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DIFFICULTIES IN THE DEVELOPMENT OF DATA JOURNALISM: KAZAKHSTAN EXPERIENCE

The paper describes the essential characteristics of data journalism, the conditions and the process of its forming, the basic features of data journalism in social communication. The article discusses a new trend in journalism as “data journalism”, which is based on the processing of open data and their use to create journalistic material. The article describes the main characteristics of data journalism, the conditions and the process of its formation, the main functions of data journalism in social communication and its importance in the media sphere of Kazakhstan.

The aim of the study is to identify the specifics of the main trends of data-journalism based on international experience and features of the development of regional experience in the composition of modern media, the definition of its structural characteristics. The subject of the research is the key characteristics of the journalist’s tool, called data journalism, which helps to provide the public with important information that could go unnoticed in vast amounts of information about contemporary reality.

Internet journalism of metadata defines fundamentally new opportunities for the strategic development of media content characteristics and functions of modern journalism as an element of open public management, the formation of the science of media (media dialogue). The use of the Internet changes the systemic and functional properties of journalism and the media, marking the communicative Internet as a stage in the development of mass media, since the characteristics outlined above reflect the fundamental differences in computer communication and information in the Internet and in the characteristics of media content. Because there is an inevitable development of visual journalism, which is a tool for transmitting information.

The author determines that the development of data journalism inevitably entails the development of digital literacy. The author concludes that data journalism, as a new format for presenting analytical media content based on the use of digital computer and Internet databases, has successful prospects in Kazakhstan. In this study, the author used the following methods: the method of content analysis (qualitative) and the descriptive method (in its modern interpretation). The areas of application of the results: journalism, mass communications, digital journalism in close accordance with the use of ICT technologies.

Key words: data journalism, Kazakhstan case, digital journalism, digital literacy.

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Деректер журналистикасын дамытудағы қиындықтар: қазақстандық тәжірибе

Мақалада журналистиканың жаңа үрдісі ашық деректерді өңдеуге және оны журналистік материалдарды жасауға негізделген «деректер журналистикасы» ретінде қарастырылады. Сонымен қатар, ақпараттық журналистиканың негізгі сипаттамалары, оның қалыптасуы мен қалыптасу процесі, әлеуметтік коммуникациядағы ақпараттық журналистиканың негізгі функциялары және оның Қазақстанның медиа саласындағы маңыздылығы сипатталған.

Зерттеудің мақсаты – халықаралық тәжірибеге негізделген күнделікті журналистиканың негізгі тенденцияларының ерекшеліктерін анықтау және заманауи БАҚ құрамындағы өңірлік тәжірибені дамытудың ерекшеліктері, оның құрылымдық сипаттамаларын анықтау. Зерттеудің

тақырыбы журналистің құрал-сайманының негізгі сипаттамалары болып табылады, ол деректерді журналистика деп атайды, ол халықты заманауи шындық туралы көптеген ақпаратқа назар аудара алмайтын маңызды ақпаратпен қамтамасыз етеді.

Метадеректердің Интернет-журналистикасы медиа-контенттің сипаттамалары мен қазіргі заманғы журналистиканың функцияларын ашық мемлекеттік басқару элементі, бұқаралық ақпарат ғылымын қалыптастыру (медиа диалог) ретінде түбегейлі жаңа мүмкіндіктерді анықтайды. Интернетті пайдалану журналистиканың және бұқаралық ақпарат құралдарының жүйелік-функционалдық қасиеттерін өзгертеді, бұқаралық ақпарат құралдарының дамуы кезеңінде коммуникативті Интернетті белгілейді, өйткені жоғарыда сипатталған сипаттамалар интернеттегі және медиа мазмұндағы компьютерлік байланыс пен ақпараттың іргелі айырмашылығын көрсетеді. Визуалдық журналистиканың қарқынды дамуы қазіргі кезде ақпарат таратудың басты құралына айналуға.

Авторлар деректер журналистикасының дамуы сөзсіз цифрлық сауаттылықты дамытады деген ой айтады. Сонымен қатар, деректер журналистикасы цифрлы компьютерлер мен интернет деректер базаларын пайдалану негізінде аналитикалық медиа мазмұнды ұсынудың жаңа форматы ретінде Қазақстанды жаңа жетістіктерге жеткізеді деген қорытындыға келеді. Бұл жұмыста авторлар келесі әдістерді қолданды: контент талдау (сапалы) және сипаттама әдісі (оның қазіргі заманғы интерпретациясында). Нәтижелерді қолдану салалары: журналистика, бұқаралық коммуникациялар, цифрлық журналистика, АКТ технологияларын қолданумен тығыз байланысты.

