at the level of socialization agents and at the level of socializing persons. The society strongly manifests the need to search and form modern models that provide predictable and orderly interaction within professional socialization.

2. The basic cognitive model for promoting the media as an "agent" of professional socialization of young people remains an improved teaching model based on a double feedback loop. In it, information about the real world not only affects actions - cognitive procedures, but also is capable of changing and self-adjusting mental models of subjects of education. The variability of mental models is a key to the effectiveness of adjustment to a specific reality in the education process, which is especially important when organizing vocational education systems. Casualness of mental models, i.e. their cause-and-effect orientation, stimulates a self-change in the loop in a given target direction.

3. The essence of professional socialization is revealed at the intersection of processes such as adaptation and internalization, at implementation of basic education, professional education and social self-realization processes. The cognitive model is presented as a complex image, including a mental model and an adaptation model. Factor impact integration gives rise to a complex reaction of the professional socialization factor as a node of intersection of simple loops of education and professional orientation. The cognitive model is a structure for integrating causes and decomposing effects. It allows forming a unified and holistic view of the studied problem of professional socialization of young people and provides the targeted separation of significant knowledge about the situation of professional orientation in the media.

### References

Argyris, Schon, 1996 – *Argyris, C., Schon, D.* (1996). Organizational learning: a theory of action approach. reading, MA: Addison-Wesley.

Berger, Luckmann, 1966 – *Berger, P.L., Luckmann, T.* (1966). The social construction of reality. A treatise on sociology of knowledge.

Danilova, 2008 – *Danilova, M.A.* (2008). Internet Culture and Socialization. *Topical problems of modern science, collection of research papers*. Novosibirsk: Centre for the Development of Scientific Cooperation – Sibprint, 3: 253-259.

De Stasio, 2015 – *De Stasio, S., Di Chiacchio, C.* (2015). Metacognitive and self regulated learning strategies profiles: an exploratory survey of a group of high school students. *Mediterranean Journal of Social Sciences,* 6 (4): 3.

Fedorov, 2015 – *Fedorov, A.V.* (2015). Media Education: History and Theory. Moscow: Information for All, 450 p.

Genner, Süss, 2017 – *Genner, S., Süss, D.* (2017). Socialization as Media Effect. The International Encyclopaedia of Media Effects. DOI: 10.1002/9781118783764.wbieme0138

Gurba et al., 2018 – *Gurba, V.N., Dyuzhikov, S.A., Rozin, M.D., Ryabtsev, V.N., Svechkarev, V.P.* (2018). Cognitive approaches to the generalized analysis of geopolitical conflicts. *International Journal of Pure and Applied Mathematics,* 119 (17): 1459-1463.

Hobbs, 2015 – *Hobbs, R.* (2015). Media Literacy. In *Children and Media: A global perspective.* Oxford, UK: Wiley-Blackwell: 417–424.

Kolb, 1984 – *Kolb, D.A.* (1984). Experiential Learning. Experience as the source of learning and development. Englewood Cliffs, New Jersey: Prentice Hall.

Kovaleva, 2012 – *Kovaleva, A.I.* (2012). Methodological problems of the socialization study. *Knowledge. Understanding. Skill,* 2: 19-24.

Masterman, 2000 – *Masterman, L.* (2000). New Paradigms and Directions. *Telemedium. Journal of Media literacy,* 46 (1): 7.

McLuhan, 2005 – *McLuhan, M.* (2005). The Gutenberg Galaxy: The Making of Typographic Man. Moscow: Academic project, 496 p.

Milenkova, 2018 – *Milenkova, V., Peicheva, D., Marinov, M.* (2018). Towards Defining Media Socialization as a Basis for Digital Society. *International journal of cognitive research in science, engineering and education the association for the development of science, engineering and education,* 2 (6): 21-32.

Nor-Arevian et al., 2017 – *Nor-Arevian, O.A., Tarasenko, L.V., Kirik, V.A., Skudnova, T.D.* (2015). Methodology of the differential games simulation in the studies of the social partnership models in the continuing professional education system. *Mediterranean Journal of Social Sciences,* 6 (4): 237-242.

Prensky, 2001 – *Prensky, M.* (2001). Digital Natives, Digital Immigrants. Part 2: Do they really think differently? *On the Horizon,* 9 (5): 1–6.

Roberts, 1986 – *Roberts, F.S.* (1986). Discrete mathematical models with applications to social, biological, and environmental problems. Moscow: Nauka, 205 p.

Serdyuchenko, 2018 – *Serdyuchenko, Y.V., Svechkarev, V.P.* (2018). Adaptive models for overcoming the risks of the world of a young family. *Engineering Herald of the Don,* 3. [Electronic resource] URL: www.ivdon.ru/ru/magazine/archive/n3y2018/5110

Tarasenko et al., 2016 – *Tarasenko, L.V., Nor-Arevian, O.A., Kirik, V.A., Ugolnitskiy, G.A., Vaskov, M.A., Gafiatulina, N.H.* (2016). Modelling the professional socialization of the student youth under the conditions of social uncertainty. Rostov-on-Don: Publishing House of the Southern Federal University, 220 p.

Tarasenko et al., 2018 – *Tarasenko, L.V., Rosin, M.D., Svechkarev, V.P., Avanesyan, K.A.* (2018). Cognitive analysis in the context of media education: an oriented graph modelling approach. *Media Education,* 58(4): 130-137. [Electronic resource]. URL: http://ejournal53.com/journals_n/1544017213.pdf
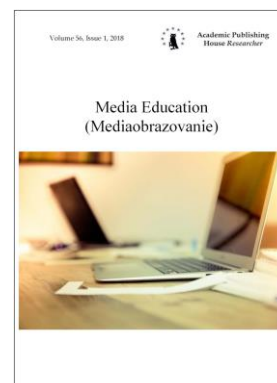
# Cyberbullying Prevention in the Opinion of Teachers

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**Abstract**

The paper sets out to present the opinions of teachers regarding the implementation of cyberbullying prevention programmes for children and youth. Such perspective is to facilitate a better understanding of the role of the prevention of Internet-mediated risky behaviours in the school environment. The text was created using the interpretative paradigm of the qualitative pedagogical research. The study was conducted using focus group technique with over a dozen of teachers participating. The text was written as part of the project SELI – Smart Ecosystem for Learning and Inclusion, in the second half of 2019. The data collected showed that cyberbullying prevention is a complex phenomenon and requires active engagement not only from the teachers but also from the third parties, parents and students themselves. The teachers who took part in the focus group listed a range of protective factors related to the elimination of cyberbullying: increasing digital literacy, developing universal skills (communication, personal culture, respect to others, critical thinking), support from the police and related institutions, building family relationships, engaging in leisure activities. The teachers agree that rapidly developing technology outdates the knowledge of people involved in media education, making lifelong education necessary.

**Keywords:** cyberbullying, teachers, prevention, school, parents, digital literacy, Poland.

## 1. Introduction

Cyberbullying and electronic aggression are a challenge for media education and the prevention of risky behaviours. Like other Internet-mediated behaviours (Plichta, 2017): problematic Internet use, sexting or piracy, different aspects of cyberbullying among the young people have become a global challenge. However, given the scale and the mechanisms of cyberbullying and electronic aggression, this type of unacceptable activity is one of the most frequently analysed e-threats. Despite introducing different didactic forms and methods, cyberbullying is a point of interest of the parties to the education and media pedagogy process (Plichta et al., 2018). Adolescents admit that the cyberbullying effects are painful and the hitherto implemented preventive measures have not eliminated nor significantly reduced the phenomenon in the school environment (Barlińska et al., 2018). The purpose of this paper is to present cyberbullying from the perspective of teachers-practitioners whose daily work involves anticipatory activities and solving problematic situations related to the misuse of the Internet. Such cumulated pedagogical knowledge allows to fill the cognitive gaps by showing the innovative and proves methods of cyberbullying prevention. The authors assume that teachers statements will enable us to design more effective media prevention activities and, thus, increase the digital literacy of the key players of the media education game.

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## 2. Materials and methods

Cyberbullying is a problem noticeable among the European teenagers. An international research conducted in several European countries (Spain, Poland, the Netherlands, Romania, Iceland and Greece) among the youths aged 14-17 (N=10,930; average age 15.8 ± 0.7 years) showed that the general of 21.4 % teenagers declared they had cyberbullying-related experiences during the last 12 months. Such declarations were most often given by the respondents from Romania (37.3 %) and Greece (26.8 %) whereas young people from Spain (13.3 %) and Iceland (13.5 %) had experienced cyberbullying the least. The international study revealed that the factors which increase the risk of falling victim to cyberbullying are the increased activity in social media and the time of using digital media. Personality traits and problems with relationships in school were also identified as the risk factors.

According to media pedagogues and psychologists, cyberbullying is a serious problem affecting more than one fifth of the surveyed teenagers in Europe. Cyberbullying prevention is one of the priorities of modern media education (Tsitsika et al., 2015). The scale of the phenomenon presented above was confirmed by other quantitative research in which the number of young people with cyberbullying experiences ranged between over a dozen to several dozen percent.

As for Poland, the result was 21.5 % (Athanasiou, et al., 2018). In Russia, for example, the percentage of cyberbullying victims was 23 % (data by EU KIDS Online) (Soldatova et al., 2014), while in Slovakia 42.7 % of young people had experienced cyberbullying and 4.4 % were the perpetrators (Hollá, 2016). The variation in the cyberbullying scale is hard to assess and so are comparative analyses. This is due to the methodology issues such as: different definitions of cyberbullying, different age of the respondents participating in studies, tool structure (operationalisation of the variables), sampling and changing styles of using digital media by teenagers. One thing is certain, however, that hitherto published data indicate that intervention, also within the framework of school education, is a necessity.

When analysing cyberbullying it is also worth pointing out that not all the negative behaviours mediated by media should be classified as cyberbullying. In the subject matter literature, electronic aggression is often confused with cyberbullying. Thus, in order to discern teasing, taunts or aggressive behaviours from the actual cyberbullying, it is worth to refer to several key criteria. Cyberbullying is characterised, among others, by: intentional actions which are meant to harm and are seen by the victim as harmful; such activity is cyclic (repetitive) and often extended to the offline environment; is based on the advantage the bullying person has over the victim (e.g. physical strength, anonymity, dependence, age, level of digital literacy) (Vandebosch, Van Cleemput, 2008). Cyberbullying and offline bullying have many common characteristics but the nature of the Internet often makes it much more severe (multiplication of the online content, unlimited access of the third parties to defamatory content, lack of possibility to quickly remove the harmful content etc.) (Dooley et al., 2009).

More and more often, the researchers studying cyberbullying point out to the non-standard solutions used to minimise this type of risky behaviours. First, there are postulates to develop the universal traits like empathy (Barlińska et al., 2013). For over a decade, the experts emphasise the key predispositions, skills and personality traits, which become the protective factors. Another crucial factors in minimising cyberbullying are the school atmosphere and digital literacy among the young people (Casas et al., 2013). The school environment is the issue which needs separate attention and is a significant intermediate variable in minimising and the occurrence of cyberbullying.

At present, schools and teachers face new difficulties and challenges related to cyberbullying. It is not only the students who see cyberbullying as a visible problem in their peer groups. Teachers have been recognising cyberbullying as a challenge in their schools. Pedagogy experts suggest we should pay attention to the three complementary aspects: development of the digital safety policy, raising awareness among the teachers and development of strategies to deal with cyberbullying with the support of parents. About half of the teachers declared that students report they have been bullied through mobile phone or Internet, and some teachers have been themselves cyberbullied (Eden et al., 2013). The above presented assumptions are the challenge for modern digital school and media education and socialisation. Properly designed and implemented media prevention activities have become the solution to minimise the threats to the digital safety of the students.

