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Review article

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Russian-Chinese Transfer of Humanitarian Scientific Heritage of M.V. Lomonosov in the Context of Digitalization and Education in the North of Russia

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Abstract. The purpose of this article is to present the conceptual ideas of innovative interdisciplinary Russian-Chinese project “Digital Lomonosov”, the idea of which appeared five years ago and is based on a decade of experience of Chinese studies development in the North of Russia and at the Northern (Arctic) Federal University named after M.V. Lomonosov. In accordance with the goal, the work solves the following main tasks: 1) justifies the relevance of the project “Digital Lomonosov” and its demand in China; 2) provides an overview of scientific works and interdisciplinary research on the humanitarian ideas of Lomonosov — a great scientist, an outstanding personality of the Russian North; 3) summarizes the main results of ten-year development of Chinese studies in the North of Russia and at NArFU; 4) briefly presents the experience of five-year network project of federal universities as the basis for developing the concept of innovative Russian-Chinese project; 5) outlines the prospects for the project and the promotion of Lomonosov Studies in China. The methodology of the review article is based on an interdisciplinary vision of the directions of humanities development in the focus of digitalization and further development of Lomonosov Studies in the interaction of Russian and Chinese scholars. The authors substantiate a new conceptual idea of international transfer of M.V. Lomonosov’s heritage digitally from the North of Russia to China. The results of the analysis are summarization and systematization of the experience of five years of cooperation between federal universities in the field of applied linguistics and education in the context of digitalization, ten years of experience in the development of Chinese studies in the North of Russia and NArFU, actualization of possibilities of international transfer of M.V. Lomonosov humanitarian heritage, and presentation of prospects of Lomonosov Studies in China.

Keywords: *Lomonosov studies, Chinese studies, digitalization, network project of federal universities, Russian-Chinese project, Russian North, Lomonosov’s humanitarian heritage*

Introduction

The idea of the international network project “Digital Lomonosov” appeared in 2020 in the course of cooperation of the Northern (Arctic) Federal University named after M.V. Lomonosov and Changchun University (China); it was actively discussed at international meetings, scientific events and during business correspondence between partners. The first conceptual vision of the large-scale project development from the Russian and Chinese sides was presented at the All-Russian scientific conference with international participation “The Russian Arctic: new meanings and values” in November 2022. The conference was prepared by the organizing committee under

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the leadership of the Doctor of Philosophy, Professor, Rector of the Northern (Arctic) University named after M.V. Lomonosov Elena Vladimirovna Kudryashova and was held under the auspices of the Russian Philosophical Society with the assistance of the Interregional Public Lomonosov Foundation. One of the most significant inter-international events within the framework of this conference was the Russian-Chinese video conference “The language of science and technology: from the ideas of M.V. Lomonosov to the digitalization of the humanities”, prepared by the Russian-Chinese team, which, among many other colleagues, included the main organizers: Doctor of Philology, Professor, Head of the Department of Translation and Applied Linguistics Alexander Mikhailovich Polikarpov, Doctor of Pedagogy, Professor of the Department of Translation and Applied Linguistics Maria Vyacheslavovna Druzhinina, Doctor of Philology, Professor, Director of the Institute of Foreign Languages, Director of the Silk Road Institute of Changchun University Wang Jinling. The international event was of a hybrid nature, since Russian teachers and students participated in it in person, while Chinese teachers and students made presentations in a distance format. About 100 people took part in the event.

Relevance of the “Digital Lomonosov” project, its demand in China

In the modern world, digitalization is rapidly developing, including in the humanitarian sphere, and the pronounced dynamism of this process is undeniable for anyone involved in digital humanities. That is why the key idea of this international event and the innovative project presented at it was the digitalization of the humanities. The main trends are considered to be the increasing role of digital culture, the formation of modern network practices, including audio-visual ones, new methodology and fundamentally different worldview that correspond to the ideas of digitalization, change the way of life and human activity, lead to an increase in the volume of information and contribute to the dynamism of the process of its transfer through digital technologies and the use of “virtual bridges between the past, present and future”, focus on “multiflows” of information. This determines the involvement of users in “constantly updated and increasingly complex digital communication and technological processes” [1, Shlykova O.V., pp. 22–31]. The role of education in the current digital environment is also increasing due to the active process of forming IT skills among representatives of professions not directly related to the Internet sphere, increasing digital literacy of students, creating and improving a motivation system for mastering digital technologies, and developing human potential in the interests of the state [2, Suraeva M.O., Cmolkova A.Yu., pp. 63–73]. Following these and some other trends of the information age and relying on the ideas of the dynamism and relevance of the digitalization of the humanities, on the one hand, and the need for not only domestic, but also international transfer of humanitarian knowledge of the great scientist and encyclopedist M.V. Lomonosov in digital format, on the other hand, during the Russian-Chinese video conference, the possibility of cooperation with colleagues from Changchun University on the implementation of the international network scientific and educational project “Digital Lomonosov: fundamentality of the humanitarian ideas of M.V. Lomono-

