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Editorial Office Address

International Institute for Archival Science Trieste (Italy) -

Maribor (Slovenia)

Via La Marmora 17, Trieste, Italy,

tel.: +39 040 39 00 20, fax: +39 040 98 800 33,

e-mail: info@iias-trieste-maribor.eu

Alma Mater Europaea University, Slovenia,

Slovenska 17, 2000 Maribor,

tel: +386 59 333 077,

e-mail: info@almamater.si.

Contacts

Peter Pavel Klasinc, peter.klasinc@almamater.si

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Arian Rajh¹

CONSIDERING DESCRIPTION LOGIC FOR ANALYZING AND CLARIFYING ARCHIVAL ONTOLOGIES

Abstract

Purpose: This paper explores the use of Description Logic (DL) in analysing and updating ontologies and examines the benefits of its applicability.

Methodology: The section on DL and ontologies explains those terms and demonstrates DL's syntaxes. Then, the author "manually" uses DL to analyse the construction of classes and properties of the Records in Contexts ontology as concepts and roles in the T-box. An A-box is constructed from an example published on the EGAD GitHub page. The author also demonstrates how DL is used to construct the main entities of an exemplar ontology, Daetika.

Results: The results comprise modelling DL concepts according to ontology descriptions (rdfs:comment element in RDF/XML ontology file). When descriptions were insufficient to model DL concepts, scope notes or external elements were used. After presenting the results of harmonizing ontology entities with the DL structures, the author discusses the importance of such efforts.

Conclusions: The author concludes with establishing a connection between DL used for analysis or construction purposes and the clarity and cohesion of ontologies. He also provides recommendations for future work on ontologies and outlines general possibilities with RIC-O.

Keywords: Daetika, description logic, knowledge, ontologies, OWL, Records in Contexts

¹ Arian Rajh, PhD, Assoc. Prof., University of Zagreb, Faculty of Humanities and Social Sciences, Ivana Lučića 3, Zagreb, Croatia, arajh@m.ffzg.hr.

1. INTRODUCTION

The paper unveils the potential of Description Logic (DL) as a tool for analysing RIC ontology (RIC-O) and constructing ontologies of selected domains. Other works have considered this potential more generally by tracing relationships between ontologies and DL knowledge bases (Horrocks et al., 2003, 10; Baader et al., 2017, 5). This article analyses the formal concepts and properties of the RIC-O, which is an already-developed ontology. This analysis is enhanced by manual mapping parts of definitions and scope notes of the concepts from that ontology to DL. In some cases, we felt it was necessary to add external concepts. The second ontology is being constructed according to the DL apparatus. This approach aims to analyze ontologies and alert if their concepts lack some clarity. Mapping of DL and ontology concepts could also serve as a foundation of reasoning, not only for (re)formulating an ontology.

2. DL AND RIC-O

DL is a set of formalisms that represent domain-related knowledge by defining its concepts (i.e., the world of a domain expressed by carefully designed vocabulary) and descriptions of individuals or their properties (Baader et al., 2003, 43). DL is also a cluster of languages (*AL*, *SHIQ*, *SROIQ*)² that vary in expressivity and reasoning potential. It could be explained as an arena of scientific and practical activities that use constructors to describe concepts and roles and the logic to solve their complex semantics (Baader et al., 2017, 1; Baader et al., 2003, 43). DL, thus, works with concepts, roles, and constructors.³ Concepts and roles are interconnected in a T-box's terminological axioms (equalities or subsumptions of concepts or roles). After defining concepts, the interrelations of terminological axioms provide background knowledge of a domain (Baader et al., 2017, 17). We could, for example, define concepts of Person and Place and the role of hasBirthPlace in a

² The broad family of *AL* (attributive) languages expresses concepts and primary constructors. *SHIQ* languages expand *AL* languages, as stated by Szeredy et al. (2014). The Semantic Web explained. Cambridge: CUP, pp. 188-199, and Baader et al. (2017). An introduction to Description Logic. Cambridge: CUP, pp.11-12. *SROIQ* language works with the most complex constructors; see Szeredy et al., ibid., pp. 233, 243-5, and Horrocks et al. (2006). The even more irresistible *SROIQ*. 10th Int. Conference on Principles of Knowledge Representation and Reasoning, United Kingdom, June 2-5, 2006.

³ A concept is a set of individuals, and roles reflect concept relationships. Constructors assemble more compound concepts/roles in a T-box. For further explanation, see Baader et al. (2017). An introduction to Description Logic, Cambridge: CUP, p. 23.

T-box. The A-box or assertion box is the other essential part of the DL knowledge base. An A-box includes individual names (i.e., Cook: Person, Vancouver: Place) and their relationships (i.e., individual name – role – individual name as role-filler: Cook hasBirthPlace Vancouver or (Cook, Vancouver): hasBirthPlace). We could add some background knowledge about Vancouver. DL enables software agents to use reasoning on background knowledge. For example, if an information system has information about Terry Cook and Vancouver, we could ask in which country Terry Cook was born, and this information could be acquired without being explicitly stated anywhere in the system and without human help. This way, DL assists software agents in reasoning and creating new knowledge.

DL languages form the foundation of the Web Ontology Language (OWL) used for building ontologies (W3C, 2012a). DL concepts correspond to ontologies' classes, and roles correspond to object properties. Ontologies are computer-readable specifications of shared conceptualizations (Studer et al., 1998, 25). This paper will predominantly focus on DL as a tool to syntactically express and clarify elements of an archival ontology, RIC-O. Records in Contexts (RIC) is an advanced professional descriptive standard that enables archivists to describe record resources and other essential entities and their attributes and relations. It consists of three parts at present: an introduction, a conceptual model (ICA EGAD, 2023), and an ontology (RIC-O) (ICA EGAD, 2024). The ontology represents a further development phase of the conceptual model or a more systematic application of syntactic and semantic formalisms to concepts. As demonstrated in this paper, conceptual models could also be created using DL, which can bring certain advantages. DL is an appropriate tool for conceptualization in the "conceptual model phase" of ontologies. RIC-O encompasses classes and individuals, as well as data and object properties related to archival entities – record resources, their instances, agents involved with creating records or thematized in records, dates, places, events, and other entities. RIC-O data properties describe those entities, and object properties connect them according to linked data (LD) principles, implementing the Semantic Web's dispersed and decentralized but feasibly cooperative practices. RIC-O-based descriptions of archival entities lean on LD technologies like the Resource Description Framework (RDF) data model (W3C, 2024a) and its serializations (W3C, 2024b; W3C, 2024c) and query languages (W3C, 2024d).

3. APPROACH

We want to consider the role of DL for an ontology such as RIC-O or any other ontology. Observing and handling RIC-O "through the DL prism" makes sense because RIC-O is based on the OWL 2 language (https://github.com/ICA-EGAD/RiC-O), mainly constructed according to the OWL RL profile⁴ (W3C, 2012b), and OWL 2⁵ was derived from the *SROIQ* DL language (W3C, 2012a; Horrocks et al., 2006).

The approach of this paper focuses on the manual mapping of DL concepts, roles, and assertions with entities of an archival ontology, and we aim to analyse and reformat the archival world by constructing its knowledge base and axiomatization. In other words, by building descriptions and hierarchies of concepts and roles from an ontology and individuals from examples of its implementation. Two archival ontologies are examined – RIC-O and another smaller and simpler one, Daetika.

For RIC-O, whenever possible, descriptions of concepts will be based on RIC-O class-IRIs' definitions (https://www.ica.org/standards/RiC/RiC-O_1-0-1.html), also expressed by rdfs:comment element in ontology's RDF/XML file, and RIC-O property-IRIs' definitions and domains and ranges related restrictions. This means building RIC-O's T-box and exemplar A-box. An RIC-O-compatible A-box is provided by a description, i.e., one of the descriptions on the EGAD RIC-O GitHub page: https://github.com/ICA-EGAD/RiC-O/blob/master/examples/examples_v1-0/Matterhorn-Switzerland/IP-RiC-O/metadata.ttl description serialized in RDF Turtle file. The same thing is achievable by using any other RIC-O harmonized description. This example file contains descriptions in the

⁴ As stated in a discussion of the RIC-O Google group, the post from July 12, 2024, https://groups.google.com/g/Records_in_Contexts_users/c/mhAkB6k-E9c. The W3C 212b document states, "[t]he RL acronym reflects the fact that reasoning in this profile can be implemented using a standard Rule Language." In addition, "OWL 1 DL can also be viewed as a profile of OWL 2.", W3C. (2012b). OWL 2 Web Ontology Language (2nd ed.), Introduction.

The first W3C OWL recommendation dates to 2004 when the OWL DL sublanguage and OWL Lite were specified. OWL DL has several constraints on concept usage and is focused on reasoning and specific domains, as DuCharme noticed in his book from 2013 (page 424). OWL Lite has additional restrictions and limits OWL expressivity for more manageable software implementations, as explained in section 8.3 of the 2004 OWL W3C recommendation. In OWL DL, a class is separated from an individual, and an object property is separated from a data property; plus, some constraints are related to types of properties and axioms, as stated in section 8.2 of the same W3C recommendation. The first version of OWL also includes OWL Full, the most expressive use of OWL. Besides OWL Full language and its OWL DL subset, the second version of the W3C OWL recommendation (OWL 2), dated from 2009 and updated in 2012, specifies OWL 2 RL, EL, and QL profiles. Each profile or sublanguage performs best in different use cases: RL (rules) facilitates rule-based scalable reasoning, EL (expressiveness) facilitates reasoning with complex ontologies, and QL (queries) facilitates querying assertions recorded in relational databases, as stated in the 2012 W3C recommendation. OWL 2 EL and OWL 2 RL can be considered like DL in their approach, whereas OWL 2 QL follows OWL 1 Lite's simplicity. Ultimately, there are multiple profiles and sublanguages within the OWL 2 framework to suit various needs.

form of sentence-resembling triples of subjects, predicates, and objects. Subjects that appear before predicates "a" (e.g., rdf:type) in the RIC-O example Turtle file are instances that occupy A-boxes. Baader and his colleagues consider such RDF triples as DL concept assertations (subject-predicate-object = instance : Concept, if predicate = a or rdf:type) (Baader et al., 2017, 207). According to Baader and his co-authors, RDF triples can also be DL role assertions, DL T-box axioms, or non-DL statements (rdfs:comment) (Baader et al., 2017, 213).

Another ontology, Daetika, created by the author of this paper, will also be expressed in DL. Daetika is an archival ethical ontology that combines deontology, or ethics of behaviour and procedures, with aretaic ethics of characteristics. Here, we will explore the notion of archivists behaving justly: focused on the empathic understanding of others' positions, inclusive acceptance of their values, and transparency to legitimize their duties. Daetika's knowledge base consists of concepts, rules, and hypothetical examples of instances. The Daetika ontology will provide the T-box, and the A-box should be provided by making exemplary statements about individuals

4. RESULTS

Part 4.1 relates to the DL analysis of RIC-O, which provides an example of what can be achieved on already-built ontologies. Part 4.2 relates to the Daetika ontology, a new ontology designed from scratch.

4.1. AN EXCERPT OF THE RIC-O 1.0.1. KNOWLEDGE BASE

Figure 1 and 2 below compare certain ontology classes and their definitions (or rd-fs:comment elements, W3C, 2024e, §3.7) with equations in DL. A part of RIC-O consisting of Agent subclasses was selected from the ontology. The strategy was to represent concepts using their ontology definition whenever feasible. For some classes, it was challenging to create concept axioms out of original RIC-O's IRI descriptions published on the EGAD website or embedded in the rdfs:comment

⁶ The theoretical background of the Daetika ontology is described in detail in Rajh, A. (2024). Prilog arhivističkoj etici: osobine arhivista, perspektiva pravednosti i vrednovanje. Arhivski vjesnik 67 (Contribution to archival ethics: Characteristics of archivists, justice perspective, and appraisal). Daetika is based on Rawls's theory of justice, with self-reflexivity as a starting point for just behavior instead of his primary position and the veil of ignorance. The final effect is similar to Rawls's principles of justice, but in the "archival world," and it is accomplished with selected characteristics and behavior of the archivists.

nodes of the RDF/XML file. Hence, it was necessary to use broader, similar, or just meaningful other object properties or classes outside RIC-O rdfs:comment element or even RIC-O itself to supplement RIC-O concepts. For the Mechanism class concept, the first choice for linking a mechanism to a person or group who creates it was property "isRelatedTo," because RIC-O's property "hasCreator" refers to different domains. If the "hasCreator" property included the mechanism class in its domain, we would use it to model the concept. Still, the property "isRelatedTo" was too broad. A new object property, "createdBy," non-existing in RIC-O, was used as suggested during the review of this work and paper. The Position class was challenging to model in DL using the definition (rdfs:comment from the ontology RDF/XML file). This class was more manageable to model from the skos:scope-Node7 information; adding its name and relations to the mandate and activity was possible. Reaching for the non-RIC-O class "Project" was necessary to state that it could relate to projects. The position class is an example where it was convenient to reach for information outside the class definition and RIC-O ontology.

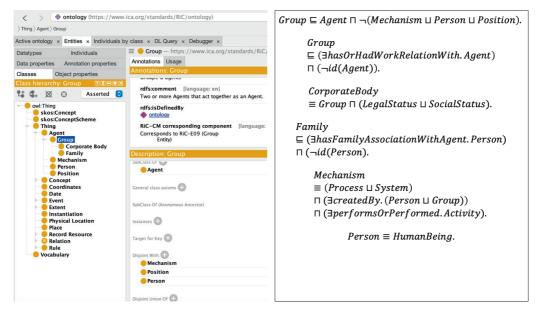


Figure 1: Figure 2:
Classes in RIC-O 1.01 (Protégé) DL representation of RIC-O classes

Additional classes of record set, record, record part, and documentary form type were modelled, too—all these classes are well-known among archivists.

⁷ Please see https://www.w3.org/2012/09/odrl/semantic/draft/doco/skos_scopeNote.html (accessed 6.10.2024

$RecordSet \sqsubseteq \exists isRecordResourceAssociatedWithRecordResource.Record$

The record set concept was defined above using RIC-O entities alone. Using internal entities solely was not the best option for modelling the record and record part concepts below. Regarding the record class, RIC-O does not define the information content class, although the ontological definition of the record mentions it. The equation is modelled by combining rdfs:comment and supplementary skos:-scopeNote. However, the statement that records could be evidence of activity was avoided because RIC-O links evidence-related concepts with the top relation class (not to the activity class). Regarding the record part class, its DL equation contains the concept of the complete record from RIC-O's ontological definition ("intellectual completeness").

 $Record \equiv Information Content \sqcap (\exists documents. Activity) \sqcap (\exists hasCreator. Agent) \sqcap (\exists hasOr HadInstantiation. Instantiation) Record Part \equiv Record Resource \sqcap \neg Complete Record.$

Modelling RecordResource as a DL concept directly from the RIC-O class would be very demanding. This complex class uses a simple, constitutive class of Information and roles of "producing," "acquiring," and "retaining," which were not modelled anywhere in the ontology. Also note that the RecordResource uses the "Information" concept, and the Record class, as shown, uses the "Information-Content" concept. These simple, constitutive concepts act as synonyms.

DocumentaryFormType

 $= (\exists isOrWasCategoryOf.(Record \sqcup RecordPart) \\ \sqcap (ExtrinsicElement \sqcup IntrinsicElement) \sqcap \exists communicates(Content) \\ \sqcup AdminstrativeContext \sqcup DocumentaryContext \sqcup Authority).$

The ontological definition of the "documentary form type" complex class has elements like ExtrinsicElement and IntrinsicElement, as well as the aspect of communication of the content, administrative and documentary context, and authority. Concepts of the extrinsic and intrinsic element, content, contexts, authority, and the object property "communicates" were derived from rdfs:comment of DocumentaryFormType class. They do not exist as RIC-O's simple classes, although they constitute RIC-O's complex class DocumentaryFormType. The equation may be partially redundant as the intrinsic element structured in the protocol already "contains administrative context of the action" and eschatocol

"contains the documentation context of the action" (Duranti, 1991:11). However, the main intention was to do the most literal "translation" of RIC-O's definition to DL. Also, this equation covers all the aspects of the documentary form – not just those elements reflecting administrative and documentary context.

An A-box that follows is selected from an EGAD example published on EGAD's GitHub page: https://github.com/ICA-EGAD/RiC-O/blob/master/examples/examples_v1-0/Matterhorn-Switzerland/IP-RiC-O/metadata.ttl. On the level of the record, A-box is constructed in the following standard manner:

```
__20201118115821577; Record,
(_20201118115821577,20030501): isAssociatedWithDate,
(_20201118115821577,20201231): isAssociatedWithDate,
(_20201118115821577,700): isOrWasRegulatedBy,
(_20201118115821577,701): isOrWasRegulatedBy,
(_20201118115821577,702): isOrWasRegulatedBy,
(_20201118115821577,Komplettübernahme): isOrWasAffectedBy,
(_20201118115821577,Direktübernahme): isOrWasAffectedBy,
(_20201118115821577,20201118115820159): hasOrHadDigitalInstantiation.
```

The triplet "<_20201118115821577> a rico:Record" from the metadata.ttl file was transformed to the concept assertion, following the rules Baader and his colleagues stated. A similar principle was used for role assertions, with instances and DL roles: isAssociatedWithDate, isOrWasRegulatedBy, and isOrWasAffectedBy. Constructing the T-box from the entire RIC-o in this paper was impossible because it is a relatively large ontology. This excerpt from T and A-boxes modeled according to RIC-O shows the relationships between RIC-O and DL.

