

PERAET 2021**International Scientific Conference «PERISHABLE AND ETERNAL: Mythologies and Social Technologies of Digital Civilization-2021»****REGIONAL DIGITAL CLUSTER OF TRADITIONAL VERBAL CULTURE**Natalia Bolshakova (a)*, Lina Vorobeva (b), Zinaida Mitchenko (c), Maja Muratova (d),
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Abstract

The article presents the first effort of research in the problem of verbal folk culture preservation through the systematic implementation of information technologies. The purpose of the study is to define a model of a regional digital cluster of authentic culture on the example of a system of electronic forms, the content of which represents the traditional folk culture and language of the Pskov region. The regional cultural cluster is understood as a single system of interconnected electronic forms, the content of which represents the traditional folk culture and language of the Pskov region. The article considers the stages of creating a cluster, its current state and development prospects. A comprehensive program of digitization of archival material has been implemented in the Laboratory of Socio-Humanitarian Regionics, Pskov State University, since 2005. The purpose of the program is to preserve the cultural heritage concentrated in two interconnected archives – folklore and dialect ones. A set of measures is being implemented to maintain and develop a system of modules of a single cluster of traditional verbal culture of the “Pskoviana” region. The structural organization of the cluster is represented by a number of certain modules. The modules have different levels of attraction. Thus, digitized audio and text files form the basis of electronic databases. The cluster’s development prospects are associated with the creation of new modules and segments in existing modules, the modernization of the platform and design, and an increase in the level of interactivity.

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1. Introduction

Currently, the cluster approach in various industries is one of the most recognized and effective. The introduction of clusters as a feature of regional policy is associated with the development and stabilization of ethno-cultural values, which is especially important for the youth environment (Babarykina, 2019, p. 179). The analysis of successfully operating regional cultural associations allows us to develop recommendations for the further development of cultural clusters. In particular, it is proposed to pay more attention to the search for an organic combination of innovations with the historical and cultural traditions of the region and the possibilities of creative self-realization of the individual (Kulichkina & Melnikova, 2019, pp. 103-104).

The system of postulates of the cultural cluster as a cultural association that concentrates the best creative resources of the region is also relevant for the regional digital cluster. The regional cultural digital cluster is understood as a single system of interconnected electronic forms, the content of which represents the traditional folk culture and the peculiarities of the folk speech of the region. If the traditional cultural cluster unites institutions of a creative nature located in the geographical space of the region, then the regional digital cluster is localized in the digital environment.

Due to its historical and geographical specifics, the Pskov region is rich in cultural traditions. Oral folk verbal culture, represented by language and folklore, is the focus of the best aspirations of the people, their views and values – spiritual and aesthetic. On the other hand, the Pskov dialect and folklore-ethnographic archive, which has existed since the late 50s of the XX century, stores a large volume of unique expedition data used in the scientific and educational research work of the university. The relevance of digital processing of archival data and their systematic presentation is due to the need to ensure the preservation of the archive and expand the possibilities of access to it for the scientific and cultural community.

The optimal form of such a presentation is a digital cultural cluster that has no analogues, which not only performs the function of a translator of cultural and historical tradition, but also contributes to the maintenance of national cultural memory.

2. Problem Statement

At the beginning of the XXI century, digitalization covered various spheres of culture, it is observed in the economy, in the humanities, in the teaching methodology, forming an extensive “digital landscape” (Serova, 2019). In the field of humanities, the “concept of digital history (Digital History) – a branch of digital science that studies the use of computer technologies and digital resources in the process of historical analysis of research data and their visualization” has become popular (Makarova & Chernova, 2019, p. 476).

Despite the acutely debatable nature of the problems of digitalization of education, its ability to enrich and diversify traditional methods and techniques of secondary and higher education becomes obvious, as well as to provide prospects for postgraduate development of graduates (Miller et al., 2020). Moreover, as it is rightly noted, in the conditions of the development of modern science, when the measurement, collection, analysis and presentation of structured and unstructured data of huge volumes

becomes a part of life, humanitarians simply cannot ignore the “digital” discourse (Vorobyova, 2019, p. 23).