sov in an electronic database in Russian and Chinese” (hereinafter referred to as the “Digital Lomonosov” project). The idea of interdisciplinarity is promising for the implementation of this project. One cannot but agree with M.A. Lukatskiy about the need to integrate various sciences in order to conduct modern research: “It is hardly possible to seriously doubt that the trend of modern science is the expansion of the range of interdisciplinary research jointly conducted by scientists representing different fields of knowledge. This is also evidenced by the numerous projects being implemented today, uniting the efforts of various scientists aimed at understanding certain phenomena of reality” [3, pp. 62–76]. Doctor of Philology, Professor Wang Jinling, Director of the Institute of Foreign Languages, Director of the Silk Road Institute of Changchun University stated in her scientific report “The concept of creating an electronic database of M.V. Lomonosov in Russian and Chinese”, presented at the Russian-Chinese video conference “The language of science and technology: from the ideas of M.V. Lomonosov to the digitalization of the humanities”, the fact that information about the life and scientific work of M.V. Lomonosov are little known in China. Professor Wang Jinling has extensive experience of cooperation with Russian scientists, from whom she received information about the world achievements and discoveries of the famous scientist. In the works and books about him, she, as a philologist, translator, who is fluent in Russian, saw the high potential of enlightenment and educational work among the youth and the population of China to get acquainted with the scientific and creative heritage of M.V. Lomonosov. In this regard, it is quite relevant to develop the concept and implementation of the “Digital Lomonosov” project, which can considerably increase the level of international significance of the research of Russian scientists in the field of humanities, including Lomonosov scholars. The presentation of the book “Mikhail Lomonosov: Pomor Encyclopedia” took place at the event [4, p. 604]. Editor-in-Chief of the NARFU Pomor Encyclopedia V.P. Bazarkina told about the encyclopedic publication containing information about the life and scientific achievements of M.V. Lomonosov. The presentation was accompanied by a display of rare photographs, drawings, a story about historical facts, which interested the Chinese representatives and motivated teachers and students of NARFU and Changchun University to participate in the international project “Digital Lomonosov”.

Brief information about Lomonosov’s innovative ideas in the humanities

Mikhail Vasilyevich Lomonosov, the great genius of Russia, an outstanding scientist-encyclopaedist, the first Russian academic naturalist, the most profound theorist and experimenter, an outstanding philologist, as well as a historian, artist, poet and translator, who today is often called a universal person (lat. homo universalis) [4, p. 10], was born in the village of Mishaninskaya, Kurostrovskaya volost, Dvinskoy district, Arkhangelsk province, on November 8 (19), 1711. He was a versatile person and had a great influence on the development of Russian science. The works of Lomonosov gave a powerful impetus to the development of such exact and natural sciences as physics, chemistry, astronomy, and geography in Russia. The scientific activity of Lomonosov contributed to the enrichment of new ideas in a number of domestic applied sciences,

such as geology, metallurgy, instrument making, mechanics, and meteorology. Scientific heritage of M.V. Lomonosov includes theories that help to understand the world and explain the phenomena observed in the Arctic territories. We should mention, for example, practice-oriented research on the drift of ice in the Arctic Ocean from east to west, on the electromagnetic nature of the northern lights, features of sea ice, and the possibility of conducting northern marine expeditions.

Being an outstanding, talented person, a person with extensive advanced knowledge, M.V. Lomonosov managed to advance many humanities, such as philology, history, philosophy and economics. He made an outstanding contribution to the development of the Russian literary language, laying its foundations and for the first time determining the correlation of the elements that made up Russian literary speech. Being a talented poet, he created works of various genres: odes, lyrical and satirical poems, fables, epigrams, but his favorite genre was the ode. Lomonosov developed the theory of Russian versification, contributed to the development of rhetoric, the doctrine of the three styles. Skillfully using the experience of his predecessors in the grammatical description of the Church Slavonic language, he created the first Russian grammar of the new, secular Russian language. M.V. Lomonosov made a huge contribution to the formation of the norms of the literary Russian language not only through his works, but also through his translations, and called upon to consider translations of foreign authors' works as a powerful means of enriching Russian literature with new ideas and forms.

The works of modern Russian researchers of the scientific heritage of Lomonosov, representatives of the Northern (Arctic) Federal University, largely reflect the special value of Lomonosov's humanitarian heritage.

NArFU Professor M.Yu. Elepova considers the phenomenon of the humanitarian universe of M.V. Lomonosov in the context of modern scientific knowledge [5, p. 59–63]. The article analyses the contribution of M.V. Lomonosov as a universal scientist in the development of Russian humanitarian thought. Emphasis is placed on the application by the scientist-encyclopaedist of both specific and interacting with each other humanitarian directions of scientific knowledge. The author points out the necessity to take into account both the principles of the methodology of science developed by him and the integrity of his worldview, when studying the humanitarian ideas of the great scientist. Specific examples show that Lomonosov's contribution to the development of the humanities (the creation of the first academic grammar of the Russian language, of the concept of antinormanism in history, the coverage of the role of the church calendar in theology, etc.) is becoming very relevant today for the development of the humanities.