Түйін сөздер: деректер журналистикасы, қазақстандық тәжірибе, цифрлық журналистика, цифрлық сауаттылық.

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Трудности в развитии журналистики данных: опыт Казахстана

В статье описаны основные характеристики журналистики данных, условия и процесс ее формирования, особенности журналистики данных в социальной коммуникации. В статье обсуждается новая тенденция в журналистике как «журналистика данных», которая основана на обработке открытых данных и их использовании для создания журналистского материала. В статье описаны основные характеристики информационной журналистики, условия и процесс ее формирования, основные функции информационной журналистики в социальной коммуникации и ее значение в медиасфере Казахстана.

Целью исследования является выявление специфики основных тенденций дата-журналистики на основе мирового опыта и особенности развития регионального опыта в составе современных медиа, определение её структурных характеристик. Предметом исследования являются ключевые характеристики инструмента журналиста, под названием дата-журналистика, помогающего представить общественности важные сведения, которые могли остаться незамеченными в огромных массивах информации о современной реальности.

Интернет-журналистика в метаданных идентифицирует радикально новые возможности, такие как содержание медиаконтента и роль открытого публичного управления, формирование медиа-науки (медиа-диалога) с функциями современной журналистики. Использование Интернета изменяет системную функциональность журналистики и средств массовой информации, определяет коммуникативный Интернет во время развития средств массовой информации, поскольку описанные выше характеристики представляют фундаментальное различие между компьютерным и интернет-контентом в Интернете и медиа-контентом. Быстрое развитие визуальной журналистики в настоящее время является основным инструментом распространения информации.

Автор полагает, что развитие журналистики данных несомненно повысит цифровую грамотность. Кроме того, данные журналистики заключают, что использование цифровых компьютеров и баз данных в Интернете предоставляет Казахстану новые достижения в качестве нового формата для предоставления контента. В данной работе автор использовал следующие методы: контент-анализ (качественный) и метод описания (в его современной интерпретации). Область результатов тесно связана с использованием журналистики, средств массовой информации, цифровой журналистики, технологий ИКТ.

Ключевые слова: журналистика данных, казахстанский опыт, цифровая журналистика, цифровая грамотность.

Introduction

The article gives reasoning about the genre of journalism as “data journalism”, which uses public data and other public data to provide information. Data can relate to a variety of spheres of life: education, economics, politics, science and much more. This may be information about the growth of inflation or public debt for a certain period of time, the statistics of crimes committed in a particular region, the percentage of enrolled in universities or the average annual change in the river bed. Data is added to traditional data for the journalistic arsenal: printed text, photographs and the like. Thus, data, figures and facts that are complex for perception in their usual form become clear and simple for the audience. Adhering to the opinion that the “data journalism” genre, which has long spread in the West, has not yet received the same recognition in the countries of the former USSR, including in Kazakhstan. The author shows that there are several reasons for this, the main ones are the inability of domestic journalists to work with “raw” data and excessive closeness of both government departments and private businesses.

Soviet journalism, which before the independence in 1991, was also related to the Kazakh press, among other things, such functions as education and propaganda were given, and “digging in numbers”, on the contrary, was not encouraged – this was the function of the State Statistics Service – the figures were needed in order actively foster a myth of the inevitability of communism’s triumph. Around the same time fresh data on the growth of unemployment in the US and the closure of mines in the UK could always be obtained from the local district party committee.

Unfortunately, this approach has shifted to the domestic journalism faculties: where they teach to write, but do not work with data. So, for example, unlike students at the Faculty of Economics or Jurisprudence, future journalists do not study statistics, mathematical analysis, or at least the basics of the economy. For the sake of justice, it should be noted that students pass such a subject as computer science (the acquired knowledge is forgotten because they do not find the field of application). As a result, we receive journalists who can brilliantly describe the suffering of a large family, which the local administration does not allocate the proper housing in any way. But the same journalist will confuse the concept of “profit” and “revenue”, and will not be able to explain how interest differs from percentage points (Anderson J., Rainie L., 2012).