The processes of global digitalization of life have sharpened the problems of digitizing the sphere of humanitarian knowledge. The level of development, the availability of digital technologies and the lack of competence of users come into conflict, and most importantly, the lack of coherence of aspirations between the humanitarian sphere and the sphere of programmers. The researchers identify a whole complex of problems of digitalization in its relation to reality: the professional “unpreparedness of humanitarians for the qualified use of technical means, and programmers - to reflect the specifics of humanitarian knowledge in the created software product” (Ivashevsky, 2020, p. 54), the weak demand for digitalization by the humanitarian community (Guryanova & Timofeev, 2020, p. 70). Moreover, there is a manifestation of cultural incompatibility, when the values of the digital world are not accepted by the cultural tradition (Ivashevsky, 2020, p. 55), as well as the lag of the spiritual sphere in its development from technical innovations (Sagitov, 2019, p. 100).

Despite the legitimacy of the problems raised, we still allow ourselves to disagree with such categorical assessments. Without touching upon the issues of the large-scale Russian National Corpus (<https://ruscorpora.ru/>) and regional dialect corpus (Ivantsova, 2017) and collections, we note the latest data indicating that inertia has been overcome in the digitalization of humanitarian knowledge. Russian sign language electronic database is currently under active development (Kagirov et al., 2020), the Institute for Linguistic Studies of the Russian Academy of Sciences has turned to a large-scale project to create an electronic format of a consolidated dialect dictionary of Russian folk dialects (Syanova, 2020). Karelian scientists write about the need for new socio-economic conditions to update the forms and methods of work in the existing archive (Kuznetsova & Markovskaya, 2020).

The transformation of arrays of regional dialect-folklore information into digital form is associated with the risk of its superficial study: “in the conditions of digitalization of humanitarian knowledge, an array of information fills the entire space of knowledge to the detriment of the meanings of this knowledge. Deep layers of knowledge (meanings) remain outside the field of activity of the researcher” (Ivashevsky, 2020, p. 55).

Digitalization forms a new type of culture – electronic. “In modern philological research, the importance of local texts has been repeatedly proved, where a specific geographical space acts as the main intertextual dominant, since “a conscious attitude to the place of one’s own life becomes an urgent task of spiritual creativity” (Oleshko & Oleshko, 2020, p. 509). In this regard, there is a need to understand the place and role of the traditional verbal culture of the region, as well as its adaptation to the digital format.

In an era when digitalization “becomes the basis of culture and changes ... this culture itself before our eyes” (Kuznetsova, 2019, p. 100), there may be an opinion that the study of traditional folk culture, characterized by archaism, is away from modern trends. However, this is not the case. A deeper acquaintance with the experience of digitalization in the philological field, where the text is the dominant unit, reveals more specific – technological – problems of informatization of philological activity. Such problem areas include, “firstly, the development of special technical equipment and computer programs aimed at the formation of an electronic philological environment, secondly, the procedure for completing

electronic databases in the field of philology, and thirdly, understanding the transformation of the content plan of the text when translating it into digital form” (Chevtaev, 2019, p.29).

The digital cluster of the traditional verbal culture of the “Pskoviana” has overcome many of these contradictions during its formation and reflects the unity of the aspirations of humanitarians and programmers to preserve and broadcast cultural heritage.

So, the main achievement of recent times has been the availability of digital technologies, which (despite all the contradictions) are generally recognized as an effective tool for storing and broadcasting “intergenerational communication for the continuity of cultural values” (Lopatina & Neretin, 2018, pp. 75-76). Under these conditions, the cultural cluster described in the work is formed, which could not exist in the world of “traditional”, non-digital communications.

3. Research Questions

- 3.1. What is the mechanism of transformation of the Pskov dialect-folklore continuum into a digital form?
- 3.2. What are the methods of processing and structuring large amounts of information to ensure the material availability and its effective use?
- 3.3. What is the potential of the regional digital cluster as a means of establishing and maintaining intergenerational cultural and communicative memory?

4. Purpose of the Study

The purpose of the study is to present a model of a regional digital cluster of authentic culture on the example of a system of electronic forms, the content of which accumulates the traditional folk verbal culture of the Pskov region.