The name of Lomonosov is closely connected with the North of Russia. According to Doctor of Historical Sciences, Professor Yu.F. Lukin, the concept of "Russian North" has a hybrid character, as it is based on the principle of interdisciplinarity. The researcher emphasizes that the ethnographic, historical, philological, cultural, i.e. interdisciplinary study of the North began in the 18th century, in the time of M.V. Lomonosov. M.V. Lomonosov is presented as a master of scientific discussion, who had the courage to criticize the Norman theory, "proved the Slavonicity of the Va-

rangians as Rus, cited the names of the country found in foreign sources: Russi, Russia, Rugia, Ruthenia, Risaland". Yu.F. Lukin notes that "Christian Orthodoxy, parish churches, monasteries, chapels, votive crosses played an important role in the settlement of the Slavic oecumene of the Russian North", which, in turn, had a spiritual influence on the formation of character traits of a brilliant scientist, a native of the Russian North [6, pp. 275–302].

Doctor of Pedagogical Sciences, Professor T.S. Butorina, in her monograph, which examines the Lomonosov period in the history of Russian pedagogical thought in the 18th century, proved that M.V. Lomonosov is the founder of pedagogical science. As T.S. Butorina notes, the formation of pedagogical views of the great scientist was greatly influenced by the Pomor folk pedagogy. According to the scientist, Lomonosov was able to substantiate the subject of pedagogy, the essence of upbringing and education, to explain the ways of organizing training, its content. These and many other statements allow us to conclude that the scientist formulated the methodological foundations of pedagogical science. M.V. Lomonosov is rightly called the founder of the national pedagogical theory of Russia. Work with archival documents and historical and educational materials, a content analysis of the pedagogical terminology of the Enlightenment period in the studies of T.S. Butorina convince that M.V. Lomonosov was not only a brilliant theoretician of pedagogical science, but also a prominent representative of scientific, educational and organizational and managerial practice, which is confirmed by numerous facts of his active work in the field of education: the foundation of Moscow University, the idea of opening St. Petersburg University, which was realized half a century after his death, writing textbooks, outlining didactics of teaching disciplines and much more [7, Butorina T.S.]. Thus, the foundation for the development of public education and the preservation of patriotic traditions, laid down by Lomonosov, determined the further positive dynamics in the development of science and education in Russia.

Born in the North of Russia, M.V. Lomonosov learned everything new through the prism of perception of the surrounding world, not limiting himself to the knowledge of sciences for the development of the northern territories and Russian society as a whole. As a result of visiting other countries, studying and working abroad, learning foreign languages, studying the works of foreign scientists, translating them into Russian, constantly comparing, contrasting and analyzing scientific information and facts, taking into account the needs of people, M.V. Lomonosov expanded the range of his scientific and creative thinking. The example of M.V. Lomonosov's multilingual and multicultural personality, his courage to approve everything new and non-standard can motivate the development of multilingual pedagogy, innovative didactic concept and the creation of a multilingual manual on the cultural phenomena of the Russian North [8, Druzhinina M.V., Zashikhina I.M., pp. 124–135].

Everything that the great scientist designed, created, developed and implemented in science and education is associated with the ideas of creativity and design. The originality of innovative thought, non-standard thinking, original solutions, outstanding abilities in the field of a number of sciences and in art were constantly improved by him, never ceased to amaze his contempo-

aries and everyone who today turns to the creative works of Lomonosov. The trajectory of movement from scientific thought through creativity to implementation in practice is the design idea that Lomonosov laid down and implemented already in the 18th century. Understanding the special properties of glass, its advantages and benefits is an example of the embodiment of a scientist's design ideas and best practices. For Lomonosov, the study of glass was a mystery of nature that can be embodied in telescopes, microscopes, barometers, thermometers, glasses, and various instruments. For scientists, this is an example of design research and creativity. The relationship between theory and practice, design and implementation of the experiment is valuable in his achievements. Scientific and applied research of M.V. Lomonosov always had a systematic approach. He believed that any scientific research should serve people. Lomonosov also urged to focus on the aesthetic principles of the embodiment of new ideas. These postulates of Lomonosov's design thinking are harmoniously combined with the provisions of modern pedagogical design. Pedagogical design in vocational education, for example, can be implemented both in educational processes and in scientific research. The main tasks of the pedagogical design of educational processes include the development of innovative educational programs, the design of new courses, individual routes, scientific disciplines, and the examination of new educational products. The key principles of pedagogical design are the understanding of scientific approaches to the problem under study, the logic of following from the idea and systematization of materials to the development of models, technologies and innovations. Thus, the scientific foundations of various approaches and research methodology are implemented into the practice of educational activities. These two components of the design project are linked by the aesthetics of the activities of the researcher, teacher, pedagogical designer [9, Druzhinina M.V., p. 168].