Materials and Methods

The methodological foundations of the research correspond to the main parameters of an interdisciplinary approach to the study of media texts. Material research – in terms of open databases, a key in the provision of materials based on this kind of information, is a method of analysis, interpretation, presentation. The tendency to shift the emphasis on the analytical nature of the presentation of information for contemporary socio-economic discourse as such. In particular, databases are actively used as a source of information for the development of innovation processes: for example, in March 2013, the European Institute for Innovation and Technology (European Institute of Innovation and Technologies, EIT) holds a large-scale international conference ‘Data Innovations: a New Growth Imperative’. The source of material extraction is the English-language press and the Russian-language press of Kazakhstan, open data catalogs, scientific methodological aids and scientific research and professional journalistic reports. According to the research team, the electronic media in Kazakhstan are the first to respond to all changes (Zhanabekova, 2014). It is because of their heightened “sensitivity” to the interests and needs of the audience that they are included in the sources of material extraction.

In this study, we used the following methods: the method of content analysis (qualitative) and the descriptive method (in its modern interpretation). Let’s clarify that content analysis is used by us according to Lasswell: as an analysis of signs and statements to test their influence on the audience; analysis results are the frequency of certain characters, their intensity, and the sender’s rating (Lasswell, 1949). Descriptive method, according to A.A. Gorbachevsky includes three stages of analysis of linguistic material: segmentation (separation of linguistic units from the text), identification (delimitation of linguistic units and their variants), and arrangement (determination of the relationship between linguistic units) (Gorbachevsky, 2011). These stages are completed by us in the course of the study.

Scientific methodology

The study of the theoretical foundations and first practices of metadata journalism as a phenomenon and process allows us to formulate a working definition: metadata journalism is a set of specific skills for searching, analyzing, visualizing information from digital sources of metadata to form interactive formats of unique presentation of the author’s analytical content and effective interaction with the audience. This is the format of current journalism, the format of the media text / media content, the method

of its creation, translation, consumption, which can be used as a metamethod and metabase for other genres.

The study allowed for the first time to fix from a theoretical point of view a new format for synthesizing fundamentally different approaches to using fact as the main category of journalism and the possibility of contamination, synthesis, synergy of all types / formats / genres of journalism in the search for media content and the functioning of the media system. In this study, limited to the length of the article, a professional journalistic message (verbal, auditory, visual, convergent content) with a specific set of characteristics, functioning within a certain media resource and a specific media model, is designated as “format”, since the term “genre”, typology of genres To this day, have no clear definitions. This trend in the structure of the media activity continues the vector of research of convergent journalism formats and is fundamentally new.

This format (meta format) of analytic content delivery allows, for the first time, fixing the direction of formation of approaches to journalism not so much as applied scientific knowledge, but as a science that has its own methods, presents conclusions that can be verified, and the results can be repeated. Such qualitative changes in media communication confirm the concept of medialogy proposed by the author as a complex science about media, the subject of which is media communication (Shilina M., 2009).

Literature review

Similar in scope to this study is the work of Mirko Lorenz. Mirko Lorenz is one of the world's leading experts in data journalism. Founder Datwrapperr service, which helps journalists create correct charts and diagrams, is known all over the world. Here we can quote an important statement from Lorenz from his scientific work: “The European Journalism Center conducted a study to find out what journalists should learn. The authors found that journalists have a great willingness to go beyond the comfort zone of traditional journalism and invest their time in gaining new knowledge and new experience. The results of the research showed that journalists see the opportunity, but they need some support to rip through the initial problems that keep them from working with data. There is a certainty that if the data journalism is more thoroughly mastered, the workflow, tools and results will improve very quickly.

Pioneers in this direction, such as the Guardian, the New York Times, the Texas Tribune and Die Zeit, continue to raise the bar with their data-based arti-

cles and stories” (Mirko Lorenz, 2016, p. 18). From Kazakhstan authors we can mention G. Ibrayeva. The author emphasizes that Data Journalism is actively developing in national newspapers as “Egemen Kazakhstan”, “Kazakhstanskaya Pravda”, in the online editions of Kazakhstan. The author offers sources actively developing this Trend, as well as tools that allow Journalists actively using Data. The author makes conclude that Data Journalism in Kazakhstan successful prospects (G. Ibrayeva, 2016).

