

# Archives' call to Digital Humanities: a case study of Portuguese Municipal Archives

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## Abstract

The availability of digitised cultural heritage content held by archives and other memory institutions improves their visibility, facilitate and increases access to information, allowing new kinds of research of digital heritage, namely Digital Humanities. This study intends to report how Municipal Archives of mainland Portugal are ensuring access to their digitized cultural heritage content. For this purpose, an analysis was held to collect data about online catalogues with digital objects linked to the archival description in 278 Municipal Archives of mainland Portugal. The data revealed that the openness of the primary information sources preserved by the municipal archives, which can be reused by all those who need them and particularly by digital humanists, is still in infancy.

## CCS Concepts

Information systems → Information retrieval; Information systems → Digital libraries and archives; Information systems → Information integration

## Keywords

Portuguese Municipal Archives; Cultural Heritage; Digitization; Digital Humanities, Online Access

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## INTRODUCTION

In a society where access to information, knowledge and culture are increasingly relevant as factors of economic and social development, it is necessary to discuss the role of archives to the Digital Humanities (DH), understood as «the use of digital tools in research, teaching, scholarship and publication in humanities disciplines» [19].

Archives, such as libraries and other cultural heritage institutions, are moving from analogue to digital form to support research in the DH. However, it is not about making everything digital but about creating useful content to researcher that can be integrated into research outputs.

Digital access to archives can be perceived as a strategy to create competitive advantage and added value for their users, insofar as «digitization and the publication of heritage collections online can be considered as a first indication of the organization's ability to innovate in the creation of new heritage information services, expand audience reach or create new value for collections» [3]. Full-text information search and retrieval through online catalogues introduces a new approach in communication between information services and users, as well as significant improvements in the access to resources. These improvements are reflected in the researchers' satisfaction since it allows them to «search contents remotely and download them in a way to work on them anywhere, eliminating spatio-temporal barriers» [11].

This means that the adoption of Information and Communication Technologies (ICT) and the openness of digital collections held by archives and other memory institutions contributed to improve their visibility, to facilitate and increase access to information, and allow the creation of services and products focused on users' information needs that are able to meet their current and future needs and expectations. On the other hand, it also entails numerous challenges and opportunities for both memory institutions and researchers.

In the researchers' perspective, the challenges introduced by the ICT into their information behavior can be regarded as: (1) the need for training, including the technical training to use new tools and services, and the continued support in its use; (2) the need to develop and make sustainable (in the long term) the digital infrastructure to support research; and (3)

improve the capacity of data sharing and interconnection between different archives [4].

In the Portuguese case, as observed by Guardado & Borges [10], the results regarding the adoption of digital practices by R&D units working in the field of History is positive, even when compared with the international reality: «the major difference is related to patterns of collaboration. In many non-Portuguese projects, public participation is one of the main characteristics while in Portugal the collaboration is mainly inside the scientific community, involving historians and other researchers».

Understanding the digital practices of R&D units allows us to begin to understand not only the present use of new technologies but also the way these organisations are transforming themselves. Indeed, the omnipresence of the digital phenomenon has operated a shift in epistemology and forms of academic work. We are not in the exclusive domain of use because it is impossible to distinguish the impact of new technologies - and the consequent omnipresence of digital - from the way science is done today.

However, DH cannot be reduced «to the mere application of tools and digital resources», since it is a matter of debate and experimentation with «new models of understanding the culture and the world» [14].

Because not all digital content, tools and services are necessarily useful or usable [2] and to ensure that the human and financial efforts in digitization projects are relevant to the greatest number of users, the collaboration among archivists and digital humanists will be beneficial in what concerns: (1) decision-making on issues related to appraisal and selection policies (what is to be preserved or not); (2) acquisition of documents; (3) selection of appropriate information systems and interface design and (4) to support decisions on what is digitized and made available online. They are also called to work together to face common challenges such as the long-term preservation of digital collections and holdings (digitized and born-digital) in the public domain.

For DH research it is important to insist on the urgency of improving communication with the public in general and with researchers, in what concerns the selection of the documents to be digitized and made available in OA to enhance the use of the digital collections made available by the archives.