4.2. DAETIKA'S KNOWLEDGE BASE

It is possible to show the entire knowledge base of Daetika ontology due to its small size. The Daetika ontology consists of 12 classes besides Thing, and its purpose here is to show the first steps of constructing an ontology with the help of DL. The focus is on DL in the initial phase and modelling the main ontology classes and object properties. Firstly, the main concepts in the terminology can be defined as follows:

$JustBehavior \equiv Behavior \sqcap Just.$

JustBehavior

 $\sqsubseteq \forall leadingTo^-.\{Empathy\} \sqcap \forall leadingTo^-.\{Inclusivity\}$

 $\label{eq:leadingTo^-.} $$ \forall leadingTo^-. \{Self-reflexivity\} \cap \forall isLinkedTo. \{Transparency\}. $$$

TargetedCharacteristic

 $\equiv Targeted Characteristic Leading To Just Behavior$

 $\sqcap Targeted Characteristic Linked To Just Behavior.$

TargetedCharacteristic ⊆ Characteristic.

Targeted Characteristic Leading To Just Behavior

 $\equiv \{Empathy\} \sqcap \{Inclusivity\} \sqcap \{Self-reflexivity\}.$

 $Targeted Characteristic Linked To Just Behavior = \{Transparency\}.$

 $\exists is Linked To. I \sqsubseteq Targeted Characteristics Linked ToJust Behavior.$

Sym(isLinkedTo).

 $\exists leading To. \top \sqsubseteq Targeted Characteristic Leading ToJust Behavior.$ leading To = comes From-.

In the future, Daetika should be populated with definitions of the highest classes or merged with other ontologies that already have these classes defined, along with definitions of other entities that were not in the focus of this work. Figure 3 shows an as-is comprehensive view of Daetika's ontology. The focus was on the classes of JustBehavior and TargetedCharacteristics with its subclasses. Behavior, Characteristics, and Process are classes taken from other domains. Empathy, inclusivity, self-reflexivity, and transparency are characteristics (like Scott Cline's archival virtues, Cline, 2021) modelled in the Daetika ontology as instances. A set of hypothetical personal characteristics is, of course, more extensive. However, these are the specific characteristics that lead to just behaviour or are associated with just behaviour, as per the theoretical framework of the Daetika ontology (please see note 6). They are represented by DL as nominals so that they can be used in the T-box.

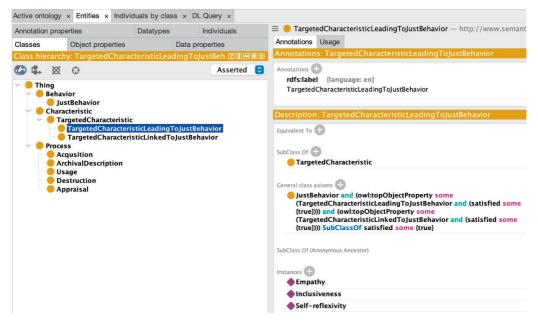


Figure 3: The classes of Daetika ontology (Protégé)

Furthermore, it is possible to model an A-box with individuals. Below is an exemplar A-box that describes an archivist who acts justly, using the instance of an Archivist and concepts defined in Daetika terminology. Before jumping to the A-box, the Archivist concept should be modelled and added to the T-box above. In one of the RIC-O Google group discussions, the Archivist entity was already considered in several ways. The concept of archivist could be defined throughout the concept of occupation type as its specialization.

The archivist could be defined more strictly or loosely as a DL concept, matching a new subclass that can fit in the OccupationType class of RIC-O as the ontology with the same domain as Daetika. The Archivist could be defined as an accumulator of record resources and their manager because RIC-O has object properties isAccumulatorOf and isOrWasManagerOf, with agent class as the domain and record resources class in their range. However, an archivist's job is not limited to the accumulation and management of records, so if the previous concept doesn't suit us, for the time being, we could emphasize archivists' distinctiveness among other occupation types.⁹ It is not a perfect solution, but more comprehensive.

⁸ Please see: https://groups.google.com/g/Records_in_Contexts_users/c/qc4PqaZVF24 (accessed 12.7.2024).

⁹ As mentioned in the previous paragraph and as documented in the literature on the level of more general principle, Baader et al. (2003). The Description Logic handbook. Cambridge: CUP, pp. 58-9.

$Archivist \equiv OccupationType \sqcap \exists isAccumulatorOf.RecordResource$ $\sqcap \exists isOrWasManagerOf.RecordResource.$ $Archivist \sqsubseteq OccupationType.$

A-box with an instance of archivist could contain assertations like:

terry:Archivist⊓JustBehavior,

(TargetedCharacteristicLeadingToJustBehavior,JustBehavior) :leadingTo, (JustBehavior,Process) :isLinkedTo,

(JustBehavior, TargetedCharacteristicLinkedToJustBehavior): isLinkedTo.

A-box with an instance of archivist could contain assertations like:

From all of this (the terminology combined with the A-box) it can be inferred by reasoning that archivist Terry is self-reflexive, empathic, inclusive, and transparent while practicing archival processes. The given background knowledge supports this.

5. CONCLUSIONS AND FUTURE WORK

DL can analyse, construct, consolidate, update, and revise an ontology. This paper showcased the use of DL to analyse or construct RIC-O and Daetika ontologies. Some conclusions from a limited set of analysed entities suggest that using simple interconnected concepts to explain complex ideas would be best. The definitions of concepts should be clear and comprehensive rather than unnecessarily complex and overly elaborated using many undescribed concepts. Generally, the DL terminology and, thus, the ontology classes and properties should be carefully coordinated and logically organized. Concepts should be economically reused throughout the knowledge base. When constructing a new ontology, a good approach is to define the concepts and roles using DL and then derive and publish the definitions. Ontology definitions should be interrelated and form a solid foundation of background knowledge. This interconnectedness ensures the ontology's consistency and facilitates automated reasoning.

RIC-O is based on OWL 2, which could be "roughly speaking...mapped...into SROIQ" DL (Badder et al., 2017, 206). The length of this paper did not allow for an all-comprehensive RIC terminology analysis; however, this short DL analysis showed that establishing a clear T-box using just RIC-O ontology's definitions was not always possible. RIC-O requires more use of primary, constitutive con-

cepts, and defining complex concepts in DL for some RIC-O classes was challenging due to RIC-O's disconnected definitions. A set of fundamental simple concepts is needed to model more complex archival entities or the building blocks of archival description. This doesn't mean adding a multitude of banal concepts to the ontology. It is advisable to create simple, essential classes for use in defining complex classes – systematically yet efficiently by managing synonymy and avoiding overabundance. Revising ontology definitions that are "DL-problematic" in RIC-O can enhance the ontology's cohesion and should be considered part of its normal life cycle. The same conclusions would apply if the characteristics of people behaving justly in Daetika had not been modelled as instances. For ontology instances, rdfs:comment elements are used less frequently than classes and properties (W3C, 2024e, §3.7). However, as a good practice, rdfs:comment elements should be added to the instances in Daetika in the future, and if this ontology does not integrate with others, its higher-level classes – Behaviour, Characteristic, and Process – should also be unambiguously defined.

6. GENERAL POSSIBILITY IN THE FUTURE

Matching DL structures with ontology entities could enhance ontology clarity and consistency and enable automatic reasoning and the generation of new information. Defining DL terminology before ontology construction may streamline this process, and for established ontologies like RIC-O, reverse engineering of concepts and roles using DL tools could improve expressiveness and decidability. The potential for creating new knowledge through the automatic processing of archival entities is promising. RIC-O facilitates far more advanced usage of archival information beyond the limits of the ISAD(G) family of standards. This represents more than evolution in the archival profession. Because of the integration of semantic web concepts in RIC, its potential is very promising. Automatic reasoning and generating information not explicitly written by archivists can be a powerful tool for archive users.

Finally, DL and ontologies like RIC can make archival terms and concepts in professional dictionaries more distinct and neater, thus making our discourse more explicit and precise. Archivists may consider all of this for future work.

7. ACKNOWLEDGMENT

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Ivan Szekely¹, Michael Friedewald², Murat Karaboga³

THE COUNCIL OF EUROPE RECOMMENDATION R(2000)13 ON A EUROPEAN POLICY ON ACCESS TO ARCHIVES AND ITS IMPLEMENTATION

Abstract

Purpose: The aim of this article is to briefly introduce the Council of Europe Recommendation R(2000)13 on a European policy on access to archives, explain its relevance, summarize the main findings of the 2022-2023 pan-European survey and outline the main challenges in the field of access to archives.

Methods/Approach: After a brief historical overview, the main principles of the Recommendation are listed, followed by a quantitative data analysis of the results of the pan-European survey, supplemented by expert interviews. The dilemmas and results of developing a compliance index are presented.

Results: It can be concluded that the situation of access to European public archives has improved considerably during the last two decades, but that there are still certain practices, especially in the Eastern part of Europe, which are contrary to the provisions of the Recommendation and the principles of democratic information rights. Political and social traditions do not determine access patterns.

Conclusions/Findings: Rapid technological development creates new challenges in terms of access and the relationship between archives and users. The principles of the Recommendation remain valid but may need to be modernized in order to include technological developments.

Keywords: Council of Europe, Access to archives, Compliance index, Digital documents, Remote access.

¹ Ivan Szekely, CSc, Senior Research Fellow, Blinken OSA Archivum, Budapest szekelyi@ceu.edu (corresponding author).

² Michael Friedewald, Dr.-Ing., Head of the ICT Research Unit, Fraunhofer Institute for Systems and Innovation Research, Karlsruhe.

³ Karaboga, Murat, PhD, Researcher, Fraunhofer Institute for Systems and Innovation Research, Karlsruhe.

THE PATH TO THE RECOMMENDATION

The issue of accessibility of European public archives in the cultural West became a major focus after the Second World War, and the changing practice led to a new paradigm in the history of archives: from the national archival paradigm serving bureaucrats and scholars, research rooms were opened to attract the general public, user-friendly finding aids were created, and amateur genealogists, NGOs, and individuals interested in their immediate and wider environment became users. This did not, of course, mean the end of the sometimes-controversial withholding and classifying of documents and, in some cases, positive and negative discrimination between users, but it did mark a new era of accessibility to public archives. The legal and administrative traditions of the communist/state socialist regimes in the eastern half of Europe, the Soviet sphere of influence, were different before the Soviet era, as were their archival practices. It was on this different basis that the centralized Soviet-style administrative and legal system, and, through many layers, the archival administration was built. The Soviet system unified much of the legal and administrative practice of these countries but did not completely erase their cultural and social traditions. At the European level, the radical political and social transformations, the velvet and bloody revolutions, the events of the "regime change" around 1989 and after, have brought the issues of archives and, more broadly, the accessibility of documents and the information they contain, into the spotlight.

An important characteristic of the communist or state-socialist regimes was administrative secrecy and the restriction of access to current, semi-current, and historical information and documents, treating access as a privilege - this also meant limiting the right of individuals to self-determination over their personal data. For peaceful and violent participants in regime-change movements and revolutionary actions, as well as for a large part of the civilian population, the need for transparency of information became one of the most important symbolic and practical demands.

During the turbulent period of the early 1990s, with the end of the Cold War and the emergence of the vision of a united Europe, the International Council on Archives (ICA), thanks to the commitment and organizational skills of its Secretary General Charles Kecskeméti, successfully convinced many national archival

administrations in the East and West, as well as the competent bodies of the Council of Europe (CoE), of the need to codify at international level the general principles of archival access in line with the mission of the CoE. Following a series of bilateral meetings between archival experts and lawyers from Western and Eastern European countries, which led to various codification circles and plenary sessions, the Council of Europe formally adopted Recommendation R(2000)13 on a European policy on access to archives in 2000.⁴

The Recommendation was the first international standard for access to archives. It did not demand uniformity from the Member States, it considered different social, archival and administrative traditions, and it clearly set out common principles that all Member States are expected to respect. Although not a binding legal document, its moral and political importance has shown what the European community expects of its members in the field of access to archives.

THE BASIC PRINCIPLES OF THE RECOMMENDATION

The core text of the Recommendation is short and concise and is explained in the Explanatory Memorandum. Its basic principles can be divided into three groups in a simplified manner: ethical principles, procedural principles, and technical principles.

Ethical principles

- Access to public archives is a right
- The right should apply to all users
- Restrictions are necessary to protect public interests
- Restrictions are necessary to protect private individuals
- All restrictions should be limited in time
- The same conditions should apply to all users

Procedural principles

- All regulations affecting access should be harmonized
- The same rules should apply within the territory of the country

⁴ The official text of the Recommendation is available in English at https://rm.coe.int/16804cea4f, with its explanatory memorandum at https://rm.coe.int/16804cf8f4, and in printed form in English and French in two editions of the CoE Handbook (Kecskemeti & Szekely, 2005, 2007), as well as in several national language translations.

- All restrictions should be based on law
- Users are entitled to request special permission for access
- Users are entitled to appeal against the rejection of requests
- Any refusal or special permission should be communicated in writing Technical principles
- Consultation of public records and finding aids should be free
- All finding aids should be accessible to users
- Archives should not deny access to "irrelevant" documents
- Users should be informed of partial access
- Private archives should be encouraged to follow access rules applicable to public archives

These principles and the detailed rules that follow from them may be familiar to professionals and users of European public archives and some private archives. This is because over the years, the provisions of the Recommendation have been incorporated into the legal systems of European states, and the principles are now enforced by law in many countries, not just by voluntary compliance.

THE FIRST AND SECOND PAN-EUROPEAN STUDIES

Immediately after the adoption of the Recommendation, and following a pilot study of limited scope, the Council of Europe, in cooperation with the Open Society Archives (OSA), conducted a pan-European survey on access to archives. The study covered all CoE Member States and targeted three main groups: public archives (including national, regional, and local archives), professional users (primarily historians' associations), and civil society organizations (especially those advocating for information rights). Its aim was to assess the extent to which the practices of European countries comply with the principles of the Recommendation. The results of the survey showed that not only did the practice in the new democracies fell short of the ethical, procedural and technical principles outlined in the Recommendation, but even the archival institutions in the Western democracies did not fully comply with these standards.⁵

⁵ The results of the survey can be found in the Council of Europe Handbook on access to archives (Kecskemeti & Szekely, 1995, 1997).

Twenty years later, the CoE commissioned its Division of Culture and Cultural Heritage to re-examine the accessibility of public archives in the CoE member states (at present 46 countries), to assess the changes that have taken place and to take stock of the challenges facing archives today, both in terms of technological developments, legal frameworks and changing user expectations. The new pan-European study in 2022-2023 was carried out by the Fraunhofer Institute for Systems and Innovation Research ISI in collaboration with the Blinken OSA Archivum, with the authors of this article as principal researchers.

The new survey was conducted using a professional online survey tool, following the principles of the Recommendation and the logic of the previous survey to track changes; maintaining the three target groups (public archives, professional and civil users, 266 institutions surveyed in total) but adding new sets of questions to the questionnaire to assess the impact of technological developments and changes in the way archives operate on access.⁶

The three target groups had partly different questionnaires.⁷ The original questionnaires were produced in English and then translated into French, German and Russian, to make the respective questionnaire available in at least the most widely used foreign languages in all Council of Europe member states.

For archives, the response rate was high (national archives: 85%, regional archives: 67%, local/municipal archives: 55%), despite the length and detail of the questionnaire; for professional and civil users of archives the response rate was lower (22% and 15%, respectively). The data set (422 variables) was analyzed using quantitative methods, considering that the data were self-reported and did not constitute a representative sample. These data were complemented by expert interviews, the purpose of which was to validate the results of the study and our conclusions, and to identify and prioritize the main current and future challenges related to accessibility. The interviewees included a practicing archivist, an archives manager, an archival scholar, an academic researcher, a civil user and a data protection commissioner.

⁶ The full English version of the study can be found in the CoE report published in print and digital format (Friedewald et al., 2024).

^{7 58} questions for archival institutions, 38 questions for professional users, and 41 questions for civil society users, partly with conditional sub-questions in each group. The questionnaires are available online at https://doi.org/10.5281/zenodo.7676589.

From this rich empirical material and the conclusions drawn, only a few important areas will be highlighted in the following due to the space limitations of this article.

THE PRESENT SITUATION

It is important to emphasize that the findings of the study were not intended to critically compare or rank individual countries or individual public archives, but rather to identify and analyse problems and challenges and to present best practices.

In the early 2000s, 10 European countries (including Russia⁸) had published the text of the Recommendation in their national language; now the number of such countries is 17. (Fig. 1)

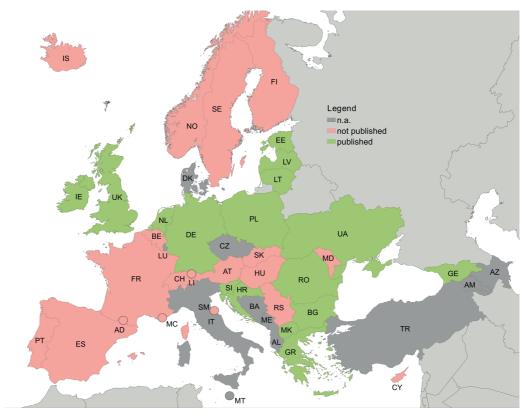


Figure 1: Publication of the Recommendation in national languages

More importantly, the provisions of the Recommendation are widely implemented: national legislation in the great majority of the countries (72%) complies with the Recommendation in full or with a few exceptions (Figure 2).

⁸ Russia left CoE in 2022.