### 3. Discussion

The research into cyberbullying are one of the most popular areas of educational sciences, assigned to media pedagogy (Pyżalski, 2012). At present, the number of available publications on the scale and mechanisms of electronic aggression and cyberbullying among the adolescents is rapidly growing. More and more often, the pedagogical research leverage the advantages of the longitudinal studies which reflect the changes taking place in the recent years (Tomczyk, 2017). Research into cyberbullying has a long tradition also in the area of preventive activities aimed at finding the effective methods of preventing or minimising the occurrence of undesired behaviours in the context of education (Ševčíková, Šmahel, 2009; Ševčíková et al., 2012). The research results presented herein are in line with the international discourse on cyberbullying which, despite extent knowledge and a relatively large number of preventive programmes, has not been eliminated yet (Schultze-Krumbholz et al., 2014; Del Rey et al., 2015).

The results show the bottom-top view on cyberbullying from the perspective of the persons who have to deal with cyberbullying-related problems as part of their daily educational responsibilities. It is teachers who, in many cases, are legally obliged to help the victims as well as the perpetrators (Zych et al., 2015). The opinions and experiences of the teachers expressed during the focus group reveal that these professionals need educational support in the situations of solving the cyberbullying issues. The respondents still feel unsecure when facing situations mediated by digital media (Stošić, Stošić, 2015). Very often, as part of their activities supporting prevention on the first and third level, they use help of external institutions such as Police or City Guards, partly shifting the responsibility and searching for support on the most difficult cases. This situation is typical and observed not only in Poland (Vandebosch et al., 2012).

The teachers most often emphasise the importance of the tertiary prevention, that is, solving the problems as they occur. When a given cyberbullying case is connected with the penal liability, they feel the weight of the problems. Unfortunately, this is still the typical approach to the problem of digital safety, focusing on eliminating the risky behaviours as they occur instead of primary (anticipatory) prevention (Pyżalski, 2012b; Tomczyk, Potyrała, 2019; Tomczyk, Solecki, 2019). However, we need to point out to the new trends which some time ago were absent from the Polish educational system: regular and centrally organised projects to support the teachers. It is the initiatives led by the third sector and the representatives of the first sector (the ministry or school supervising authorities) or businesses implementing their social responsibility values (Pyżalski et al., 2019) support researchers by providing finances to diagnose the negative phenomena and expertise (trainings for teachers in using the effective cyberbullying prevention methods and techniques). However, given the teachers' opinion about such trainings, the offer seems to be inadequate to the actual needs. First, due to the rapid development of the services of the information society, the trainings are often outdated (Ziemba, 2013). The changing cyberspace prevents the teachers from effective diagnosis all the threats of the digital world. Their knowledge often becomes irrelevant (Lokmić et al., 2013). Second, the teachers emphasise the problem of the limited time they have for self-learning, therefore the trainings should focus on presenting the cyberbullying mechanisms using specific case studies (Zych et al., 2017). Third, there are teachers who still believe in the effectiveness of blocking the access to mobile phones in schools. The focus group participants noticed that the model based on restrictions motivates students to engage in other, offline activities and thus eliminates cyberbullying (Blaya et al., 2018). But the restrictive prevention causes other threats like lack of competencies to deal with cyberbullying outside of school, when there are no regulations preventing children and youths from using their mobile devices.

Cyberbullying prevention is a complex activity (Tomczyk et al., 2019; Zych et al., 2016). This means that, according to the teachers, effective elimination or reduction of the behaviours classified as cyberbullying requires the efforts of both parents and students. The respondents said it it parents who are responsible for this type of activities their children engage in while online. However, they emphasise that the parents are still insufficiently involved in education of their children in the cyberspace. Lack of rules of using the Internet, poor knowledge about the services young people use in social media or insufficient engagement in the world of the young people leave the adolescents without the significant protective factor of parents' involvement in the education of their children (Wąsiński, Tomczyk, 2015; Tomczyk, Wąsiński, 2017). When led only by the teachers, such activities have insufficient impact. According to the teachers, prevention in the family does no require specialist knowledge but is based on building the relationships with the children and developing empathy towards the suffering of others. However, there is a group of teachers who

clearly refer to the intergenerational transfer within which building bridges between the adults and children helps to understand the nature of the new digital services, including the threats, without creating unnecessary stereotypes. At the same time, the respondents emphasise that they themselves together with the parents, lack advanced digital literacy which is in line with the diagnoses commissioned by the Ministry of National Education (Tomczyk, 2018; Tomczyk, 2019).

When referring to minimisation of cyberbullying, the teachers also focus on the styles of using digital media by the young people and say the problem is also rooted in poorly developed critical thinking. Schools do not help their students to function in the cyberspace; there are no activities focusing on developing the universal skills which would useful online and offline. The teachers are right when they say that in many cases, new media are introduced to schools without providing the proper methodology grounds. The technocratic vision of school saturated with new media but lacking proper educational activities and awareness raising, only strengthens the undesired behaviours. In this situation, the teachers recognise the need to design proven and quick procedures of responding to cyberbullying. In addition, the respondents notice the fact that cyberbullying in schools is more and more often addressed not only to peers but also to the teachers. Cyberbullying towards the teachers is very often a taboo. Teachers share many concerns and lack digital literacy to be able to protect themselves against such phenomena.

## 4. Results

The paper presents the results of the focus group study into the widely defined cyberbullying and expectations related to prevention-educational activities in this area. The study was conducted as part of the project SELI – Smart Ecosystem for Learning and Inclusion – SELI ERANet17/ICT-0076. The project focuses on the development and implementation of open model of access to the ICT-based tools and environments in order to encourage digitisation of the learning ecosystem through strengthening the educational solutions (detailed methods) and improving integration and availability of the ICT in the European Union and Latin America.

The objective of the research was further determined as the following research problems:

- What are the teachers' experiences related to their participation in the activities to increase their knowledge about cyberbullying prevention?

- What difficulties do the teachers face as they implement cyberbullying prevention activities?

- According to the teachers, what are the needs and expectations of children and youths related to cyberbullying prevention?

- How do teachers evaluate the existing cyberbullying prevention programmes?

*Sample characteristics and research procedure*

The sample consisted of the teachers who were postgraduate students at the Pedagogical University of Krakow in the academic year 2019/2020. The qualitative study was conducted in May 2019 using the focus group method. The respondents had different educational background and were teachers of different subjects. The study was carried out in two separate random groups (two faculties of the postgraduate studies). For the purposes of the research, an interview questionnaire was designed, divided into 4 thematic sections respective of the detailed research problems.

The focus groups took place on 12 May 2019. The sample consisted of 13 persons (teachers-postgraduate students of: childcare and guardianship education, pedagogical diagnosis and therapy in the Faculty of Pedagogy of the Pedagogical University of Cracow). The group consisted of 13 females. They were mostly teachers (primary and secondary education). One of the respondents was a school director. The age of the group was 33-49 years. Most of the teachers worked as appointed and chartered teachers in primary schools and secondary general and technical schools. All the respondents gave their consent to take part in the study, thus the ethical standards of the research were met.

*Analysis of the quantitative data*

The study was conducted using the interpretative paradigm of the pedagogical research. The starting point for the analysis of the qualitative data is the assumption that the focus is on an individual. Their problems, feelings and experiences are the starting point. The existing research results are the background rather than the theoretical framework for the research development. The studies within the interpretative paradigm are usually a small-scale research, such as in the presented case. The human activities (in this case, related to cyberbullying prevention among the teachers) reflect the social reality in a micro space. Research within this paradigm are subjective and require personal engagement of the researchers (members of the SELI project) (Łuszczuk,

2008). The study is based on the pedagogical phenomenology (Peters, 2009; Ryk, 2011). Such formulates assumptions allowed to explore the individual views of the teachers-practitioners of cyberbullying prevention. Phenomenology-based assumptions are used in the research into educational phenomena which have not been sufficiently explored in the individual perspective (Bolton, 1979). The researchers are aware that the qualitative data collected can be also applied in practice (designing cyberbullying prevention teaching materials) and may contribute to the diagnosis within the positivist (quantitative) research.

Some of the respondents took part in regular meetings addressing the issues of cyberbullying, organised by the police or city guards (usually as an annual meeting for all the students and teachers from a given school).

*I mean, I had* [some experiences], *but through the prevention meetings with the police officers in Bochnia. We just invited the officers and they came to the class and talked about the legal-penal consequences related to cyberbullying, situations they recorded in the region and pending cases. We have been introducing this type of prevention activities for two years in our school.*

*We had the same type of preventive programme in our school. Someone from outside the school who trained both parents and teachers. There were talks with the children, combined with different activities like making posters about cyberbullying – prevention posters.*

Some teachers had an opportunity to participate in trainings as parents. This experiences provided them with additional knowledge about the barriers to effective prevention.

*I also took part in such a meeting about cyberspace but as a parent. It was led by a police officer. It was to address a certain situation many people were involved in and parents were completely unaware how serious the threat was. They seem to listen but like it was not related to them or their kids.*

Only in one out of the 13 schools represented by the respondents, the director appointed a cyberbullying coordinator. Usually, this type of problems are solved by the teachers or school psychologists or counsellors.

*In our school there is the cyberbullying coordinator who is responsible for training for the teachers and parents, we invite police officers, psychologists dealing with cyberbullying. Recently there was a police officer -psychologist who was the cyberbullying expert and that was a great meeting.*

According to the respondent, this role *must be additionally paid because it requires extra trainings this person must complete to be able to share their knowledge and recent news.*

The respondents declared they knew the existing prevention programmes such as Bezpieczna+ (*Safety+*) or IMPACT. These are the activities implemented as part of the national programmes to improve the level of digital literacy among the parents, teachers and children. The activities are organised centrally and financed by the institutions responsible for supervision over the schools.

*In Krakow, all the four-graders and their parents are under the programme led by the police. Police officers come to the general education classes and meetings with parents. So we begin with the fourth grade, in a systemic manner.*

However, the interviewed teachers were a little sceptic about the effectiveness of these programmes. They signalled that knowledge in this area changes so rapidly that they are not able to update it.

*It all changes so incredibly fast that it is really hard to keep up with all the news. We would have to spend all the time in social media and track everything what is going on there.*

This way, they emphasised the need to establish institutions or roles, which would focus solely on updating the knowledge about the new forms of cyber abuse and cyberbullying. Young people who are often active observers could play an important role in such updating process.

Thus, the respondents have been most often using the experience and expertise of the invited guests (mainly police representatives). In their opinion, only a person in full uniform, who gives the specific examples of the legal consequences of cyberbullying is convincing for both, the students and their parents.

The above mentioned meetings focused most often on the legal issues related to the consequences of cyberbullying (mainly publishing photographs or images without the consent of the party involved and hate speech). The most engaging were actual examples, often from their own environment.

The participants of the focus group pointed out to the necessity to make students aware that all the images shared in the Internet remain there even after they are removed from the social networked portals. This communication channel is the most popular among the young people, and often parents, who carelessly share their holiday or family photos. These images often are beyond the good taste and show too much nudity (for example, a mother posting her photos in bikini while her child's friends comment them).

*I witnessed that parents really are not aware that sharing photos online can be dangerous. For example, in a Facebook group "Moms from Krakow" a girls wrote that she would do a free photo session and asked to send her the photographs of children so she could choose the best ones. And actually, those mothers shared the photos of their beautiful daughters in comments, completely unaware that these images may go who knows where within minutes.*

The teachers admitted that parents the weakest link in the prevention and fighting cyberbullying. First, their over-involvement in the cyberbullying acts and the need to protect their children hinder the work of the teachers and the police. Second, thanks to their thoughtless attitude towards the online activities their children are exposed to cyberbullying. The young generation observes the behaviours of their parents and follows them. If Facebook is a place where parents create their image and share everything with everybody, their children will adopt the same attitude.

One of the respondents mentioned a highly media-covered case of sharing the photographs of intimate body parts by a teenage girl. It was then the focus of a cycle of trainings. What concerns the teachers, is the lack of awareness of the threats or even ignoring them by the parents.

