Media competence of an editor as a factor of the effective promotion of scientific journals in the international information environment

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Abstract. The article gives insights into the concept of media competence regarding the profession of an editor of a scientific journal. Currently, the media competence is gaining the same relevance as other important competencies of publishers of scientific periodicals. The ability to find the required information quickly and efficiently, the ability to work professionally with international scientometric databases, a good understanding of the process of promoting a publication in the information environment, an ability to see if the publication corresponds to the research request and bibliographic description - all these and other skills and knowledge become crucial in organizing the work of the editorial staff of a scientific journal. At the same time, it should be recognized that the editorial staff of scientific journals acquire professional media competences directly in the process of work on the basis of their own successful or less successful experience. The country does not have a training system for such personnel, despite the fact that the challenges faced by the publishers are ambitious. These challenges require an integrated approach, including the increase of the media competence of editors of scientific journals.

1. Introduction
The problem of promoting domestic scientific journals in the international information environment is becoming increasingly important. The reason for this is the need for a free exchange of information with researchers from other countries, as well as the urgent need to integrate the achievements of Russian scientists into the international scientific discourse.

This promotion of research results can be performed due to the quality of the research itself, the scientific novelty and distinction of discoveries. However, in today's hyperconnected world, much depends on the managers of the scientific process, and they require special competencies allowing these discoveries to achieve results with a maximum speed and focus in the shoreless sea of scientific information. This refers to the media competencies of editors and other specialists that publish scientific journals.

The concept of “media competence” includes a set of knowledge and skills of a person allowing to understand the functioning of communication tools in society, namely, to find the necessary
information, to use it wisely, to analyze and evaluate information, to transmit messages in various ways, forms and styles.

In the documents of the Council of Europe, media competence is interpreted as “a critical and discerning attitude towards the media in order to form well-balanced citizens, capable of making their own judgements on the basis of the available information. It enables them to access the needed information, to analyze it and be able to identify the economic, political, social and/or cultural interests that lie behind it. Media education leaches individuals to interpret and produce messages, to select the most appropriate media for communicating and, eventually, to have a greater say in the media offer and output” [1]. This approach focuses the attention of researchers on critical thinking and evaluating messages in terms of human rights to information and communication.

A more rigorous and technological definition of media competence is given by the leader of the Strategy for Media Literacy movement, a lecturer at the University of Texas, Kathleen Tyner, who understands media competence as “the ability to find, evaluate and use information effectively in personal and professional lives” [2].

Media competence seems to be a multidimensional concept. It includes certain personality traits, knowledge, ways of action, and the result of a specific education, which we call media education. A common synonym for the concept of “media competence” is the concept of “media literacy” or “media and information literacy”.

In modern conditions, media and information literacy is necessary for all citizens, regardless of their field of activity, status, age, religious and national origin, etc. A modern specialist in any industry should be media competent, capable of active information work in a busy media environment. In this respect, the developments of Ukrainian researchers in the field of “professionally-oriented media education”, [3] that were the first to introduce this term into scientific discourse, is of great interest. This direction is presented in more detail in the joint monograph “Media Competence of a Specialist” [4], where the authors consider the peculiarities of the formation of media competence using the example of the profession of an editor. The problems caused by difficulties in the editorial revision of articles are noted, attention is drawn to the pedagogical component of media education of editors.

2. Media competences and media skills
The most relevant media competences of an editor include the ability to determine own information needs, the ability to distinguish, describe and manage them; comprehension / understanding / construction of strategic and tactic information needs, as well as the understanding of the processes of accessing information, the exact wording of the information request. The most important media competencies of an editorial staff member also include the awareness of the sources and information distribution channels, the ability to distinguish their significant characteristics and specifics, the awareness of technologies and tools for searching and receiving information. In addition, the complex of media and information literacy includes the ability to classify and systematize the information received, sort it into short-term and long-term information, sort it by topic, format, functional purpose, codify and package information materials, as well as the ability to deliberately limit the number of information sources and channels to the required amount.

This set of media skills allows an editor to quickly and easily navigate in numerous databases, bibliographic catalogs, references, state standards and other regulatory documents necessary to ensure the quality of a scientific journal.

Currently, this is especially true in connection with the state goal that was set back in 2015 to “rise the share of publications of Russian researchers in the total number of publications in world scientific journals indexed in the Web of Science database up to 2.44 percent” [5]. However, as noted by E.G. Grishakina, in 2014 there was a slowdown in the growth rate of the number of publications from 4.48% in 2009 to 1.01% in 2014 [6].