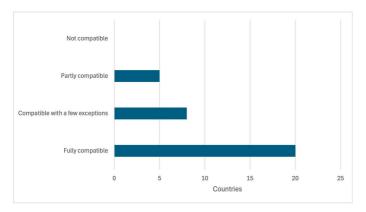


Figure 2: Compatibility of the national legislation with the Recommendation

Rights and non-discrimination

A core principle of the Recommendation is that access to archives is a right for everyone, not a privilege. This means that unrestricted documents should be accessible without permission and free of charge. It also implies that catalogues and other finding aids should also be accessible without permission and free of charge, otherwise the user would not be able to exercise their right of access. In a broader sense, this also requires the prohibition of the creation and maintenance of secret archives, the existence of which is not known to the users. (This does not mean, of course, that there cannot be exceptions to access or that the archives cannot charge for certain services.)

These principles and requirements are respected by most European public archives, but archives in 12 countries require a license to consult unrestricted documents, 12 countries have no restrictions on the operation of secret archives, and 5 post-so-cialist countries do not even catalogue restricted documents, so researchers do not know which documents to apply for or which documents are no longer classified.

Access to archives can be an area of positive and negative discrimination in some countries and archival institutions. Positive discrimination may be experienced by academic researchers in 9 countries, which may lead to easier access to archival documents or, subject to publication restrictions, to restricted documents. In five countries the lack of a scientific degree (or certificate from a scientific institution) may be a disadvantage compared to the general access rules. Such practices were reported by 80% of professional researchers and 85% of civil users. 70% of

civilian researchers stated that in some cases they needed the support of a public authority or research institute to obtain a research permit. In one country, special rules applied to access to archives by foreigners (Fig. 3).

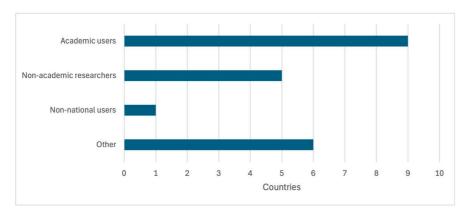


Figure 3: Access rules for special categories of users

The number of countries whose archives refuse to release requested documents on the grounds that the researcher does not have an appropriate academic degree or that the requested documents are allegedly not relevant to the researcher's research topic, has remained virtually unchanged over the past 20 years. All such practices are fundamentally at odds with the spirit and provisions of the Recommendation. Exploring the roots of these practices and the possibilities for their elimination is beyond the scope of the present study, but certainly requires further investigation.

General closure period

According to the Recommendation, the law should provide for (a) the availability of public archives without specific restrictions, or (b) a general closure period (Article 7). The general closure period has now been significantly harmonised and is usually 30 years. However, in many countries' archival legislation there is no general closure period at all, so that, in principle, documents transferred to archives are accessible from the moment they are received (Fig. 4).

⁹ Legally, however, the general closure period is hardly applicable, since a document that was accessible under freedom of information laws before it was transferred to an archival institution cannot be legally restricted because it has been archived. And if the document contains personal data, special rules apply to its handling that override the rules of the general closure period. The original function of the closure period was to facilitate the work of archivists, in particular to ensure that the availability of a large volume of incoming and unprocessed documents was not requested by users before the expiration of the closure period.

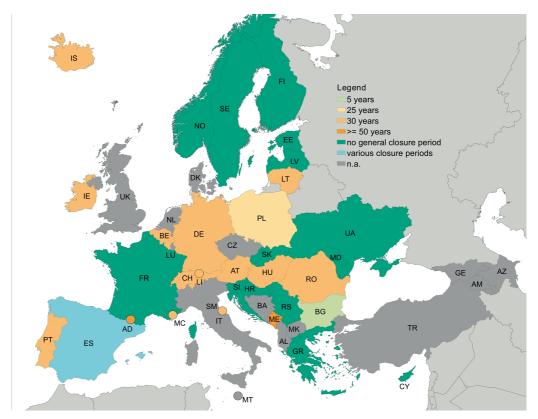


Figure 4: General closure periods in Europe

Exempted public archives

In one third of countries (39%), there are public archives whose access rules differ from the general access rules, typically set by archives law (Figure 5). The scope of these institutions is broad: among central public bodies, they typically include parliamentary archives, court archives, archives of the ministries of defence, police and secret services. Among the specialized archives operating under access rules other than the general ones, the most frequently mentioned were the archives of statistical offices, the archives of civil registry and land registry records, and, as an offhand reference, the archives of health records.

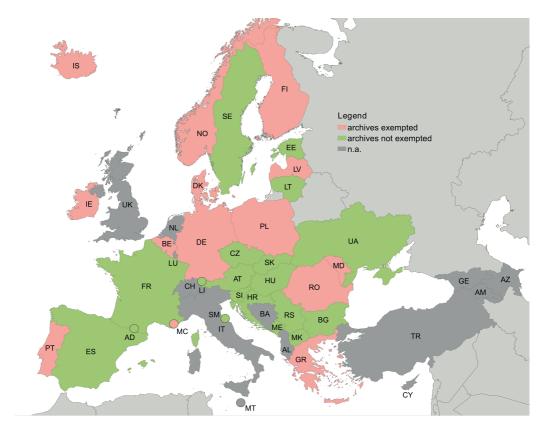


Figure 5: Exempted public archives

Refusals and appeals

There are legitimate exceptions to the right of access, as set out in the Recommendation: important public interests (such as national security) and the protection of the privacy of individuals in the file. In addition, there may be arbitrary restrictions on access to documents, but as a general rule, the restriction must be for a specified and declared period of time, and a restriction on access without a time limit is contrary to the provisions of the Recommendation.

Users can therefore legitimately face refusals, the reasons for which are shown in Figure 6.

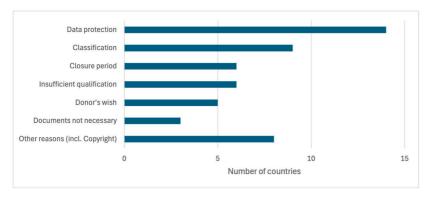


Figure 6: Reasons for refusing access in the last 12 months before the survey

As can be seen in the figure, privacy/data protection is the most common reason, but the general closure period and formal classification are also common. The lack of scientific qualification and the irrelevance of the documents to the user's research topic can also be seen here.

On the positive side, there has been a significant increase in the number of public archives that are aware of the possibilities of partial access and are able to put it into practice. 52% of archives report that they have the expertise and staff to implement partial access in practice; in 20% of countries this is only available in some archives, in 12% only in specific cases and in only four countries partial access is not practiced.

If a researcher becomes aware of the existence of restricted documents, he or she can request access to them under a special permission, but it is telling that professional users – by their own admission – are granted permission in the majority (70%), while 78% of civilian users are denied.

Costs

Equal rights and access for potential users may be limited not only by legal provisions or arbitrary practices of individual archives, but also by the cost of access. According to the Recommendation, access is part of the public services provided by archives and as such should not be charged for (Article 6). In most countries (90% of Member States), the researcher's card or equivalent digital identifier required to use an archive is free or perceived by researchers as low (mostly below €15 per year). However, archives charge more than the cost of providing the service for several services such as photocopying, scanning, issuing certified copies

and in some cases access to electronic records, which generate additional revenue for archives. Nevertheless, more than three-quarters of users in both groups found these fees to be realistic and acceptable.

PATTERNS OF ACCESS AND THE COMPLIANCE INDEX

Again, it is emphasized that the pan-European study was not intended to rank countries, and the profile of a country - the basic unit of the study - was based on data from several archives and user groups. Nevertheless, it was tempting to use the large amount of data to distinguish characteristic groups between countries on the basis of their political and social structures, administrative traditions and historical experiences. Several analyses have been carried out, partly by cluster analysis of variables related to the key principles of the Recommendation, partly by hypothetical clustering of countries and comparing their access patterns.

Our first, simplest hypothesis was the detectability of a difference between the former socialist/communist countries and the rest of Europe. This division has not yielded results, presumably because these countries have rapidly harmonized their archival - in a broader sense, information - legislation and practices with Western standards and expectations after the change of regime, importing many elements from these countries and international organizations.

Our next, slightly refined hypothesis was based on the division of former dictatorships and democracies - but here we ran into methodological dilemmas in the very process of creating the division: in which historical period can we count the political systems of each country as dictatorships?

Therefore, irrespective of political systems and based on cultural and administrative traditions, we examined the country groups in Nordic/Scandinavian, Western European/Anglo-Saxon, Eastern European and Mediterranean divisions, but found that even within each country group there are significant differences in the legal conditions and practices of access to archives. Next, included in our analysis, were the European Social Survey¹⁰ and then the World Values Survey¹¹ divisions based on social and cultural characteristics, but even these widely used (and partly criticized) methodologies did not provide a convincing basis for seg-

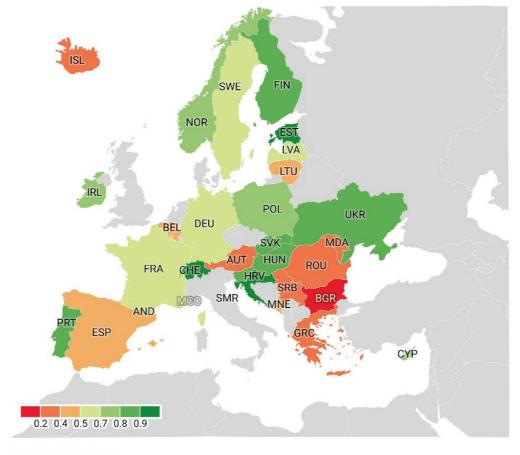
¹⁰ See https://www.europeansocialsurvey.org/.

¹¹ The Inglehart-Welzel World Cultural Map - World Values Survey 7 (2022), www.worldvaluessurvey.org.

menting and analysing the archival access situation in each country. Similar experiences were obtained using Hofstede's theory of cultural dimensions.¹²

Finally, the development of a country-by-country compliance index based on a comparison of the provisions of the Recommendation and the answers to the questions based on them was considered to be the most appropriate.

Figure 7 shows how each country ranks on this index, where the lowest score is -1 and the highest is +1. 13



Created with Datawrapper

Figure 7: Overall compliance with Recommendation R(2000)13

¹² See Hofstede et al., 2010.

¹³ The full compliance index and the operationalization of the provisions of the Recommendation for the survey can be found in Friedewald et al., 2024b.

PRESENT AND FUTURE CHALLENGES IN ACCESS TO ARCHIVES

Over the past two decades, the technological environment in which archives operate has changed fundamentally. This has led to changes and challenges in two major areas: (a) the internal functioning of archives, including digitization and the management of digital documents, and (b) the relationship between archives and their users, including the need and practice of remote access.

Digitization and digital documents

According to the pan-European survey, the vast majority of European public archives see the benefits of digitization: 73% of them see the positive impact of digitization as the ability to make digitized documents available online. Similarly, a large number of public archives cite the fact that digitized documents are directly accessible on the equipment in the research rooms, thus eliminating the need to retrieve the original document from the repository (sometimes from an external repository) and transport it to the research room, and then retrieve and return it. In this context, a majority of the respondents mentioned the reduction of the burden on archivists as an advantage. However, about half of the archives consider the fact that only a part - typically a small part - of the documents are digitized as a limiting factor.

The potentially negative effects of digitisation are mainly seen by regional or local archives. Among the possible responses offered were the impact of digitisation in terms of diverting resources from other, more important tasks, the creation of excessive expectations on the part of researchers, and the increased possibility of researchers copying and publishing documents illegally. This pattern of opinion is presumably related to the generally fewer resources available to local and regional archives, including qualified staff.

However, 56% of public archives said that they have digitized only 0-5% of their paper holdings, with a further 34% saying that they have digitized between 5% and 15% of their records. One national archive reported a digitization rate between 25% and 50%, while two national and one regional/local archives reported a digitization rate of over 50%. More than two thirds of national archives and half of regional/local archives report that digitization of their analogue audio-visual

documents (photographs, celluloid films, analogue video recordings) is in the range of 0-5%, and only one national archive reported digitization of more than 50% of its audio-visual collections.

The proportion of born-digital documents in archives is still low. For textual documents, the vast majority of archives (86%) have less than 5% of such documents in their holdings. However, more than 50% of the holdings of one national and one regional/local archives are in digital format. The situation is similar for born-digital audio-visual documents: two thirds of archives have less than 5% of such documents in their audio-visual holdings. However, two national archives have more than half of their audio-visual holdings in born-digital format.

The use of artificial intelligence (AI) has great potential in the management of both digitized and born-digital documents: such systems are used by archives to automatically add metadata to documents and to filter potentially sensitive documents from access (Colavizza et al., 2022). In the former case, however, the risk of algorithmic bias must be considered as the AI learns the biases inherent in the data: for example, when classifying documents from the colonial era, there is a risk that European colonial terminology and racist stereotypes will be reproduced (Luthra et al. 2023). In the latter case, it is important to remember that machine recognition is only based on probability, and further verification may be required before documents are made available.

Remote connection with users

Various applications of network technology allow remote connection between users and archives. Our study found that the most common online communication channel is the archives' website, which provides a one-way asynchronous link to users and potential users. This is used by 85% of national archives and all regional and local archives. Direct e-mail communication with the reference archivist offers a two-way private asynchronous contact and the vast majority of archives offer this option in their contact with users. Communication on social networks is also popular, providing information to registered users and visitors interested in the archives' programs offered to the wider public, with the possibility of providing feedback. Direct, real-time contact can be provided by chat with the reference archivist, but only a few national archives offer this option to users.

A special form of remote access is the "virtual research room", where a physically remote user can access the services available in the physical research room in an identified and responsible way.¹⁴ However, the services made possible by new and emerging technologies are also demand-driven: today's users can expect to have direct access to archival records wherever they are via the Internet.

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¹⁴ Such a "virtual research room" is maintained, for example, by Blinken OSA Archivum.

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Dieter Schlenker¹

OPEN ARCHIVES FOR SOCIAL SCIENCE RESEARCH IN WIDENING COUNTRIES OF THE EUROPEAN UNION

Abstract

Purpose: Archives play a key role in social sciences research by providing access to primary sources of public and private organisations, and individuals.

Method/approach: A research project of archivists and scholars was launched in 2024 at the European University Institute to analyse access conditions of public archives in Widening Countries, the Western Balkans and Eastern Partnership Countries.

Results: Two workshops were organised, one on 6 September during the Annual Graduate Conference on the history of European integration at the European University Institute, and one during the 34th International Archival Day Conference organised by the International Institute of Archival Science IIAS in Maribor, Slovenia, on 26-27 November 2024. The first workshop was dedicated to a discussion amongst scholars of European integration history, and the latter workshop was attended by archivists of public archival institutions.

Conclusion/findings: The research papers presented and discussed during the two workshops provided an up-to-date overview on legal provisions and practice in providing access to public archives in EU Widening Countries, the Western Balkans and Eastern Partnership Countries. Based on the research results and as a follow-up to the investigation, the project team intends to formulate potential elements for a training programme curriculum for archivists on the principles of access to archives in Europe.

Key words: Open Archives, European Union, Archives, Social Science Research

¹ Director, Historical Archives of the European Union, European University Institute, Florence, Italy, assistant professor at the AMEU ECM and member of the IIAS, email: dieter.schlenker@eui.eu.

INTRODUCTION

Archives in the European Union play a key role for academic research in social sciences. They preserve primary sources produced by public and private institutions and shape research by making these sources available and accessible. They provide open, equal and inclusive access to historical documents in custody according to common principles formulated by international, European and national archival law, reinvigorated by codes of ethics and declarations of the profession. They also play a key role in transparency and accountability of public administration by preserving and giving access to trustworthy and authentic records and by responding to the citizens' right to freedom of information.

In the aftermath of the 1989 events in Europe and the following political transformation of Central and Eastern Europe from the previous Soviet regime towards democratization, an intense discussion began in the European Union about the ethical foundations and the mission of Archives in democratic societies. The political change did not immediately lead to overall modernization of the legal and regulatory framework for archival practice. These processes were long-term and are today still unfinished. Archives in Europe, and in particular in EU Widening Countries, have diverse legislation and practice on access to archives.

In 2024, the European University Institute launched a research project under its Alcide De Gasperi Research Centre to analyse the accessibility conditions, research experience, and levels of education and training of archivists and scholars on the right to access public archives in EU Widening Countries. The inter-disciplinary project involves both, archivists and scholars. Two workshops were organized to discuss access conditions in public archives and draw conclusions from the analysis. A round-table discussion took place for historians of European integration during the Annual Graduate Conference on the History of European Integration at the European University Institute on 6 September 2024, while two workshop sessions were held for archivists during the 34th International Archival Day Conference, organized by the International Institute of Archival Science IIAS in Maribor, Slovenia, on 26-27 November 2024.

The research on archival legislation and practice in Widening Countries analyses the ethical principle of open archives as key element of transparency and accountability of public governance, as called for in the Council of Europe's Recommendation R (2000)13 on a European policy on access to archives, the EU Archives Regulation 354/83 and the EU's Access to Document Regulation 1049/2001. The research project also voices the insights of archival professionals in Widening Countries in facilitating access to primary sources for social science research.