*I have been recently on a meeting where we wondered how to ask the parents if they actually know what is cyberbullying… The parents have no awareness at all.*

Other teacher added:

*The parents do not know there is something like cyberbullying, they cannot deal with it themselves. I suspect that some suicides, problems with attendance and behaviour problems result from the fact that children experience some problems online, to which the parents do not respond.*

Another problem are parents who give their consent to create Facebook accounts of their children who are under 13. Such profiles are outside the parental control.

*You can impose parental control on any device but the parents have no idea that something like this exists.*

Other issue addressed during the meetings with parents was the use of mobile phones at school, which may be used to record ridiculing or harassing videos. Unfortunately, many schools have no idea how to practically execute the ban on mobile phones. Confiscating the phones at the beginning of the classes has met with the resistance of children and youths.

*The moment we introduced the ban on mobile phoned in the school and started to take them away, every morning a lady comes with a box to collect the phones. Of course, not everybody gives their phone away. If they do not and I see them using them during a break, I confiscate the phone. One of the parents is supposed to come and take it but it does not always work.*

The respondents notice that the teachers themselves are not united in this regard: *some teachers resist to take the phones away because they believe they are the source of information.*

It is the fact that using mobile devices in the school changes the way young people function during the breaks. They have the opportunity to respond to the lack of exercise during the classes. One of the respondents presented a thorough analysis of the changes in the students' behaviour.

*When we introduced this rule in our statute, suddenly the kids have become more laud, began to run and talk to one another. As long as they could use their mobiles, it was quiet in the halls. I was shocked each day I walked the corridors. Well, maybe not a deafening silence but it was quiet. And now I know that this school is a normal school, that these kids can rest after each class. It may be annoying for us, adults, but they need to vent their energy. We know very well that kids need to run and need to shout, the psychology says so. That is why I think it is stupidity to hand them mobile phones. It is simply stupidity which at some point will have negative impact on their mental well-being.*

According to the respondents, one of the difficulties in the implementation of the prevention activities related to cyberbullying is the intergenerational barrier.

*We had to explain the parent the basics which their children comprehend every day.*

The school students are the generation for whom telecommunication technologies are the natural habitat. Young people are fluent using these technologies but they are not mindful (they lack critical thinking). They do not realise the threats they are exposed to in the virtual reality.

*Let us remember that very often students provoke such situations themselves by posting their photos, weird photos and they are then shocked it fires back. I also had a situation in the school: a girls, not even 15 years old, so the police had to question half of Krakow because people shared the photographs. The mother was appalled and could not comprehend that it was her daughter who posted the photographs, she is still in shock that someone is sending out these photos. She does not understand these mechanisms.*

Again, the last sentence resonates with the problem of the generational barriers between the parents and their children. And children do not think, *that if something gets into the network, it will stay there and not vanish.*

The careless attitude of the parents is related mainly with the activities of their children in the social networked services: Facebook, Instagram or Instastory. Children create closed groups so that adults could not control them.

*Parents feel released from the responsibility to trace and control what their children do, everything is on the school – it is the school that teaches them wrong, has wrong programmes etc.*

*Access to these closed groups is limited and we do not have access to where teenagers can act and get away with it. This limits the teachers greatly when it comes to any interventions.*

Some teachers try to monitor activities within such groups but after a while, they give up. One of the teachers pointed out that young people have their own language, abbreviations and slogans so that adults would not understand what they talk about.

The respondents hope that introduction of the new regulations will cut the impunity of cyberbullies.

*In 2020 there is supposed to be a new regulation that all comments must be signed with a name and a surname or a nick. Police has now much difficulty to identify the perpetrators because, as you said, half of Krakow was questioned because they cannot track the IP of the one who wrote this or if it was written from someone else's notebook. They say that now it will be like this, as part of the protection so people are aware they are responsible for their words and can be punished for it. Good that they have introduced it. There should not be so much anonymity.*

The teachers pointed out that one of the barriers to cyberbullying prevention is the particular cruelty of the young offenders and the accompanying conspiracy of silence. In such circumstances, it is difficult to identify the initiator and encourage the witnesses to testify.

*I have been through a situation in my own school, my own, because it has been my school for years. Our son was attacked on Nasza Klasa portal. It works like a pack of wolfs, this is how these children function. One kid attacks and immediately the whole group joins in. They literally act like a pack. And my son told me: "Mom, I will never go to that school again!" So it only because I have a good relationship with my kid, I know that much. So thanks to my reaction he changed his mind and it is ok, but is something like this happens and no one knows... the problems grow bigger and bigger with each year.*

Another barrier mentioned by the respondents is the lack of time and will to talk to their children openly. The statistic 15 minutes a day is not enough. According to the teachers, the primary and tertiary prevention means that *one simply needs to talk to them and again, talk. It is not that they do not understand. One just needs to calmly, without attacking them, explain the problem in simple words. I think one can achieve a lot this way.*

The respondents noticed the fact that ever younger children become the Internet users, which leads to the increase of addiction to modern information technologies.

*A child comes to the clinic, a 2-year old, and they wait in line. Suddenly the mom says: look what a beautiful bird and the child comes to the widow and tries to zoom it with their fingers like on the phone. So what does it mean? That this 2-year old has contact with a phone all the time and already has this zooming mechanism worked out.*

Other teacher added:

*I have read that Poles [which is strange because we are not a rich society] buy mobile phones very early. Something is wrong because this is not about giving the child a mobile phone.*

Adults push children into phone addition. More and more often these devices serve as nannies or enhancers of learning (reference to the behavioural psychology). There are different

results of such behaviours: from speech-related disorders to neurologic symptoms like temporary nervous paralyses or epileptic seizures. In this situation, the priority are the wide-spread prevention activities addressed directly to the parents with small children.

*I think we should teach parents at least from the kindergarten, how the new technologies can affect their children's development. My neighbour sits her son on a potty to teach him hygiene, gives him the phone with a cartoon, and he sits there for 20 minutes. We used to give them books.*

Other respondent added: *one needs to tell the parents because they are not aware, they just think they are doing well, they try their own ways, sometimes better, sometimes not but they try, they do not think there is a threat.*

Some respondents also postulated that preventive activities should be implemented using media, including television. They suggested cartoons for children, addressing these issues, for example "Seep in the net" (cartoons by Sheeplive.eu). The wider audience the better, especially that our society focuses primarily on media messages. The more often do the parents see these type of content, the greater chance the educational and prevention activities will bring effects. Let them know that our typical, constant commenting on someone's look or decisions may result in hate speech.

Interestingly, one of the respondents suggested that schools are too enthusiastic about the modern technologies. There is a common opinion that a good school is the one where technologies take the central place. The respondent think a golden mean is needed

*because is they watch a movie, they may remember maybe 10% of it. At some point the child will switch off and go into the sleep mode. The problems I see with focus result from the fact that children are over stimulated and tired of staring into different screens. At some point, an information shock occurs and there is not much left in their heads.*

Other teacher noticed that some parents, especially the older ones who remember the times where there were no screens in schools, see the escalation of mediatisation in schools.

*We had open days and the parents came. They came to us and asked why there is an interactive board in the first grade class, instead of a traditional, blackboard. Maybe it is their sentiment from their childhood.*

It is hard not to agree that the present technological transformations have changed the way people learn and function, especially in the area of fine motor skills. Some of the respondents tend to explain the causes of dysgraphia and dysorthographia with the reduction of writing exercises in schools. They believe that students learn to scroll and click the screens in the first place. This leads to problems with writing letters or holding scissors.

One the barrier may be the attitudes of the parents, that is, their thoughtless, unprofessional approach to cyberbullying cases. Another barrier is also children's ability to hide the truth. A student can be very kind and well-behaving in the class while bullying other online with a particular cruelty. It is very difficult to identify such offender as no one even suspects him or her. Another issue is the language young people created for cyberbullying purposes. These are special abbreviations – a slang children use in the Internet. They do not make sense for outsiders, but young people know it perfectly. A blend of consonants may be a very specific insult. In this way they safeguard themselves.

*They have created their own language and we, the teachers, are "not in". Seemingly, there is nothing going on in this group but when I began to search and made some screenshots, it turned out there were plenty of insults. They know what an insult is, they know what it means. Some of them are hard to figure out. To be honest, when I saw some of them, it made me think too. I came up writing many meanings on the paper.*

The problems related to the cyberbullying prevention are most often addressed by the respondents during the general education classes. However, many teachers use these classes to catch up with their own subject curricula and the prevention of the new forms of risky behaviours is completely ignored.

When asked what is the most common type of electronic aggression they had encountered, all the teachers agreed it was: ridicule, mocking, mean and offensive, often very vulgar comments towards specific persons in the closed Fb groups. What is interesting, potential victims are first banned or removed from the group and remains unaware she or he is cyberbullied. The other group members are bind with the conspiracy of silence so certain acts of violence come to light when bullying is already at a huge scale. The victim usually withdraws from the class life.

*When there are closed Messenger groups and someone shares an offensive photo and then adds insulting comments, both parents and the kid do not react because the child has been removed from the group. Neither the parents nor the child have access to that group. I had such situation at school, because I regularly control such groups in the Messenger. Not, that I have too much time but sometimes I think it is necessary. Children talk about different things there. In my daughter's class there was a boy whose photograph was posted to a group. He was banned from the group so he was not aware the comments others wrote. I reported it to his mother and she talked to him but the post disappeared from the group, were deleted as soon as it became the point of attention. This is difficult to deal with.*

One of the teachers noticed that the groups do not serve the purposes for which they are officially created. In general, children do not like to share their homework or explain one another what are the assignments about. Even when all the group members are active, help requests remain unanswered, both those posted in a forum and individual.

*It is a trend, and I heard that from many friends that children do not want to help one another with homework. They just have many other things to do and, surely, updating friends about the classes is not one of them.*

According to the respondents, today's young people lack emotional intelligence or simple empathy. This should be the starting point in designing training and prevention curricula. One of the respondent was very specific about this issue.

*I think the general education classes should be used to teach children how to express emotions. They should focus in particular on identifying difficult emotions before they accumulate, on teaching children how to use "I-messages" to say what they dislike in other people's behaviour by focusing on the facts and without insulting anyone. The students should learn how they can change this behaviour so they could function better in the class.*

According to the teachers, possibility to comment all the information by the Internet users is not a good solution because it ensures them that they may speak regardless of their knowledge and culture level. The anonymity of the comments encourages behaviours which break the commonly respected social standards.

As for the already mentioned need for the students learn how to deal with emotions, it is important to teach them how to handle difficult emotions, especially the negative ones. The ability to manage emotions is one of the main protective factors. The victim's response always depends on their psychological wellbeing. Unfortunately, the teachers do not feel competent to lead workshops or trainings for young people in this area. It would be good if qualified emotional intelligence coaches would get involved in such activities. This type of investment in the students would surely bring the long-lasting benefits.

As the second most common bullying behaviour the respondents mentioned publishing sneak peak photos taken in a dressing room or a bathroom with a mobile phone and modifying pictures or posting memes which illegally use someone's image. Most of these activities is initiated out of boredom. The teachers noticed that young people do not like any effort and are not interested in doing anything. Thus, the training materials should include the content related to the development of the socially useful attitudes: *values, for example, diligence, I was able to raise my son this way so maybe it is possible and it will be beneficial for them in life. The problem is that young people simply do not want anything.*

This issue provoked the discussion over the effective use of time and the advantages of different mobile applications to measure the time spent online. According to the respondents, cell phone addiction is also present among the teachers. Sometimes a mobile is an excuse to avoid confrontation with a student.

*There is another phenomenon in schools and it is not only among the children but also teachers who simply forget why they come to the class. I personally know 3 teachers who come their class and take out their mobile phones. Children are supposed to work with their textbooks while the teachers are busy with Facebook, Instagram and other stuff. Adults should receive addiction treatment too...*

One of the teachers referred to the threats related to the relationships initiated and developed through social networked services like Facebook. An initial fascination may turn into a relationship which is hard to disentangle from.

