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## ARCHIVAL SCIENCE: BRIDGES BETWEEN TRADITION AND INNOVATION

### Abstract

*In the conditions of digital transformation archival science as an autonomous scientific discipline faces serious challenges which force to revise traditional archival theories, to look for and to try new methods in interconnection with other scientific disciplines as well. Besides, the proving of the system of organization of archival research takes place, which, in Russia, is presented in the centralized model. This system has both benefits and disadvantages, which are described in the article. The necessity to resolve new scientific and practical problems appeared in the period when scientific institutions have certain financial problems and the lack of specialists. New qualified specialists of new formation, and a solid technical and technological base to work with digital data are strongly required. Obviously, the search for new partners is indispensable, as well as the development of interdisciplinary and interinstitutional cooperation, including this on the international level. Building the new bridges will help archival science save its authenticity and receive new impetuses for further development.*

**Key words:** archival science, archives, digital transformation, electronic records, organization of research, multidisciplinary approach, VNIIDAD

## ARCHIVISTICA: PONTI FRA TRADIZIONE ED INNOVAZIONE

### Abstract

*Nelle condizioni della trasformazione digitale l'archivistica come disciplina scientifica autonoma affronta gravi sfide che costringono a rivedere le teorie archivistiche tradizionali, e pure a cercare ed a provare nuovi metodi di interconnessione con altre discipline. Inoltre, ha luogo la verifica del sistema di organizzazione della ricerca archivistica, che in Russia consiste nel modello centralizzato. Questo sistema presenta sia vantaggi che svantaggi, descritti nell'articolo. La necessità di risolvere nuovi problemi scientifici e pratici è comparsa in un periodo in cui le istituzioni scientifiche hanno alcuni problemi finanziari e soffrono per la mancanza di specialisti. Sono fortemente necessari nuovi specialisti qualificati di nuova formazione ed una solida base tecnica e tecnologica per lavorare con i dati digitali. Ovviamente, è indispensabile la ricerca di nuovi partner, così come lo sviluppo della cooperazione interdisciplinare e inter istituzionale, anche a livello internazionale. Costruire i nuovi ponti aiuterà la scienza archivistica a salvare la sua autenticità ed a ricevere nuovi impulsi per un ulteriore sviluppo.*

**Parole chiave:** archivistica, archive, trasformazione digitale, documenti elettronici, organizzazione della ricerca, approccio multidisciplinare, VNIIDAD

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## АРХИВСКА ЗНАNOST: MOSTOVI MED TRADICIJO IN INOVACIJO

### Izvlaček

V času digitalne preobrazbe se arhivska znanost kot samostojna znanstvena disciplina sooča z resnimi izzivi, zaradi katerih je treba revidirati tradicionalne arhivske teorije, iskati in preizkušati nove metode tudi v povezavi z drugimi znanstvenimi vedami. Poleg tega poteka tudi dokazovanje sistema organizacije arhivskih raziskav, ki je v Rusiji predstavljen v centraliziranem modelu. Ta sistem ima tako prednosti kot slabosti, ki so opisane v članku. Nujnost reševanja novih znanstvenih in praktičnih problemov se je pojavila v obdobju, ko imajo znanstvene ustanove določene finančne težave in pomanjkanje strokovnjakov. Nujno so potrebni novi usposobljeni strokovnjaki novega formata ter trdna tehnična in tehnološka osnova za delo z digitalnimi podatki. Očitno je iskanje novih partnerjev nujno, pa tudi razvoj interdisciplinarnega in medinstitucionalnega sodelovanja tudi na mednarodni ravni. Z izgradnjo novih mostov bo arhivska znanost ohranila pristnost in dobila nove spodbude za nadaljnji razvoj.

