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THE ROLE OF ARCHIVES IN THE GLOBAL WORLD OF TOMORROW – SOME REFLECTIONS

Abstract

Purpose: *The aim of the article is to offer some reflections on the role of archives in a global world, with a focus on specific areas (particularly making archives accessible, digitization, the use of artificial intelligence, and the education and competencies of archivists).*

Method/approach: *The method used in the paper is a description and an explication.*

Results: *The article presents various reflections on issues facing the archival profession, with a view to its future development.*

Conclusions/findings: *Even in the global world of tomorrow, archives should retain their fundamental tasks regarding the preservation, registration, processing, and making accessible of archival materials. On the one hand, archives should not become „information vaults" accessible only to a select few; on the other, it will be necessary to ensure the protection of vulnerable materials and information against unauthorized use or even misuse, with ethical, security, and cybersecurity issues playing a significant role. Significant attention will need to be devoted to the preservation of digitized and, above all, born-digital archival materials – a task that will entail considerable challenges, not only technical but also economic and even environmental. Various questions also arise in connection with the use of artificial intelligence. Fulfilling all these tasks will require archive staff to possess adequate professional expertise and training; alongside competencies related to the development of digital archiving, it is also essential not to overlook the skills needed for the management (and processing) of analog documents created in previous centuries.*

***Key words*:** *making archives accessible – digitization – artificial intelligence – education and competencies of archivists*

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VLOGA ARHIVOV V GLOBALNEM SVETU PRIHODNOSTI – NEKAJ RAZMISLEKOV

Izvleček

Namen: *Namen članka je predstaviti nekaj razmislekov o vlogi arhivov v globalnem svetu, s poudarkom na posameznih področjih, zlasti na zagotavljanju dostopnosti arhivskega gradiva, digitalizaciji, uporabi umetne inteligence ter izobraževanju in kompetencah arhivistov.*

Metoda/pristop: *V prispevku sta uporabljeni metodi deskripcije in eksplikacije.*

Rezultati: *Članek predstavlja različne razmisleke o vprašanjih, s katerimi se sooča arhivska stroka, z vidika njenega prihodnjega razvoja.*

Sklepi/ugotovitve: *Tudi v globalnem svetu prihodnosti bi morali arhivi ohraniti svoje temeljne naloge na področju hrambe, evidentiranja, strokovne obdelave in zagotavljanja dostopnosti arhivskega gradiva. Po eni strani arhivi ne bi smeli postati »informacijski trezorji«, dostopni le izbranim posameznikom, po drugi strani pa bo treba zagotoviti ustrezno varstvo občutljivega gradiva in informacij pred nepooblaščeno uporabo ali celo zlorabo, pri čemer bodo pomembno vlogo imela etična, varnostna in kibernetsko varnostna vprašanja. Veliko pozornosti bo treba nameniti dolgoročnemu ohranjanju digitaliziranega, predvsem pa izvorno digitalnega arhivskega gradiva, kar bo prinašalo številne izzive, ne le tehnične, temveč tudi ekonomske in celo okoljske. Različna vprašanja se odpirajo tudi v povezavi z uporabo umetne inteligence. Za uspešno izvajanje vseh teh nalog bo moralo arhivsko osebje razpolagati z ustreznim strokovnim znanjem in biti ustrezno usposobljeno; poleg kompetenc, povezanih z razvojem digitalnega arhiviranja, pa ne smemo zanemariti niti znanj in veščin, potrebnih za upravljanje in strokovno obdelavo analognega gradiva, nastalega v preteklih stoletjih.*

Ključne besede: *dostopnost arhivskega gradiva – digitalizacija – umetna inteligenca – izobraževanje in kompetence arhivistov*

IL RUOLO DEGLI ARCHIVI NEL MONDO GLOBALIZZATO DI DOMANI – ALCUNE RIFLESSIONI

Abstract

Scopo: *Lo scopo dell'articolo è quello di offrire alcune riflessioni sul ruolo degli archivi in un mondo globalizzato, con particolare attenzione ad alcuni ambiti specifici (in particolare l'accessibilità degli archivi, la digitalizzazione, l'uso dell'intelligenza artificiale, nonché la formazione e le competenze degli archivisti).*