*I know from my daughter's experience. She was texting via the Messenger with a boy she had met there and he fell for her a little and then, the emotional blackmail began. My daughter*

*did not want to write to him anymore, and he was telling her about some serious family problems. He expected her to help him, but she was only 14. She blocked him so he set up another account. And she was communicating with him again. The blockades did nothing because he kept creating new accounts. Fortunately, she told me about it and I reacted. It ended well but that was cyberbullying.*

An important issue mentioned in the context of the needs and planning the training activities was dealing with cyberbullying once it happens. The teachers emphasised that is it parents who often report the incidents, but they knew about them from their children. Such information come from the children unless they have good relationship with their parents. Thus, the training resources should include the content addressing building healthy, trust-based relationships between the children and adults.

It may disturbing that some parents ignore the signs of cyberbullying. They think it is a silly child's play (videos recorded with mobile phones) or natural conflicts (verbal attacks in groups or through SMSes) which will dissolve with time. Only when there is an external intervention, e.g. by the police, or when a tragedy happens, they realise how damaging these seemingly innocent (in their eyes) behaviours were. According to the teachers, the particular focus should be on educating the parents, and it will be best done using the actual examples. It is hard to do during scheduled, standard meetings with parents because many of them do not participate.

Asked, how can they deal with cyberbullying experiences, the respondents said it depends whether they work with the perpetrators, the victims or the witnesses. First of all, young people must be ensured they can always come with any problem. And that they will always receive help and no one will criticise them but try to understand what they feel.

*I did not have any problem with that in my school because for several years I had built a partnership relation with the students, so the kids were voluntarily showing me screenshots with cyberbullying, showed me what others wrote in the Messenger and how the group responded. Children come by themselves, they just ask me to be discrete so no one knows it is them reporting".*

Second, the witnesses should be aware it is their duty to react to and report cyberbullying to the teacher. If they do not do it, they may bear the consequences, also legal. One of the focus group participants, recalled a situation when a boy was bullied by his peers. Someone pasted his face into a photograph with a naked body and then uploaded as the desktop background of the school computers. The Police was called and they tried to determine from which computer it was uploaded and who did it. They found the perpetrator. It turned out that quite many students knew about it but no one stopped the bully or reported the abuse.

Other teacher noticed that in their school cyberbullying and Messenger storms begin in the fifth or sixth grade. So the school began to organise meeting for the fifth-graders, their parents and invited police officers, during which they sing a contract. Then, they listen to information about the consequences of breaching the law. Usually these meetings turn out to be effective. In the seventh grade, the interest in messaging decreases. There are no incidents like the one mentioned above.

Students, in turn, are educated most often through talks delivered during different subject classes or dedicated meetings. One of the respondents signalled the need to develop a dedicated general education lesson curriculum, during which the students could talk about such values as: respect for others, responsibility for one's own actions or personal culture.

The respondents think there should be special procedures developed of conversations with the victims, offenders and witnesses. Communication is the basis for all the preventive and intervention activities. The teachers hold conversations based on their own intuition and knowledge of interpersonal trainings, yet sometimes they lack quick, ready-to-use solutions.

The respondents also suggested creating a professional support network for teachers. It could function as a forum to exchange experiences and share proven solutions. The teachers openly admitted that they are the first ones the bullied students usually turn to for help. In such situations, they become the ones who organise the whole support network and need to be equipped in the professional and relevant knowledge as well as receive the support from their environment. One of the teachers declared:

*Support from our colleagues is very important. Thanks to it, we can solve many problems quickly and effectively. During the conventions, we always share our difficulties and educational challenges. We are an informal support but also supervision group. I value my friends' comments*

*like: "you know, you do not achieve much using this strategy" or "be careful because this may turn against you".*

Such support seems to be necessary when dealing with the cyberbullying cases, especially that it has been taking on more and more sophisticated forms. The respondents admitted they had never been cyberbullied by their students but they had heard about such cases. For example, one of the teachers was ridiculed and insulted in a closed group. After a while, the students get bored with it and when the case was brought into light, it was already over. This does not change the fact that teachers should know how to deal with attacks from the students. This is true as, given the nature of their profession (evaluating students), they are particularly prone to it. Confiscating mobile phones before the classes is to prevent recording or taking photographs of teachers but where is a will there is a way.

The respondents were rather sceptic towards the existing prevention programmes which are mainly based on e-textbooks for parents, teachers and students. Despite attractive graphics, it is still verbal messaging. They also said that the offer of in-house trainings does not bring sufficient results. First, they provide the participants with information about cyberbullying, its types, perpetrator and victim profiles and legal consequences. But they lack practical solutions and case studies teachers could use to work with students and their parents. A specific example will be always more engaging. Also, due to too many responsibilities, trainings for the teachers are short and quite superficial. Teachers willingly collaborate with police officers as they provide them with an up-to-date knowledge and real life examples. Students also gladly take part in the meetings with uniformed officers. Their uniforms and experiences earn the students' respect.

Another weakness of this type of programmes is that they are occasional. In the opinion of the respondents, this type of classes should be obligatory at all stages of education. Young people are extremely creative in this area therefore we need regular updates. One of the suggested forms of training was short question and answer methods. The questions usually raised by the teachers and parents, and the answers which would provide specific guidelines. The content of such trainings could be published as an e-guidebook.

When asked what are the biggest weaknesses of the cyberbullying prevention programmes and trainings, the respondents listed:

- One-sidedness of the training content (definitions, types, causes and results of cyberbullying). There are no content related to managing emotions or conducting intervention and therapeutic conversations. And while there are many resources on how to talk to the parents (difficult parents, using different strategies of action), the Internet lacks similar materials on how to talk to students. The materials on how to use the "I-messages" are not enough. The respondents signalled the need to obtain more knowledge, for example how to talk to a child who has had traumatic experiences or is planning a suicide.

- Training materials should be designed and trainings led by specialists: police officers, psychologists. It would be worth to consider students' contribution, as they often possess many practical knowledge in this area. And maybe parents who would be interested in collaboration? The teachers also postulate creation of a database of individuals and institutions who can support the prevention activities implemented in the schools. The more experts engaged, the greater potential effectiveness of the actions taken.

- More emphasis on the obligatory character of this type of trainings, especially among the parents. These issues should be addressed throughout the whole school year, at every stage of education. The sooner the primary prevention activities are introduced, the less work will remain for the future.

The trainings offered should contain ready-to-use, attractive scenarios which adopt man different solutions (mini presentations, videos, case studies, Webquests scenarios of project ideas). These expectations were justified with the lack of time to create their own scenarios. diversity of the materials offered would allow them to adapt them to the actual needs of their didactic and care career. In addition, all the materials should be written with plain language to be understandable for the students and the parents, who represent different intellectual environments and levels. The simpler the language the easier it is to digest the content delivered.

## 5. Conclusion

When referring to the effectiveness of digital media education, the interviewed teachers mentioned many challenges for modern "digital schools". Among them they listed legal support

(regulations eliminating anonymity in the Internet), combining prevention online and offline, including teachers in the process of the lifelong learning with particular focus on the nee trends emerging in the cyberspace. There is also a shift in the methods used to eliminate the undesired phenomena through developing the universal traits and competencies, which are at the same time the universal protective factors. For example, the respondents emphasised the importance of working with students' emotions, developing respect to others, personal culture and adequate response to other person's suffering (from observer to defender).

Cyberbullying prevention which is, in fact an attempt at developing digital literacy among the students, parents and teachers, has been discussed in the subject matter literature and praxis for more than twenty years (Potyrała, 2017). The evolving view on cyberbullying (joining the online and offline spheres), using diverse forms and methods, avoiding information methods and including the characteristics of the developing information society helps the teachers to implement prevention activities more and more intentionally. They have been facing the growing number of educational challenges related to the e-threats but at the same time their awareness of the complexity of the risky behaviours (such as cyberbullying or event-time convergence has been also increasing (Morbitzer, 2007). This is one of the predictors of the technological maturity in the society and the global challenge in media education (Fedorov, 2008; Gilbert, Fedorov, 2004).

## 6. Acknowledgements

## References

Athanasiou et al., 2018 – *Athanasiou, K., Melegkovits, E., Andrie, E.K., Magoulas, C., Tzavara, C.K., Richardson, C., Tsitsika, A.K.* (2018). Cross-national aspects of cyberbullying victimization among 14–17-year-old adolescents across seven European countries. *BMC public health*, *18* (1): 800.

Barlińska et al., 2013 – *Barlińska, J., Szuster, A., Winiewski, M.* (2013). Cyberbullying among adolescent bystanders: Role of the communication medium, form of violence, and empathy. *Journal of Community & Applied Social Psychology*, *23* (1): 37-51.

Barlińska et al., 2018 – *Barlińska, J., Plichta, P., Pyżalski, J., Szuster, A.* (2018). Ich słowami–obraz pomocy w sytuacjach cyberprzemocy rówieśniczej z perspektywy uczniów. *Dziecko Krzywdzone. Teoria, badania, praktyka*, 17 (4): 82-115.

Blaya et al., 2018 – *Blaya, C., Kaur, K., Sandhu, D., Sundaram, S.* (2018). Cyberbullying in Higher Education in India and France. Bullying, Cyberbullying and Student Well-Being in Schools: Comparing European, Australian and Indian Perspectives: 107.

Bolton, 1979 – *Bolton, N.* (1979). Phenomenology and education. *British Journal of Educational Studies*, 27 (3): 245-258.

Casas et al., 2013 – *Casas, J.A., Del Rey, R., Ortega-Ruiz, R.* (2013). Bullying and cyberbullying: Convergent and divergent predictor variables. *Computers in Human Behavior*, *29* (3): 580-587.

Del Rey et al., 2015 – *Del Rey, R., Casas, J.A., Ortega-Ruiz, R., Schultze-Krumbholz, A., Scheithauer, H., Smith, P., Plichta, P.* (2015). Structural validation and cross-cultural robustness of the European Cyberbullying Intervention Project Questionnaire. *Computers in Human Behavior*, 50: 141–147. doi:10.1016/j.chb.2015.03.065

Dooley et al., 2009 – *Dooley, J. J., Pyżalski, J., Cross, D.* (2009). Cyberbullying versus face-to-face bullying: A theoretical and conceptual review. *Zeitschrift für Psychologie/Journal of Psychology*, *217* (4): 182-188.

Eden et al., 2013 – *Eden, S., Heiman, T., Olenik-Shemesh, D.* (2013). Teachers' perceptions, beliefs and concerns about cyberbullying. *British Journal of Educational Technology*, *44* (6): 1036-1052.

Fedorov, 2008 – *Fedorov, A.* (2008). *On Media Education*. Moscow: ICOS UNESCO "Iinformation for All".

Gilbert, Fedorov, 2004 – *Gilbert, L.C., Fedorov, A.* (2004). A model for media education research in Russia and the US. *Educational Media International*, *41* (2): 157-162.

Hollá, 2016 – *Hollá, K.* (2016). Cyberbullying as a negative result of cyber-culture of Slovak children and adolescents: selected research findings. *Journal of Language and Cultural Education*, *4* (2): 40-55.

Lokmić et al., 2013 – *Lokmić, M., Opić, S., Bilić, V.* (2013). Violence Against Teachers – Rule Or Exception?. *International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)*, 1 (2): 6-15.

Łuszczuk, 2008 – *Łuszczuk, W.* (2008). Normatywny i interpretacyjny paradygmat w badaniach pedagogicznych. *Pedagogika*, 3: 13-26.

Morbitzer, 2007 – *Morbitzer, J.* (2007). Edukacja wspierana komputerowo a humanistyczne wartości pedagogiki. Kraków: Wydaw. Naukowe Akademii Pedagogicznej.

Peters, 2009 – *Peters, M.A.* (2009). Heidegger, phenomenology, education. *Educational Philosophy and Theory*, 41 (1): 1-6.