**Ključne besede:** arhivska znanost, arhivi, digitalna transformacija, elektronsko gradivo, organizacija raziskav, multidisciplinarni pristop, VNIIDAD

## АРХИВОВЕДЕНИЕ: МОСТЫ ОТ ТРАДИЦИИ К ИННОВАЦИИ

*В условиях цифровой трансформации архивоведение как отдельная научная дисциплина встречается с серьезными вызовами, которые заставляют пересматривать традиционные архивные научные теории, искать и опробовать новые методы, в том числе во взаимодействии с другими научными дисциплинами. Кроме того, серьезной проверке подлежит система организации научных исследований, которая в России имеет ярко выраженные централистские черты. Эта система имеет как преимущества, так и недостатки. Необходимость решать новые научные и практические вызовы выпала на период, когда научно-исследовательские институты испытывают серьезные финансовые трудности и дефицит кадров. При этом именно сейчас требуются квалифицированные специалисты новой формации, серьезная техническая и технологическая база для работы с цифровой информацией. Очевидно, что разумным выходом из данной ситуации является поиск новых партнеров, развитие междисциплинарного и межинституционального взаимодействия, в том числе на международном уровне. Выстраивание новых мостов поможет архивоведению сохранить свою аутентичность и получить новые импульсы к дальнейшему развитию.*

**Ключевые слова:** архив, архивоведение, ВНИИДАД, мультидисциплинарный подход, организация научных исследований, цифровая трансформация, электронный документ

## 1. ARCHIVAL SCIENCE AS AN AUTONOMOUS SCIENTIFIC DISCIPLINE

Archival science as "the science developing the procedures for preserving, managing, improving and describing by standards the archival heritage" [*electronic source*, 10] has a long history of its formation and self-identification [*Хорхордина*, 2003, 2012]. In the article we will follow the abovementioned definition of the term "archival science", given in the IIAS Multilingual dictionary of archival terminology, in order to harmonize the perception of the statements and ideas proposed in the article. It has to be mentioned, though, that there are different definitions of the term in different languages, in different dictionaries and scientific publications. In Russia the term usually includes the study of the history of archives, being thereby understood wider than just an applied science [*Хорхордина*, 2003].

The theoretical base of the modern archival science was generally formed more than a century ago. The basic archival principles, such as the principle of provenance and its two major concepts: "respect des fonds" and "original order" were accepted as the core, and were later supported and compiled by different theoretical reflections and conclusions and practical guidelines. Special educational programs appeared, training courses and institutes providing higher educational programs for archivists were created (in Russia, for example, Archaeological Institute in 1877 [*Колышницына*, 2010] and, later, the Moscow Institute for history and archives in 1930 [*Хорхордина*, 1997]).

In the process of its formation archival science integrated different approaches inherited from many other scientific areas. Having emerged from diplomatics, archival science accumulated methods and approaches of many other scientific disciplines. Duranti and Michetti [2015] note that the 'autonomous' internal core of archival knowledge coming to us from ancient times is very small. It had influences from law, history, philology, social science, library and information sciences.

Nowadays the archival science summarizes methods and techniques of a number of special and auxiliary historical disciplines: source studies, paleography, diplomacy, historical chronology, historical metrology, sphragistics, heraldry, genealogy, epigraphy, numismatics, historical geography and others, as well as of the documentation science - the study of the recording and retrieval of information, taking historical perspective, organization of records management. Achievements of sociology, psychology, and marketing research are in demand while organizing the use of archival documents and for strengthening the positions of archival institutions in the society. Archival science requires also knowledge provided by chemistry and biology for ensuring optimal conditions of storage of documents, their conservation, restoration, migration to other media. Engineering and architectural knowledge is necessary for designing and construction of archival buildings. Legal aspects of access to archival documents and their use include complex of restrictions concerning intellectual property, state secret, sensitive data and other aspects, as well as the necessity to balance between different freedoms, individual rights, and public and private interests. Therefore, a good knowledge of civil law is required from archivists, and not only of the archival legislation. Knowledge in economics and management is indispensable for archives management, including equipment, staff, and budget planning, etc. Digital transformation of the society requires the use of the achievements of computational science [*Marciano, R. et al.*, 2018].