5. Research Methods

The leading method in this study is the modeling method used to build a multi-level structured cluster. The interdisciplinary nature of the research determines the involvement of methods of the humanities and technologies of archival material computer processing. The minimum unit of the cluster is the text that corresponds to the genre-thematic principle of the organization of the material. At the stage of textual analysis, such textual methods as text delimitation and attribution are used. Each of the generated collections of texts is transported to an electronic database, the fields of which reflect the text itself and the audio file, the necessary elements of text attribution (with minor variation): genre, motive, keywords; as well as metadata: information about the informant, indicating the place and year of recording.

The philological tasks of the work determine the application of a systematic approach to the analysis of interdisciplinary archival material. The methods of content analysis, communicative dialectology and the system-structural method are used in working with the text. The main method of developing the theoretical aspects of the topic is descriptive and comparative methods.

6. Findings

There are two strategies for describing the regional digital cluster of folk verbal culture: diachronic and synchronic. The diachronic approach involves the analysis of step-by-step activities: from the digitization of archive funds to the modular formation of a single cluster. The value of this approach is that it reflects the clarity of the goal and the technology of gradually complicating the structure of the final product. However, at the beginning of the study, when there are no analogues and technical resources are limited, it is impossible to plan and carry out strictly regulated activities. And the goal itself was initially more humanitarian (to preserve the archive) than technological. At the same time, the constant progress towards the introduction of digital technologies in scientific and practical work with the archive has led to the creation of a coherent multi-module digital product that corresponds to the idea of the cluster in its parameters and functions.

To present the results of the work, the article uses mainly a synchronic description model, which reflects the current state of affairs and a system analysis of intermediate results.

6.1. Digital form as a method of data storing in an archive and as an empirical material for systematic philological research

The Pskov dialect and folklore-ethnographic archive includes two interrelated funds: a card file and a handwritten archive of the “Pskov regional dictionary with historical data” and a folklore-ethnographic archive, including a handwritten fund and audio recordings.

Of particular value is the audio fund, which by 2013 was completely converted to digital format. Currently, the total volume of the audio pool is 60.8 GB, which is 1055 hours of sound. The audio fund is an archival collection structured according to the historical and cultural zones allocated on the territory of Pskov region, within the zone – by districts, and within the districts – by the years of the survey. In addition to the song repertoire, the collection presents a variety of verbal genres: ritual folklore, children's folklore, fairy tales, non-fairy tale folklore prose-legends, legends, mythological stories, etc., as well as a large volume of speech materials that do not yet have an indisputable attribution. The collection of audio recordings, with all its self-sufficiency, in accordance with the general concept of the cluster, has an auxiliary character, is considered as a base for genre-thematic study of the folklore traditions of the region. The audio files extracted from the collection are used to form electronic databases, audio applications for book editions of Pskov texts, and are included in the electronic guide to the archive's funds.

The manuscript fund of the folklore and ethnographic archive is also digitally processed. The scanned expedition notebook together with the corresponding audio file is a storage unit in the structure of the guide to the archive funds.

6.2. Structured forms of representation of large information amounts in a digital cluster

The large volume of data from the Pskov archive does not allow us to fit it into one electronic form without loss. During the formation of the digital sphere itself, it is much more fruitful to use small forms,

from which the overall picture is formed according to the principle of a puzzle. The model of a digital cluster represented by a system of interconnected modules has both integrity and mobility.

To date, the following modules have been mastered and are functioning: a digitized audio collection; a partially scanned handwritten archive fund; electronic databases (6 electronic databases have been created and received certificates of state registration,); websites (<http://noc.pskgu.ru/>; <http://ethnodict.pskgu.ru/>). Modules, interacting with each other, are characterized by different levels of attraction. Thus, digitized audio and text files form the basis of electronic databases. In turn, electronic databases on children's folklore, fairy tales, non-fairy tale folklore prose are synchronized with certain pages of the laboratory's website. Each module includes several segments, the composition of which is updated as a new topic is developed. Currently, in connection with the implementation of the research project on the theme of childhood in the discourse of the Pskov-Belarusian borderzone of particular relevance are the segments such as established at different times of the electronic database "Children's folklore" (2012) and "The Pskov-Belarusian borderzone (a guide to collections of Pskov dialect and folklore-ethnographic archive)" (2020).

Prospects of development of the cluster associated with the creation of new modules and segments in the existing modules, modernization platform and design, increase the level of interactivity.