Plichta et al. 2018 – *Plichta, P., Barlińska, J., Pyżalski, J.* (2018). Cyberprzemoc a kreowanie własnego wizerunku w internecie-co w ich mechanizmach zmienia niepełnosprawność młodych dorosłych osób?. *Interdyscyplinarne Konteksty Pedagogiki Specjalnej*, (20): 101-122.

Plichta, 2017 – *Plichta, P.* (2017). Socjalizacja i wychowanie dzieci i młodzieży z niepełnosprawnością intelektualną w erze cyfrowej. Toruń: Wydawnictwo Adam Marszałek.

Potyrała, 2017 – *Potyrała, K.* (2017). iEdukacja. Synergia nowych mediów i dydaktyki. Ewolucja – antynomie – konteksty. Kraków: Uniwersytet Pedagogiczny. doi:10.24917/9788380840522

Pyżalski et al., 2019 – *Pyżalski, J., Zdrodowska, A., Tomczyk, Ł., Abramczuk, K.* (2019). Polskie badanie EU Kids Online 2018. Najważniejsze wyniki i wnioski. Poznań: Wydawnictwo Naukowe UAM.

Pyżalski, 2012a – *Pyżalski, J.* (2012a). From cyberbullying to electronic aggression: typology of the phenomenon. *Emotional and Behavioural Difficulties*, 17 (3-4): 305–317. DOI: 10.1080/13632752.2012.704319

Pyżalski, 2012b – *Pyżalski, J.* (2012b). Agresja elektroniczna i cyberbullying jako nowe ryzykowne zachowania młodzieży. Oficyna Wydawnicza Impuls, Kraków.

Ryk, 2011 – Ryk, A. (2011). W poszukiwaniu podstaw pedagogiki humanistycznej. Kraków: Oficyna Wydawnicza Impuls.

Schultze-Krumbholz et al., 2014 – *Schultze-Krumbholz, A., Göbel, K., Scheithauer, H., Brighi, A., Guarini, A., Tsorbatzoudis, H., Smith, P.K.* (2014). A Comparison of Classification Approaches for Cyberbullying and Traditional Bullying Using Data From Six European Countries. *Journal of School Violence*, 14 (1): 47–65. DOI: 10.1080/15388220.2014.961067

Ševčíková et al., 2012 – *Ševčíková, A., Šmahel, D., Otavová, M.* (2012). The perception of cyberbullying in adolescent victims. *Emotional and Behavioural Difficulties*, 17 (3-4): 319–328. doi:10.1080/13632752.2012.704309

Ševčíková, Šmahel, 2009 – *Ševčíková, A., Šmahel, D.* (2009). Online Harassment and Cyberbullying in the Czech Republic. *Zeitschrift Für Psychologie / Journal of Psychology*, 217 (4): 227–229. doi:10.1027/0044-3409.217.4.227

Soldatova et al., 2014 – *Soldatova, G., Rasskazova, E., Zotova, E., Lebesheva, M., Geer, M., Roggendorf, P.* (2014). Russian Kids Online: key findings of the EU Kids Online II survey in Russia.

Stošić, Stošić, 2015 – *Stošić, L., Stošić, I.* (2015). Perceptions of teachers regarding the implementation of the internet in education. *Computers in Human Behavior*, 53: 462-468.

Tomczyk, 2017 – *Tomczyk, Ł.* (2017). Cyberbullying in 2010 and 2015 — A perspective on the changes in the phenomenon among adolescents in Poland in the context of preventive action. *Children and Youth Services Review*, 75: 50–60. doi:10.1016/j.childyouth.2017.02.017

Tomczyk, 2018 – *Tomczyk, Ł.* (2018). Digital competences of parents in the matter of electronic threats. In *SHS Web of Conferences* (Vol. 48, p. 01004). EDP Sciences.

Tomczyk, 2019 – *Tomczyk, Ł.* (2019). What Do Teachers Know About Digital Safety? *Computers in the Schools:* 1–21. doi:10.1080/07380569.2019.1642728

Tomczyk, Potyrała, 2019 – *Tomczyk, Ł., Potyrała, K.* (2019). Wybrane zagrożenia bezpieczeństwa cyfrowego dzieci i młodzieży w perspektywie pedagogiki mediów. Kraków: Wydaw. Uniwersytetu Pedagogicznego.

Tomczyk, Solecki, 2019 – *Tomczyk, Ł., Solecki, R.* (2019). Problematic internet use and protective factors related to family and free time activities among young people. *Kuram ve Uygulamada Egitim Bilimleri*, 19 (3): 1-13.

Tomczyk, Wąsiński, 2017 – *Tomczyk, Ł., Wąsiński, A.* (2017). Parents in the Process of Educational Impact in the Area of the Use of New Media by Children and Teenagers in the Family Environment. *Egitim ve Bilim*, 42 (190).

Tsitsika et al., 2015 – *Tsitsika, A., Janikian, M., Wójcik, S., Makaruk, K., Tzavela, E., Tzavara, C., Richardson, C.* (2015). Cyberbullying victimization prevalence and associations with internalizing and externalizing problems among adolescents in six European countries. *Computers in Human Behavior*, 51: 1-7.

Vandebosch et al., 2012 – *Vandebosch, H., Beirens, L., D'Haese, W., Wegge, D., Pabian, S.* (2012). Police actions with regard to cyberbullying: The Belgian case. *Psicothema*, 24(4): 646-652.

Vandebosch, Van Cleemput, 2008 – *Vandebosch, H., Van Cleemput, K.* (2008). Defining cyberbullying: A qualitative research into the perceptions of youngsters. *CyberPsychology & Behavior*, 11 (4): 499-503.

Wąsiński, Tomczyk, 2015 – *Wąsiński, A., Tomczyk, Ł.* (2015). Factors reducing the risk of internet addiction in young people in their home environment. *Children and Youth Services Review*, 57: 68-74.

Ziemba, 2013 – *Ziemba, E.* (2013). The holistic and systems approach to the sustainable information society. *Journal of Computer Information Systems*, 54(1): 106-116.

Zych et al., 2015 – *Zych, I., Ortega-Ruiz, R., Del Rey, R.* (2015). Systematic review of theoretical studies on bullying and cyberbullying: Facts, knowledge, prevention, and intervention. *Aggression and Violent Behavior*, 23: 1–21. DOI: 10.1016/j.avb.2015.10.001

Zych et al., 2016 – *Zych, I., Ortega-Ruiz, R., Marín-López, I.* (2016). Cyberbullying: a systematic review of research, its prevalence and assessment issues in Spanish studies. *Psicología Educativa*, 22 (1): 5–18. DOI: 10.1016/j.pse.2016.03.002

Zych et al., 2017 – *Zych, I., Baldry, A. C., Farrington, D.P.* (2017). School Bullying and Cyberbullying: Prevalence, Characteristics, Outcomes, and Prevention. Handbook of Behavioral Criminology: 113–138. DOI: 10.1007/978-3-319-61625-4_8

Zych et al., 2019 – *Zych, I., Farrington, D.P., Ttofi, M.M.* (2019). Protective factors against bullying and cyberbullying: A systematic review of meta-analyses. *Aggression and Violent Behavior*, 45: 4–19. DOI: 10.1016/j.avb.2018.06.008
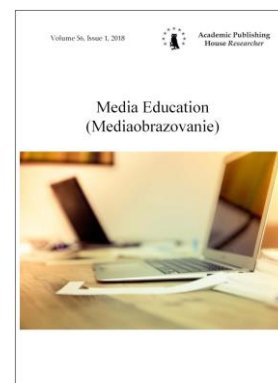
# Social Implications of Media Education in the Curriculum of a Future Teacher

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## Abstract

The article highlights the social implications that determine the use of media in contemporary education. Features of a new post-industrial society advance the necessity to redefine professional competences, taught within all kinds of curricula. Pedagogical schooling is no longer viewed from the perspective of the teacher-centred approach. Students find themselves in the centre of all educational practices. Learners are given a right, and consequently, responsibility to make choices. They receive the opportunity to enjoy a rich assortment of media, which is profoundly used as a learning source by most teachers today. Students can either judge media texts, and manage their content, by themselves, or rely upon teacher's professionalism. In such a context media competence acquires limitless importance. The authors theorize the necessity of mastering media literacy for future teachers. The experience of implementation of the knowledge of media studies is exemplified by the course "Philosophy and Psychology of Education". The curriculum was developed in the framework of the international master programme "Foreign Language Acquisition and Teaching" taught at Northern (Arctic) Federal University (NARFU). In conclusion, a dependency of modern education participants on their understanding of the mechanism and impact of media is pointed out.

**Keywords:** education, media education, teacher education, educational aspect of media, pedagogical philosophy, psychology of education, media literacy.

## 1. Introduction

Educational beliefs and approaches undergo alterations in tune with the demands of society. In terms of historical development, we may recall that Greek paideia envisioned the development of an ideal member of the polis that included subject-based and practice-oriented schooling, focused on liberal arts, arithmetic, and medicine as well as socialization of learners within the aristocratic hierarchy of polis. Moral upbringing, musical education, and physical training were also much valued and presented part and parcel of a refined Greek citizen. Societal demands, cultural and economic requirements of the time determined such an educational ideal. Nowadays educational ideals incorporate different skills and competences as compared to, for example, 20 years ago. According to K. Schwab today, at the time of the fourth industrial revolution, which has begun at the beginning of the XXI c., professionals need social and creative skills, "in particular decision making under uncertainty and the development of novel ideas" (Schwab, 2017: 40).

A dramatic turn of the fourth industrial revolution, "characterised by a much more ubiquitous and mobile internet, … by artificial intelligence and machine learning", defined a new paideia, a new challenge for educationalists, who faced the necessity to approach the issue of

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appropriate curriculum development. It became obvious that the curriculum was to encompass a wide range of competences that were not taught previously, like the competences of professional adaptability, critical reflection, pragmatic logic and creative thinking. However, it was not so clear, which subjects had the potential content for the upbringing of these skills. The traditional subjects, that looked fit for the mission, e.g. Philosophy, Psychology, Logic, Ethics, Mathematics, associated with a cemented set of values, which were definitely necessary for studying, but useless from the point of view of changing perspective.

## 2. Materials and methods

This research has been conducted within the process of curriculum development for a new international programme at Northern (Arctic) Federal University, Arkhangelsk. The staff of Northern (Arctic) Federal University continuously analyses features of new educational discourse for the development of educational programmes. The developers of the international master programme "Foreign Language Acquisition and Teaching" followed the principal aim of meeting the perspectives of the contemporary historical, social, economic, and cultural contexts, as well as new labour market demands. The necessity of building critical thinking skills and ability to teach future teachers to work in the changing educational system has been considered imperative. This factor advanced the course of "Philosophy and Psychology of Education" as highly influential for the construction of professional teacher's competences. The course curriculum equals 9 ECTS and is taught during the first and second semesters online. It should also be noted that the master programme highlights learning outcomes according to the Dublin descriptors, European competence framework and the requirements of the professional community. The programme has undergone international expert assessment and was credited as valid for teaching.

Building the course curriculum, the developers followed the idea that media education possesses crucial importance as a fundamental part of pedagogical schooling. Many media educators have discussed features of teaching media literacy, for example, A. Fedorov (Fedorov, 2001), I. Chelysheva (Chelysheva, 2016), N. Khlyzova (Khlyzova, 2011), Y. Tyunnikov (Tyunnikov et al., 2016), N. Chicherina (Chicherina, 2008). In this study we follow the European commission approach to media literacy and define media literacy as "the ability to access the media, to understand and to critically evaluate different aspects of the media and media contents and to create communications in a variety of contexts. It includes all media. Media literacy aims to increase people's awareness of the many forms of media messages encountered in their everyday lives. Media messages are programmes, films, images, texts, sounds, and websites that are carried by different forms of communication. Media literacy is a matter of inclusion and citizenship in today's information society. It is a fundamental skill not only for young people but also for adults and elderly people, parents, teachers and media professionals" (Ding, 2011: 5).