Nevertheless, archival science pretends and is recognized to be an autonomous scientific discipline, not contrary to, but even due to the multidisciplinary of its methods and knowledge required. Being used for the common purpose, united by basic principles of archives' formation, classification, preservation, and use, these numerous approaches, methods, techniques, theorems and concepts, combined all together, form a separate field of research – archival science.

## 2. ORGANIZATION OF THE ARCHIVAL SCIENCE RESEARCH IN RUSSIA

The organization of archival research influences rather a lot the development of archival science within the certain country. It depends a lot on historical reasons, traditions and on the administrative model accepted in the state.

In Russia, due to the centralized state governing model in the twentieth century, the similar approach was applied to the archives administration, archives management [Старостин, Хорхордина, 2007] and archival science organization models.

The center for research in the field of archival science was created in 1966 in Moscow in the system of the Main Archival Administration under the Council of Ministers of the USSR (now – the Federal Archival Agency of the Russian Federation) - the All-Soviet Scientific and Research Institute for Records and Archives Management (VNIIDAD) [Ларин, 2006]. After the dissolution of the USSR the Institute continues its activity on the territory of Russia, while the similar institutes were created also in Ukraine and Belarus.

This centralized model of archival research, which resulted both in fundamental theoretical works and in different rules, regulations, standards, instructions, guidelines, and recommendations, was combined with university science centers in Moscow, Ekaterinburg, Tomsk, Kazan' and other cities, and with research activity performed in archives. VNIIDAD was playing the leading role in the development of archival science in Russia.

The centralistic way of organization of archival research under the supervision of the governing body in the field of the archives management has been maintained until now.

## 3. ADVANTAGES AND DISADVANTAGES OF THE CENTRALIZED MODEL OF ARCHIVAL RESEARCH

There can be found both benefits and disadvantages in this model.

### 3.1. Among the benefits are the following:

- 1) The special profession was created – archival science researcher. There were about 250 employees at the Institute, and their only task was to conduct scientific research in the field of archives and records management. Nowadays there are about 80 employees in VNIIDAD. The full-time employment in the sphere of archival science contributes to a comprehensive and indepth study of the subject field of research.
- 2) The second advantage is the rapid dissemination and implementation of research into practice. After a certain procedure of quality control and, in some cases, practical approbation (please see below) the research reports and other results of the scientific work (in the form of recommendations, instructions, guidelines, etc.) are being placed at the official site of the Federal Archival Agency as recommended for practical use in archival institutions.
- 3) Control over the quality of the results of scientific activity. Before being recommended for practical use, all the research reports and their statements, conclusions and recommendations should be approved by a special commission under the Federal Archival Agency. There are two commissions: the Scientific Methodical Commission and the Expert-Verification Commission, the last one specialized mostly on the questions of appraisal, accessioning, acquisition policy, and the determination of the retention period of records.

It should be added that in the regions of the Russian Federation there are functioning scientific and methodical councils (8 councils in different areas of Russia) which perform the role of expert organizations for approving the results of application studies of regional archivists or making comments and critical remarks on them.

These councils are also giving their opinions to the works of VNIIDAD at the request of the Federal Archival Agency. All received comments are analyzed and taken into account when finalizing the research.

The results of scientific work of the Institute may also have practical approbation in some archives which express such a wish, depending on the theme of the research. For example, when the new classification scheme was elaborated, there was organized its experimental implementation in the State Archive of the Russian Federation and the State Archive of the Murmansk region, which used it for classification of information at the process of creation of electronic catalogues. After receiving favorable reviews, the classification scheme was recommended by the Federal Archival Agency for use in the archives all over Russia.