7. Conclusion

The creation of the regional digital cluster "Pskoviana" is carried out in inseparable connection with the research and educational activities of the laboratory. In addition to philological research tasks, the cluster modules contain significant socio-cultural potential.

The issue of preserving cultural values is focused on a generational approach, which assumes continuity and a spiritual connection between the future and the historical past. In society, as the researchers note, "there is a need for the transmission of the accumulated communicative and cultural memory to younger, "digital" generations as the most important indicator of the development of society based on humanistic traditions" (Oleshko & Oleshko, 2020, p. 509).

The generational approach is already evident at the stage of the expedition survey, in which a significant role is assigned to student field practice, where young people, meeting with traditional culture and especially with its carriers, gain experience in cultural communication. Software students were also involved in the creation of separate modules of the digital cluster "Pskoviana", which corresponds to the principle of interdisciplinarity and even "transdisciplinarity" (Chira, 2019) of the digital cluster.

Thus, the regional cluster of traditional verbal culture "Pskoviana" is an integral, internally structured digital product that has an original form and content. Due to the significant volume, variety of modules and segments, regional orientation, it has scientific, artistic, historical and cultural value. All this gives the cluster social significance and national and cultural identity.

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References

- Babarykina, N. V. (2019). Kul'turnyj klaster kak sredstvo razvitiya etnokul'turnyh cennostej studentcheskoj molodezhi [Cultural cluster as a means of developing ethno-cultural values of student youth]. *Vestnik Moskovskogo gosudarstvennogo universiteta kul'tury i iskusstv* [The Bulletin of Moscow State University of Culture and Arts], 3(89), 175-180. <https://doi.org/10.24411/1997-0803-2019-10318>
- Chevtaev, A. A. (2019). Formirovanie cifrovyyh baz dannyh rukopisej: problemy i tekstologicheskie perspektivy. Stat'ya 1 [Formation of digital databases of manuscripts: problems and textological perspectives. Article 1]. *Novyj filologicheskij vestnik* [The New Philological Bulletin], 1(48), 28-43. <https://doi.org/10.24411/2072-9316-2019-00002>
- Chira, R.-G. (2019). From mathematics to literature – an interdisciplinary approach. *Journal of Language and Education (JoLE)*, 12(1), 19–34. <https://doi.org/10.29302/jolie.2019.12.1.2>
- Guryanova, A. V., & Timofeev, A. V. (2020). O prednaznachenii filosofii i gumanitarnogo znaniya v epohu cifrovizacii [On the purpose of philosophy and humanitarian knowledge in the era of digitalization]. *Vestnik Moskovskogo gosudarstvennogo oblastnogo universiteta. Seriya: Filosofskie nauki* [Bulletin MSRU serie 'Philosophy'], 3, 70-76. <https://doi.org/10.18384/2310-7227-2020-3-70-76>
- Ivantsova, E. V. (2017). Tomskij dialektnyj korpus: obosnovanie koncepcii i perspektivy razvitiya [Tomsk dialect corpus: substantiation of the concept and prospects of development]. *Voprosy leksikografii* [Russian Journal of Lexicography], 11, 54-70. <https://doi.org/10.17223/22274200/11/4>
- Ivashevsky, S. L. (2020). Social'nye problemy cifrovizacii gumanitarnogo znaniya [Social problems of digitalization of the humanities]. *Vestnik Nizhegorodskogo universiteta im. N.I. Lobachevskogo. Seriya: Social'nye nauki* [Vestnik of Lobachevsky State University of Nizhni Novgorod. Series: Social Sciences], 1(57), 52-57.
- Kagirov, I. A., Ruymin, D. A., Axyonov, A. A., & Karpov, A. A. (2020). Mul'timedijnaya baza dannyh zhestov russkogo zhestovogo yazyka v trekhmernom formate [Multimedia database of Russian Sign Language items in 3D]. *Voprosy Jazykoznanija* [Topics in the Study of Language], 1, 104-123. <https://doi.org/10.31857/S0373658X0008302-1>
- Kulichkina, G. V., & Melnikova, N. S. (2019). Problemy i perspektivy organizacii deyatelnosti kul'turnyh klasterov (regional'nyj aspekt) [Problems and prospects of organizing the activities of cultural clusters (regional aspects)]. *Kul'tura i obrazovanie: nauchno-informacionnyj zhurnal vuzov kul'tury i iskusstv* [Culture and education: scientific and informational journal of universities of culture and arts], 2(33), 98-104. <https://doi.org/10.24411/2310-1679-2019-10210>
- Kuznetsova, T. F. (2019). Cifrovizaciya i cifrovaya kul'tura [Digitalization and digital culture]. *Gorizonty gumanitarnogo znaniya* [The Horizons of Humanities knowledge], 2, 96-102. Retrieved from <http://journals.mosgu.ru/ggz/article/view/1007> <https://doi.org/10.17805/ggz.2019.2.7>
- Kuznetsova, V. P., & Markovskaya, E. V. (2020). Fol'klornyj arhiv i istoricheskaya dejstvitel'nost' (na materialah arhivov Instituta YALI KarNC RAN) [Folklore archive and historical reality (based on the archive materials of the Institute of Language, Literature and History of the Karelian research Center)]. *Studia Litterarum*, 5(4), 338-357. <https://doi.org/10.22455/2500-4247-2020-5-4-338-357>
- Lopatina, N. V., & Neretin, O. P. (2018). Sohranenie cifrovogo kul'turnogo naslediya v edinom elektronnom prostranstve znaniy [The preservation of digital cultural heritage in uniform electronic