In 2018, the goal was formulated differently: according to the national project “Science”, Russia should enter the top five states in the country’s priority areas of science, which would mean an almost twofold increase in the number of scientific publications.
How to achieve this goal? In addition to creating favorable conditions for the work of researchers, developing international cooperation, attracting young talented scientists to science, it is necessary to improve the quality of the journals, where Russian authors are published. This is also possible through an increase in the media competence of the staff of scientific journals.

The vice-president of the Russian Academy of Sciences Aleksey Khokhlov fairly assesses the situation with scientific journals: “the changes are ripe, it is already impossible to put them off. In connection with the development of electronic communication media, the market of scientific journals around the world is undergoing rapid changes. Publishing a scientific result is no longer a problem; anyone can publish anything on the Internet. It is important that your result becomes known to colleagues and appreciated by them. That is, the center of gravity shifts from the publication itself to the widest possible distribution of information about this publication” [7].

3. Lost in translation

The monitoring of publication activities of Russian authors in Web of Science performed by the Russian Ministry of Education and Science in 2014 showed that one of the problems of recording publications of Russian researchers in the Web of Science database and determining the amount of funding per article is the lack of habit of entering the publication identification data (author, organization, funding organization, address). When filling in the registration card, the authors make technical and logical errors that the editorial staff does not notice. The incorrect presentation of metadata of a scientific article makes the publications of Russian researchers “invisible” for the world scientific community, as a result, the relevance of Russian science decreases [8].

E.G. Grishakina gives an example of several different names for the same organization found in the database, e.g., Tomsk State Pedagogical University has more than 12 names in the Web of Science system (Tomsk State Pedagogical University, Tomsk State Pedagog Univ, Tomsk State Pedag Univ, Tomsk Pedag Univ, etc.). This means that when working with the information of analytical server of scientific citation Web of Science, problems arise with the search for scietometric information on educational institutions of higher professional education, their identification in the Web of Science system, because the authors or editors of journals indicate not the official English name of the organization (as stated in the documents), but the one at their own discretion [8].

As for the publications in Scopus, the articles of Russian scientists are relatively rarely included in high-ranking journals from the first CiteScore quartile of Scopus (i.e. the top 25% of journals). Only 20% of articles of Russian scientists appear in such journals, and the situation has not changed much since 2010. The nearest competitors of Russia in Scopus are Iran and Brazil, their share of such publications is 35 and 40%, respectively. The reason for this is not the low level of research of Russian scientists or the lack of proper scientific weight. Often the reason for the absence of demand for the research results is the fact that the article is published in Russian or the poor quality of its translation into English.

In this respect, a good example is the special issue of the scientific journal “Computer Optics”, which was published in 2015 in English and included translations of 22 articles from the Russian version of the journal over the past three years, including the highly cited review article by N.Yu. Ilyasova dedicated to the methods of digital analysis of human vascular system [9]. The “Computer Optics Selected papers” became an entry point into the foreign scientific community for the journal, which allowed to attract foreign authors to publish their works in current issues of the journal.

However, in order for this to happen, the editors had to perform a lot of preparatory work. The publishing unit of the editorial office was expanded. A new design layout has been developed especially for the Computer Optics Selected papers to meet the modern world trends for scientific periodicals. A professional technical translator was engaged so that the level and quality of the English language of the publications complied with the international standards [10].

The need for publication of original English-language articles in “Computer Optics” was caused by the fact that at the end of 2015 the journal entered the 650 most popular Russian scientific journals both in Russia and abroad published on the Web of Science platform as a separate database Russian
Science Citation Index (RSCI), fully integrated with the Web of Science platform. A year later, the publication entered the main base Web of Science - Emerging Sources Citation Index [11]. This was an important stage in promoting the journal in the international scientific community for the editors.

According to the researcher of scientific journal periodicals, the president of the Association of Scientific Editors and Publishers (ANRI) O.V. Kirillova, “English-language journals are much more likely to get high rates as compared to the journals published in the native language. Thus, the task of publishing journals in English should be a priority” [12]. At the same time, she emphasizes that “it is also important to preserve the native language as the language of scientific communication within the country and among the Russian-speaking foreign diaspora. It is the decision of the founder and publisher of the journal whether to publish only in English or publish two parallel versions” [12].