The Northern (Arctic) Federal University actively develops the foundations of integrative translation studies in connection with the need to develop translation for the development of Arctic territories [10, Polikarpov A.M., pp. 6–17]. A.M. Polikarpov expresses the idea that our great countryman M.V. Lomonosov, who had a special creativity of thinking, was at the origin of integrative translation studies. It is pointed out that Lomonosov creatively applied and sometimes created language forms in a completely new way in his translation activities. Attention is drawn to the fact that Lomonosov made a great contribution to understanding the social significance of translation, presenting the "old ideas" in a new way in order to educate and improve the morality of the Russian people. It is important to state that Lomonosov contributed to the development of science and economy of Russia, spreading the best foreign experience on the "Russian land" and forming new scientific terminology [11, pp. 7–10]. Summing up the results of research in the field of translation experience of the great countryman, the author of the article concludes that "M.V. Lomonosov's translation activity is an example of mastery of subject knowledge", which is directly related to the anticipation of the main provisions of integrative translation studies [11, p. 11].

As a result of analysis of M.V. Lomonosov's works and writings, studies of scientists of his creative, cultural, scientific and educational activities, groups of ideas, opinions, statements, rea-

soning in the field of the humanities, to which M.V. Lomonosov contributed, were identified. Humanitarian views and ideas of M.V. Lomonosov were divided into at least nine scientific fields: Russian language, poetry, education, history, culture, translation, philosophy, politics, local history. Consequently, there is a need to involve major specialists in the implementation of the planned project — representatives of various branches of the humanities. The progressive ideas of Lomonosov in the field of the humanities are a systematic work, interdisciplinary research, the unity of theory and practice, logic and non-standard thinking, creativity, the desire for new knowledge, motivation for knowledge and discoveries, patriotism and service to the fatherland, as well as practice-oriented, bringing the benefits of scientific achievements to the peoples of Russia. These progressive features of Lomonosov's activity do not lose their relevance today. That is why the popularization of his heritage is necessary to motivate young researchers and scientists, to understand their capabilities in science and in their professional activities. Thus, the transfer of Lomonosov's scientific ideas to China, the joint scientific, educational and cultural activities of the participants in the network international project should be considered as its integral part.

Experience in the development of sinology in the North of Russia and at NArFU

The development of sinology in the North of Russia began in 2013. This direction of the language education policy of the Arctic zone should be considered as an innovation in the North of Russia. In the current geopolitical situation, the popularization of sinology has both domestic and international significance for Russia. Since 2014, the Asian vector of the multipolar policy of the Russian Federation has been considered a priority. Understanding of Chinese culture and knowledge of the Chinese language is recognized as an urgent need of the Russian population, including its Arctic zone. Ideally, it is necessary to design an educational route of socio-cultural Chinese language learning in the system of kindergarten — school — university. In university education, it is necessary to work, firstly, in the logic of interdisciplinary professional and language training, coupled with sinology, and secondly, to implement successive educational programs at all levels of education: bachelor's — master's — postgraduate studies. Various forms of work in the system of additional education are also in demand. Thus, access to education in the field of sinology should become natural and comfortable for all willing residents of the North of Russia, regardless of their age and profession.

The chronicle of events related to the development of sinology in the North of Russia, in Arkhangelsk, at NArFU contains the following facts. In 2013, a Chinese delegation of representatives of the College of Information Technology of Hainan Island visited NArFU, correspondence and cooperation with the Doctor of pedagogical sciences, Professor Shang Zhiqiang began. We consider this event as the beginning of the development of sinology in the North of Russia and at NArFU. In May 2014, the Department of Translation and Applied Linguistics of the Institute of Philology and Intercultural Communication of NArFU submitted an official application for participation in the competition of the NArFU Development Program 1.1 "Providing relevant educational

content and teaching technologies”, 1.1.15 “Development of network educational master’s programs”. From that moment, the development of the innovative for the North of Russia master’s program “International professional communication in the Eurasian context” began. Active work continued until October 2014 and included the following activities: 1) creation of a working group; 2) establishment of a network partnership and conclusion of an agreement with the Ural Federal University named after the First President of Russia B.N. Yeltsin (UrFU), 3) coordination of forms of international cooperation and signing of the Memorandum of Understanding between the Northern (Arctic) Federal University named after M.V. Lomonosov (Arkhangelsk, Russia) and the College of Information Technology of the Hainan Island (Qionghai, Hainan Province, China) with the assistance of the Consulate General of the People’s Republic of China in St. Petersburg; 4) involvement in the development and implementation of the program of employers, heads of enterprises and organizations that have confirmed their consent to participate in the implementation of the program; 5) designing the concept of the program; 6) development of the curriculum, educational program, work programs of disciplines, electronic educational and methodological complex of disciplines and modules; 7) drawing up international work programs of two disciplines in practical Chinese and a workshop in cooperation with Chinese colleagues; 8) approbation of remote communication with Chinese colleagues and conducting trial classes with NArFU students; 9) organization of the work of the Chinese Language Club at the Institute of Philology and Intercultural Communication of NArFU by a master student from China, Liu Feng, under the guidance of Professor Druzhinina M.V.; 10) correspondence and organization of cooperation with the Consulate General of the PRC in St. Petersburg on organizing the work of a Chinese lecturer at NArFU. This incomplete list of cases and events that are absolutely new for NArFU and the North of Russia convinces of the innovativeness, complexity and courage of the team of NArFU teachers and specialists in the implementation of their plans. According to the results of the competition, the new network master’s program was among the winners, which motivated a group of developers and a team of teachers who were ready to implement the program for further work and became the basis for an even more active development of sinology in the North of Russia [12, Druzhinina M.V., pp. 117–118].