Results and discussion

The main task of data journalism is “to make the numbers more attractive,” most often the result of the journalist's work is illustrated using infographics. Moreover, the journalistic material itself can be presented in the form of interactive infographics. And then it's not publication in the media, it's something else (Data Journalism and its traps http://redactor.in.ua/ru/actual/7817.Zhurnalistika_dannih_i_ee_lovushki). The fact is that data journalism as a phenomenon is largely a product of an open society in which neither government departments nor business structures try not to restrict access to data. Throughout the world, since 2008, an active movement for open data began. In many countries, open data portals appear, containing a wide variety of data, differing in both quantity and quality. Opportunities appeared to analyze on the basis of these data, and these opportunities gave impetus to the dissemination of data journalism (E. Constantaras, 2016).

In 2008 the U.S. President Barack Obama signed three presidential memorandums of transparency and the open government. Open data are the public state data placed on the portal for the purpose of their further use and a reprint by citizens and business. The largest states and international organizations, such as UN, EU, OSCE, World Bank, OGP (Partnership of the open government), International Budget Partne. (Mirko Lorenz, 2016, p. 32)

The state portals of open data were created in 23 countries, including the USA, Great Britain, Singapore, France, Canada, Australia, Singapore, Denmark and other countries. The leading position is taken by Great Britain (data.gov.uk), the USA (data.gov) and Singapore (data.gov.sg). Successful implementation of the Open Data project is shown by the countries of Europe. The cumulative economic effect of the applications based on open data in economy of the EU-27 is estimated at 140 billion euros a year.

In Canada access to open data allowed to analyse and reveal losses of 3.2 bln. dollars of the USA from fraudulent actions with charity foundations. In Great Britain – the “Where Does My Money

Leave?” project allows to control the cost of budget money. In the USA – the project allowing to find housing taking into account duration of a trip to work is implemented. In the Netherlands the Ministry of Education published all the online training materials for reuse. People became more rare to ask it questions, the burden and expenses decreased (Mirko Lorenz, 2016, p. 37).

In 2016, the government of Kazakhstan launched its own open data portal. The portal data.egov.kz operates within the framework of a larger project – the Electronic Government of Kazakhstan. This is a platform that acquaints citizens of the state with data that will be useful for them in everyday life. In addition, they have great potential for economic growth, business innovation and job creation.

The open data portal is a key component of the “Open Government”, which publishes data of government agencies in a machine-readable format. When processing and analyzing information from the portal can be effectively used in various fields, in particular, in journalism.

Visitors to the portal can get acquainted with the actual information provided by both central and local government bodies. As of August 14, 2017, 2,260 sets of public data were published on the Open Government portal of Kazakhstan (open.egov.kz) (News.rambler.ru – https://news.rambler.ru/internet/37814539/?utm_content=rnews&utm_medium=read_more&utm_source=copylink).

For example, the National Bank of the Republic of Kazakhstan provided statistics on the interbank money transfer system, and the Ministry of National Economy – data on special protective, anti-dumping and countervailing measures in force in the framework of the Eurasian Economic Union against third countries. Akimats (Regional Governor’s Office) share information about social facilities, tourist routes, statistics on the industry of regions, etc.

Among them – information about legal entities, lists of insolvent debtors, information on taxpayers, the birth rate in the country, the administrative and territorial structure of the state, etc.

Among them – information about legal entities, lists of insolvent debtors, information on taxpayers, the birth rate in the country, the administrative and territorial structure of the state, etc.

One of the popular data sets among portal users was the statistics of diseases. The presented data reflect the types of diseases in the context of all regions of the country, indicating the types and number of diseases in 2015 and 2016.

However, the problem of the modern world is not a lack of data, but an excess of data. Abilities to

analyze them are in a great demand. Unfortunately, the lion’s share Kazakhstani journalists do not have the skills to review this kind of data and it is unlikely that there will be a dozen worthy journalistic materials written in this genre.

A media specialist who wants to work in the field of data journalism must be able to work with a variety of analytical and technical tools: starting with common Excel, Google Docs and ending with more specific ones like IBM ManyEyes, Wordle or Planning Tools from Google, or even OfficeReports. In Kazakhstan, so far few journalists have the skills to work with these tools.

Data journalism requires knowledge of basic topics, as a rule, beyond the attention of traditional journalism. It is necessary to know how public administration works, how to interpret laws, decrees and decrees. If a journalist does not know the principles of the work of institutions in his own country, his career in data journalism will quickly stall.