In 2016-2017 “Computer Optics” took the next steps to enter the international scientific environment by issuing full-fledged editions with original articles in English. Some articles from these issues [13-17] aroused considerable interest among scientists. Starting from 2018, the original English-language articles have been published not in a separate issue, but in the current one, based on the degree of readiness of the publication [18-26]. This editorial policy resulted in the fact that other journal articles [27-58] indexed by the international Scopus database began to be cited actively in many scientific publications. Leading authors of “Computer Optics” are actively published in other national and international journals. This provides additional attention to their articles published in “Computer Optics”. I will give you some examples: design of lighting devices [33, 59-66], laser recording [46, 56, 67-71], plasmonics [57, 72-79], computer vision [16, 35, 45, 53, 54, 80-83], including hyperspectral [15, 17, 30, 37, 42, 43, 47-49, 84-85], mathematical modeling in optics [86-91]. The results published in “Computer Optics” are cited not only in articles in the most prestigious journals [92-96], but also in monographs [97-98], in materials of plenary reports of international conferences [99-101], and in scientific speeches from the podium of the Presidium of the Russian Academy of Sciences [102-103].

4. Website of a scientific journal as a key media competence

The promotion of a journal depends greatly on its positioning in the information space through its website, which should be user-friendly and modern in terms of design. The website reflects the quality and level of the journal, its representation in Russian and international scientometric databases; digital technologies should provide opportunities for professional interaction, the information resource should also be functional, mobile and technological, should provide information value and openness of the content. Transparency, technological effectiveness, accessibility and reliability of information - these are the main principles for building a scientific journal website.

Such open access resources included in the Scimago Journal & Country Rank in the subject area “Arts and Humanities” are the websites of the Russian journals “Novoe Literaturnoe Obozrenie” (Q2), “Schole” (Q1), “Zolootoordynskoe Obozrenie” (Q2), “Bylye Gody” (Q1), “Voprosy Onomastiki” (Q2), “Studia Slavica et Balcanica Petropolitana” (Q2), “Horizon, Fenomenologiceskie Issledovania” (Q2). All of them provide quick access to relevant research results of Russian and foreign scientists to the authors and readers of their journals. The ability to organize an efficient website and maintain it constantly is one of the key media competencies of the editorial staff of a scientific journal.

5. The problem of recruitment of media competent staff

The area of responsibility of any editorial office includes the organization of article editing. For this purpose, the editorial staff engages a scientific editor in charge of editing materials and manuscripts with the scientific and technical content. Unlike the technical editor engaged in technical support of the materials to be published and rarely dealing with the editing itself, the scientific editor is engaged exactly in checking and changing the scientific content. And this is where the media competence plays a key role.

The scientific editor should be aware of the latest scientific achievements related to the journal scope both in his country and abroad, be proficient in the methods of professional search and
processing of information, as well as scientific editing of manuscripts; be able to analyze articles from the point of view of their verification, the scientific logic of presentation, to have a perfect command of his native language and its communicative features, and know some other language, preferably English; know the standards adopted for scientific and technical terms, abbreviations, acronyms, as well as standards for the layout of scientific articles, etc. A scientific editor can bring the quality of an article to the level where it can compete with the articles of the foreign colleagues.

Unfortunately, not all the editorial boards of scientific journals can provide such services to the authors. Quite often, it is not easy to find enough material to fill all the pages of the journal, so everything received by the editor is published. Currently, this is a serious problem for the scientific periodicals. Besides, finding a qualified scientific editor is not easy as well.

It is even more difficult to find a scientific journal editor that would also be a specialist in scientometric databases, scientific citation technology, Russian and international politics in the area of publishing and promoting scientific journals in the information environment. This has little in common with the traditional idea of an editor as a specialist in working with texts. At present, there is practically no professional training with such specialization in Russia. The competencies of editors, including the scientific editors, are formed as part of the Journalism course at the Lomonosov Moscow State University, Higher School of Economics, MGIMO University and other universities. As for the editors of scientific journals, which are very specific periodicals, they have to gain the necessary media competencies by trial and error as they work.

6. Conclusions
Currently, the publication of a scientific journal is a very complex multifunctional process that includes various technological issues from organizing a constant supply of high-level scientific articles to the smallest details of the process of promoting a publication in the information environment, its virtual communication with the reader. Ratings, indices, indicators - these characteristics of a scientific journal make its inner life similar to mathematical exercises on solving the tasks “on the quantitative relations and spatial forms of the real world”, as one of the greatest mathematicians of the 20th century, Andrei Nikolayevich Kolmogorov, said. Today, the traditional education of a journalist or an editor is not enough to address the challenges faced by the Russian scientific publishers. Editors of modern scientific journals are required to have new media competencies that will enable them to advance the Russian science at the international arena. Today, media education of editors of scientific journals has similar priority to the task of increasing the citation index of a journal.

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