1. THE CONTEXT FOR ACCESS TO ARCHIVES

As integral part of public administration, archives work in the service of society and citizens. By preserving and making available records on the decision-making processes of public institutions, they shape democratic societies and secure the common memory of societies. Within the European Union, strong and diverse archival traditions exist in the member states. At the same time, common ethical, procedural and technical principles have evolved through cooperation and harmonization initiatives that secure a rights-based approach on access to archives. Open and equal access to archives has become a key element of the EU's democratic governance model of transparency and accountability. Already in 1966, the international archival professionals, gathered in the Extraordinary ICA Congress in Washington, had issued the first international declaration on free access to archives. In 1968, the ICA Conference in Madrid called for a general limitation of access restrictions for 30 years (Valge, 2007, 195–198). In 1996, the ICA agreed on a common Code of Ethics on access to archives, and 15 years later, in 2011, UNESCO published its Universal Declaration on archives and their role in democratic societies

Following the events of 1989 in Europe and other regions of the world, the democratic transformation and the principles of access to archives became relevant topics for the international archival profession. In 1993, the ICA conference in Mexico established an expert group on archives of former repressive regimes to develop recommendations on archival access for countries in process of democratisation (Quintana, 1997, 3). The expert group followed the idea that: "Archives have a decisive influence on the lives of people. Nothing serves as a better example of this than the way in which documents are used to serve the ends of repression" (Quintana, 1997, 6). Access to the archives of repression was considered key for individual rights to reparation and compensation, restitution of confiscated goods, amnesty for political crimes committed during the regime,

and indemnity for victims and families. As precondition to access, the experts considered the requirement of securing archival holdings from destruction. A primary example was the determination of the people in the German Democratic Republic in the aftermath of the Fall of the Berlin Wall to preserve the archives of the State Secret Service STASI, which was later used to purge the responsible of the former regime from the new administration and to compensate victims (Quintana, 1997, 6–7).

The experts also claimed that these archives would need to be immediately placed under the new law and under the authority of the democratic government, and ultimately be kept in dedicated archival institutions. New archival legislation should cover the right of free access, the decision on consultation by third parties, and the right to obtain files of repressive agents. Moreover, a code of ethics should be established for the archivists to preserve the integrity of the documentation, to serve the people and grant free public access (Quintana, 1997, 12–13). The principles of access to archives defined by the expert group triggered the preparation of the International Council on Archives' Code of Ethics, published in 1996, which confirmed the public's right of access to archives of public bodies on equal and fair terms, and claimed that both public and private entities should open their archives to the greatest extent possible. Archivists should pro-actively participate in the decision-making processes on access to archives. Any access restrictions should be clear, of stated duration and based on law with the possibility for appeal to a denial of access (ICA, 2012, 8–11).

2. ACCESS TO ARCHIVES IN EUROPE

In Central and Eastern Europe, the protection, preservation and opening of archives during the years of democratic transformation was important for restoring the rule of law and for protecting the rights of victims (Kecskeméti & Székely, 2005, 10). The Council of Europe and the European Union supported this transition with the Resolution of the Council of the European Union in 1993 calling for a group of experts to report on the situation of public archives in the European Union with the Council of Europe Recommendation R (2000)13 on a European policy on access to archives, and with another EU Council resolution in 2003 calling for a report of an expert group on public archives in the enlarged Europe-

an Union. Moreover, during this period, the European Union formalised the citizens' right to access to public records in its Freedom of Information Regulation 1049/2001. The EU also raised the protection of personal data in public records, first with Regulation 45/2001, then in 2016 with the General Data Protection Regulation 2016/679. Finally, the EU strengthened the archival cooperation amongst National Archives and EU institutions with the establishment of the European Archives Group in 2004.

Under the communist regimes, human rights had been seriously violated in Central and Eastern Europe. During the democratic transformation, the archives changed from an instrument of power towards a service to citizens and civil society. The main question after 1989 revolved around the redressing of the victims and their right to know the truth. The access to the files of former secret services was, therefore, a crucial precondition to the restoration of individual rights, the right to privacy, the public and judicial interest, and finally the scholarly research interest (Gruodyte, 2015, 151-152; CoE, 2006, 14). Two different approaches were chosen, either the provision of full access (e.g. Bulgaria, Czech Republic, Germany and Slovakia) or that of limited access (e.g. Estonia, Hungary, Latvia, Lithuania, Poland and Romania) (Gruodyte, 2015, 155). In Germany, during January 1990, civil society activists occupied the State Secret Service (Stasi) headquarters to hold officials from shredding evidence when already up to 16,000 mail sacks were piling up full of shredded documents. The GDR government intended to destroy the files to avoid politically motivated revenge and the use of the files by Western State Security Services. When various leaks of politicians with Stasi past, as well as untrue allegations of collaboration against activists went to the press, the Eastern German Parliament decided in favour of opening the files to the victims and using them to uncover the truth. It placed the archival custody under the Parliament and the Federal Commissioner Joachim Gauck (Danielson, 2004, 176–180).

The Council of Europe in Strasbourg got active in 1992, organising for November 1994, in cooperation with the European Board of the International Council on Archives, the first conference of directors of National Archives. It then established an Archives Assistance Programme for democratic transition and prepared draft recommendations on access to archives, which were published in 1997. The rec-

ommendations called for equal access, short closure periods, accountability, rule of law and privacy, improved preservation conditions, systematic declassification, education and training of archivists, the development of international standards, the use of ICT, the public availability of finding aids, and the preparation of codes of good practice and ethical principles (Tyacke, 1995, 133–136; Valge, 2007, 193–194; Kecskeméti & Székely, 2005, 10).

On 13 July 2000, the Council of Europe adopted Recommendation No. R (2000) 13 on a European policy on access to archives, which expressed the common ethical, procedural, and technical principles on rights-based access to public archives in Europe. It called for any restrictions to be duly justified and limited in time, the harmonization of rules based on law, and free access to public records and finding aids. The Recommendation is considered the first intergovernmental standard on archives access policy and practice in Europe. It encouraged the development of access policies based on democratic values, human rights and the rule of law, acknowledging that access to public archives is a right and not a privilege (Kecskeméti & Székely, 2005, 7; Friedewald, 2024, 61). Archive users should be entitled to request access and to appeal against the rejection of access. Moreover, Archives should not deny access to material they deem irrelevant for the research in question and should inform users if only partial access is granted. Access rules to private archives should align with those for public archives (Access to archives, 2005, 15–17).

Based on its recommendation, the Council of Europe commissioned a survey in 2003, as regards archival law and practice on access in the 45 member states and signatories of the 1954 European Cultural Convention of the Council of Europe. 22 of them claimed their legislation would be fully compatible with the recommendation, 12 stated compatibility with few exceptions and 10 claimed to have respective archival legislation revision on the way. While 14 respondents had no general disclosure period in their archival regulation, 20 respondents applied 30 years rule years. 50 percent of respondents reported to have obstacles for research on post-1950 files and the majority claimed their archival legislation was not adequate to fully respond to the recommendation (Kecskeméti & Székely, 2005, 18–26, 34–38). The survey of 2003 revealed significant shortcomings of traditions that were still in favour of archival secrecy. 20 years later, in 2022, the

Council of Europe commissioned a follow-up survey. National legislation now corresponded with few exceptions. Archival acts had been updated in the light of the arrival of information technology and the internet, due to important new European regulations, such as the GDPR and the European Data Act. The closure periods had been harmonized towards 30 years and overall, progress was made in implementing the Council of Europe recommendation of 2000 (Friedewald, 2024, 57–63). "The survey showed a visible shift from the challenges of secrecy and classified documents towards a balance between transparency on the one and data protection on the other hand" (Friedewald, 2024, 65–66).

In a 2021 study, Mikuláš Čtvrtník compared access law of archives in selected European countries, United Kingdom, France, Germany, Sweden, Switzerland, Czech Republic, and the EU institutions and defined the functions of closure periods in protecting recent, sensitive and valuable information from misuse, and in protecting the administration and its efficiency, privacy, and commercial or business interests. "The study demonstrates that, over time, a gradual release occurs in what was initially a very restrictive regime of access to public records and historical sources" (Čtvrtník, 2021, 319). In the United Kingdom, in 1967 the closure period was lowered from 50 to 30 years. This became the average closure period on continental Europe introduced 1979 in France, 1988 in Germany, and 1983 in EU institutions. The EU's Freedom of Information Regulation of 2001 obliged not only public archives to make records available to the public, but covered all records from the moment of their production in public entities (Čtvrtník, 2021, 321–322). Recently, the United Kingdom moved to 20 years archival closure (2010), and Switzerland introduced general open access to federal public records in 2006 (Čtvrtník, 2021, 328–329), thus, coming close to the Swedish approach introduced already in the 1766 Freedom of Press Act. Central and Eastern European countries generally followed the 30-years EU model in the 1990s (Čtvrtník, 2021, 331–332). One exception was the national archives of Romania, which remained restrictive even under the new Archival law of 1996 with privileged access remaining general practice. In 2002, another law reform guaranteed for the first time in view of EU accession the right to access to information of public interest, and the amendment of 2007 showed a clear will for reform, democratisation, and transparency (Dobrincu, 2012, 19–23).

3. COORDINATION WITHIN THE EUROPEAN UNION

The European Union became active in the field of access to archives following the events of 1989 at the same time as the International Council on Archives and the Council of Europe. On 14 November 1991, the Council of the European Communities issued a resolution that stressed the role of archives in times of democratic transition and in line with the objectives of the Maastricht Treaty of 1992 establishing the European Union. The Treaty of 1992 introduced a common European citizenship and brought to the fore the common European cultural heritage as an instrument for the functioning of democracy. Public archives were considered key in providing access to public records and for writing the history of the European Union, the entire continent, and its individual nations. The resolution called for an expert report to analyse the organization of public archives in EU member states and to come up with areas for coordination and cooperation. Examples were the appraisal and disposal of records, the preservation of archives, the improvement of access conditions, the revision of national legislation, the management of digital archives, the exchange of archival information through digital networks, the training of archivists and the recognition of diplomas, the handling of private archives, and finally the work methods of EU institutional archives (European Commission, 1994, III-V).

With regard to public access to archives, the experts reckoned the general acceptance in Europe of the 30-years disclosure rule as a common standard, but also noted that his should be considered an upper limit, in particular in view of freedom of information requirements. The main recommendation on access referred to: guaranteeing equal access to all users, opening reading rooms in public archives for at least 40 hours per week, not limiting the number of items requested for consultation by the readers, making available the full range of reprographic processes and a system of exchange through reproduction, the publishing and distribution of bilingual user guides, making available published repository guides, not preventing access in those cases where full inventories were absent, exchanging inventories of collections of international interest, establishing an archival telematic network on European level, providing minimum provisions for the services to be given to readers and researchers, and finally training all reading room personnel towards receiving readers (European Commission, 1994, XII and 30).

The preceding account shows, on the one hand, the profound similarity of the legal and ethical principles which govern the availability of archives in the 12 Member States of the Community and, on the other hand, the great diversity of formulas adopted by the laws and regulations of these 12 Member States regarding the concrete expression of these principles. It seems illusory (and moreover in the main useless) to seek complete unification of these laws and regulations, many of which are connected with ideas and traditions which are specific to each national culture. However, it could be wished that where analogous documents of all countries are concerned, the rules of access be harmonized, with duly justified exceptions. (European Commission, 1994, 43–44)

Moreover, a European definition of personal data and privacy was desirable to clarify the conditions of access to archives, and the report called for the general strengthening of cooperation in archival methodology, management and the opening of archives to the public. Transnational training programmes, information exchange and standardization in information technology were also deemed important. Finally, the report referred to the transformation in Central and Eastern Europe as an important contribution to the reinforcement of democracy in Europe:

"This awareness is even more important in that archives in the countries of Central and Eastern Europe are in general in a state of decay, owing to a lack of funds and qualified personnel. Remaining within the sphere of the resolution, attention given to the state of archives in certain countries or furthering cooperation with regard to their use will also contribute to reinforcement of democracy throughout Europe." (European Commission, 1994, 78–79).

Ten years after the first report, on 6 May 2003, the Council of the EU issued a new resolution on public archives in member states and convened once again a group of national experts to prepare a report on increased future cooperation in the enlarged Europe. The report was presented in Brussels on 3 June 2004 and covered the organization of the archival sector in Europe, access to archives, the role and training of archivists in the 21st century, preservation and damage prevention of archives, electronic archives, activities at the European level, and finally audio-visual archives. The main actions in the field of access to archives referred to the monitoring of EU and national legislation relating to the access to and the establishment of an inventory of existing archival legislation within the

enlarged European Union. Moreover, the report recommended the creation of an official European Archives Group for a first period of 3 years to implement all recommendations (Council of the EU, 2004, I–IV).

"In a world of continuous and rapid change, modern archives services in the 21st century are an element of continuity, stability and provide a solid base for essential information and indispensable documents and archives, which are among the prerequisites for the democratic functioning of our societies." (Council of the EU, 2004, V). The new European Archives Group became a standing official expert group under the rotating Presidency of the Council of the EU and still operates today. Coordinated by the European Commission, it acts as main forum for cooperation, standardisation and information exchange amongst national archives of EU member states and with EU institutions. Its membership also includes the Historical Archives of the European Union at the European University Institute in Florence. During the negotiations for the General Data Protection Regulation, for example, it represented the needs of public archives and achieved the recognition of the principle "archiving in the public interest", which permits the preservation of relevant personal data for transparency, fundamental rights, accountability, scientific and research purposes, beyond its strict administrative use, for long-term preservation and public access (European Archives Group, 2018, 5).

CONCLUSION

In democratic societies, access to archives is a general right and not just a privilege. Much has been achieved since the first claim of public access to archives in the French Revolution of 1789 and the first legal reference to access in the Swedish Press Freedom Act of 1766. Important steps towards the democratic provision of access have been made in the West during the Cold War. The Freedom of Information movement has further extended access rights to public documents onto the moment of their creation and overriding the general disclosure periods set by archival legislation.

In the aftermath of 1989 and the democratic transition in Central and Eastern Europe, the Council of Europe and the European Union became active and played important roles in facilitating the democratization and modernization of archival legislation and practice in the countries in transformation. Still today, though, archival legislation and the accessibility of public archives continue to vary.

The research project OPENARCH of the EUI's Alcide De Gasperi Research Centre analyses the development of accessibility conditions in EU Widening countries since the events of 1989 and seeks to give guidance to the archival profession in the Western Balkans and the Eastern Partnership countries in the field of open access to archives. Moreover, the project consults the experience of scholars in the social sciences when consulting public archives, and identifies areas for strengthening cooperation and training on public access to archives.

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Charles J. Farrugia¹

PUBLIC ACCESS TO ARCHIVES IN MALTA SINCE ITS EU MEMBERSHIP: IMPACTS ON THE SECTOR

Abstract

Purpose: Access to archives is essential for both the academic community and for ensuring transparency in democratic societies. In Malta, archival access has fluctuated over time due to various historical, political, and logistical challenges. This study explores the impact of Malta's accession to the European Union (EU) in 2004 on access to archives, focusing on changes in policies and practices.

Methodology: The study employs a qualitative approach, analysing existing literature on archival access in Malta and drawing from the author's personal observations during the transitional period. The author, who played an active role in this transition, provides insights based on first-hand experiences.

Results: The findings reveal a significant transformation in archival access post-EU membership. Legislative reforms, shifts in cultural attitudes, and the new opportunities associated with EU membership substantially influenced how archives in Malta manage and deliver services to the public.

Discussion: EU accession had a profound impact on Maltese archival practices, with improved access to archives due to regulatory changes and a broader cultural shift towards transparency. The study highlights the positive role EU membership has played in enhancing public access to Malta's archival resources.

Keywords: archival science, access to archives, European archives.

¹ Dr. Charles J. Farrugia, Ph.D. (Aber.), National Archives of Malta, Head, Department of Library, Information and Archives Sciences, University of Malta, email: charles.j.farrugia@gov.mt.

Archival cooperation has changed over the last few decades. The change was the result of several factors, not only the technological revolution we experienced but also new notions of rights of access to information. This paper will focus on changes that happened in the Maltese archives domain. It will investigate to what extent changes might have been the direct or indirect result of Malta's joining the European Union (EU) in 2004.

The transitions in the sector have been the topics of discussion of several international fora. In May 2006 the VII European Conference on Archives was organised in Warsaw. This joint initiative between the Association of Polish Archivists, the State Archives of Poland and the European Branch of the International Council on Archives (EURBICA) focused on the topic "Archivist: Profession of the Future in Europe" (Urbaniak 2006, p. 358). I was a speaker in that conference and looking back at how the sector changed in Malta made me revisit the proceedings of that event. Of particular interest is a quote from the foreword by the Director of the Polish State Archives at the time, Daria Nałęcz. She wrote,

"The title of the conference: "Archivists: Profession of the Future" may seem inappropriate or excessively provocative. This element of surprise, however, should abate taking into consideration an increasing role of information in the life of modern societies, stress on facilitating access to information, including that of significance for individuals, pertaining to the history of our families, as well as information focused on wider phenomena, desire to gain knowledge on our historical environment." (Urbaniak 2006, 16)

Inspired by the overarching theme of the conference, during the Warsaw event I presented a paper entitled "The Archivist in Today's World: Regulator or Facilitator?" (Urbaniak, 2006, 104–133). The points for discussion focused on the multitude of roles the archivist plays when it comes to appraisal, regulating access, exploiting the holdings and convincing society that archives are relevant. This was applied on the Maltese scenario and highlighted the legislative obligations imposed as part of EU membership and how this changed the rules of the game when it comes to access.

International collaboration is nowadays quite common not only due to the acknowledgement of the benefits by stakeholders but also due to the economic interdependence of businesses and companies all over the world. Mergers and franchises are rapidly taking ground world-wide, even in countries that in the past were unreachable either due to logistical and geographical barriers or due to political ideologies that promoted segregation and isolation.