Metodo/approccio: *Il metodo utilizzato nel presente articolo consiste in una descrizione e in una spiegazione.*

Risultati: *L'articolo presenta varie riflessioni sulle sfide che la professione archivistica deve affrontare, in vista del suo sviluppo futuro.*

Conclusioni/risultati: *Anche nel mondo globalizzato di domani, gli archivi dovrebbero mantenere i propri compiti fondamentali relativi alla conservazione, alla registrazione, al trattamento e alla messa a disposizione dei materiali d'archivio. Da un lato, gli archivi non dovrebbero diventare «caveau di informazioni» accessibili solo a pochi eletti; dall'altro, sarà necessario garantire la protezione dei materiali e delle informazioni vulnerabili da un uso non autorizzato o addirittura improprio, con questioni etiche, di sicurezza e di sicurezza informatica che rivestiranno un ruolo significativo. Sarà necessario dedicare grande attenzione alla conservazione dei materiali d'archivio digitalizzati e, soprattutto, di quelli nati in formato digitale – un compito che comporterà sfide considerevoli, non solo tecniche ma anche economiche e persino ambientali. Sorgono inoltre diverse questioni relative all'uso dell'intelligenza artificiale. Per svolgere tutti questi compiti, il personale archivistico dovrà disporre di adeguate competenze professionali e di una formazione adeguata; oltre alle competenze relative allo sviluppo dell'archiviazione digitale, è fondamentale non trascurare le competenze necessarie per la gestione (e il trattamento) dei documenti analogici prodotti nei secoli precedenti.*

Parole chiave: *accessibilità degli archivi, digitalizzazione, intelligenza artificiale, formazione e competenze degli archivisti.*

1. INTRODUCTION

Archives rank among the oldest institutions of human society; indeed, the maturity of states in the past was often reflected in the extent to which care was devoted to preserving documents vital to the existence of individual state entities. The purpose of archiving has changed little since the dawn of the earliest civilizations: its primary task remains the collection and preservation of significant records and vestiges of past human existence and activity – as well as the products of human consciousness and knowledge – that possess significant and enduring historical, cultural, and social value. Other tasks of archives include the registration and processing of these records; equally important is making archival funds accessible – that is, presenting the results of past activities to the public and facilitating their subsequent use. Alongside archaeological, architectural, and other tangible monuments, archival documents constitute one of the most significant sources for understanding the past, serving not only purely historical purposes but also a range of other functions, including practical ones. Archives thus fulfill a wide array of roles, encompassing scientific and cultural functions in addition to administrative and informational ones. More than other institutions, they significantly link the past with the present and the future. Contemporary globalization changes nothing in this regard, although the global world does create greater scope for connections across nations, cultures, and societies. But is this actually the case? Do archives not remain, for the most part, closed entities? And is that not as it should be? The following text offers a few reflections on archives in a global world and their future evolution.

2. THE IMPORTANCE OF ARCHIVES IN THE ERA OF GLOBALIZATION

Archives safeguard the written, visual, and – increasingly – digital heritage of humanity, and are of fundamental importance for preserving cultural and historical memory. In an era of globalization marked by rapid social change and extensive cultural intermingling, the archives can help preserve the identities of individual nations, regions, and minority groups – and contribute to safeguarding their uniqueness – while countering the loss of distinctive characteristics. In this case, the role of archives and archivists depends not only on their focus, content,

and capabilities, but also on the preparedness and ability of the archivists to carry out these tasks.

Modern archives are an essential component of the rule of law. By preserving the records of public administration bodies, they enable the oversight of state institutions, the protection of citizens‘ rights, and the holding of public authorities accountable. In this regard, they provide significant support for democracy and transparency. A prerequisite for this is the free use of archival materials and their accessibility as provided by the creating entities (see also below).

Archives play a significant role in the protection of human rights and collective memory. They preserve evidence of war crimes, persecution, and human rights violations. Consequently, they can contribute to coming to terms with the past, processes of reconciliation, and the safeguarding of historical truth. In this context, the free use of archival materials is a fundamental prerequisite also.