In the course Philosophy and Psychology of Education, we apply a long list of media sources in various topical areas for study. These sources are connected with the subject areas of the discipline and relate to such themes, as history of philosophy and psychology, modern philosophical and psychological theories, contemporary educational issues, state educational policy, educational reform, school life, parenthood. Most of the texts are selected by professors teaching the course. Others are chosen by the students in the process of home task preparation. Students are provided with recommendations on text analysis aimed at making their reflections professionally qualified and grounded. Theoretically, we build upon the method developed by L. Masterman, who points out four areas of critical study of a media source (Masterman, 1985). The scholar claims that in the course of a media text analysis it is vital to encompass the following questions: 1) Who is responsible for the media text production? Who is the owner and controller of the mass media? 2) How is the necessary effect reached? 3) What are the values of the environment created by the media? 4) How does the audience perceive such values?

Both individual and group analysis of the media follow Socratic tradition and use a dialogical approach, developed by many philosophers, psychologists and educationalists, e.g., M. Bakhtin, D. Elkonin, L. Vygotsky, P. Freire. Thus, discussions are guided by the principles of collective participation, reciprocity and mutual support. We also rely upon seven rules of an exploratory dialogue pointed out by Grugeon E., Hubbard L. and formulated as follows:

• everyone in the group is encouraged to contribute;
• contributions are treated with respect;
• reasons are asked for;

• everyone is prepared to accept challenges;
• alternatives are discussed before a decision is taken;
• all relevant information is shared;
• the group seeks to reach an agreement (Grugeon, Hubbard, 2006).

The research included a series of surveys conducted in order to obtain information on a number of course's outcomes. Questions for analysis related to the students' levels of interest in specific learning activities, use of different types of media texts, satisfaction with the course's endeavors and its results. The surveys were organized both by the teachers of the module and by the University administration via the University learning management system (LMS) Sakai. The present paper studies findings of three years of the course's progress. The total number of students who took part in the assessment procedures equals thirty six. Both local and international course participants were interviewed with the help of written questionnaires. The results of the surveys are kept at the department of English Philology, Nordic Languages and Language Pedagogy and on Sakai LMS, NARFU.

### 3. Discussion

At the beginning of the XXI century pedagogs realised that most of the curriculum subjects, included in educational programmes of different levels, followed Descartes' rational logic and defined knowledge in terms of «correctness» or «incorrectness» The teacher transferred a strictly defined, unarguable knowledge and the learners accepted this information without questioning it. Such a pattern, the core of the famous triad of knowledge, skills, and abilities, grew unviable, as it fostered educational technologies aimed at the transfer of an existing set of knowledge and informational patterns. Such an approach to teaching restrains the growth of a learner's creative potential, the construction of an independent personal identity, which impacts societal and economic development (Zhao, 2015). The continuously increasing volume of information requires new forms of its presentation and innovative knowledge acquisition technologies.

At the end of the 1990ies, more and more Russian scholars started discussing the growing role of media in the educational process of students of various levels. That was the time when traditional for this country television and mass media underwent a process of profound changes. The nature of media became entirely different, acquiring entertaining, even hedonistic component and growing heterogeneous and versatile in its content (Chelysheva, 2005). Whereas before that period media shouldered all responsibility for its reliability, even if a more significant part of it was ideologically bound, starting from the end of the XX century, a load of responsibility was shifted to the reader. However, the reader was not equipped with any skills, necessary for his/ her new role (Buckingham, 2015).

All that framed a new area of educational research and practice. By the beginning of the XXI century, the concept of media education developed in full swing in Russia. A. Fedorov generalised and systematized the experience of scholars working in the denoted area (Fedorov, 2001). Media education was defined according based on UNESCO documents and problematized as part and parcel of the curriculum at different educational levels. The subject of media education was claimed and argued to be a vital integrative component of various educational models. The discipline aimed at personal development through mass media, "i.e. the development of the communicative culture with media, creative, communicative skills, critical thinking, skills of the full perception, interpretation, analysis and evaluation of media texts, training of the self-expression with media technology, etc." (Fedorov, 2001: 38).

High frequency of contacts of an individual with media in the contemporary world is highlighted by many social scientists (Buckingham, 2015; Fedorov, 2007). Such an influence has its roots and causes and presents logical dependence based on historical, social, political, and technical factors (Masterman, 1985). The educational aspect of media is pointed out as one of the critical features of its presence in the life of a modern person (Korochensky, 2003). The culture of understanding of media sources comprises a vital part of human development in the areas of communicative and creative skills, independent analysis and assessment of a media text, critical thinking. Development of media culture is considered to be a counterpart of liberal education (Gerbner, 1995). Humanitarian and democratic nature of such education lies, at the same time, at the core of media culture development, as well as the culture of an individual in general.

*Teaching is not Knowledge Transfer*

In his work *Ignorant Teacher* a French philosopher Jacque Rancière investigates the notions of *knowledge, pedagogy, teaching* and raises the problem of a teacher's professional qualities (Rancière, 1991). In the scholar's opinion, the absence of knowledge is the most valuable feature of a teacher's professionalism. The original approach underlines the idea that it is not necessary, and even unwanted to possess knowledge. Knowledge is abundant and easy to access nowadays. A teacher's task is to foster learning, to facilitate the inquisition process and to direct a student in his/ her search. The highest expertise lies in the teacher's ability to reveal the boundless opportunities for a learner, uncover the gaps in the learner's knowledge, help analyse information or prove an assumption. J. Rancière calls such practices "intellectual emancipation" (Rancière, 1991: 6) and focuses on the importance of learner's critical skills development. Pedagogical expertise does not equal a teacher's knowledge, and this should be imperative while choosing a teaching strategy. Today this point of view is supported by many scholars (Hauke, 2019; Miller, 2018; Mößner, 2017; Olofson, 2016).

The facilitation of critical skills is a comparatively new vector in teaching, though quite often discussed in the educational debates of these days. In the last decades, critical thinking skills have been proclaimed to be essential qualities of an individual and prerequisite for successful social and professional activities. Critical thinking brings a person to the opening of such features of an object (or situational characteristics, or a context of an issue) that have previously been hidden from him/her. When a student reflects over a problem critically, a whole new perspective evolves, new opportunities and new restrictions for the chosen research methodology appear, new methods and approaches can be applied, even the aim and tools for the problem study may change (Dahl, 2018).

However, critical reflection and its benefits are easier described than taught. Following the famous sociologist Ch.W. Mills, we live on the world of second-hand knowledge, which we acquire not through our personal experience, but other people (Mills, 2008). This means that in today's world, the world of digital technologies and social networks, which makes information instantly available for a vast majority of people, we are severely dependent on the meanings and interpretations produced by other people. However, how have those people formed their knowledge, how verifiable is it and what is its contextual framing? What state of mind did those knowledge providers have? What is the psychological environment of the knowledge transmitter? These challenging questions were not attended before the new educational paradigm started evolving.

*Philosophy and Psychology of Education for Soul Navigation*

At the end of the XX century - beginning of the XXI century these and other questions connected with new realia started to resurface regularly, which gave way to the appearance of a new subject area (Sandoval, 2016). This subject area covered a wide range of questions which were rooted in the feelings of approaching global catastrophe, instability, and insecurity (Gershunsky, 1998). These feelings triggered the search for general ideas which could help to deal with the challenges of our days. The necessity of new solutions caused the demand for new professionals able to cope with the difficulties. Then it became clear that the existing professional training programmes were not efficient for the purpose.

Moreover, the gap between the new life realia, new social, cultural and economic demands required an in-depth, systematic analysis leading to appropriate solutions in the area of education. That was the time which gave way to the subjects of Pedagogical Philosophy and Psychology of Education in Russia. To specify, it is necessary to notice, that even if these branches of science appeared much earlier than at the divide of the XX and XXI centuries (XIX and XVIII respectfully), they manifested themselves in our country only with the decline of Soviet Pedagogy.

The content area of Pedagogical Philosophy encompasses issues relevant to both Philosophy and Pedagogy. It is concerned with the purpose of schooling, a teacher's and students' roles, and what should be taught and by what methods. It also studies aims, forms, methods, or results of the process of separate disciplines. Pedagogical Philosophy questions definitions and meanings produced in their professional debates by teachers, administrators, and policymakers. It builds on epistemology, axiology, and metaphysics, as well as a general philosophical approach to address the problems of learning and teaching, curriculum development and educational management, including education policy. As such philosophical debates aim at new educational logic and new schooling practices, we can see the boundless innovative potential of Pedagogical Philosophy in the area of education (Orchard, 2016).

Educational Psychology applies the findings of Psychology in the field of education. It studies human behaviour in educational settings: learner's motivation, cognitive, emotional and moral development, relationships between the participants of the educational process, a span of life development. Psychology of education researches on the existence and co-existence of individuals and society, the relationships between natural, social, cultural and individual aspects in human development. It also deals with the cultural factor of human development, explaining the correlation between the way we process new ideas and the cultural setting we were brought up in. This subject area includes issues connected with the impact of digital technologies or the choice of media platform on learning. Besides psychological knowledge is used for grounding reforms in teaching and schooling, aids investigations that are focused on teacher certifications and licensure. At last, Educational Psychology thinks about the possibility of adapting the content and methods of specific subjects to the needs and capabilities of an individual learner (Hilpert, 2018).

Covering the denoted subject area Pedagogical Philosophy and Psychology of Education aim at personal emancipation, social improvement, and collective well-being. These goals are reached through anthropological perspective, which focuses on a new human identity. In the XXI century personal identity is developed based on self-determination, self-organisation, self-regulation, and self-control. Autonomous behaviour building is placed in the centre of contemporary paideia as it is a pre-condition of abilities and professional qualities development (Ogurtzov, 2004). This means that education emphasizes the necessity to foster self-realisation and goal-oriented behaviour of a learner. Such goal-oriented approach refers to all areas of a student's life: starting from a person's attitude to his/ her own body, relationship with other people and outside life objects up to a person's relationship with state institutions and political and legal structures. The described perspective is expected to facilitate the development of a person who is free in his/ her actions and can make a grounded choice when it is necessary, at the same time ready to take responsibility and deal with the consequences of this choice. This approach to education is called anthropocentric and is viewed as a part of a value system, thus addressing the question of values in today's notion of paideia (Isaev, Slobodchikov, 2013).

According to V.M. Rozin, "in the new era (meaning the period after the IVth industrial revolution) a learner should be constructive and creative, as he/ she will face with the task of building a new reality, new world" (Rozin, 2007: 45). At the same time, he/ she is to belong to the area of culture and history, because new life cannot be constructed without a foundation, it needs to build on the invariant advantages of history and culture — labour division, cognition, machines, personality, etc. - which can be rethought and preserved for the benefit of future generations. This can be achieved if a learner manages his "soul navigation". The term coined by V.M. Rozin means self-observation, thinking through one's own life, its meaning and goal, the intention to realise the planned life script to the full, the assessment of what happens in the person's life, reflection on one's own life experience, and starting all over again.

Which skills and competences does a learner need to possess to cope with the task of «soul navigation»? These are abilities connected with the human aptitude to construct a new reality. They are abilities of: 1. imagination; 2. reflection; 3. self-education; 4. creativity; 5. communication; 6. self-identification.

The skills of "soul navigation" are aimed at deep understanding of the living environment, designing new forms and modes of living, at learning and self-modification, at human interaction, empathy, and collaboration. K. Schwab argues that the skills of "complex problem solving, social and systems skills will be far more in demand in 2020 when compared to physical abilities or content skills" (Schwab, 2017: 41). In the conditions of society becoming more and more perplexing one should be self-reliable and able to make logical assessments and grounded decisions (Chu, 2017). There are no ready-made answers anymore. It is by no way enough to follow a pattern for a typical situation or to read a manual to manage a process. With multiple changing factors an equation can be impossible to solve. In a rapidly changing environment, adaptability and critical thinking skills become vital.