Only effective communication can reveal the advantages of the society investment in the culture and scientific research in DH. This is important because it can prove the capacity of memory institutions and humanities to survive in a highly competitive environment where their social role and contribution to economic development are often questioned.

## PORTUGUESE MUNICIPAL ARCHIVES

The Municipal Archival Network Support Program (PARAM), initiated in 1998 by the Portuguese Institute of National Archives / *Torre do Tombo*, has profoundly changed the landscape of municipal archives at a national level. PARAM

allowed municipalities to provide their archives with appropriate structures to house them and to preserve and promote access to archival materials [7]. In this way, PARAM was the first step in defining a national archives policy and in affirming and «promoting the quality of archives in their dual administrative and cultural dimension» [13], with the aim of ensuring citizens the right of access to information held by municipal archives.

With the introduction of digital technology in the production, processing, exchange, storage and dissemination of information, new challenges and opportunities for access to information and the provision and delivery of citizen-centered online services are born. Opportunities include the availability of online catalogues with descriptive metadata and digital objects associated, produced from the digitization of several primary sources of information - handwritten, printed, photographic, film and sound sources, among others - capable of meeting the needs of users with very different profiles that have been changing in recent decades.

In addition to the "traditional" users of the archives, such as scholars, academics and genealogists, more recently, other users so-called "amateur" are welcomed at the archives: «l'intérêt pour le patrimoine et l'histoire locale a fait venir à partir des années 1980 d'autres chercheurs amateurs tandis que la montée plus récente de la demande mémorielle et sociale - convoquant la dimension civique des archives - provoque l'arrivée dans les salles de lecture d'usagers différents, souvent pressés, cherchant une information précise et fiable» [12].

The European Commission has published directives addressing the issue of digitization and online availability of cultural heritage [5] and has set up financial incentives through funding programs for this purpose, as it considers that: «collections in libraries - including digital libraries - in archives, museums, galleries and other European public institutions (...) should be made available to researchers and citizens, also through new technologies, in order to enable a look to the future through the archive of the past» [6].

Thus, it is necessary to reflect on the role that municipal archives, as repositories of culture, can and should play in the scientific research process by providing online access to digitised archival material.

## RESEARCH METHODOLOGY

This study intends to analyze the availability of digital content, i.e., digital objects, in online catalogues of municipal archives which are essential to DH research.

In a first stage, the 278 municipalities' official websites of Continental Portugal were analyzed and, where applicable, on the municipal archives websites to ascertain the existence of online catalogues. In a second stage, the online catalogues data was retrieved (used databases and the existence of digital objects linked to the archival description). Finally, it was verified how of these municipal archives adhere to the content

aggregators, namely the *Portuguese Archives Network* and the *Portuguese Archives Portal*, as well as the *Directory of Municipal Archives* and the *Directory of Digital Repository of Knowledge*. All data were collected in June 2017.

## RESULTS AND DISCUSSION

From the analysis carried out and based on the municipalities' official websites analysis or their municipal archives websites, it was found that only 15% have a catalogue available online.

The analysis of [Table 1](#) shows the existence of large regional asymmetries since in five districts no municipal archive has an online catalogue.

**Table 1: Municipal Archives of Continental Portugal with online catalogues**

District	Municipal Archives	Online Catalogues	Municipal Archives with Online Catalogues (%)
Aveiro	19	5	26%
Beja	14	2	14%
Braga	14	3	15%
Bragança	12	0	0%
Castelo Branco	11	0	0%
Coimbra	17	0	0%
Évora	14	1	14%
Faro	16	3	25%
Guarda	14	1	1%
Leiria	16	2	12%
Lisboa	16	6	38%
Portalegre	15	0	0%
Porto	18	5	28%
Santarém	21	1	5%
Setúbal	13	3	23%
Viana do Castelo	10	8	80%
Vila Real	14	2	14%
Viseu	24	0	0%
<b>TOTAL</b>	<b>278</b>	<b>42</b>	<b>15%</b>