In the era of globalization, many historical processes transcend national borders to a greater extent than in the past – whether it be migration, trade, wars or various environmental issues. Consequently, international cooperation is becoming increasingly important, extending to archives and the diverse areas of their operations (particularly regarding digitization and providing access to archival materials on various topics). One of the most important international archival organizations from this perspective is ICARus (International Center for Archival Research), which began to develop intensive cooperation first in the Central European and then in the European framework, and its result is a number of interesting and significant projects (especially Monasterium – the virtual charters‘ archive with over 700.000 medieval and early modern charters provided by 100 institutions from 20 European countries, but also Topotheque or Matricula – online portal to church registers on a cross-border and interdenominational basis). The fundamental issue in this case is the financial security of similar projects, which is not easy in an international environment.

3. MAKING ARCHIVES ACCESSIBLE

A benefit of the modern era, beginning with the French Revolution in 1789, was the gradual opening of archives to the public; this trend spread from France to other countries and led, among other things, to the opening of one of the world’s

most extensive and – in terms of its scope – most significant archives: the Vatican Apostolic Archive (Archivum Apostolicum Vaticanum; known as the Archivum Secretum Vaticanum from 1646 to 2019). However, the opening of archives has always faced – and continues to face – limitations, typically in the form of a protective period (usually thirty years from the time of creation); furthermore, private archives (such as family or ecclesiastical collections) may establish their own specific rules. Significant restrictions on archival research and access to archival materials were imposed by various totalitarian states, which determined not only which archives and records would be made available but also who would be granted access and who would be denied. Can it be stated unequivocally that these realities belong solely to the past and will have no place in the world of tomorrow? Archivists will certainly strive – and indeed ought to strive – to ensure this does not happen, and to prevent archives from turning into „information vaults" accessible only to the chosen few, or repositories of compromising material that serve the ruling power and function as places of fear (as seen in the film „Cloud Atlas"); yet, will archivists have the opportunity to influence or change this?

Another factor is that certain archival materials, due to their nature and significance, cannot be made generally and unrestrictedly accessible – usually out of concern for the security of the state and its citizens. A further development that has recently brought about significant changes – and is likely to see these effects intensify in the future – is the application of GDPR (General Data Protection Regulation) principles regarding the protection of individuals and personal data; while this impacts archival operations, it may also be perceived, particularly by investigative journalists, as a restriction on the right of access to information. The role of archives in this respect consists and will continue to consist in ensuring the protection of endangered materials and information from unauthorized use or even misuse - without leading to the aforementioned totalitarian regulation. Ethical and security issues, cyber security issues, etc. will play a significant role. In this regard, international cooperation could also yield benefits.

4. DIGITIZATION

The digitization of analog archival records marked a genuine breakthrough in making documents accessible – whether they were exceptionally rare or hard-to-

find materials, or documents that were frequently used, fragile, or oversized. The impact was felt almost immediately: it relieved pressure on often-overcrowded archive reading rooms where genealogists consulted parish registers and other sought-after records, while simultaneously helping to preserve original materials and reduce the workload of archival staff. The COVID-19 pandemic undoubtedly contributed to the expansion of digital access, particularly regarding the use of digitized archival materials. Digitization enables a wide range of experts to utilize archival resources on a global scale without having to visit the archive in person. Researchers are thus no longer constrained by distance, the accessibility of the archive in terms of time and transport, or the cost of traveling to access archival materials; instead, they can work with digital copies anytime and anywhere (unless, of course, they need to examine the original for some reason – such as the writing material itself). This transforms the archive from a local institution into part of a global information structure.

On the other hand, creating digital copies demands significant effort from archivists – in terms of personnel and technical resources (unless digitization is outsourced), but above all in terms of professional expertise, such as the preparation of metadata, indexes, and the like. Archivists need no lengthy explanation to understand that digitization is costly – whether it involves the actual creation of digital copies and their descriptions or ensuring their long-term preservation. This stands in contrast to the general public, who may view the process as a simple matter that will (or should, or must?) lead to the digitization of all archival treasures and make everything accessible online. However, this is not realistic. (Even with digitized archival materials, consulting the originals remains essential for investigating certain specialized questions.) However, the digitization process should not result in non-digitized materials appearing „invisible“ compared to their digitized counterparts (for instance, some students already tend to overlook other materials when selecting topics for their final projects and working with them). A key prerequisite for the use of archival materials (whether digitized or not) is awareness of their existence and informational value – on the part of both researchers and archivists. In this context, the role of archives lies not only in further facilitating access to digitized materials but also in providing information about and access to all other documents (a task requiring a high level of profes-

sional expertise – see below); however, initiative on the part of researchers and mutual communication with archivists are also essential.