The archives sector by nature is very specific and a by-product of national or regional realities. Since archives reflect the legal, administrative and operational functions of the creating bodies, they find it more difficult to align themselves with the globalised way of conducting their business. Traditionally they would devise strategies and solutions that cater to their needs. Gradually, we started seeing archives looking beyond their shores. Initially this was aimed at identifying whether other institutions have already tackled a particular challenge, the way they did it, and whether international or regional solutions can be applied locally. The archivist changed the role from a lone ranger to a member of the international community (Farrugia, 2016).

There is no doubt that one of the most commendable actions in breaking the isolation in the field of archives was the setting up of the International Council on Archives (ICA) on 9 June 1948². Notwithstanding its non-governmental status ICA managed to acquire international recognition through its world-wide membership and its consistent operations and support to the profession of archivists and records managers over the years.

When one looks at the European Union (EU) level, it is also worth noting that although countries members of the EU have some of the oldest and most important archival holdings, minimal priority was initially given by the EU on both the upkeep and collaboration in the field of archives. The assessment done by Patrick Cadell in 1991 led him to state that, "there was in general a profound ignorance amongst administrators of what archives were for and what they are about, and ... national archivists were almost as ignorant of how their colleagues operated in other countries." (Cadell, 2008, 418).

A strong political statement was made through the Council Resolution of 6 May 2003. Apart from the political message that the EU was appreciating the importance of archives for a democratic environment, the same resolution acknowl-

² ICA was set up with its main aim to foster a community of archivists and to facilitate collaboration between them and with the outside world. More information about the vast array of opportunities and services is available at www.ica.org.

edged the lack of information sharing amongst the sectors. It also encouraged the setting up of a group of experts with a specific remit, which included "enhanced coordination, information sharing and exchanging of good practice between the archives services." (Council of the European Union, 2003).

This drive towards a larger and more unified EU led to new thinking and conscious efforts to identify areas which could be promoted as part of a bigger process to strengthen European identity. As part of this emerging collaboration one of the first tangible results was the publication of the first Report on Archives in the European Union, commonly known as the "Black Book." This report provided policy makers and archivists themselves with a stocktaking of the situation and the possibility to start looking at legal frameworks, administrative structures and metrics on an EU-level.

The end results of these measures were positive in that the EU now had official structures defending the archives domain. These structures still need to be strengthened further, but at least, while respecting the traditions of all countries, there is a common forum where one can discuss the challenges and come up with common policies for the sector at EU level. In parallel with political challenges, the sector was also reacting to constant changes at the core of the profession – what to teach archivists; what does the public want from archives; new challenges of data protection and freedom of information; and above all new media mainly in the form of digital technology that revolutionised the whole domain (Farrugia 2016, 117).

The transitions that we, practicing archivists, have noticed on the job during the last few decades have been mapped by several academics. One such scholar is Terry Cook who interpreted the transition of national archives from Juridical Legacy to Cultural Memory, to Societal Engagement and finally to Community Archiving.³ These paradigm shifts have seen the archivist transform him/herself from a passive curator to an active appraiser, into a societal mediator and finally to a community facilitator.

Another perspective is that by Margaret Hedstrom and David Bearman. They have analysed the changing scenario with the advent of electronic records and recommended "reinventing archives" entirely by moving focus away from actu-

³ Cook has several works on the issue of archival paradigms. See Reference List.

al custody of records in archives towards controlling records remotely as these reside in on interconnected computers all over the government or business (Hedstorm, 1993, 97).

What is common in the line of thinking between various academics who worked on this issue is that there is an agreement that archives are experiencing a paradigm shift. This can be attributed to several factors including unprecedented geo-political, social and economic changes. Writing about these shifts, a previous Keeper of the Public Record Office (now National Archives) of the United Kingdom, Sarah Tyacke, grouped the reasons for this transition from a perspective on three levels: philosophical; technical; and communication through a common language (Tyacke, 2003, 3).

Against this background of change and rapid shift from a local to a global perspective the ICA came up with a declaration enshrining the fundamental concepts on archives. The Universal Declaration on Archives (UDA) is not simply a political statement but also the result of long drawn-out political, academic and professional debates in the sector. The first version of the UDA was written by archivists in Quebec in 2007 and it was later adopted by the Section of Professional Associations within ICA. The Declaration was brought up for approval at the AGM of ICA held on 29 November 2009 in St Julian's, Malta. At that session there was a suggestion by South Africa to postpone its approval to bring it closer to UNESCO principles. The Declaration was approved in principle but re-discussed and approved in Oslo Norway on 17 September 2010. Another milestone in its development was its endorsement by the 36th Session of the General Conference of UNESCO in Paris, on 10 November 2011.

The Declaration provides decision-makers world-wide with a powerful and succinct statement about the relevance of archives in society. It highlights administrative transparency and democratic accountability as well as the preservation of collective social memory as fundamental roles of archives. The document is a step forward towards an international consensus on the scope and nature of archives. The Declaration mentions the concept of "collective social memory." The challenge of such a document was the fact that its target is world-wide. When one looks at the history of archival development in Europe, we also realise there are big challenges arising from different historical, political, and economic back-

grounds. This might explain why the focus on the archival legal frameworks and policies started gaining momentum during the last two decades.

Writing in 2008, Patrick Cadell who was one of the protagonists in the initial discussions and policy formations, argued that it was during the presidencies of the Netherlands and that of Greece that archives took priority on the ministers of culture agenda (Cadell, 2008, 417). The Report commonly known as the "Black Book" which came out in 1994 gave a snapshot of the situation in archives in Europe. The groundwork led to a milestone in the sector. The Recommendation on Access to Archives (2000(13)) paved the way to greater cooperation. Furthermore, the sector established a structured mechanism in the form of the European Archives Experts Group (EAG) which took over the role of an official channel between national archives in the EU countries and the Commission.

Individual countries were gradually affected by the new thinking of the EU on archives. The impact might have been more pronounced in those countries like Malta that were candidate countries and thus fully focused on aligning themselves with all the policies of the EU. Malta joined the EU on 1 May 2004 in the largest enlargement at one go of the Union.⁴ In the EU network of archivists, sectors like the National Archives of Malta found a golden opportunity to learn from, network and grow.

THE EU MEMBERSHIP IMPACT

This paper identified three domains that were strongly impacted as a direct result of Malta's joining the EU. These are in the areas of legislation, mobility possibilities and funding opportunities. To some extent the changes were even felt earlier, as the preparation for membership was already leaving a mark. The main impacts will be referred to under the three main categories of impact.

Legislation

Like most colonial countries Malta established its own national archives quite late.⁵ Considering that Malta holds archival records dating back to the fifteenth

^{4 10} countries joined the European Union in that enlargement: Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

⁵ For a detailed account of how the National Archives of Malta was set up see Charles J. Farrugia, The Making of a National Archives: the case of Malta 1944-1990, in Carmel Serracino (ed.), Ardet Amans: essays in honour of Horatio Caesar Roger Vella, Midsea Books, 2022, pp. 267-90.

century, the storage and organisation of huge amounts of records was haphazard and offered substantial challenges. The National Archives Act 1990 formally established the institution at a time when the Maltese government was already targeting EU membership. The current operations of the National Archives are conditioned by the second legal framework that was enacted in 2005.

The first legal framework was an empowering one. It established the institution but left it operating as a section within the Department of Libraries and Archives.⁶ However, that starting point was important and it provided repositories and also opportunities for personnel to start joining the National Archives. It also triggered Malta's participation in the international events organised by ICA and the EU related bodies

Due to EU membership Malta had also to align itself with a legal regime that also impacted public records. The Malta Data Protection Act was enacted in 2018 and the Freedom of Information Legislation in 2008. The impact was substantial. Not only did these mechanisms clarify the rules of access but also provided Maltese citizens with a European yardstick with which to compare access, as well as the possibilities of appeal for any decision of closure that might come their way.

One direct impact of the EU legal thinking that I can attest to from experience at the archives was the complete change of frame of mind in terms of the ownership of records and the information within them. One case we had was a request for medical information from a file of personnel who worked with the British Forces in Malta. Notwithstanding that it was the client who was asking for the information for medical reasons, the interpretation was that the information was owned by the government and the closure periods in the National Archives act had to be observed. This meant depriving that citizen from access to his health information in the government file. All this changed with the putting into place of the full corpus of legislation. Under the provisions of the Data Protection Act we revised our access procedure for data subjects. While the data is in a government file, since it is about a data subject the interests of the latter take precedence.

⁶ For an analysis of that legislation see Maximilian Farrugia, A comparative analysis of the National Archives Act (1990) in relation to International Archivel Legislation, University of Malta 2000.

Mobility opportunities

Another change brought about by EU membership was a strong emphasis and resources for mobility of students and workers. Up to the process for joining the EU Malta already had few opportunities for its youngsters to study abroad or explore international placements and experiences. This often emerged from programmes offered to Commonwealth countries or out of bilateral cultural agreements. For Malta, the Cultural protocol with Italy offered several opportunities for such exchanges.⁷

The preparation phase to join the EU started opening new opportunities which found their fulfilment with membership. As National Archives of Malta, we started experimenting with projects that were funded under the EU programmes. The first project the National Archives of Malta embarked upon in 2005 was under the Leonardo Programme with a project entitled "Preserving Digital Archival Contents." It was a project that we led and involved several participants. The participants included the Friends of the National Archives of Malta, Linguamine Ltd., the Institute of Mathematics and Informatics of the Bulgarian Academy of Science, the National Archives of Bulgaria, the Open Society Archives Budapest, and the two private digitisation companies Datadisc.it and Global Microfilm Digital SRL from Italy.⁸

During the same year the National Archives of Malta also got involved in another project, ARISTHOT: Sciences in the Mediterranean. The project aimed at developing and using Information Society tools to preserve and promote natural, applied, traditional and auxiliary sciences from the Mediterranean basin. The strength of this project was not in the amount of funding Malta received but more in the fact that this project was managed by a network of fourteen institutions, 10 from the EU and 4 from Mediterranean countries.

Needless to say, other EU-funded projects followed and have now become part of the daily business process of the National Archives of Malta. However, the focus on these two first projects is on purpose. These projects gave the first exposure to almost all the staff of the institution at the time to travel abroad, visit other

⁷ The author of this article was a recipient of a Commonwealth scholarship to specialise in Archives and Records Management at UCL in the UK during the academic year 2000-2001.

⁸ For a detailed report about the project see National Archives of Malta Newsletter, Issue 10, July 2007, pp. 3-5.

archives, and build friendships with archivists abroad. Twenty years down the line these friendships and networks are still flourishing and benefitting the sector.

Funding opportunities

Several organisations and members of the public associate EU membership with funding. While it is true that there are huge sums of money to be tapped into at EU level, the archives sector in Malta benefitted much more in terms of expertise rather than funding.

Notwithstanding, the National Archives of Malta has participated in several EU funded projects which provided it with a steady stream of funds. The funding was not huge but was enough to start putting focus on areas that were overlooked – training, finding aids creation and publications.

One such project was the Archives Portal Europe in which the National Archives of Malta was one of the founding partners. This project has bestowed so much knowledge on our cataloguing staff. It has also provided us with the main tool of our catalogues. The project is now a standalone product backed up by the Archives Portal Europe Foundation of which NAM is a member.

The European Digital Treasures (EDT) was another bigger project in which we participated fully. It focused on identifying treasures within European archives that can be communicated to wider audiences using unconventional methods. The transmedia exhibitions, multi-lingual catalogues and merchandising convey the spirit of European collaboration and values. The whole learning experience is now feeding into other projects, with the current focus on a newly awarded project led by Spain under the heading "Sustainable Archives and Greener Approaches" (SAGA).

CONCLUSION

The changes described above have affected the very essence of our services to the public, especially access. It is rather difficult to segregate what actions arose from membership in the EU or from a conglomeration of other factors. There were developments such as the focus on standards development by ICA that made a huge impact on how national archives operate. The development, publication and promotion of ISAD(G) brought a silent revolution in the area of archival de-

scription. This was further promoted through the development of a free to use open-source software that made it possible for several archives to apply standards on an electronic platform (AtoM, 2022). Combined with better opportunities for mobility through internships, scholarships and professional exchanges, it became possible for small national archives to produce much more than they could ever have done if they remained in isolation.

All these factors are helping in overcoming the limitations imposed by market economies through the sharing of resources. This line of action is imperative for a profession that comparatively speaking will always remain small and specialised compared to several other streams of specialisation. The future still holds important challenges for the profession. The positive impact of EU membership on access to archives cannot be denied. The current discussions about the digital challenges and the impacts of AI on archives augur well for a future in which better access will be further guaranteed

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Dorota Drzewiecka¹

FACTORS RESTRICTING POST-1989 ACCESS TO RECORDS IN POLISH ARCHIVES

Abstract

Purpose: The purpose of this article is to evaluate the laws and rules of accessibility of documentation in Poland after 1989, and the pace of changes, their causes and restrictions.

Method/approach: The applied approach was based on the historical and constitutional regime as well as common methods applied in social science – a questionnaire based on the research of 2022 (Friedewald et al., 2023).

Results: The evolution of the restrictions of access to contemporary documentation was reproduced based on the analysis of legal acts, ordinances of the General Director of the State Archives, and the internal policies of the archives. The article also presents the results of the surveys conducted in 2024 among 26 Polish scientists (historians) using public archives.

Conclusions/findings: After 1989, Poland has undergone evolutionary changes in terms of accessibility to the recent archives for scientists (and citizens as whole). Nonetheless, the rights to protection of personal data have been in effect and continue to have a significant impact on the archivists who decide whether to grant access to the documentation or not. The survey confirmed that older documentation is more accessible than the recent one (including sensitive or confidential documentation). The archives of institutions were not subjected to the Union laws; the historical (national) archives did not struggle with complying with them, since the courageous transformation of the Polish archives in the second half of the 20th century was consistent with the EU policies. However, classified archives (of the central authorities and the Institute of National Remembrance) remain a problem as they have not complied with the Union standards, and the Polish archive authorities are not empowered to interfere in their accessibility policy.

Keywords: accessibility to archives, archival laws, Polish National Archives after 1989, personal data protection, research work of historians.

¹ Dr Dorota Drzewiecka, Assistant Professor, Department of Archival Studies and Auxiliary Sciences of History, Institute of History and Archival Studies, University of the National Education Commission, Krakow, e-mail: dorota.drzewiecka@uken.krakow.pl.

It is a common belief that the Polish society – remarkably active in bringing down the "*Iron Curtain*" – regained freedom in 1989. Indeed, that was when the first partially free post-socialist parliamentary elections were held. Lech Wałęsa would win presidential elections one year later. Having ruled the country on Soviet orders for over forty years, the Polish United Workers' Party was dissolved on January 29th 1990. That same year, censorship was abolished, and local governments restored. The free market and private entrepreneurship began developing speedily (Blok, 2006; Codogni, 2012; Chwalba, 2005).

In contrast to political transformation, societal and cultural changes would not be revolutionary in nature. The 1990s were a time of poverty, extraordinary high unemployment rates and social discontent, ultimately resulting in post-communists returning to power, a development which must have contributed to a slowdown in the process of opening socialist-time archives. While archives of the liquidated ruling party were immediately incorporated into state (i.e. public) archives, records of the secret service or prosecution services, for example, were transferred to the Institute of National Remembrance formed in 1998. The institution does not report to the General Director of State Archives, record access is restricted in multiple aspects, and the process of bringing communist criminals to justice has remained an open issue until this day, while investigating recent history is a tedious process, universally dependent on the political climate and personal beliefs of individual historians. Extreme differences in the assessment of Lech Wałęsa – possibly a communist secret service collaborator in the 1970s – are the most glaring example. Failing to penalise perpetrators of the 1981-1983 martial law is another high-profile case, although the trial took place in times of newly free Poland (Cenckiewicz & Gontarczyk, 2008; Paczkowski, 2021).

It might seem that devoid of most sensitive records, state archives ought to be open and friendly to users. Meanwhile, the General Director of State Archives passed an ordinance in the year 2000, regarding archival access; the regulation could have been openly considered a normative relic of the previous era. A list of particularly blatant decisions follows:

- Ban on providing record access to foreign nationals not holding consent from the local archives' director, or (in some cases) the General Director of State Archives,

- Option of user competency verification by archivists should any doubt arise, letters of recommendation could be requested: from institutions of higher learning for students, from employers for employees,
- Possibility of ordering a search of archive users' personal belongings (such as bags or office resources),
- Ban on record photography; the only option for securing copies involved ordering copies from archivists for relatively high fees,
- Option of introducing a month-long summer break in archival office operations, making research extraordinarily difficult for amateurs interested in visiting archives during the holiday season,
- Failure to expand regulations to include a clause on fitting user research room workstations with power sources, a circumstance some archives would take advantage of by introducing a ban on charging laptop computers, cameras and/ or mobile phones, and using financial savings as a justification/excuse.

Furthermore, the National Archival Resource and Archives Law of 1983 introduced a so-called (thirty-year) grace period; a ban on access to records for three decades from the date of their creation, any derogations requiring the archive director's consent. Under the Polish archival system, records considered perpetual shall be preserved in the record-generating institution's archives for a term of no less than twenty-five years. While records had been greatly simplified or abandoned over recent years, another five years was added for state archive processing purposes. Consequently, any records received by historical archives would not be provided to users for the first five years as of the date of their reception, even if publicly available at the record-generating institution pursuant to the public information access principle.