*Media Texts in the Curriculum of the Course Philosophy and Psychology of Education*

A vast array of media products on the contemporary information market has made educators alert and on guard. As it was decades ago, newspapers, magazines and journals, radio and TV broadcasts are still regarded as a cultural and educational source and profoundly used by teachers for their professional purposes. The influence of media on culture is pervasive. Media text presents social and cultural events through the prism of its own, thus making separate facts more or less

valuable. It is the audience's responsibility to judge the broadcaster's perspective and make conclusions. At the same time, as it has already been generally accepted, nowadays media cannot be treated as utterly reliable in many, if not most, cases. "Freedom of the press" has degenerated into freedom to buy the press, a free market for the truth: whoever has the most money, makes their version of the truth stick (Forte, 2018). Going further, Stahl R. uses the term «militainment» to show the manipulative and propagandist nature of media. These facts make educators realise an acute need for developing media literacy among a broad range of professional directions with a specific focus on teacher's education (Stahl, 2009).

Analysed experiences and literature review bring as to the conclusion that media competence is critical for future pedagogs as their skills of critical reflection and creative thinking will define the way they will teach the next generations of learners. Such competence is of crucial importance not only because an educator needs to analyse, assess, select, and present media texts for their audience, but also because an educator has to teach his/ her students the strategy of using media resources to their advantage. As Hazanov claims, "teachers were and remain today the main mediators in the process of immersion of the younger generation in the world of human culture" (Hazanov, 2018: 77). The responsibility of forming one's mindset and life attitudes is exceptionally grave. Media literacy allows enjoying the benefits of knowledge without being misled by false interpretations or personal biases. It also helps a teacher educate wise and conscientious citizens, able to make their own grounded choices. As Livingston has argued it, "media literacy manifests the promise of empowerment, critical literacy, democratic engagement and participatory culture in a thoroughly mediated world" (Livingston, 2011: 4).

Media competence is multifaceted and demands a sophisticated approach. Media literacy grants correct solutions when one seeks truth and makes choices. It provides knowledge in the situations of limited access (Fedorov, 2007). Media competence allows media texts to aid in our understanding of the outer world in various social, economic and political contexts. Once a person learns how to be media-literate, he/ she grows able to evaluate media texts along with the text's agency and cultivate a well-balanced personal opinion of the issues discussed in the media source. Through media analysis most controversial issues of the contemporary society, such as those of gender, ethnicity, race, class, age, identity. acquire additional discursive features. Additional information elicited through media literacy supports valid argumentation and makes one's decisions grounded and knowledgeable.

Another vital reason to use media texts is that they allow for the development of a teacher' personality presenting real-life illustrations of complex pedagogical situations common for the contemporary school. School pupils getting into conflicts or communication troubles need professional guidance and human sympathy. However, such skills manifest a Herculean task for the beginning teachers. In fact, they have to walk a long way to master interpersonal communicative skills and gain psychological maturity. Media texts, especially films and novels, give an opportunity to analyze professional cases and discuss characters' choices, dilemmas, disagreements and predicaments.

On the other hand, discussing psychological and ethical choices at the examples of artistic videos and fiction stories solves the problem of professional training that is connected with the features of the object of pedagogical impact. Pupils are vulnerable growing individuals who need to be spared of pedagogical mistakes inevitable for the beginning educators. Those professional errors may derive from the fact of personal immaturity and psychological callowness, which should unquestionably be developed (Postnikova 2008: 63). Though the use of media texts ethical and personal qualities of a future teacher are impacted by the force of art or documentary authenticity. The module "Philosophy and Psychology of Education" uses the pedagogical value of media for the upbringing of a teacher's moral and ethical qualities.

Giving examples of media texts selected for the course "Philosophy and Psychology of Education", we can name such famous samples of the world cinematographic art as:

*Scarecrow* (1984), directed by R. Bykov (the problems of bulling, teenage aggressiveness, communication between teenagers);

*Practical Joke* (1976), directed by V. Menshov (the issues of teacher-students relationship, the problem of moral choice);

*The Emperor's Club* (2002), directed by M. Hoffman (issues of a teacher's professional life);

*The Art of Getting by* (2011), directed by G. Wiesen (the problem of youth loneliness, first love, communication of teenagers).

To illustrate the use of a text resource we can present the article derived from a popular British newspaper *The Telegraph*, named "Russia Hit by Exam Cheating Epidemic". The media source was chosen for the discussion of the issues of the contemporary educational system in the Russian Federation. The article ponders the situation with Russian State exam, held in our country starting from 2009 as a unified school graduation and college admission exam. The author tells of the problems of the exam procedure that Russian education faced in the process. The problems are connected with the vast territories of the country, various time zones of the state, control issues and the limitations of the tests. Systemic contradictions of the education system, corruption cases, and plagiarism issues are also covered.

Students receive a task to conduct a discourse analysis of the article in order to assess the unified state exam procedures at Russian schools. A set of questions to analyse in relation to the problem is developed. The questions are both closed-ended and open-ended. The first is aimed at the content revision and general understanding of the topic. The second set of questions is intended at the development of critical reflection skills and media competence. The latter is also assessed with the help of the criteria developed by A. Fedorov and including the following factors: 1) motivational, 2) contact, 3) informational, 4) perceptive, 5) interpretational, 6) practical/operational, 7) creative (Fedorov, 2007).

Another case, connected with the cinematographic experience of the students, is the modern film *Detachment* (2011) starring David Brody tells about the life of an American second-rate suburban high school, its teachers, administrators, and students. Students were asked to analyse parts of the film. Dialogues between a substitute teacher of the school, Henry Barthes, and students were chosen as illustrations of problematic situations in a teaching-learning context. Students were assigned to comment on the quotes, reflect on the teacher's and students׳ emotions and behaviour and work out their professional solutions using theoretical knowledge of the course "Philosophy and Psychology of Education". The selected teacher's lines ran, for instance, like the following:

"Henry Barthes: How are you to imagine anything if the images are always provided for you?

Henry Barthes: Doublethink. To deliberately believe in lies, while knowing they are false.

Henry Barthes: Examples of this in everyday life: "Oh, I need to be pretty to be happy. I need surgery to be pretty. I need to be thin, famous, fashionable." Our young men today are being told that women are whores, bitches, things to be screwed, beaten, shit on, and shamed. This is a marketing holocaust. Twenty-fours hours a day for the rest of our lives, the powers that be are hard at work dumbing us to death.

Henry Barthes: So to defend ourselves, and fight against assimilating this dullness into our thought processes, we must learn to read. To stimulate our own imagination, to cultivate our own consciousness, our own belief systems. We all need skills to defend, to preserve, our own minds".

The described experience shows that the use of media sources benefits teaching and learning process to a considerable extent. Among the advantages, we identify the possibilities to:

1. apply professional knowledge in practical contexts of problem-solving, which allows getting rid of dry theorizing in the framework of the course "Philosophy and Psychology of Education";

2. incorporate activity approach in the constructivist tradition of Jean Piaget and Lev Vygotsky, which adds to the course's academic value;

3. implement dialogical communication between teachers and students, which boosts the practical significance of the learning process;

4. approach real-life teaching and learning contexts, imitating possible professional situations;

5. develop the values system and professional life goals of the teachers-to-be.

In the course Pedagogical Philosophy and Psychology of Education students are taught to cope with the external unpredictability of complex life contexts. Such unpredictability is relevant for a limitless number of situations in a teacher's career. A teacher works with a living personality, whose future is tacitly shaped by his/ her professional philosophies. A teacher communicates with a pupil's parents, who seek support and assistance of an expert. A teacher is a member of a schooling system, which is inevitably a part of political discourse and a mediator between society and the state. To sum it up, a teacher's profession possesses a unique status, which evolves from an educator's role in a pupil's life, which implies high levels of influence on collective social well-being. Media literacy turns out to be a core competence for pedagogical expertise.

### 4. Results

Implementation of the course "Philosophy and Psychology" of education has shown the following findings:

- media resources are preferred to traditional resources as teaching resources by educationalists;
- media resources are preferred to traditional resources as learning resources by students;
- learners assess the usability and educational impact of media resources as higher than those of traditional resources;
- teachers of the course assess the educational potential of media resources as significantly more impressive as compared to traditional resources.

As it has been given earlier teaching resources of the course included a vast array of various media texts. Figure 1 illustrates the distribution of media texts utilized in the course. The analysis shows that media resources were used with a serious prevalence as contrasted to traditional textbooks or paper journal articles.
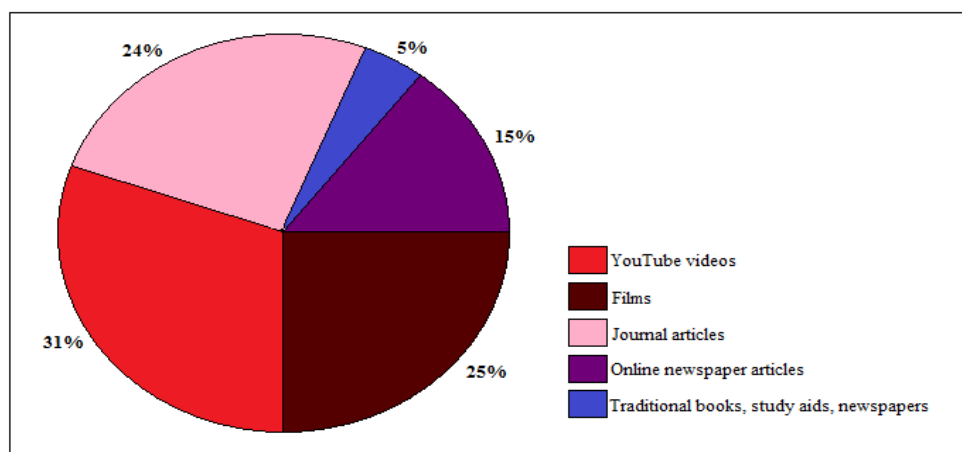


**Fig. 1.** Teaching resources in the cource *Philosophy & Psychology of Education*

When students' choices of learning sources were measured in a survey, the results showed that the weigh of traditional texts was again minimal.
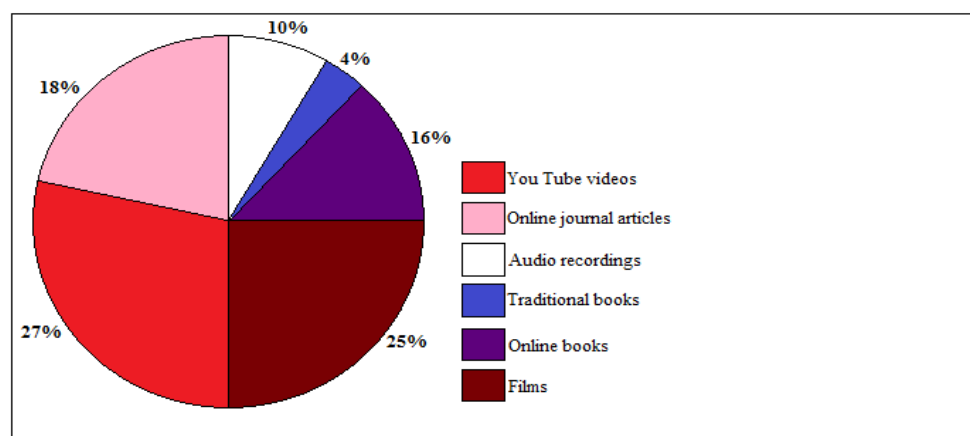


**Fig. 2.** Students' choice of media resources used for completition of creative tasks

In those cases students had freedom to choose between traditional and media texts, they demonstrated their readiness to employ media resources for studies. Figure 2 depicts the distribution of media sources chosen by students for the completion of creative tasks in the module.