- 4) Interconnection with educational and training process. Since 1999 VNIIDAD has been proposing professional training and retraining of archivists organized in the form of educational courses, seminars and workshops, both resident and non-resident [Romanova, 2017]. The training programs are based mainly on the results of the archival research made by VNIIDAD, other Russian and foreign institutions and researchers. The participants have an opportunity to learn archival knowledge from the authors of widely used standards, guidelines and recommendations, to ask their questions and to receive comprehensive, scientifically based answers, to get acquainted with the latest trends and achievements in archival science.
- 5) The existence of the scientific and analytical center, which has possibilities to collect statistical and other data because of its direct subordination to the Federal Archival Agency, can help to summarize the achievements of archives of all the levels (federal, regional, municipal, and, in some measure, archives of organizations) and of different numerous constituent entities of the Russian Federation. This statistical and analytical information is a precious resource for scientific research. In comparison, the archives are mostly guided by their current needs in their work. With the help of the activity of VNIIDAD they have got an opportunity to see their place and role in common processes, to evaluate their progress in comparison with the others, and to use the achievements of their colleagues instead of reinventing the wheel.

It must be noted, though, that federal and regional archives have rather strong specialists, which are not just making their routine job, but proposing very interesting solutions to the topical problems. The work on making descriptions, reviews and publications of archival documents, compiling guidebooks and collections of documents, preparing instructions for archivists, etc. is also a kind of scientific work, the results of which are estimated by the Expert and Methodical Commissions working under the archival administrative bodies in the subjects of the Russian Federation and in federal archives. Scientific activity of archival institutions is encouraged and supported by various competitions of scientific works organized on the federal and regional levels.

- 6) The research center is at the same time the center for scientific and technical information, gathering materials related to archival science, archival practice and records management from different sources. The archives of Russia are sending their books, brochures, booklets and other materials to VNIIDAD. So the specialized library is being formed, in traditional as well as in electronic form. It contains also periodicals, books and scientific publications of Russian and foreign authors.

- 7) Archives participate in planning archival research and influence the choice of themes to be included into the annual plan of the Institute. This plan is annually prepared by the Federal Archival Agency which takes into account the needs and the proposals of archival institutions and of VNIIDAD.
- 8) International and intranational cooperation and coordination in the field of archival science is organized in large measure through this centralized model, but then again alongside with the activity of other educational organizations and archival institutions.

**3.2. As every centralistic model, it is accompanied by certain side effects. Among the disadvantages of this centralistic approach are the following:**

- 1) While operating with statistical data and summarized indexes, the researchers risk to get isolated from the real practical needs of archives. The common recommendations are not always appropriate for this or that concrete archive. Sometimes, the archivists consider that the scientific works are too "theorizing" and ask researchers to be closer to the practical needs of archives.
- 2) The lack of personnel negatively influences the development of archival science. The specifics of the profession, which requires a certain way of thinking, certain knowledge and facilities for writing scientific texts, precondition the difficulties with selection of cadres and attraction of new researchers into the Institute. The full-time employment in archival science together with low level of salaries doesn't contribute to a better situation with skilled specialists. The challenges of digital era, transformation of archival processes and the objects of archival storage require the new type of specialists, skilled both in computational sciences and archival science, able to use freely new information technologies. These specialists are mostly engaged in other spheres and do not feel interested in archival research. At the same time experienced researchers are not always able to overcome traditional thinking, while the new approaches are needed and new procedures in archival work are to be elaborated.
- 3) The lack of financial, technical and technological resources has much more negative effect on the development of archival science research than it had decennaries ago. Nowadays huge governmental and nongovernmental data centers and innovation technologies centers have much more opportunities to work with digital data, including big data, to use digital platforms for trying different approaches, to get experimental material to analyze. Archival institutions and archival science institutions in Russia don't have these opportunities until now.

#### **4. INTERDISCIPLINARY, INTERINSTITUTIONAL AND INTERNATIONAL COOPERATION AS A STRATEGIC WAY TO FOLLOW**

In spite of all the difficulties the Russian model of organization of archival research has enough potential for its further development. Having recognized all the problems that we have, the archival science institutions need to make certain conclusions and to take certain measures to overcome difficulties and to look for the new methods and techniques in their activity. Interdisciplinary, interinstitutional and international cooperation should be recognized as the strategic way of the development of archival science.