Fluency in English. Most of the most commonly used data-journalism tools are available only in English. At the moment, the gap between journalists, who thanks to their language skills can use all the resources of data-journalism, and journalists who, due to the lack of these skills, can not, is huge (Oboler A, 2012).

Online search skills. It’s not enough just to use a regular Google search. You need to take advantage of advanced search by format, by topic and by date. In addition, since states are not in a hurry to spread data in the public domain, it is necessary to know which official sites store data.

Skills for creating spread sheets. Journalists need to know how to handle numbers in Excel or similar programs.

Knowledge of mathematics, as well as descriptive statistics and inference statistics. A journalist suffering from phobia of numbers will inevitably encounter problems in analyzing the state budget, taxes or such topics as crime and pollution (V.Kaul, 2012).

Teaching data-journalism skills is basically self-learning. None of the world schools of journalism, with rare exceptions, does not teach journalism data, so it becomes urgent to learn in practice.

Projects can be time consuming and expensive. The journalist will have to deal with dozens if not hundreds or even thousands of forms, texts and graphs.

It is necessary to remember the three main parts, which are the reporting of journalism data. In addition to the plot, the report should provide readers with background documents, explain the methodol-

ogy for data collection so that the work is evaluated by experts, and also adequately illustrate the data.

Using the data, the journalist's work shifts its main focus, switching attention from the task of being the first one to report something, to the task of being the one who will tell us what can actually mean a certain course of events. That's why journalists should view the data as a prospect, as a chance, as an opportunity and an opportunity. They can, for example, tell how some kind of abstract threat, such as, for example, unemployment, can affect people, depending on their age, gender, level of education. The use of data turns something abstract into something that everyone can understand and with which one can relate themselves.

They can create personalized calculators to help people make decisions, whether buying a car, at home, deciding on education, or choosing a career path in life or pursuing strict cost control so as not to incur debts.

They can analyze the dynamics of complex situations, such as insurgencies, insurrections or political debates, demonstrate frequent misconceptions and help everyone see possible solutions to complex problems.

Acquaintance with such processes as search, cleaning and visualization of data, also transforms the profession of the information collector. Journalists who master these processes at a high level will learn on their own skin that the creation of articles based on data, unique information and analytical developments brings clarity, variety and changes, as well as relief. Fewer assumptions, fewer citations – instead, a journalist can create a strong position with the support of data, and this can greatly affect the role of journalism in general.

Conclusion

Summarizing the article, it should be said that the data are invaluable. Access of the journalist to the data allows to show this or that topic in such a way as to reveal the process and its decision. Many journalists publish bold materials, supporting the arguments in the language of real numbers. There are dangers of using infographics when texts are accompanied by graphics, but it performs the function of an ornament, does not reveal the potential,

or there is a discrepancy between textual and visual information. Sometimes, incorrectly created infographics can distort information. Despite the difficulties, there is a result, and Kazakhstani journalism successfully masters the new world trend of Data Journalism.

We believe that the goal of the research has been achieved, the tasks have been solved. The fields of application of the results obtained are journalism, philology, linguistics, intercultural communication, cultural studies, and sociology.

Among the tendencies, we note the movement towards journalism of open metadata: programs on the so-called open governance, the implementation of open government concepts all over the world, including in Kazakhstan, contribute to the development of this type of database and hence metadata journalism as a significant driver for social development.

Also, the presentation of such analytical media content on the Internet makes it possible to develop a new format for the consumption of media information, deepens the setting to form the audience's opinion, but knowledge, which corresponds to the progressive paradigms of the innovation discourse as the next stage of social development. The use of metadata as a resource for innovation development, recorded, in particular, in the EU and USA, allows us to talk about the prospects of metadata journalism in the formation of the innovation sphere, where communication is mandatory, professional communication changes its ontological status, acquiring characteristics of a field that is equivalent to politics, economy, culture, which allows to fix the trend of a possible overcoming of the crisis of corporate identity.

And finally, from the point of view of professional creativity, journalism of metadata, despite the use of computer, Internet data, can strengthen the significance of the author, not technology, strengthen the humanitarian, rather than technocratic, trends in the development of journalism, since it is the interpretation, choice of form content allows you to create on the basis of standard statistics original journalistic material. Thus, theoretical studies in the indicated direction will make it possible to overcome the creative crisis of the corporate identity of modern journalism in practice.

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