Another essential Polish development involved the following predicament: until roughly the year 2000, state archives – even if scanning their archival records – rarely made them available online, related decisions in all probability arising from a concern that one day, these institutions would no longer be needed (Drzewiecki, 2017, 2020).

Yet the 1997 Personal Data Protection Law and 1994 Copyright and Related Rights Law (1994) proved to be the greatest obstacles to information access of

all (Grot, 2015). While not designed to curb scientific research, they have been always been subject to assorted archivist interpretation, occasionally with exaggerated concern that aforesaid rights would be breached – by the archive rather than the user. Archival practice does have a history of believing that particular protection ought to be extended to any information younger than one hundred years, albeit pursuant to the letter of law the rule applies to (birth) certificates of civil status (registry and identity records) only. Furthermore, archivists have failed to recognise that every archive user is obliged to sign a statement to the effect of complying with aforesaid legal regulations, thus assuming all and any responsibility for any breach thereto.

State archives apart, the Polish archival network is formed by aforementioned current archives of record-generating institutions preserving most recent records (for approximately twenty-five years). While originally intended for use by public officials, these records can be made available to third-party users (pending consent by the given entity's director) if having proven legitimate interest.

Archives of institutions of higher learning and scientific institutions are rather particular current archives. Having been granted the right of perpetual resource preservation, they are not obliged to transfer any records to state archives. In consequence, they have to combine official and historical archive functions, a development tying in with providing access to relatively recent and oldest records alike, in turn obviously entailing necessary compliance with assorted regulations.

The existence of separate institutions — current archives of major central institutions of the Polish state and specific historical archives, such as military archives or the aforementioned Institute of National Remembrance — is the gravest problem associated with researching present-day history. Archives of the president, *sejm* and senate (lower and upper parliamentary houses), Ministry of Internal Affairs and institutions reporting thereto (such as the police force), Ministry of Foreign Affairs, Ministry of National Defence and institutions reporting thereto, and numerous archives of other services do not report to the General Director of State Archives, but rather to the respective ministers or heads of central authority chancelleries. Each of the aforesaid archives operates (and grants record access, obviously) pursuant to separate regulations — i.e. in-house independent principles. In consequence, Poland does not have a single archival service: it has several

dozen. Separate archives can – but are not obliged to – transfer records to central archives within a term of fifty years as of the date of their creation.

Back to state archives: accession aspirations and Poland's actual 2004 accession to the European Union brought positive change to the process of granting archival record access. For example: over the years 2005-2006, the European Commission and European Council issued a number of recommendations regarding the need for digitising cultural property as a contribution to the process of building an information society. Commissioned by the Polish Ministry of Culture and National heritage, a report on the state's condition of digitisation saw daylight in 20091, authors openly admitting that due to negligence in the field, Polish museums, libraries and archives have failed to join the process of building a modern society the workings of which base on access to information. A National Archives Strategy for the years 2010-2020 was drafted one year later. In the foreword thereto, the new General Director of State Archives admitted that negligence in a number of areas (infrastructure, archival aid and scan availability, education and promotion, openness and friendliness) are standard-wise significant enough to rank Polish state archives not only beneath West European archives, but beneath institutions operating in former socialist bloc countries as well.

Multiple positive changes would arrive at the door of state archives only in the second decade of the 21st century, not least owing to university communities who appealed for these institutions to become more open and friendly to their users, fully aware of the importance of a proper attitude, and conscious development of a positive image of archives based on public relations techniques coupled with considered and professional archival education starting with early primary school curricula (Jabłońska, 2016; Rosa, 2012; Mazur, 2017).

That was also a time of courageous decisions by General Directors of State Archives. By 2011, state archive users were allowed to take individual free-of-charge photographs of archival records. The General Director's 2013 ordinance regarding archival record access included clauses concerning the following:

- Providing users with comfortable, ergonomic, and properly lit workstations fitted with electric sockets in archival research rooms,
- In case of interest in such a solution: the need to set up afternoon duty rosters for research rooms (merely recommended beforehand),

- Continuous user surveillance, including CCTV use (earlier solutions included a theoretical option of bag scanning).

Clauses regarding options of verifying user competencies and requiring them to submit letters of recommendation – and distinguishing between Polish and foreign nationals – were annulled.

Poor physical condition of records has been identified as the main reason for refusing record access. Under circumstances of legal protection, archives may (in justified cases only) demand extra statements. It has been clearly emphasised that the matter of using information bearing hallmarks suggesting that it is current, with no breach to freedoms or rights arising in particular from legal regulations protecting personal property or personal data, shall be resolved by the signing of a brief statement attached to the user application. Regrettably, the solution did not eliminate exaggerated caution in the archivist community, said caution exacerbated by the EU General Data Protection Regulation of 2016. As it were, until this day the phrase "GDPR" is used like a magic word closing doors to users, should any doubt arise in the archivist's mind – even if he or she does not, in all actuality, know the Regulation.

The second decade of the 21st century was also a time of mass digitisation and access granting to archival records online – in the early days (in the years 2012–2015), owing to microfilm scanners, the public record was growing by over a dozen million scans per annum. While the tempo would eventually drop, it has overall remained satisfactory. It was decided that a single integrated online electronic archival support system would be introduced for all state archives and any other institutions concerned. The so-called retro-conversion – the process of digitising hard copy inventories (via OCR or manually) proved to be a considerable challenge.

Positive changes to state archives do affect the functioning of other archives – holders of custodial resources and selected church archives in particular – to a certain extent. A less ostensible development was that of emulation by archives of official institutions and separate archives. While aforesaid organisational units can in all probability identify examples of positive practices, they are the outcome of individual and open archivist attitudes rather than systemic solutions.

It was in such varied archival reality – made even more complex by diversified interpretations of legal regulations – that the Public Sector Information Re-use Law

was amended in 2015, as a result of Directive 2003/98/EC having been amended by Directive 2013/37/EU to include archives, libraries and museums. Changes to the aforesaid Law made it necessary to amend the Archives Law in 2016. Consequently, it ultimately took three years to adapt and align Polish archival laws with the European Directive (Konstankiewicz, 2016).

The annulment of the thirty-year grace period for state archives was the most important and obvious legal change. We had previously been facing a situation of citizens having had public information access for a term of twenty-five years, only to lose it for five years following information archiving. The law was thus reorganised, exclusion periods introduced for selected types of documentation only:

- Population registers thirty years,
- Personal and payroll employee files fifty years,
- Investigative, judicial, notarial and perpetual usufruct files seventy years,
- Civil status records (marriage and death certificates) eighty years,
- Civil status records (birth certificates) and medical files one hundred years.

Archival users were thus finally provided with clear-cut regulations rather than unilateral archivist decisions arising from suppositions and concerns.

Furthermore, the right of all users to free-of-charge record access was confirmed, nationality notwithstanding. The need to preserve the integrity of state archival resources was reiterated as the chief premise for record access refusal. Physical condition as well as potential electronic file protection are thus two factors under consideration. State secrets (classified files) and personal data will obviously continue to be protected.

It seems that the re-use of information (e.g. archival scans) by an entity which had secured it from the disposer will remain a paper clause as far as the Re-use Law goes. The aforesaid entity should file an application with a state archives director, for example, the director then obliged to specify re-use conditions (or lack thereof). Yet no sanctions have been proposed for a failure to file such an application. The Re-use Law has no impact on the operations of institutional current archives, since they had not been made part of the obliged entities category. Consequently, specifying one's own legal interest in an application submitted with a director of an institution remains of key importance. Furthermore, aforesaid regulations

shall not apply to radio, television, Polish Press Agency (for copyright-related reasons, in all likelihood), school archives, or – peculiarly enough – archives with custodial archival resources.

On the other hand, while legal changes did apply to separate archives, the process of adapting in-house regulations to the Re-use Law is non-harmonious, requiring in-depth research; notwithstanding the above, some answers have been provided by survey questionnaire results presented herein. In case of the Institute of National Remembrance archives, regulations only apply to the institution's own (generated) resource rather than historical (received) records.

* * *

A questionnaire survey was held for purposes of this paper over a period of July 1st until 15th 2024. Twenty-six historians and archival studies professors from several academic institutions participated. Based on Google Forms, the questionnaire was distributed online. The survey is available in its entirety at: https://doi.org/10.24917/UKEN/TKKNAS. In multiple instances, survey questions are a repetition of questions made part of the 2022 questionnaire (Friedewald et al., 2023) and discussed in the article (Friedewald et al., 2024). The first question concerned knowledge of the Recommendation No. R (2000) 13 of the Committee of Ministers to member states on a European policy of access to archives, adopted on July 13th 2000. One-half (50%) of respondents declared that the Recommendation is not commonly known. The other half (46.2%) concluded that only a few scholars are aware of its existence

An exact one-half of all academics pointed to issues with accessing pre-1989 records, arising chiefly from legal regulations regarding personal data and copyright protection. Issues with accessing post-1989 records were mentioned by an even greater share of scientists (57.7%), identified restrictions including professional secrecy, the Archives Law, and legal regulations regarding former special forces' archives. Just over one-half of respondents concluded that restrictive interpretation of legal regulations is a major obstacle to research.

A great 58.8% of respondents answered in the negative to the question concerning satisfaction with how archival reading rooms are organised. Chief reasons for

dissatisfaction included limited opening hours, long waiting times for records, and limited volumes of archival units provided per day.

Nearly 70% respondents answered in the positive to the question regarding compliance with rules of access (similar to state archives access rules) in corporate/ institutional and separate archives (e.g., Ministry of Foreign Affairs, Institute of National Remembrance, sejm, senate), institutions with custodial archival resources (e.g. Polish Academy of Sciences and/or university archives), and archives preserving non-state evidenced archival resources. Identified restriction examples included "limited, occasionally reluctant access granting by some corporate and separate archives"; "different rules, opening hours and access conditions at custodial resource archives – sometimes access is granted to larger, at other times to lower archival unit volumes than at state archives; while not a major obstacle to users, the differences are blatant"; "different rules of access granting at ecclesial archives – considerable in-house rule discrepancies; some institutions have introduced clauses regarding glove use – users are expected to bring their own, or purchase gloves on site; inconsistent application of rules and regulations, multiple exceptions extended to the clergy or befriended individuals; charging fees for archive use has been noted"; "corporate and institutional (including university) archives tend to provide access upon the institution's director or manager's consent; university archives forbid archival record photography (GDPR + Copyright Law); the majority of separated archives' resource is restricted; furthermore, inquiries are handled by archivists rather than users (Institute of National Remembrance), bringing inquiry completeness into question"; "permission from the institution's director/manager required (corporate/ institutional archives, university archives included); no option of inquiry handling by researchers – all inquiries are handled by archivists (e.g. the Institute of National Remembrance); difficulties with accessing some ecclesial archives"; "Ministry of Foreign Affairs archives are reluctant to grant access to post-1989 records; cases of outright refusal have been noted"; "Some university archives (at smaller institutions) are reluctant to grant access to individuals from outside the university"; "School Inspectorates have refused to grant access to pre-1989 records of historical value, for example, using personal data protection as justification/excuse; the phenomenon has been identified in other archives as well,

e.g. the Polish Teachers' Union and others"; "separate archives continue to apply the thirty-year grace period for records of general significance; some university archives and most diocesan archives require letters of recommendation".

Just over 40% of questionnaire responders pointed to variations in record access granting depending on the administrative level or the region (of Poland). Nearly 70% of questionnaire responders pointed out that some archives require special permits to be secured before access is granted.

Some archives (46.2% of responses) continue requiring qualifications to be proven or recommendations submitted prior to granting access to records. Furthermore (38.5% of responses), research plan descriptions are frequently required. Nearly 70% of respondents declared some archives to be charging fees for granting access to records (hard copies, microfilmed or digital versions), said fees considered rational (57.9%). Others referred to fees (charged chiefly for scanning and photocopying) as irrational and excessively high.

The question whether archives are granting access (annually) to records no longer subject to access exclusion yielded remarkably positive responses (42.3% - yes, regularly; 42.3% - yes, occasionally). Similarly, the matter of granting access to records available pursuant to the Law on Public Information Access or Similar Laws (at the time of being preserved at the generating institution) received positive evaluation (50% - yes, occasionally; 38.5% - yes, regularly).

According to questionnaire respondents, professional secrecy (73.1%) and private economic interests (46.2%) were the most frequent criteria determining access to records (outside the grace period).

Over 70% of respondents are aware of particular restrictions applicable in selected periods of state history, pointing to the post-World War II (pre-1989) and post-1989 periods as times subject to special limitations. Restrictions identified and applicable to selected aspects of the country's history included changes to the political system, repressions and persecution, military occupation of Poland, and social and political conflicts.

Most questionnaire respondents are unaware whether archives are preserving interminably classified records. Over 70% declared that archives do not consult with the academic community when deciding as to declassification priorities.

Further questions regarded access to archival aids. Over 60% of respondents are unaware whether archival aids for records subjected to restrictions are available, 31% claiming that they are – special permission pending. Over 73% of questionnaire respondents are unaware whether archival aids for classified records are available, 19.2% claiming they are not. An exact 50% of respondents know nothing of the existence of archival records other than those archived recently, unavailable due to the lack of archival aids, a further 38.5% claiming that they do exist. Over 73% of respondents know that users may apply for special permits to access classified/unavailable records.

Over 80% questioned scientists claim that declassification and opening records for general research purposes is a solution superior to awarding special rights to individuals. An exact 88.5% of respondents concluded that archives grant partial access to restricted records through redacting, anonymising or granting partial access, 92.3% considering such partial access useful.

Just under 31% of respondents have experienced (or heard from scholarly community colleagues of) refusal of archival record access over the past year, personal data contained in archives the main reason for refusal. An exact 57.7% of respondents declare that archival authorities in Poland are not pursuing a policy of promoting private archive accessibility for scientific research purposes.

In terms of state-of-the-art technologies, online inventories are hugely popular – 92.6% of scholars use them before reaching for archival records. Institutional websites and records made available online are of huge importance as well (73.1% responses of support per option).

Polish scholars do not resort to crowdsourcing (only one individual declared experience in photograph description). When contacting archival institutions, they are declared email supporters, albeit direct phone calls are valued as well (42.3%).

Respondents concluded that remote access is an excellent supplement for on-site

Respondents concluded that remote access is an excellent supplement for on-site research in this day and age and may be considered a substitute for research room work; yet they did express regret that not everything is available in digital format. Proposed archival access betterment options chiefly point to more detailed inventories and a greater volume of electronic ("born digital") records, digitalised online resources, and improved usefulness (functionality) of in-house archive browsers

Statistics described herein do not reference the experience of archival research abroad, since few respondents have been using the option.

CONCLUSIONS

In summary, it ought to be concluded that Poland underwent swift post-1989 transformation, though evolutionary rather than revolutionary in case of scientific access to youngest archival records. Regrettably, personal data protection and copyright protection – occasionally considered sacrosanct – have been (and, in all likelihood, still are) affecting the mentality of archivists responsible for granting or refusing record access.

The questionnaire survey has showcased a blatant phenomenon in the Polish archival grid (where records are preserved by record-generating institutions for a term of no less than twenty-five years). Access to older records (however sensitive or classified) is easier than to more recent files. Institutional archives have not been subjected to European Union regulations, historical (state) archives having experienced no problem with adjusting, since the Polish archival revolution of the second decade of the 21st century was consistent with EU policies.

Separate archives (of central authorities and the Institute of National Remembrance) are Poland's problem; while having failed to adjust to European Union standards, they are also beyond help from Polish archival authorities.

It is something of a consolation that modern-day history researchers see no particular differences in the treatment of state and institutional archive users. Not only does this prove that attempts are being made to comply with recommendations and standards – it also goes to show that Poland is aspiring to a new professional archivist model. Regulations are one thing, grassroot activities are another, possibly a more important one. User pressure and the education of successive archival studies graduates, year upon year, are yielding actual outcomes. Our students are employed by state as well as institutional archives, separate archives included. They have been taught in class what archival education, conscious brand-building and promotion campaigns in local communities mean. They are aware that without users, they will become redundant.

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Bogdan-Florin Popovici¹

PERSPECTIVES ON COSTS ASSOCIATED WITH LONG TERM DIGITAL PRESERVATION

Abstract

Purpose: This paper aims to review the main projects about the cost of and to present the main cost factors involved in performing activities, associated with digital preservation.

Method/approach: The method used in our paper is documentation and analysis of models, followed by a structured presentation of cost factors.

Results: Despite a tendency of inactivity in publication on this topic, cost of digital preservation/curation are an important element of sustainability of such endeavours.

Conclusions/findings: Examining several decisions that can influence the costs during the activity of curation/ preservation, one can see the multitude of occasions where costs can ramp rapidly. It is evident that aiming too high and trying to create the "perfect" solution for all cases may be counterproductive, since it implies costs that do not bring obvious benefits to the goal. On the other hand, lack of strategy and management may also lead to the same result.

Key words: cost models, digital preservation, digital curation, OAIS, digital repository

¹ Bogdan Florin Popovici, phd, archivist, head of Brasov County Division, National Archives of Romania. email: bogdanpopovici@gmail.com

The present paper started as an enlarged reflection following my presentation of the last year, during the Autumn School from Maribor, about lessons learnt in a large digitization project (Popovici, 2023). Generating a large number of digital records required also large resources to manage them, and it is clear that a long-term preservation process would require even more. All these needs are reflected in costs, which are, of course, directly influenced by options and decisions. "Which are the factors that determine the total cost of digital preservation?" was my initial question. I was aware at that time of the 4C project – "Collaboration to Clarify the Cost of Curation" (4C Project, 2015a), but the huge number of papers around this topic has become apparent to me only after diving into professional literature. As a result, the goal of this paper has become more a review and an attempt to summarize issues and possible solutions than a simple list of costs factors, as originally intended.