While the digitization of analog archives can rely on archival material (and various archival aids) that have often been processed and made available long ago, the processing and making available of the electronic or digital archives themselves (digital born) is still in its infancy (both for technical reasons and due to the aforementioned protection periods). This is a fundamentally different area, so the archive is referred to as an „information hub" or „a manager of digital memory". While traditional archives acquired, registered, and preserved physical documents, the digital environment requires the ongoing management of information from the moment of its creation, necessitating new rules for the creation, storage, and long-term preservation of electronic documents. In addition to official documents (and potentially those of a personal nature), it is also necessary to address the archiving of emails, databases, websites, digital photographs, audiovisual files, and social media content. These issues are currently among the most pressing and will certainly continue to be addressed in the future – on a global scale. Moreover, as a result, the archivist is no longer merely a custodian of historical collections as in the past; instead, they are becoming (or should become) a specialist in digital curation, an expert on metadata, a guarantor of the authenticity of electronic documents, and a partner to IT professionals and information system administrators. The long-term preservation and sustainability of these documents also pose a significant challenge. Considerable attention must also be paid to ensuring cybersecurity. Paradoxically, digital documents can be more vulnerable than paper ones; risks include the technological obsolescence of formats, data loss, cyberattacks, and dependence on specific hardware and software. Archives therefore must – and will continue to – invest substantial resources in digital storage, data migration, and security systems. All of this presents significant problems – not only technical but, to a large extent, economic and environmental – that are particularly concerning given the deepening climate crisis and the associated energy demands. It is already clear that preserving everything will be impossible (just as it was impossible to preserve every analog document); nevertheless, the active management and preservation of digital documents will pose a major challenge for archives in the global world of tomorrow.

5. ARTIFICIAL INTELLIGENCE

The use of AI in archival work is also in its early stages, although we are witnessing very dynamic – even rapid – developments in this area. Currently, AI is primarily used to transcribe audio recordings or written texts; however, experience to date indicates that caution and human oversight are required. The same applies to information regarding available archival collections. At the same time, concerns about the future development of artificial intelligence are increasingly emerging – even among its creators. Thus, the spread of AI certainly does not mean that the roles and work of archivists will be replaced or that archives will lose their significance. Conversely, in the era of social media and the rapid spread of information – as well as disinformation – archives serve as a source of verified and authentic data, making it possible to substantiate the provenance of documents and the roles played by institutions and prominent figures in various historical events, as well as the course of those events. Furthermore, verifying information generated by artificial intelligence will remain a task for archivists – a role that may even grow in importance – which in turn requires that archival staff possess the necessary professional expertise.

6. EDUCATION AND COMPETENCIES OF ARCHIVISTS

All the aforementioned factors regarding the role of archives in a globalized world will naturally place demands on the competencies of archivists – demands that cannot always be met (partly for the reasons mentioned above) through the use of artificial intelligence. With the development of digital archiving – specifically the preservation of electronic documents – there has recently been a justified emphasis on competencies related to digital curation and metadata, leading to a significant convergence between the archival profession and information technology. This is also reflected in archival studies programs, which nowadays frequently lack „traditional“ disciplines linked to history. Unfortunately, however, it seems that the management (and processing) of analog documents from previous centuries – materials requiring extensive knowledge of history, auxiliary historical sciences, historical languages, and the like – is also being somewhat overlooked. In the past, archivists were the very experts capable of comprehensively evaluating archival materials – a fact reflected in the methods used to process and provide access to them. This

expertise also enabled them to communicate effectively with researchers at a high professional level (whereas today, one may sometimes encounter difficulties when attempting to access specific historical materials or obtain expert consultation). There is no surplus of experts in auxiliary historical sciences or historical languages to whom one might turn, and, moreover, such experts may not be immediately available. The solution lies precisely in preserving traditional instruction – though this does not mean rejecting newly designed study programs in the field of archival science. Naturally, this also entails staffing requirements that are not always easy to meet within the framework of accreditation standards; moreover, a traditional focus may not always align with the strategies of the respective higher education institutions (partly due to issues regarding their funding, etc.). However, given the specific characteristics of different countries and their historical development – as reflected in extant archival records – addressing the issue of training archival specialists on a global scale will certainly not be easy; on the contrary, maintaining specialization will remain desirable (also in the context of preserving the identities of individual nations, regions, and minority groups, as mentioned above). This, too, will therefore pose a challenge for archives in a globalized world.