Source: **Municipal Archives of Continental Portugal Web page.**

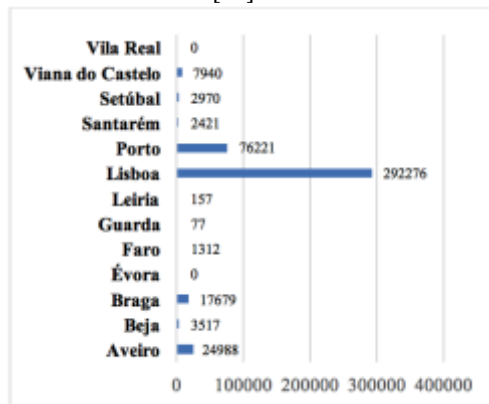
Only *AtoM* and *Archeevo*, which correspond respectively to 14% and 46% of the archival description software used by the Portuguese Municipal Archives, allow us to obtain the total number of descriptive records with associated digital objects

available online. To obtain the same data from other databases in use, a more thorough research is necessary and in some cases, this task is not possible at all.

In [Figure 1](#), the Lisbon district stands out regarding the number of descriptive records with associated digital objects, despite having only six municipal archives with available online catalogues, followed by the Porto district, representing both districts 83% of the total descriptive records with associated digital objects available for online retrieval in Continental Portugal.

Among the sources of information available online there is a vast number of public and private archives - including personal and family archives, religious confraternities and brotherhoods, and various associations.

During the research on the catalogues, it was observed that there is a clear commitment with the digitization and availability of photographic collections from diverse sources (public and private) and the local press, which means that the digitization, in the context of archives, acquire its own characteristics: «digitisation in an archival context is often a hybrid concept combining features of digital *conversion* of library holdings (periodicals, books, newspapers), digital *surrogacy* of historical records and long-term Digital Preservation of materials» [15].



**Figure 1: Amount of descriptive records with associated digital objects (n=42)**

Fulfilling the administrative and cultural dual function, the archivists are responsible for the management of information to respond to the needs of the organization, serving the purpose for which it was created, and at the same time to respond to the research needs [17]. This means that municipal archives must respond to different user profiles with different information needs.

In the context of the inquiries carried out in 2014 and 2016 ([Figure 2](#)) by the Working Group of the Municipal Archives of the Portuguese Association of Librarians, Archivists and Documentalists (BAD), it was included all municipal archives at national level (Continental Portugal and Autonomous

Regions of the Azores and Madeira), in a total of 308 municipalities.

In these inquiries, three categories of external users were considered: students, researchers/historians and citizens. By "researchers/historians" were considered those who seek the archives as holders of primary sources with the purpose of carrying out their research work, whereas "citizens" are all those who go to the municipal archives to access information to enable them to fully exercise their rights [8] [9].

It is concluded from the results of these surveys that the "largest" users of the municipal archives are "researchers/historians" and "citizens" almost *ex aequo* (Figure 2).

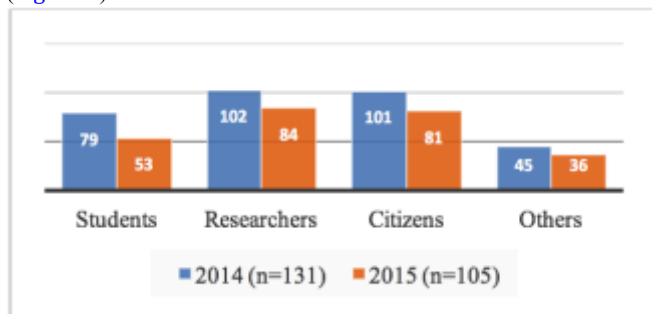


Figure 2: Users' profiles at the Municipal Archives in 2014 and 2016 [8] [9]

The main reasons that have led the municipal archives to digitize and to provide digital access to their collections can certainly be found in the results of the ENUMERATE survey. In fact, although the results are reported to memory institutions in general since museums and libraries were surveyed across Europe in addition to the archives, there were identified the following reasons: scientific research, teaching (teaching content) and the reduction of the use / handling of the original documents [18].