- 4.1. The traditional interdisciplinarity of archival research should take new orientation points. Together with traditional cooperation with the representatives of adjacent disciplines and using their methods and achievements (see part 1) the accents should be taken to the methods and approaches, knowledge and experience of

the computational sciences. It is obvious that for digital records it is not efficient and in some cases is absolutely inappropriate to use archival theories and methods developed for paper records. So the close study of the processes of production and consumption of electronic records and digital data is indispensable together with the examination of the theories and methods of computer science. At the same time computer science face certain problems which can be solved in mutual cooperation with archival science specialists. Archival thinking and computational thinking, terminology used by both sciences and the methods applied need to draw closer together.

#### 4.2. Interinstitutional cooperation is also an indispensable factor for the successful development of archival science.

Among the primary partners of archival science institutions there should be archives of different types, IT companies, computational and other scientific centers, educational institutions, data centers and organizations in the system of the Ministry of digital development, communications and mass media, as well as various organizations creating different types of records both in digital and in traditional form.

Strengthening of relationships with archives which are the first customers and consumers of the research results is very important. The representatives of our Institute participate in the meetings of archival councils and commissions (see part 3.1), archivists are invited for participating in research projects and for reviewing research reports.

Different forms of cooperation with education institutions help to attract young specialists to the archival science sphere. The choice of appropriate candidates can be realized through the organization of professional competitions for young researchers. The multidisciplinary of archival research requires specialists working in different areas. The lack of these or those specialists in the scientific institute can be compensated by realization of common projects with organizations of various profiles.

In VNIIDAD we are trying to attract the interested organizations to participate in the discussions on the topical archival problems and we endeavor to enter different programs and projects connected with our sphere of scientific activity.

The realization of research projects is organized on the base of tight cooperation with all the interested parties and those who can contribute into the project. One of the examples is the process of preparation of the new Rules for storage, accessioning, accounting and use of scientific and technical documentation in organizations. A wide discussion of topical questions in this connection was organized in VNIIDAD (see electronic source, 11). While preparing the draft project the specialists of the Institute visited organizations of different types which create scientific and technical documentation in various forms, with different software. The purpose was to study the practical decisions applied in organizations and to learn their current needs and topical problems.

One of the biggest challenges nowadays is the creation of the branch of the State Archives of the Russian Federation, specialized on the storage of electronic records and digital data, which is expected (see electronic source, 12) to be built in 2022. Specialists in archival science, IT specialists, representatives of archives and managing authorities are working together in making the concept of the archival data-center and developing schemes and making descriptions of archival processes and procedures required.

While such a repository is under construction, special agreements with different organizations, including data centers, could permit to use their technical and technological base for the purpose of scientific research.

Cooperation with other institutions will also help to gain prestige of archival science and to strengthen positions of archival institutions in the State and in the society.

- 4.3. The archival science cannot develop only within the boundaries of one single country, being isolated from the world research community and its achievements. Different professional associations and organizations, first of all the International council on archives, and (in Europe) the International institute for archival science of Trieste and Maribor, international projects, conferences and meetings are making a lot for promoting research, developing archival theory and practice, and disseminating archival knowledge.

Active participation of archival science institutions in the processes of international cooperation, using the achievements of the colleagues together with making their own contributions will strengthen the theoretical base of archival science and will facilitate and improve the quality of decision-making in archival area.

## 5. CONCLUSION

The pervasive force of the digital era influences a lot the processes of archival work. Digital data and electronic records as the new objects of archival storage generate new tasks and new problems to resolve. The sphere of the archival research renewed and enlarged a lot. Digital transformation processes are challenging and at the same time giving a new impetus to the development of archival science. These challenges are inspiring researchers for new ideas, new discoveries and even breakthroughs. It's obvious that stagnation is not about archival science, all the preconditions for its fructuous development are existing, but the appropriate conditions should be created, and mostly by the efforts of the archival science institutions themselves. The new challenges of digital society are to be met by archival science with the new methods, approaches and way of thinking. The perfecting of organizational forms of archival science research is also indispensable.