- space of knowledge]. *Vestnik Moskovskogo gosudarstvennogo universiteta kul'tury i iskusstv* [The Bulletin of Moscow State University of Culture and Arts], 5(85), 74-80.
- Makarova, N. N., & Chernova, N. V. (2019). Opyt primeneniya elektronnykh obrazovatel'nykh resursov v processe prepodavaniya istorii Rossii v universitete [Experience of using electronic educational resources in the process of teaching the History of Russia at the university], *Perspektivy nauki i obrazovaniya* [Perspectives of Science and Education], 3(39), 474-488. <https://doi.org/10.32744/pse.2019.3.36>
- Miller, K. K., Jorre de St Jorre, T., West, J. M., & Johnson, E. D. (2020). The potential of digital credentials to engage students with capabilities of importance to scholars and citizens. *Active Learning in Higher Education*, 21(1), 11-22. <https://doi.org/10.1177/1469787417742021>
- Oleshko, V. F., & Oleshko, E. V. (2020). Kommunikativnaya pamyat' Yugry i problemy ee mezhpokolencheskoj translyacii v cifrovuyu epohu: filologicheskij aspekt [Communicative and cultural memory of Yugra and problems of intergenerational translation in the digital age: the philological aspect]. *Vestnik ugrovedeniya* [Bulletin of Ugric Studies], 10(3), 507-516.
- Sagitov, S. T. (2019) Sociokul'turnaya sfera i razvitie cifrovoj ekonomiki [Social and cultural sphere and the development of the digital economy]. *Vysshee obrazovanie v Rossii* [Higher Education in Russia], 28(10), 97-105. <https://doi.org/10.31992/0869-3617-2019-28-10-97-105>
- Serova, O. A. (2019). Problemy razvitiya metodologii grazhdansko-pravovykh issledovanij v cifrovuyu epohu [Problema of methodology development of civil law research in the digital age]. *Metodologiya grazhdansko-pravovykh issledovanij v cifrovuyu epohu* [Methodology of civil-law researches in the digital age], 1(1), 351-362. <https://doi.org/10.33397/2619-0559-2019-1-1-351-362>
- Syanova, E. I. (2020). K probleme sozdaniya elektronnoego svodnogo dialektnogo slovarya [On the problem of creating an electronic consolidated dialect dictionary]. *Vestnik Permskogo universiteta. Rossijskaya i zarubezhnaya filologiya* [Perm University Herald. Russian and Foreign Philology], 12(1), 68-77. <https://doi.org/10.17072/2073-6681-2020-1-68-77>
- Vorobyova, O. V. (2019). O problemah i perspektivah razvitiya gumanitarnykh nauk i gumanitarnogo obrazovaniya v Rossii [About problems and prospects of humanities and humanitarian education in russia]. *Vysshee obrazovanie v Rossii* [Higher Education in Russia], 28(11), 22-33. <https://doi.org/10.31992/0869-3617-2019-28-11-22-33>