THE RELEVANCY OF THE COST OF DIGITAL PRESERVA-TION²

Digital systems are a common reality today and more and more relevant information for the society is produced only in electronic environment³. This relevant information requires, at a given moment, to go through the process of preservation as records.

Similar to paper records, "In general, the value of digital preservation is only apparent long after the initial investment has had to be made" and "the value placed on the digital materials by organisations depended in part on how dependent the organisation was on the material for business activity, with the highest value placed on information by organisations who either saw or exploited the potential

[&]quot;Digital curation" was defined as set of actions about "maintaining, preserving and adding value to digital content throughout its entire lifecycle" (DCC, 2024). Making the difference between curation and preservation, Seamus Ross stated: "The umbrella term 'digital curation' encapsulates the many activities involved in caring for digital entities such as selection, documentation, management, storage, conservation, security, preservation, and provision of access. Curation focuses not just on preserving digital entities but on keeping them functional, supporting their continuous annotation and maintaining their fitness for purpose. Preservation is a lot narrower in focus". (Ross, 2006, 1) On the other hand, the researchers in the 4C project admitted that "The definition of digital curation and underlying digital curation activities are not universally accepted and understood, nor sufficiently detailed. There are challenges in extracting a subset of activities defined as 'curation' from the overall business processes of an organisation even if the organisational remit is primarily curation". (4C Project, 2015e, 15). For the present paper, another term used is "digital repository", meaning "the technical infrastructure, services, and resources for the storage and management of digital information" (SAA, 2024).

³ As a trivial fact, I asked Chat GPT the question: "how much of the society is digitalized?" and it assessed that "On a global scale, around 60-70% of daily human activities are impacted by some form of digital technology".

re-use of information or identified the risks associated with its not being available" (Ross, 2006, 1). This assertion is quite old (2006), but I do believe, by mere observation, that this may still be true today. But what changed is that more and more, is the stress, from technical to financial: "The question 'Is digital preservation technically feasible?" becomes overshadowed by the question 'Is digital preservation economically feasible?" (Lavoie, 2018).

The question is not necessarily new. Almost 20 years ago, the above-mentioned Seamus Ross emphasized the fact that "preservation is perceived as expensive and often the scale of this investment is under-appreciated and certainly almost never balanced against recognisable benefits" (Ross, 2006, 3). This is admitted even in more recent works (Pendergrass et al., 2019, 169) and the "cheap cost" is part of usual misconceptions about digital preservation (Sandner, 2012).

Beside the benefits for a certain organisation, the high cost of digital preservation may be relevant for society. Traditional technical model of preserving records was to be physically in the custody of the creator, at least for a determined period of time. Balancing the technology today and its cost, I find it relevant, for public administration, for instance, if 100 datacentres are produced or a consolidated one; if the budget is spent economically, or public resources are wasted on an outdated model of records preservation.

Another aspect which gets more and more public agenda is the environmental cost of digital preservation. One analysis showed how big datacentres consume more energy than many countries (Shilov, 2024). In this regards, ecological sustainability approach in digital preservation would also imply several decisions to reduce the fingerprint of the activity (Pendergrass et al., 2019, 195).

Methodologically, the financial sustainability is one of the relevant elements in all high-level specifications for digital repositories. In the OCLC *Trusted Digital Repositories: Attributes and Responsibilities* (OCLC, 2002) it is stated that a digital repository must ensure financial sustainability over time (#14) and that "digital preservation will require ongoing resource commitments—potentially more than for traditional materials." (#19) In Nestor's criteria for trusted digital repositories, it is required that 1 "Adequate financing of the digital repository is secured" (Nestor 2009, #4.1). The TRUST Principles for digital repositories also indicate that for sustainability, it is necessary to secure "funding to enable ongoing usage

and to maintain the desirable properties of the data resources that the repository has been entrusted with preserving and disseminating" (Lin et al., 2020).

As a conclusion, the cost is one of the key elements in the digital preservation. It may be influenced by several elements as it will be presented below, and it is a central component for the sustainability of a trustable digital repository.

COST MODELS

Several models for analysing costs associated with long term preservation were developed and I shall briefly present them below⁴. However, beforehand, a couple of remarks are necessary. Firstly, the multitude of such models is in itself a testimony about the difficulties in establishing an encompassing rule for all cases. Then, these models were summarized in 4C Project almost 10 years ago and despite the attempts I made, I did not manage to find out updates for any of them. It seems the topic for costs of digital curation was intensively debated between 1998–2018, and afterwards either it exhausted its attractiveness, or the projects solved all the potential problems. Also, it is noticeable that most of the online references to projects websites or other associated resources are not found any longer today. It is a sad irony that references about the cost of digital long-term preservation did not resist the challenge of time...

A. TOTAL COST OF PRESERVATION (CDL-TCP)

The model was developed by the California Digital Library and UC Curation Centre (UC3) in 2013. It modelled the full cost of preservation, dividing it in costs for labour, operations etc. It considers more variables of cost, from various roles of the staff to costs for specific activities. (4C Project, 2015k). The links to the original resources are not valid today, but references may be still found on the internet see Stephen et al., 2012 and UC3, 2014.

B. COST MODEL FOR DIGITAL ARCHIVING (CMDA)

The model was developed by Data Archiving and Networked Services (DANS) of the Netherlands and ended in 2013. The capital and labour are resources considered. The costs vary according to variables like size of the archives, quality am

⁴ For studies before the main projects see Lazorchak, 2012; Strodl, 2011, 12–15 or CCEx, s. d. b.

complexity of metadata, standards applied, staff involved etc. (4C Project, 2015b) The link to the project is broken, but a report is accessible online (Palaiologk et al., 2012).

C. COST MODEL FOR DIGITAL PRESERVATION (CMDP)

CMDP was developed as a model by the National Archives and the Royal Danish Library in Denmark and ended in 2012. The resources were also the capital and labour. The variables of the cost consisted of types of information assets, volume, type of storage system, number of copies of each information asset, salary-level, person-hours per week (4C Project, 2015c). The links to the original resources are not valid today, but some published papers are still available (Kejser et al., 2013).

D. DP4LIB COST MODEL (DP4LIB)

DP4Lib was developed by the German National Library in 2013. It considers as resources the capital, labour, direct and indirect costs. The variables included are hardware, software, people, accommodation, external service, transfer; depreciation of capital etc. (4C Project, 2015f). The model webpage (DP4Lib, 2012) is still active with a lot of resources, though it seems it did not get updated since 2013⁵.

E. ECONOMIC MODEL OF LONG-TERM STORAGE (EMLTS)

The model was developed by David Rosenthal in 2011 (Rosenthal, 2011) and focuses on cost of storage technology (acquisition, operation, migration etc.) (4C Project, 2015g)

F. KEEPING RESEARCH DATA SAFE (KRDS)

The KRDS Project was funded by Jisc and conducted by a partnership in 2010. It considers the costs of capital, labour, outsourcing and indirect costs. The costs depend on variables like collections levels, aims of preservation, complexity of digital files etc. (4C Project, 2015h). The website is still available, but with dead links on the page (Beagrie, 2013) and additional resources can be found on the internet (Beagrie, Lavoie, & Woollard, 2010).

⁵ See a practical implementation see at Ucharim, 2013.

G. LIFE3 COSTING MODEL (LIFE3)

It was developed by the University College London and British Library in several phases and finished in 2010. It is one of the most influential models, being referenced in many other works. It considers 2 main resources (capital and labour) and several variables, like retention period for digital assets, size of holding, their typology, processing actions etc. (4C Project, 2015d) The main source for reference is currently active (Life Project, 2010).

H. NASA COST ESTIMATION TOOL (NASA-CET)

Developed for NASA by SGT (Stinger Ghaffarian Technologies, Inc.) in 2008. It considers as resources the capital cost and labour cost. It has 96 distinct variables, such as staff salaries, system purchase cost, COTS software license, archive media, inflation, volume, automation level. (4C Project, 2015i) The resource about the model is available online (NASA, 2019).

I. PRESTOPRIME COST MODEL FOR DIGITAL STORAGE (PP-CMDS)

It was developed for the European Commission in 2012, and it is focused on storage variables, like data volume, migration frequency, latent and access corruption rates, no. of copies, storage systems, current costs, half-life for cost, access costs (4C Project, 2015j). No active links to deliver the tools were developed, but some deliverables in the project are still available online.⁶

J. TEST BED COST MODEL FOR DIGITAL PRESERVATION (T-CMDP)

It was developed by The National Archives of the Netherlands in 2005. It counts costs of a digital archive system and a functionality for preservation system, personnel costs, the costs of the development (or procurement) of software and methods/strategies for the preservation of digital records, the costs of the actual performance of certain preservation actions, other factors that influence the total costs of preservation. There are no active links to the project, but the report can be found on the internet (Slats & Verdegem, 2005).

⁶ Tools for modelling and simulating migration based preservation see at (Addis & Jacyno, 2010); Financial Models and Calculation Mechanisms see at Netherlands Institute for Sound and Vision, 2011.

K. COLLABORATION TO CLARIFY THE COSTS OF CURATION

It was developed within a European project, that ended in 2014. It is outlined as a methodology for establishing costs, identifying "activities measured against the resources in the context of organisation context" (see 4C Project, 2015e, 13). As broad groups, it considers services/activities (in their dynamic of adjustments), resources (direct/indirect costs, capital, labour, financial adjustments) and organisational context (type, lifecycle scope, collection profile, legal, policies etc.). In many regards, it is a sum of previous experiences, being a rather flexible tool for accommodating different specific situations.

In the framework of 4C project, a comparative matrix of these models has been developed, structured as follows:

- Model type does the model cover past and future costs, activities, benefits? Resource breakdown - does the model cover direct and indirect costs?
- Activity breakdown does the model break down all activities by type?
- Adjustments does the model allow you to account for volume and complexity of assets?
- Usability what sort of learning curve is required to use the model? The result of this analysis can be found at (CCEX, s. d. c.).

ACTIVITIES AND COST FACTORS

The projects briefly presented above were undertaken by different type of organisations (libraries, archives) of different sizes. They considered various group of costs, like support activity costs (equipment, staff) or core activities costs (those targeted specifically to preservation). All these specificities impact on the results, since the models were developed for specific needs and in certain contexts (see CCEx, s. d. a) for composition of costs model.

In what concerns the preservation activities, depending on the model adopted and particular workflows, the big activities varied from model to model:

Common to all projects	ingest, archival storage, administration
Common to most projects	data management, preservation planning
Common to few projects	production, pre-ingest, access, management

These general activities can be split in more granular one, and thus the list can become quite long.⁷ In the continuation, my intention is to comment on some of these activities and the way various choices can impact the budget of digital preservation project.

Activities associated with digital preservation are, in general, the ones aligned with OAIS model. In spite of that, as 4C project admitted, in the process of digital curation "challenges start well before assets are deposited in a managed repository with a long-term digital preservation remit" (4C Project, 2015e, 15).

ADMINISTRATION-ORGANISATIONAL CONTEXT

In order to perform activities of digital preservation, an organisation needs to invest in building a proper administrative and technical capacity. These investments are in general initial costs, accommodating the function with the resources and directing the overall process.

- a). The organisation type and mandate. An organisation may be tasked with preservation of digital objects from a certain domain (like, scientific data or its own records) or may have a general realm (like National Archives. Also, it may cope with part of the lifecycle of digital records (for instance, preservation of semi active records) or with long term preservation of historical records. Depending on the mandate, typology of the records in the archives may be more or less diverse, the cost increasing with the level of diversity.
- **b).** Size of the organization. A small organization, with limited staff and budget, may not be able to carry out the digital preservation process but in a limited amount. "The collection size may be defined to help define the scale at which activities must be undertaken" (4C Project, 2015e, 20).
- c). The financial resource. The task of preserving digital records may come as an extra task, with no supplement of budget or it may come as an extension of the activity. The funding may come on a limited or as continuous basis, as part of the normal operation routine. A limited funding of the repository would threaten the sustainability of the process. The operating costs of a digital repository are on-going, and they will vary in time, and it is important to foresee the periods when the digital objects cost only power to make the storage system run, with the periods when intensive migration process may occur.

⁷ For example, see Palaiologk et al., 2012; Hole et al., 2010, Strodl, 2011.

- **d).** *Staff.* The organization may/may not have a staff with the necessary skills to cope with the process. It needs to be an initial and continuous investment in training the staff or in contracting relevant competences. Beside the digital preservation process *per se*, the existing competences may need to be enlarged, from interacting with the producers of digital objects to the users of a digital repository (it may be necessary to produce guidelines, recommendations etc.). The possibility should be examined that some activities associated with digital preservation (like cybersecurity) be performed by the existing staff during their routine activity.
- e). IT resources of the organization are an important share of the costs. They consist of hardware, network and software infrastructure. The costs are initial (for the product and services), but also repetitive costs (periodically, the hardware needs to be replaced, with all complexity of compatibility to be considered). The hardware would mainly consist of servers and storage capabilities, and network equipment. The performance of this equipment directly influenced the time spent on various processes. The software is a complex problem, directly connected with the type of digital objects used. It can be general software (like file management, virus or integrity scan tools, conversion software, database systems) or specific (like archival information system designed to handle the data management process or viewers/processer for specific file types). The software licenses can be COTS or freeware, but in all cases possible services for customization should be taken into consideration. The degree of specialization of the staff may lead this activity to internal processing or to contracting external support.

PRE-INGEST

Before being transferred and ingested into a digital preservation system, several preparatory work must be performed. Identification of the relevant digital objects, their location, their content and metadata, rules of access and preservation etc. are elements whose cost of processing is directly proportional with the status of their initial management. In a weak controlled environment, the cost for answering the questions above may imply a lot of work and even specialized tools. Data may need to be extracted from systems; it is critical to have a system export functionality or a data model available, otherwise a burdensome activity of iden-

tifying and understanding the data may deem necessary, with all associated costs. The package for ingest may be standardized or arbitrary. The less standardized, the higher the cost encumber, due to customized work that need to be performed. The ideal case would be that production system can export digital objects and their metadata in a format ready for ingest.

The transfer should be transferred on a buffer area (transfer platform), waiting to be ingested. This environment needs to be calibrated for the tasks. The network speed, the size of the package and the available storage are element of infrastructure that need to be calibrated for the process, and all have impact on the cost.

INGESTION

The entering of the digital objects into digital repository implies a set of checking and normalizing activities, like metadata conversion to an agreed format or schema, updating or supplementing metadata or conversion of file formats that are not suited for long term preservation. Mapping the metadata schema from the producer to the one used by digital repository may be complex, involving programming skills and various transformation, activities that can raise the costs if they are not dealt upfront on the workflow. Also, extracting the technical metadata may vary from one format to another, and hence, the higher the variability of files, the higher the time and cost for processing. On the other hand, having a defined scope for digital objects to be preserved helps building a system that is focused on specific formats or metadata schema, which may reduce the costs, in contrast with creating a universal solution, for all possible types of digital objects. Some activities are directly dependent on the computing power available, like checksum check or virus check. A low processing power would lead to long times of expectation, which are translated into costs. And all such activities need to be performed on a stage storage environment, to avoid loading the digital repository with possible risky digital files-and this may need extra hardware resources, depending on the size of the ingestion package.

DATA MANAGEMENT

The management of data may often imply the existence of archival information system. As mentioned before, it can be a COTS product, which may lower the cost of product, but maybe more rigid, and an open source, which would require more service work for customisation and running, either internal (if there are required competences) or as contracted service.

A decision should be taken whether the organisation would host a shared AIS for both physical and digital records metadata, or it will have a separate one for each medium. On the one hand, having one system bring benefits to organisational budget (considering maintenance, procurement etc) and even users (one access interface with integrated search returns). On the other hand, such AIS systems tend to be more expensive and need more customisation for specific organisational workflows (thus, higher costs as services).

The complexity of metadata schema used is also relevant for the cost. Harvesting a set of 5 metadata for digital objects has different costs than having 20 per digital object; preserving only descriptive metadata is cheaper, integrated searchable manifestation may be more expensive.

Since the intellectual description of records manifested from the digital objects may vary in time, a decision should be taken whether such description may be part of the Archival Information Package. If so, then regular re-ingestion should be performed, a process which may be less costly than the initial process, if the workflow is preconfigured.

ARCHIVAL STORAGE

The topic of the archival storage has been addressed earlier in this paper. It is, in many regards, an essential part of the process, the whole digital preservation depending on the quality of this system: if one cannot keep the digital objects, all other processes are useless. But even so, one may say, it is one of the weakest links in the preservation process: "Current digital preservation practice assumes a goal of zero change or loss in digital collections over time. (...). David Rosenthal argues that, on a practical level, perfect bit-level preservation is a "myth" (...) [and] administrators of digital preservation systems should determine acceptable levels of loss in digital preservation programs" (Pendergrass et al., 2019, 186).

Due to its importance, the professional, high-quality systems should be used. The systems may be on site, in the ownership of the organisation, or services could be contracted. The size of storage is much more than the size of the collection

of digital objects itself. As mentioned, a stage area is necessary; then, the main storage for AIPs. According to the best practice, copies should also be preserved in at least another format, and at least one copy in a remote geographic location. Implementing this *3-2-1 system* (Vanover, 2024) would at least triplicate the need for costs. Considering the potential migration process, it is necessary to allow (temporary) space for the new output and carefully consider how many generations of AIPs are preserved. Considering three migrations in a certain amount of time, there is the original AIP + another 3 AIPs, as results of migration; that roughly totals 4 times the original size in storage. If this is not enough, the technological obsolescence should be considered, which would imply to renew the storage every 5–10 years, resulting in new costs.