The most important is not to stay apart of the processes of digital transformation but to get included in them.

In the conditions of above mentioned problems with personnel, technical, technological and financial support the coordination and cooperation strategy is seen as the most appropriate and farsighted. Archival science needs to build new bridges and these bridges will lead it to new horizons.

- Duranti, L., Michetti, G. (2015). *The Archival Method: Rediscovering a Research Tradition*. A. Gilliland, A. Lau, and A. Mc Kemmish (eds.) *Research in the Archival Multiverse*. Clayton, Victoria, Australia: Monash University Publishing.
- Хорхордина Т.И. (1997). *Корни и крона: Штрихи к портрету Историко-архивного института РГГУ*. М.: РГГУ.
- Хорхордина Т.И. (2003). *Российская наука об архивах: История. Теория. Люди*. М.: РГГУ.
- Хорхордина Т.И. (2012). *История архивоведческой мысли*. М.: РГГУ.
- IIAS Multilingual dictionary of archival terminology (online edition)*. Scientific coordination by Grazia Tatò and Antonio Monteduro; digital editing by Marcello Scrignar and Carmelo Bianco. Available at <http://www.iias-trieste-maribor.eu/index.php?id=68&L=1> (accessed on 01.07.2019)
- Колышницына, Н.В. (2010). Обзор документов фонда Петроградского Археологического института. In: *Вестник архивиста*, no. 4, pp. 205-219.
- Ларин М.В. (2006). ВНИИДАД: этапы развития и направления деятельности в 1966 - 2006 гг. In: *Отечественные архивы*, no. 3, pp. 41-53
- Marciano, R., Lemieux, V., Hedges, M., Esteva, M., Underwood, W., Kurtz, M., and Conrad, M. (2018). Archival Records and Training in the Age of Big Data, in Johnna Percell Lindsay, C. Sarin Paul, T. Jaeger John, Carlo Bertot (ed.) *Re-envisioning the MLS: Perspectives on the Future of Library and Information Science Education (Advances in Librarianship, Volume 44B)*. Emerald Publishing Limited, pp. 179-199.
- Materials of the Round table "Topical issues of storage, accessioning, accounting and use of scientific and technical documentation in organizations". Available at [https://www.youtube.com/watch?v=\\_z2qXPJtm6Y&t=3s](https://www.youtube.com/watch?v=_z2qXPJtm6Y&t=3s) (accessed on 01.07.2019).
- Romanova, E. (2017). Professional training and retraining of archivists in the All-Russian Scientific and Research Institute for documentation and archives (VNIIDAD) in: *ATLANTI*, no. 7 (2), pp. 117 - 123.
- Старостин Е.В., Хорхордина Т.И. (2007). *Архивы и революция*. М.: РГГУ.
- The project of the new building of the State archive of the Russian Federation. Available at <http://statearchive.ru/1218?fbclid=IwAR3wVAi1JyapLCKiD8noISKUBNOXF1ik-pXHZj9cBKнEobgHkNRpvWD9xVYg> (accessed on 01.07.2019).

## SUMMARY

Archival science as “the science developing the procedures for preserving, managing, improving and describing by standards the archival heritage” has a long history of its formation and self-identification. It summarizes methods and techniques of a number of other scientific disciplines. Nevertheless, archival science is an autonomous scientific discipline, not contrary to, but even due to the multidisciplinary of its methods and knowledge required. In Russia, the centralized model of archival research has formed with the creation of the All-Soviet Scientific and Research Institute for Records and Archives Management (VNIIDAD) in 1966. The centralistic way of organization of archival research under the supervision of the governing body in the field of the archives management has both benefits and disadvantages. In the era of digital transformation of the archival sphere and in conditions of lack of personnel, technical, technological and financial resources the interdisciplinary, interinstitutional and international cooperation is proposed as a strategic way to follow. Archival science needs to build new bridges and these bridges will lead it to new horizons.

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