The preparations for the introduction and implementation of the new master’s program developed surprisingly quickly. In spring 2015, the Consul of the Consulate General of the PRC in St. Petersburg, Jiang Zhongliang, visited Arkhangelsk and NArFU, and since October 2015, with the assistance of the Consulate General of the PRC, the Chinese lecturer Sun Yanan began to work in NArFU. Since 2014, the Institute of Philology and Intercultural Communication has been actively working with the Chinese Language and Culture Club, which was successfully run by master’s student Liu Feng, with scientific, methodological, organizational and didactic support provided by the undergraduate curator, head of the Club, Doctor of Pedagogical Sciences, Professor M.V. Druzhinina. In spring 2015, NArFU allocated special funding for the purchase of educational and methodological literature for learning the Chinese language. The selection of textbooks was car-

ried out with the effective assistance of Chinese colleagues, among them: Doctor of Pedagogical Sciences, Professor Shang Zhiqiang and his colleagues of the College of Information Technology, NArFU master's student Liu Feng, postgraduate student of Transbaikal State University Liu Gopin). In autumn 2015, the NArFU library received the first textbooks, dictionaries, video and audio materials in Chinese. In spring 2014, autumn 2015, winter and spring 2016, Chinese colleagues conducted individual and group remote practical classes, teleconferences, Internet sessions, forums with NArFU students studying in various specialized areas in the system of undergraduate – graduate – postgraduate studies. Generally, the multimedia Chinese communication programme QQ was used for the work. Teachers of the College of Information Technology of Hainan Island, which have become reliable partners of NArFU, developed programs for two disciplines of the master's program "Practical foreign language course (Chinese)" and "Workshop on professional communication (Chinese)". Since 2014, Chinese students have begun studying at NArFU bachelor's and master's programs. In autumn 2014, the Dissertation Council of NArFU hosted two defenses of dissertations by Chinese applicants Liu Guoping and Zhou Zhongcheng for the degree of Candidates of Philology. In 2016 and 2018, first-year master's students got the opportunity to study Chinese language and Chinese culture for two weeks at the College of Information Technology of Hainan Island. These and other events, as well as new opportunities for studying the Chinese language, culture, and the peculiarities of professional communication in the interaction between Russia and China, played a special role in the development of sinology in the North of Russia. Undergraduate and postgraduate students of NArFU received scholarships from the Consulate of the PRC to participate in the Beijing Summer School, annual scholarships for studying and working in China. The graduate students of the program "Professional communication in the Eurasian context" Natalya Makovskaya, Ksenya Vtorygina and Alexey Andreev got scholarships. This increased motivation to study the Chinese language and culture by NArFU students, residents of Arkhangelsk and the North of Russia. The development of sinology in the North of Russia became an integral part of the education, culture and science system in the Arctic zone and at NArFU.

For the development of sinology at NArFU, comparative studies of the mentality of representatives of Russian and Chinese culture, Russian-language websites of Chinese universities, educational technologies, Russian and Chinese education systems, and scientific achievements in the field of the humanities are of particular importance. A great achievement in the development of sinology was the postgraduate training of representatives of the PRC in the specialty "Theory and methodology of vocational education". Under the guidance of scientific supervisor M.V. Druzhinina, interdisciplinary research was conducted in linguistics, pedagogy of professional education, linguodidactics, linguocultural science, philology, including in the context of digitalization. Graduate student Liu Feng successfully defended his thesis "Comparative analysis of the application of e-learning technologies in Chinese and Russian vocational education systems (on the example of teaching foreign languages to bachelors)" in 2021, and in 2022, he was awarded a degree of Candidate of Pedagogical Sciences. NArFU postgraduate Sun Yanan defended her dissertation in the

specialty “Russian language” in 2022 on the interdisciplinary topic “The concept of “education” as a component of the educational potential of Chinese university websites (on the basis of Russian-language versions)”, and in 2022 she got the degree of Candidate of Philological Sciences. The scientific supervisors of the interdisciplinary research in pedagogy and philology were Doctor of Pedagogical Sciences M.V. Druzhinina and Doctor of Philological Sciences V.A. Maryanchik. It is noteworthy that the progressiveness and novelty of the research results were highly appreciated by doctors of pedagogical and philological sciences, professors of many universities of the Russian Federation, including federal ones.

The development of new forms of cooperation with Chinese partners convinces representatives of the university and non-university communities of further mutually beneficial Russian-Chinese cooperation. Thus, in 2022, a framework agreement on cooperation between NArFU and Shandong Pedagogical University was signed. In December 2022, the Winter School of Chinese Language and Culture of China started under the guidance of Professor Guo Wenjuan of the Institute of International Education. The coordinators of the Winter School from NArFU were Doctor of Pedagogical Sciences, Professor of the Department of Translation and Applied Linguistics M.V. Druzhinina and Candidate of Philology, Senior Lecturer of the Department of Translation and Applied Linguistics Sun Yanan. The school has 110 students. In cooperation with the Institute of Foreign Languages of Shandong Pedagogical University, a master’s program “Pedagogical design in language education” is being developed. The responsible coordinators of the work are Doctor of Pedagogical Sciences, Professor of the Department of Translation and Applied Linguistics M.V. Druzhinina and Doctor of Philology, Professor, Dean of the Faculty of Foreign Languages of the Institute of Foreign Languages Sun Songxia.