When the cloud services are used, some costs are reduced, but other parameters should be considered, like having different providers for different copies, the speed of access, the availability requirements, data sovereignty.

On the other hand, a proper management of digital objects in the storage may help reducing costs, either financial or ecological. Parsimony is a virtue in this case. Not all digitised records need high quality representations or non-compressed formats; that would reduce files size, and the amount of storage occupied. Also, deduplication process is vital and replacing is possible by duplicating digital objects with links to one main copy. The newer storage systems are eco-friendlier in power consumption for running and cooling and provide safety mechanisms that may reduce the need for multiple copies.

PRESERVATION PLANNING

Planning strategies and executing preservation activities is an ongoing activity, targeting both the technology used by the repository and its content. It is necessary to monitor the technology development, not only for avoiding technological obsolescence, but also to identify more performant solutions to the needs, both of users and the repository. Preservation is directly connected with the quality performance of the repository and often, this requires planning and proposing proper solutions: procedural, hardware and software. One important contribution to the reduction of costs consists in handling as low as possible number of file formats in the repository and maintaining a proper documentation on the complexity and relations of datasets.

ACCESS

Access to the information stored in the repository is the external visible part of the process of preservation and its measure of success. The sophistication of solutions used for access may require permanent funding, since the expectations of the users may change. Basic functionalities, like speed in retrieval, are directly dependent on the quality of hardware (storage, network devices) and search engine. Including more advanced solutions, like AI assisted search or producing various alternative media representations (like OCR'd text or readable content) is also a factor of cost.

An important area is that of research and education. Users may not know how to use the search interface or how to ask a question to get the proper answer and they need to be educated. The study of the behaviour of the community of users to satisfy their expectation is an important part, which implies available resources for the task.

CONCLUSIONS

The topic of costs of digital curation/preservation is an important one, not only at institutional level, but also at societal one. Developing challenging repositories may prove to be less sustainable, both financially and environmentally. But to prove such an assertion it needs to have economic models that allows for calculation of costs.

Several such models have been developed, but probably the most mature framework is the one developed in the project *4C–Collaboration to Clarify the Costs of Curation*. It seems there is a less vivid interest in the matter of cost curation after 2019, and many online resources about those projects tend to become obsolete. One key element in the models is that there is no one solution that fits all, and what is relevant is rather the methodology to adapt to specific cases.

Examining several decisions that can influence the cost during the activity of curation/ preservation, one can see the multitude of occasions where costs can ramp rapidly. It is evident that aiming too high and trying to create the "perfect" solution for all cases may be counterproductive, since it implies costs that do not bring obvious benefits to the goal. On the other hand, lack of strategy and management may also lead to the same result.

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Mojca Horvat¹

THE EFFECTS OF EMOTIONS ON CERTAIN SEGMENTS OF WORK IN ARCHIVES

Abstract

Purpose: The aim of this analysis was to gain a comprehensive understanding of discussions on emotions in archives and their positioning within different segments of archival practice.

Methodology: A qualitative approach involving a review of existing literature on the theme of emotions in archives was used. The collected articles were then categorized into various segments of archival work: archival pedagogy, archival exhibitions, the work of archivists, the impact on researchers and archive users, and philosophical-theoretical considerations.

Results: The topic is relatively young, with the first conference on emotions in archives taking place only in 2014 in Los Angeles. Nonetheless, further searches for articles will be necessary, as new publications continue to emerge.

Conclusions/findings: Based on the collected articles, it can be inferred that emotions play a significant role in motivating the exploration of new content, which is particularly evident in the fields of archival pedagogy and archival exhibitions. Emotions also influence how archivists and historians perceive archival documents. This opens opportunities for further research that could deepen existing knowledge or explore new segments of archival work where the impact of emotions is apparent.

Keywords: archives, emotions, affects, archivists.

¹ Mojca Horvat, archival councillor, Regional Archives Maribor; PhD student of Archival Sciences at Alma Mater Europaea University. Email: mojca.horvat@pokarh-mb.si.

1. INTRODUCTION

In our society, emotions are often understood as opposed to rationality, as a negative counterpoint to rationality and reason, which are considered essential for the success of democratic culture. According to conventional interpretative patterns, if emotions were not strictly controlled but mobilized, they would undermine rational thinking, negate reason, foster destructive behaviour, and pose a threat to democratic development. This dichotomy between emotions and rationality has characterized Western philosophy since the 17th century and appears to continue influencing our thinking today (Frevert & Schmidt, 2011, 18). Some historians and archivists apparently also don't recognize the influence of their own emotions in their work. They often strive to avoid eliciting emotional reactions when presenting historical facts, arguing that emotions interfere with objectivity and have no place in science (e.g. Rosenwein, 2002; Vodopivec, 2004; Verginella, 2006; Frevert & Schmidt, 2011, 5–7; Jeraj, 2018; Baier, 2023, 42). Nevertheless, archivists' emotions affect their selection, decisions, and descriptions (Rupčić, 2022).

2. METHODS AND PURPUSE

For this article, a qualitative approach involving a review of existing literature on the theme of emotions in archives was employed. Primary sources were sought in accessible online collections and databases², selecting relevant articles based on keywords such as "archives," "emotions," and "affects." Included are also contributions from a conference on the theme of emotions in archives, which was held online on October 7, 2022 and are available as video recordings on the University of Malta's website³. Two contributions from the conference "Gespeicherte Gefühle - Affekte im Archiv," held on October 13 and 14, 2022, in Krems (Austria), and some additional ones were accessed indirectly during further exploration of the topic.

The collected articles were then categorized into various segments of archival work:

- archival pedagogy,
- archival exhibitions.
- the work of archivists,

² Such as https://www.researchgate.net/; https://www.jstor.org/; https://www.academia.edu/; www.webofscience.com; https://scholar.google.com/; https://journals.sagepub.com/; https://www.sciencedirect.com/.

³ https://www.um.edu.mt/maks/las/ourresearch/projectsandinitiatives/archivesemotionsconference/.

- the impact on researchers and archive users,
- and philosophical-theoretical considerations.

Each segment was analysed separately, with a brief description of each article outlining the issues it addresses and the specific segments of archival work it explores in detail. The aim of this analysis was to gain a comprehensive understanding of discussions on emotions in archives and their positioning within different segments of archival practice.

3. RESULTS

3.1. THE INFLUENCE OF EMOTIONS IN ARCHIVAL EDUCATIONAL ACTIVITIES

Jane Greer is a professor of Humanities and Sociology at the University of Missouri-Kansas City. In her article (Greer, 2022), she provides an in-depth analysis of the seminar papers of two of her students. One student, who comes from a Christian background, was drawn to the life story of an early 20th century missionary, which she explored using archival documents. Greer notes the student's surprise upon discovering that more relevant documents related to the missionary's work were found in the archival collection of the missionary's husband, rather than in the sparse documents within the collection named after the missionary herself. The other student, who identifies as a member of the LGBT community, sought to study a lesbian activist and artist from the 1980s and 1990s. However, after delving into the documents, she was somewhat disappointed to find that the person she chose was more of a comedian than a true activist and artist. Both students, therefore, had emotional reactions to the organization of the archives. The first felt it was unjust that significant works of the missionary were stored under her husband's collection, while the second felt somewhat cheated by the classification of her subject among artists and activists.

Marino (2018) in his article notes that archival pedagogy heavily relies on the cognitive impact of instructions, often neglecting the emotional aspect. He describes an experiment with students divided into two groups: one group was taught in a traditional lecture-based manner on the use of archival aids, while the other group was given brief instructions and left to explore on their own. It was

found that the latter group had more confidence in their future ability to search archival materials, were more enthusiastic about their work, discussed their chosen topics with greater confidence, and were generally more satisfied with their archival findings.

Experiences with visits by school groups and other audiences to the archive indicate that students are most attracted to documents (e.g., old postcards, building plans, school records) that they recognize from their own environment, allowing them to compare the present with the past. It appears that the age of the visitors does not play a significant role, as all visitors, regardless of age, are most delighted by images of familiar places, such as their school, village, or neighbourhood (Horvat, 2017, 103).

In the field of education, it is also acknowledged that affect is crucial to understanding the educational experiences of both students and teachers; however, it has been overlooked for far too long. Just as the concept of motivation has become deeply embedded in our understanding of education over the past decades, affect must similarly be integrated into our perspective on educational experiences (Linnenbrink 2006, 312–313).

3.2. EMOTIONS AND ARCHIVAL EXHIBITIONS

Contributions specifically addressing emotions in relation to archival exhibitions could not be found. However, insights from museum exhibitions can be applied to archival exhibitions. For instance, Brenda Trofanenko's work (Trofanenko, 2011), while focused on museum exhibitions, also touches on archival pedagogy. Her study primarily examines photographs, which are relevant to archives that often curate similar exhibitions. The article explores the emotions elicited by war photographs in viewers, noting that these emotions are intensified if visitors have previously interacted with veterans who experienced the war first-hand.

Baier (2023) claims that emotions play a significant part in the lives of humans, and how they perceive and experience the world around them. Despite this, many museum professionals still seem to prioritize engaging their visitors' intellect over stirring their emotions. However, they should recognize the important role emotions can play in an exhibition, especially when presenting specific and often traumatic events from the past. It is crucial to analyse the variability of emotional

responses, as a single object can elicit entirely different emotional impacts depending on the observer. The interpretation of historical events is inherently subject to diverse perspectives. One must be aware of the potentially contradictory emotional reactions that visitors may experience (Baier, 2023, 42–43).

Frevert and Schmidt (2011) discuss an exhibition from the 1980s dedicated to Prussia, a topic sensitive to Germans. This exhibition, titled *Preußen – Versuch einer Bilanz*, vividly illustrated Prussian history through a collection of everyday objects and personal memories. Forty years ago, this represented a novel museum concept that relied heavily on the epistemological power of emotions. The exhibition catalogue described emotional engagement as a "path to understanding." Objects imbued with emotional significance were intended to illuminate specific periods, events, biographical connections, and fates, allowing visitors to experience and relive them. Aware of critiques of such "sentimental" approaches, the curators supplemented the exhibits with explanatory and contextual commentary. They argued that learning and understanding history require both "categories that are entirely rational" in the form of texts and emotionally charged visual representations, such as exhibits. Only their combined effect can bring history to life and imprint it permanently on memory (Frevert & Schmidt, 2011, 8–10).

Emotions play a crucial role in determining what attracts visitors to exhibitions. Understanding how to design an archival exhibition that emotionally resonates with visitors is crucial, as this can motivate them to engage more deeply with the content, fostering learning, exploration of new topics, and connecting detailed information with already known facts. Given the significant role of lifelong learning, it is important to explore the elements that influence motivation for informal learning. Archival exhibitions contribute to this learning process, and considering that archival materials can be effectively utilized in various interactive applications—likely to become increasingly popular in the future—it's important to determine which documents archivists should prepare and present to the broader public. (Horvat, 2024).

3.3. THE IMPACT OF EMOTIONS ON THE WORK OF ARCHIVISTS

A range of contributions addresses the emotions experienced by archivists in their work. Farrugia (2022), for example, mentions archivists' experiences with

users who often find distressing documents about their families in the archives. Another article, based on interviews with 27 archivists, reports on how archivists cope with the grief of donors or researchers, or with the emotional challenges of working with archival materials (Regehr et al., 2022). Nyitray and Reijerkek (2022) discuss emotions from the perspective of an archivist's responsibility for collections, the accountability that comes with ensuring the material's security, and the process of acquiring collections. Saramo (2021) reports on visits to places she had previously studied in archival documents. Based on interviews with 21 archivists from Canada and the USA, the authors (Regehr et al., 2022) explore some of the unpleasant emotions that documents evoke in archivists. Riegler (2023) acknowledges that although there are strict rules for archiving, not everything can be handled according to these rules, and sometimes individual decisions, which may be influenced by emotions, must be made. She highlights the challenge of maintaining objectivity in the valorisation of archival material and touches on the concept of nostalgia as a social phenomenon driven by a longing for the past. Nostalgic memories are triggered by sensory perceptions of objects, images, sound, and video recordings. Recent digitalization efforts are well-suited to archives, as archival materials are predominantly two-dimensional, meaning no dimension is lost in the digitalization process. Thus, the past has found a place in the present for a broader audience through nostalgic memories evoked by digitally accessible materials online.

3.4. THE INFLUENCE OF EMOTIONS ON THE WORK OF RESEARCHERS OR HISTORIANS

Similar to how archival material evokes different emotions in archivists, it also affects researchers, including historians, genealogists, and others. The distinction between contributions focusing on this theme and those dealing with the effects on archivists mentioned earlier is not clear-cut, and the two topics often overlap. An article on compassionate or empathetic perspectives on history examines a database of transcribed 18th century letters. Sara Fox (2022) developed a questionnaire for historians researching these letters, in which they reflect on emotions, including cases where researchers disagree with the individuals they study. The article also discusses what empathy is and whether it is genuinely possible in historical research or merely fictional. Additionally, there is a discussion on ethnological re-

search using family photographs (Tyshchenko, Tkachuk, 2022), which are shown to interviewees to help them talk more openly about their memories of traditional customs and ceremonies. In addition to the photographs serving as a starting point, ethnologists use classic questionnaires, while the photographs evoke pleasant emotions that lead to better descriptions of past customs. An article by Emily Bruce (Bruce, 2021) considers the impact of historians' emotions on research about the history of childhood and youth. She questions how historians' emotional frameworks and memories influence their understanding of emotions such as love, fear, hope, and pride that appear in archival sources. Bruce suggests a series of methodological reflections for studying childhood and adolescence.

3.5. PHILOSOPHICAL-THEORETICAL REFLECTIONS ON EMOTIONS IN ARCHIVES

The final group of articles explores the emotions associated with archives from a philosophical or theoretical perspective, with Cifor (2015) providing a detailed analysis through affect theory. Cifor's work highlights three key areas:

- Influence on Appraisal: Affect theory affects decisions about which archival materials to preserve or discard.
- Archivist as Witness: If archivists observe social injustices in historical documents, they have a responsibility to address these issues publicly. Failing to do so perpetuates new injustices.
- Impact of Neoliberal Ideology: Archivists must critically assess and distance themselves from societal and political demands to counteract harmful and unjust dynamics.

Cifor also emphasizes that a critical perspective reveals archives as spaces and instruments of power, contributing to both justice and injustice. Affect theory is crucial for understanding and advancing social justice in archival contexts. It helps identify and examine the conditions that have led to past injustices and oppression and provides tools for improving archival practices. This includes re-evaluating functions such as appraisal, witnessing, and access, particularly within the neoliberal context. Furthermore, affect theory offers means to challenge dominant structures of power and privilege, fostering more equitable futures for all affected by archival practices. For archivists and scholars to meet

the needs of various stakeholders – past, present, and future – they must engage critically with affect and its theoretical implications in archival work and research (Cifor, 2015).

Similarly, Raab (2023) critically examines contemporary society, noting that a society without a future tends to look back to the past. If we consider the time elapsed between an event and the emergence of nostalgia for that event, we see that it is becoming increasingly shorter.

4. CONCLUSIONS

Based on the collected literature, it can be summarized that the study of emotions in archives is a relatively young field, with the first conference on this topic held in 2014 in Los Angeles.

Some parallels can be drawn from research in related fields. In the field of pedagogy, for example, it has been found that emotions play a significant role in motivation and memory, and these findings can be effectively applied to archival pedagogy and exhibitions. Archival exhibitions, on the other hand, can be well compared to museum exhibitions, for which more research has already been conducted. The impact of emotions on researchers, particularly historians, can be meaningfully compared to the effects of emotions on archivists in their daily work with archival materials.

Emotions play a significant role in motivating the exploration of new content, especially in the contexts of archival pedagogy and archival exhibitions. They also influence how archivists and researchers perceive and interact with archival documents, highlighting the subjective dimensions of archival work. These findings suggest substantial opportunities for further research, which could either deepen existing knowledge or explore new segments of archival practice where the impact of emotions is evident. Given the ongoing emergence of new publications, continuous literature review will be necessary. Structuring this extensive topic into specific areas, as suggested in this text, appears both reasonable and practical, although additional relevant areas will likely emerge with future research.

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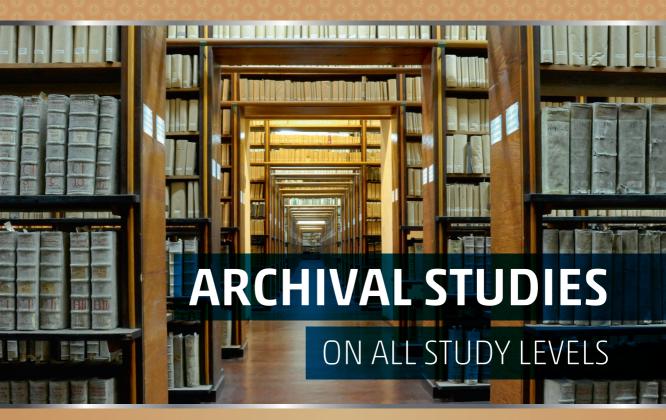
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ARCHIVAL STUDIES



ARCHIVES AND RECORDS MANAGEMENT STUDIES



ARCHIVAL SCIENCES





"Archivistica amor noster, semper et in aeternum"