A separate end-of-the-course survey was offered to the students as a part of general evaluation of the module's usability and educational impact, which is traditionally held at NARFU for the

assessment of course efficiency. The survey focused on the analysis of a) the course's general impact, b) the course's content and c) the course's logic. Figure 3 indictaes the results of the analysis.
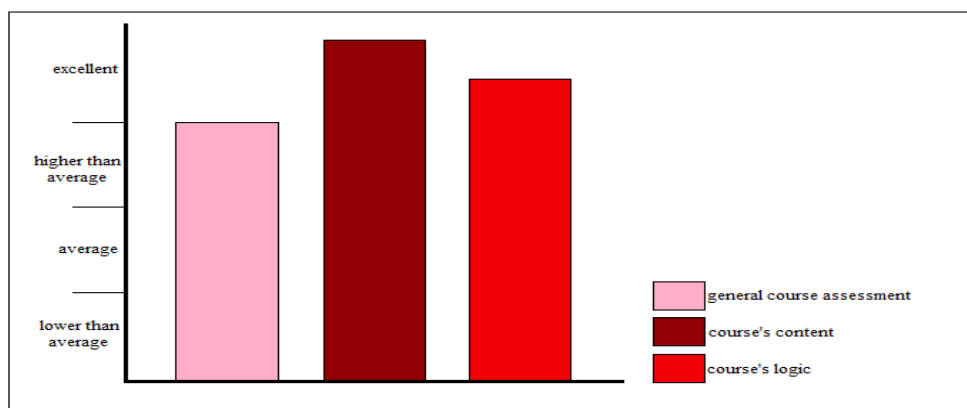


**Fig. 3.** Students' evaluation of cource's usability and learning process

The most significant findings were made in relevance to the impact of visual forms of information as compared to the impact of traditional forms of information for the teaching of humanity modules, such as the course "Philosophy and Psychology of Education". Pedagogical competences fostered in the course are impossible to acquire, building on theoretical knowledge only. Professional expertise development needs real-life examples to demonstrate how theoretical ideas work in the situations of educational experience at school and beoynd. Students have an opportunity to receive professional experience through training sessions at educational institutions. However, these opportunities are limited for two reasons. Firstly, the educational curriculum of the course presupposes just two professional training sessions during the whole course. Secondly, school pupils as the participants of educational practices are highly sensitive objects of the teaching process. Professional mistakes may be costly and entail unwanted consequences. That is why it is wiser to employ real-life examples taken from media sources like films and videos, which produce dramatic impression in the content areas relevant to complex humanity issues of education. Examples of them are numerous and quite easy to find both on TV and the Internet. In our course students showed visible willingness to refer to media samples analysing tasks and solving professional problems. The impact of works of art by world famous film directors and actors was really moving and promoted vivid discussions.

Other findings of our research highlight the following:

1. Changing social, economic and cultural context is reflected in the educational curriculum through professional competences taken as the outcomes of the educational course.

2. Professional competences widely required in the contemporary labour market are those including high levels of professional adaptability, critical reflection, pragmatic logic and creativity.

3. Media texts in a wide sense (newspaper and journal articles, narratives, films, etc.) have a crucial importance for the contemporary pedagogical process as educational (teaching and learning) resources.

4. Media text is a representation of social, economic and cultural historical conditions of the contemporary society. It reflects the present state of affairs in multiple life contexts.

5. A carefully planned methodology of the use of media texts in schooling practices becomes a determining factor of success. A teacher comes as an agent who defines a) the process of selection of media resources, b) the ways of their use in the educational process and c) the outcomes of educational practices involving the use of media texts.

6. Media literacy supports social inclusion and participation as it provides a basis of citizenship education, highlights and explains complex social constructs and enables learners to make balanced and grounded life choices.

7. The course of "Philosophy and Psychology of Education" presents a necessary part of the curriculum of a future educationalist, aiming at personal emancipation, social improvement and professional reflexivity.

8. Media resources provide a rich representative base for social, educational, cultural and political praxis and serve as a valid informational content for the curriculum of the course "Philosophy and Psychology of Education".

## 5. Conclusion

Today information spreads instantaneously and becomes open for high numbers of people. We are severely dependent upon those meanings and interpretations which we acquire through media channels. Consequently, we are all gravely dependent upon our understanding of the mechanism and impact of media. Such an influence becomes even more alarming for growing minds, whose critical thinking skills are not fully developed. Accelerated mode of contemporary existence, cognitive and energy overload, constant lack of time makes today's learner (be it a school pupil or a high school student) take presented information for granted. Patterns and schemes of the curriculum are interiorised by them without much thinking or reflection. The absence of a planned and strategic stimulation of critical brain functions makes learners easy prey of mass consciousness mechanism, turning them into an obedient screw of life machine.

Contemporary practice of media education presents a serious step forward in the area of humanitarian and liberal education. Vulnerability and discrimination have become regular features of the contemporary political and social contexts. Lack of information places the underprivileged majority of the population in a disadvantageous position of being ruled, imposed and perplexed. Pedagogs speak of a strong need to instill media literacy among various groups of learners as this knowledge gets increasingly essential in today's world of high social risk. Whereas in previous eras media possessed great trust of a reader, nowadays the public has to develop specific skills to differentiate between right and wrong, objective and biased. The ability to critically assess media texts of a broad range and benefit from media sources is demanded by the changing labour market of the XXI century.

## References

Buckingham, 2003 – *Buckingham, D.* (2003). Chapter Three of Media Education: Literacy, Learning and Contemporary Culture. Polity Press. 232 p.

Buckingham, 2015 – *Buckingham, D.* (2015). Do We Really Need Media Education 2.0? Teaching Media in the Age of Participatory Culture. In: Lin TB., Chen V., Chai C. (eds). New Media and Learning in the 21st Century. Education Innovation Series. Springer, Singapore, 216 p.

Chelysheva, 2016 – *Chelysheva, I.* (2016). Sociocultural media field: reality, communication, individual. Moscow: Information for All, 178 p.

Chicherina, 2008 – *Chicherina, N.* (2008). Media text as a means of formation of media literacy among students of language faculties. Ph.D. Dis. St. Petersburg, 232 p.

Chu et al., 2017 – *Chu. S.K.W., Reynolds. R.B., Tavares. N.J., Notari. M., Lee. C.W.Y.* (2017). Teachers' Professional Development. In: *21st Century Skills Development Through Inquiry-Based Learning*. Springer, Singapore. 204 p.

Dahl et al., 2018 – *Dahl, A.J., Peltier, J.W., Schibrowsky, J. A.* (2018). Critical thinking and reflective learning in the marketing education literature: A historical perspective and future research needs. *Journal of Marketing Education*, 40 (2): 101-116.

Ding, 2011 – *Ding, S.* (2011). The European Commission's approach to media literacy. In: Livingstone S. (2011). Media literacy: Ambitions, policies and measures. Conference: CCOST Zagreb Conference: New Challenges and Methodical Innovations in European Media Audience Research. At: Zagreb, Volume: After conference Report, 39 p.

Fedorov, 2001 – *Fedorov, A.* (2001). Media Education: History, Theory and Methodos. Rostov: CVVR, 708 p.

Fedorov, 2007 – *Fedorov, A.* (2007). Development of media competence and critical thinking among students of a pedagogical university. Moscow: Information for All, 616 p.

Forte, 2010 – *Forte, M.* (2010). The Military's media whores: on ethics, power, rapport and responsibility. [Electronic resource]. URL: https://zeroanthropology.net/2010/07/01/the-militarys-media-whores-on-ethics-power-rapport-and-responsibility/ Accessed July 26, 2018.

Gerbner, 1995 – *Gerbner, G.* (1995). Educators Activists Organize to promote Media Literacy in U.S The New Citizen, 2 (2).

Gershunsky, 1998 – *Gershunsky, B.* (1998). Philosophy of Education. Moscow: Moscow Institute of Psychology and Social Sciences, 432 p.

Grugeon, Hubbard, 2006 – *Grugeon, E., Hubbard, L.* (2006). Learning through Dialogue. In *Learning to Teach in Primary School*. Routledge: Falmer. 467 p.

Hauke, 2019 – *Hauke, E.* (2019). Understanding the world today: the roles of knowledge and knowing in higher education. *Teaching in Higher Education, 24* (3): 378-393.

Hazanov, 2018 – *Hazanov, I.* (2018). Formation of media competence of future teachers in the process of studying pedagogy. *Media Education*, 1: 77-88.

Hilpert, 2018 – *Hilpert, J.C., Marchand, G.C.* (2018). Complex systems research in educational psychology: aligning theory and method. *Educational Psychologist, 53* (3): 185-202.

Isaev, Slobodchikov, 2013 – *Isaev, E., Slobodchikov, V.* (2013). Psychology of human education. Development of subjectivity in the educational process. Moscow, 432 p.

Khlyzova, 2011 – *Khlyzova, N.* (2011). Media education and media competence in the information society epoch. *Tomsk State University Journal,* 342: 188-191.

Korochensky, 2003 – *Korochensky, A.* (2003). Media criticism of the theory and practice of journalism. Ph.D. Dis. St. Petersburg, 467 p.

Livingstone, 2011 – *Livingstone, S.* (2011). Media literacy: Ambitions, policies and measures. Conference: CCOST Zagreb Conference: New Challenges and Methodolical Innovations in European Media Audience Research. At: Zagreb, Volume: After conference Report, 39 p.

Masterman, 1985 – *Masterman, L.* (1985). Teaching the Media. London: Comedia Publishing Group, 341 p.

Miller, 2018 – *Miller E, Manz E, Russ R, Stroupe, D, Berland, L.* (2018). Addressing the epistemic elephant in the room: Epistemic agency and the next generation science standards. *Journal of Research in Science Teaching*: 1–23.

Mills, 2008 – *Mills, Ch. W.* (2008). The Politics of Truth: Selected Writings of C. Wright Mills. Oxford University Press, USA, 296 p.

Mößner, 2017 – *Mößner, N., Kitcher, P. Minerva* (2017). *Knowledge, Democracy, and the Internet,* 55: 1.

Ogurtzov, Platonov, 2004 – *Ogurtzov, A., Platonov, V.* (2004). Education Images. Western Philosophy of Education. The XX century. Saint Petersburg, 520 p.

Olofson, 2016 – *Olofson, M.W., Swallow, M.J.C., Neumann, M.D.* (2016). TPACKing: A constructivist framing of TPACK to analyze teachers' construction of knowledge. *Computers & Education,* 95: 188-201.

Orchard, 2016 – *Orchard, J., Heilbronn, R., Winstanley, C.* (2016). Philosophy for Teachers (P4T)–developing new teachers' applied ethical decision-making. *Ethics and Education, 11* (1): 42-54.

Postnikova, 2008 – *Postnikova, M.* (2008). *Psychological knowledge: Theory and practice.* Arkhangelsk. Pomorsky University, 321 p.

Rancière, 1991 – *Rancière, J.* (1991). *The Ignorant Schoolmaster: Five Lessons in Intellectual Emancipation* – Stanford University Press. 176 p.

Rozin 2007 – *Rozin, V.M.* (2007). Philosophy of Education: Research Sketches. Moscow: Moscow Institute of Psychology and Social Sciences, 434 p.

Sandoval et al., 2016 – *Sandoval, W.A., Greene, J.A., Bråten, I.* (2016). Understanding and promoting thinking about knowledge: origins, issues, and future directions of research on epistemic cognition. *Review of Research in Education, 40* (1): 457–496.

Schwab, 2017 – *Schwab, K.* (2017). The Fourth Industrial Revolution. New York: Crown Business, 40 p.

Stahl, 2009 – *Stahl, R.* (2009). Militainment, Inc.: War, Media and Popular Culture. Routledge. 224 p.

Tyunnikov et al, 2016 – *Tyunnikov, Y. Kazakov, I, Maznichenko, M., Mamadaliev, A.* (2016). The Media Competence of the Teacher: an Innovative Approach to the Self-projection. *Media Education*, 4: 29–46.

Zhao, 2015 – *Zhao, Y.* (2015). A World at Risk: An Imperative for a Paradigm Shift to Cultivate 21st Century Learners. *Society,* 52: 129–135.