Long-term cooperation of colleagues from Russia and China shows that knowledge of another culture significantly expands the range of thinking of the participants in communication, ensures the effectiveness of scientific and professional communication. Determining the special role of research in the field of sinology in the North of Russia, it should be noted that further development of this area is promising for the benefit of political, social, cultural and economic relations between Russia and China. The accumulated experience directly influenced the decision to develop the concept and implement the promising Russian-Chinese international innovation project “Digital Lomonosov”, which will be realized in the coming years. The initiators of this project were Doctor of Philology, Professor of Changchun University Wang Jinling and Doctor of Philology, Professor of NArFU A.M. Polikarpov.

From a network project of federal universities to the concept of an innovative Russian-Chinese project

The existing experience of the teaching staff of the Department of Translation and Applied Linguistics of NArFU in the implementation of innovative projects should be noted. Thus, the network project “Scientific interaction of federal universities in applied linguistics and professional pedagogy in the context of digitalization” was developed and launched in 2018. The goal of scien-

tific interaction of federal universities in applied linguistics and professional pedagogy in the context of digitalization became apparent in the process of cooperation between federal universities of Russia as an urgent and natural need for solving complex interdisciplinary problems in the humanities and education.

The set of main tasks of the network project included the following:

- exchange of experience of teachers of federal universities in the digital format of video forums, online workshops, webinars, youth schools on digital practices and technologies, online exhibitions;
- development of a joint discussion platform on digitalization issues in the field of applied linguistics and professional pedagogy;
- development of network master's programs related to digitalization in applied linguistics and pedagogy of vocational education;
- development of network academic mobility of students and graduate students in digital format, including virtual mobility;
- ensuring individualization of students' learning through digital networking;
- critical analysis of the quality of dissertation research, opposition and submission of reviews on dissertations and abstracts of applicants for scientific degrees in dissertation councils of federal universities;
- development and implementation of joint programs of additional education in a distance format, including advanced training programs in digital practices in linguistics and education;
- ensuring the advantage of federal universities in competition with other universities in Russia through digital network cooperation and sustainability of interaction and development of partner universities;
- creation of a single electronic platform with a multilingual terminological database of federal universities in the field of applied linguistics and pedagogy of vocational education.

If we refer to the history of the development of a network scientific and educational project, the innovative project of scientific interaction between federal universities in applied linguistics and professional pedagogy in the context of digitalization was launched on April 5, 2018 at the First Video Forum, which highlighted the need for mutually beneficial cooperation between specialists in the field of linguistics and education of the Northern (Arctic) Federal University named after M.V. Lomonosov and Southern Federal University.

In April 2019, four universities took part in the Second Video Forum of Federal Universities, which was held under the title "Development of applied linguistics in the context of digitalization": Immanuel Kant Baltic Federal University, Kazan (Volga Region) Federal University, Northern (Arctic) Federal University and Southern Federal University.

In April 2020, as part of the Third Video Forum “Scientific interaction of federal universities: translation activities in the context of digitalization”, five federal universities took part, including: Immanuel Kant Baltic Federal University, Kazan (Volga Region) Federal University, Northern (Arctic) Federal University named after M.V. Lomonosov, Ammosov North-Eastern Federal University and Southern Federal University.

In September 2020, as part of the Fourth Video Forum of Federal Universities “Scientific interaction of federal universities in postgraduate educational programs: digital communication”, the Ural Federal University named after the First President of Russia B.N. Yeltsin was added to the number of participants.

At the Youth School in Digital Linguistics, successfully held on November 28, 2020 by the Southern Federal University in cooperation with the Northern (Arctic) Federal University, three more universities joined the network project: the North Caucasus Federal University, the Far Eastern Federal University and the Crimean Federal University.

In May 2021, at the next Video Forum of Federal Universities, the number of participants in the network project increased to ten. The Siberian Federal University joined the project. As a result, the network project united the federal universities of Russia in its entirety and provided the prospect of creating the Consortium of Federal Universities “Digital practices in linguistics and education”.

For the period from 2018 to 2022, eight video forums of federal universities were held, organized by NArFU in cooperation with federal universities. At these forums, plenary speeches by university representatives were presented, scientific discussions on applied linguistics and pedagogy of vocational education in the context of digitalization were held, competitions of scientific reports of students (bachelors, masters) and graduate students on the problems of applied linguistics and pedagogy of vocational education in the aspect digitalization were organized.

Within the framework of the project, youth schools and online workshops in digital linguistics and education are regularly held for undergraduate and graduate students of federal universities; in total, there have already been three youth schools and two online workshops. The organizers, moderators and leading speakers are professors from NArFU, SFU, NCFU. During these events, intensive exchange of experience is carried out, the scientific potential of the regions is presented, informal scientific discussion takes place on topical issues of applied linguistics and professional pedagogy in the context of digitalization, and prospects for further joint interdisciplinary work in digital linguistics and pedagogy of professional education on the basis of digitalization are outlined. The events are notable for the high quality of theoretical and practical materials, in-depth reviews of the methodology and methods of applied research and development, interdisciplinary concepts and digital tools.