7. CONCLUSION

Even in the global world of tomorrow, archives should retain their fundamental tasks regarding the preservation, registration, processing, and making accessible of archival materials. On the one hand, archives should not become „information vaults“ accessible only to a select few; on the other, it will be necessary to ensure the protection of vulnerable materials and information against unauthorized use or even misuse, with ethical, security, and cybersecurity issues playing a significant role. Significant attention will need to be devoted to the preservation of digitized and, above all, born-digital archival materials – a task that will entail considerable challenges, not only technical but also economic and even environmental. Various questions also arise in connection with the use of artificial intelligence. Fulfilling all these tasks will require archive staff to possess adequate professional expertise and training; alongside competencies related to the development of digital archiving, it is also essential not to overlook the skills needed for the management (and processing) of analog documents created in previous centuries.

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SUMMARY

Archives connect the past with the present and the future. Even the current globalization does not change all of this, but in the global world there is more space for connecting across states, cultures and societies. The study brings some reflections on archives in the global world and their further development.

In an era of globalization characterized by rapid social change and extensive cultural intermingling, archives can help preserve the identities of individual nations, regions, and minority groups – thereby safeguarding their uniqueness – and counter the loss of distinct characteristics. The role of archives and archivists in this context depends not only on their specific focus, holdings, and resources but also on the archivists‘ readiness and ability to fulfill these tasks.

Modern archives are an important element of the rule of law. They keep public administration documentation, thereby enabling the control of the activities of state institutions, the protection of citizens‘ rights and the accountability of public authorities. From this point of view, they represent a significant support for democracy and transparency. They can therefore contribute to coming to terms with the past, to processes of reconciliation, and to the preservation of historical truth. In all these instances, a prerequisite is the free use of archival records and their being made accessible by the creating entities. The goal of archivists is – and will remain – to ensure that archives do not become „information vaults“ accessible only to a select few, nor repositories of compromising material that serve the ruling power and function as places of fear.

While making archives accessible is desirable, certain archival materials – due to their nature and significance – cannot be made available to the general public without restriction; this is usually out of concern for the security of the state and its citizens. In this regard, the role of archives lies – and will continue to lie – in protecting sensitive materials and information against unauthorized use or even misuse,

without veering into the aforementioned totalitarian-style regulation. Ethical and security considerations, including cybersecurity issues, will play a significant role.

International cooperation is also gaining importance, encompassing archives and the diverse areas of their operations – particularly regarding digitization, making archival materials accessible for various topics, and addressing security issues. A crucial challenge in this context is securing funding for such projects, a task that is far from simple in an international setting.

Digitization brings significant changes – encompassing both the digitization of analog documents and the processing and provision of access to electronic or digital archival materials. Archives must contend with both the processing and long-term preservation of these materials, tasks that entail considerable challenges – not only technical but, to a large extent, economic and environmental as well; the latter are particularly concerning given the deepening climate crisis and the associated energy demands.

The use of artificial intelligence raises a number of questions. In an era of social media and the rapid spread of both information and disinformation, archives serve as a source of verified, authentic data, making it possible to substantiate the provenance of documents and the roles played by institutions and prominent figures in various historical events, as well as the course of those events. Consequently, the tasks of archivists will also include verifying information generated by artificial intelligence.

Fulfilling all these tasks will require archivists to possess adequate professional expertise and training; alongside competencies related to the development of digital archiving, it is crucial not to overlook the skills needed to manage (and process) analog documents originating in earlier centuries. However, given the specific characteristics of different countries and their historical development – which are reflected in the surviving archival records – addressing the training of archival specialists on a global scale will certainly not be easy; maintaining specialization will remain desirable. This, too, will pose a challenge for archives in a globalized world.

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