The co-leaders of the network project, Doctor of Philology, Professor A.M. Polikarpov and Doctor of Pedagogical Sciences, Professor M.V. Druzhinina, together with the coordinators of the network project from other federal universities responsible for interaction within the framework

of the joint project, held three working meetings to solve the tasks of creating a consortium “Digital practices in linguistics and education” (June 2021, September 2021, January 2022); the Agreement on the Consortium, the Regulations on the Coordinating Council of the Consortium, the road map were developed. Letters were sent to rectors of universities, in which they were invited to acquaint with the statutory documents and join the Consortium.

Since 2018, the network project roadmap has included the Digital Arctic Transfer translation competition (organized by NArFU), which is held annually in May–June, starting from 2015. The organizers are teachers and specialists of the Department of Translation and Applied Linguistics, Scientific-Educational Center “Integrative Translation Studies of the Arctic Space” and employees of the Department of International Cooperation of the Northern (Arctic) Federal University named after M.V. Lomonosov, as well as members of the Arkhangelsk regional branch of the Union of Translators of Russia. Participants of the competition show interest in the profession of a translator and in the Arctic topics, demonstrate a creative approach when translating Internet texts in a remote format. It should be especially noted that not only linguists and philologists, but also future economists, engineers, historians, psychologists, journalists, specialists of various technical specialties show love for foreign languages and translation. In 2022, the competition received 365 applications from students from China, Germany, the Donetsk People’s Republic, Belarus, as well as from more than 40 Russian universities, including federal ones. In 2023, the nominations of translation from Chinese into Russian and from Russian into Chinese were included in the contest tasks of the international contest “Digital Arctic Transfer”. The international competition was actively supported by teachers and students of Changchun and Shandong Pedagogical Universities. In 2023, Nenets language translation tasks will be included in the competition.

In September 2022, the video forum of federal universities “Scientific interaction of federal universities in the field of postgraduate educational programs: communication in the context of digitalization” was successfully held. As part of the forum, a round table “Science of the young researches to the region!” was conducted. The round table opened a series of online events representing the regions where federal universities are located, scientific developments of graduate students and young scientists related to the development of these regions. Within the framework of the above-mentioned round table, the Arkhangelsk Oblast was presented in the year of its 85th anniversary, its geographical image, economic and scientific potential. Particular attention was paid to the Arctic orientation of scientific research of graduate students in the field of applied linguistics and professional pedagogy. Postgraduate students of the Northern (Arctic) Federal University presented their researches related to the North of Russia and the Arctic zone. Thus, a tradition of representing regions was born. Federal universities have the opportunity to demonstrate the applied nature of linguistic and pedagogically oriented research aimed at regional development.

The network project includes a permanent online exhibition “Virtualica”. On February 14, 2022, the exhibition was opened on the website of the Northern (Arctic) Federal University. Its

goal was the digital presentation of new scientific papers and relevant educational literature on applied linguistics and professional pedagogy. In general, the exhibition “Virtualica” presents a wide range of digital products developed by federal universities: unique author’s works, collective projects, theoretical research in applied linguistics. Representatives of federal universities presented textbooks on the disciplines they teach. The exhibits show that each federal university has created digital products that in one way or another reflect the specifics of the region. The exhibition is updatable and open to a wide range of users.

Thanks to the experience of scientific interaction between federal universities and the experience of implementing the international project for the development of sinology in the North of Russia and in NArFU, the methodological foundations and basic ideas for the innovative Russian-Chinese project “Digital Lomonosov” have been outlined. The associogram of the cognitive-conceptual model of the project is a cognitive map consisting of at least eleven components that logically complement each other and interacting elements of an integral system. The most significant components of the model should be considered such keywords as: humanitarian heritage, Lomonosov, Chinese language, methodology, interdisciplinarity, translation, Russian language, knowledge transfer, electronic database, parallel corpus of texts, digitalization.

In connection with the process of digitalization of unique materials related to the scientific heritage of M.V. Lomonosov, it seems logical to use the accumulated experience of foreign and domestic scientists in creating digital products developed in the international and Russian scientific communities. Such a German-language publication as “Der Digitale Grimm” deserves special attention [13, p. 132]. This is an interdisciplinary product of a unique project of the structural units of the University of Trier and the Berlin-Brandenburg Academy of Sciences, on which scientists from various scientific fields worked: linguists, computer scientists, historians, programmers, designers and methodologists. Special attention was paid to the development of the project concept, it consisted of several main components: systematization of materials, analysis and ordering of information, solving technical problems, installation of software for a qualitative presentation of the scientific heritage of Jacob and Wilhelm Grimm, presentation of separate dictionary entries, decoration, design of the publication, recording on discs, searching for sources of financing, sponsors and many other types of work. At the very beginning of the 21st century, the implementation of such a project was a great courage and was associated with risk. The experience of foreign colleagues is worthy of study and application in the international project to popularize the scientific heritage of M.V. Lomonosov in the context of digitalization.

The interdisciplinary project “Chekhov Digital” should be considered a noteworthy digital product. The goal of the project was to prepare a digital semantic edition of the works and letters of A.P. Chekhov in 30 volumes. In addition to the texts, each volume of the academic publication includes editorial and critical materials, which are also supplemented by machine-readable multi-level markup. The developed structure and its implementation based on the TEI (Text Encoding Initiative) digital publishing standard includes encoding of source metadata (description of the

publication/manuscript, title, author's name, text language, changes, etc.), metadata for letters (addressee, date and place of writing, etc.), features of the presentation of information in different types of text (play, short story, novella), and specifically labelled text information within the text module. Thus, the prepared texts become machine-readable and allow the development of tools for a rather complex semantic search not only for the texts of the writer's works, but also for the texts of comments, notes and references. The implementation of the project continues, experience in the field of digitalization of the humanities is accumulating, and there is an intensive exchange of knowledge among scientists and students at federal universities [14, Severina E.M., Bonch-Osmolovskaya A.A., Kudin A.M., pp. 153–165].

The joint work planned within the framework of the project is based on specific organizational, personnel, experimental-analytical and managerial provisions that form the basis for the development and implementation of an interdisciplinary project:

- Reliance on the experience of cooperation and organization of joint activities between NArFU, Changchun University (China), partners in scientific cooperation from other federal universities of Russia, attracting major specialists from other educational and scientific organizations of the international and domestic communities;
- The project is designed for a multi-year (at least five years) and phased implementation period, rational use of the personnel and scientific and educational potential of universities and organizations, attraction of financial resources from international and domestic funds;
- The main idea of the project is the transfer of Lomonosov's humanitarian heritage to China, the creation of the Lomonosov scientific, educational and cultural center at Changchun University;
- The leading conceptual idea of the project is the digitalization of materials in a number of humanitarian areas of M.V. Lomonosov's activity: Russian language, poetry, education, history, culture, translation, philosophy, politics, regional studies.

In accordance with the humanitarian ideas of Lomonosov, scientists and researchers, the following scientific provisions of the project emerged, logically developing organizational and managerial structures:

- The network project is based on the idea of establishing a bilingual parallel corpus of works created by M.V. Lomonosov;
- Materials selected for placement in the electronic database (3 works or fragments from each of the above-mentioned humanitarian spheres of the scientist's activity) should be provided with pre-translation comments in Russian;
- Translations of Lomonosov's texts should be accompanied by comments for Chinese users with the information contained in the electronic database;
- Federal universities have accumulated extensive experience in digitalizing literary sources (SFU and HSE project "Chekhov Digital").

***Prospects for the implementation of the project and popularization
of Lomonosov studies in China***

Project “Digital Lomonosov” is of great importance for further development of cooperation between NArFU and Chinese universities. Thanks to the joint implementation of an international project to create an electronic database related to the scientific and artistic work of Lomonosov, teachers, scientists, graduate students and students from China will be able to obtain information about the role played by M.V. Lomonosov in the development of Russian science and which of his ideas from the field of the humanities are still relevant, including in the context of the implementation of the Russian-Chinese transfer of knowledge. Teachers and students of the North of Russia, in turn, get a chance to penetrate deeper into the meanings inherent in the works of the great countryman. Russian participants of the project will have to interpret the content and form of presentation of scientific and poetic works of M.V. Lomonosov for Chinese colleagues and students who will translate the works of the scientist-encyclopedist from the Russian language into Chinese. Teachers and students from Russia and China will jointly carry out pre-translation analysis of Lomonosov’s texts. The Lomonosov movement of scientists makes a significant contribution to the process of educating young people, contributes to the development of a sense of patriotism, and the spread of humanistic ideas in the world. The proposed project will become the basis for mutually beneficial cooperation between NArFU and Changchun University in the field of humanities. Thanks to the implementation of the project, Lomonosov Studies will find a worthy development in China, awaken interest to the scientist of university mind, poet, translator and art worker. Establishment of the Lomonosov Centre in China, dissemination of information about the life and work of the great Russian scientist in a modern digital format will help to better understand how science in Russia emerged and what it is based on, will introduce the youth of China to the North of Russia through direct cooperation with teachers, scientists and students from the Northern (Arctic) Federal University. The popularization of Lomonosov Studies in China will promote mutual understanding between the Russian and Chinese peoples, cooperation in the field of science and education. Scientific and educational activities of M.V. Lomonosov in the all-Russian and international arena, his patriotism can serve as a worthy example of selfless service to the motherland. The greatness of Lomonosov lies in the fact that he managed to form a progressive scientific worldview and look into the future. It is impossible to understand the originality of the scientific and creative heritage of Lomonosov without having a clear idea of his homeland, the North, northern nature, the peculiarities of Russian culture, northern Russian dialects, customs and traditions, factors that contributed to the growth and development of the personality of the great scientist. The conceptual ideas of the project outlined in the article will be implemented in an innovative Russian-Chinese network project.

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