In addition to online catalogues and the number of descriptive records with linked digital objects, it was investigated the municipal archives that are integrated in the *Diretório da BAD (Directory of Municipal Archives)* and to content aggregators such as the *Rede Portuguesa de Arquivos (Portuguese Archives Network)* and the *Diretório de Repositórios Digitais do Conhecimento (Directory of Digital Repositories of Knowledge)* (Figure 3).

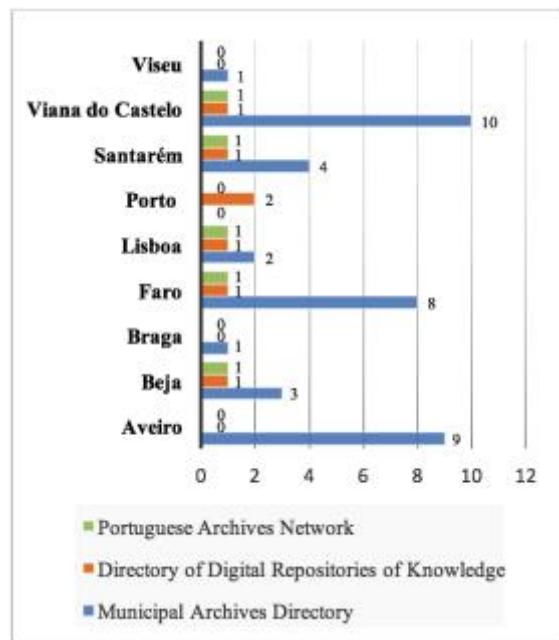


Figure 3: Number of municipal archives (by district) in the directory and content aggregators [Source: The Authors]

The *Portuguese Archives Network* aim to allow access to the «archival heritage, disseminated by different archival services, making it accessible to the citizens, giving them the opportunity to know and to "appropriate" it, as a repository of a collective memory, the basis of a common identity, but also to enjoy it, quickly and easily» [16]. It allows access to information from a single point - *Portuguese Archives Portal* - that has the dual role of service provider and content provider for other national and international aggregation portals, such as *Europeana* and the *Archives Portal Europe*. However, there are only five municipal archives present in The *Portuguese Archives Network* - Albufeira, Cascais, Constância, Ponte de Lima and Vidigueira.

The Municipal Archives Working Group of BAD introduced the *Municipal Archives Directory* in 2015 at the 12th National Congress of BAD. The aim of this project is to establish a single access point to information about Portuguese Municipal Archives. However, nowadays only 38 municipal archives are registered there, which, in terms of district representation, are distributed as follows: Aveiro (47%), Beja (21%), Braga (7%), Faro, Lisbon (12%), Santarém (19%), Viana do Castelo (100%) and Viseu (4%).

The *Directory of Digital Repositories of Knowledge*, currently in implementation, aims to aggregate all national repositories that store, preserve, generate or allow access to digital content in the areas of Science and Culture. The directory currently contains the identification and characterization of 128 entities that hold repositories, which represents 120 digital repositories. Nevertheless, there were

only identified seven digital repositories in the category of municipal archives - Albufeira, Cascais, Constância, Penafiel, Ponte de Lima, Porto and Vidigueira.

Online access to digital content has several advantages for science and researchers, in particular about «broadening the dissemination of the publication, which thus becomes more visible and accessible» [11].

## CONCLUSION

The Portuguese Municipal Archives, whose origins go back to the foundation of the respective municipalities, some of them from the Portuguese Middle Ages, have in their custody a vast diversity of important and unique information sources that interests scientific research in several areas of knowledge such as History, genealogy, demography, urbanism, among others.

Almost three decades have passed since the first archives catalogues appeared and that Bearman foresaw online catalogues that combine images and sound records linked to descriptive metadata: «the cultural information systems (...) cannot consist simply of documents and objects surrogates, representations of information-laden holdings; they must consist of the things themselves. Thus, images will need to be carried along with their descriptions, text along with their cataloging, and data files along with descriptions» [1].

Despite the financial incentives for digitization of cultural heritage the present empirical study shows that the online catalogues made available from the Portuguese Municipal Archives are still incipient. Online access to the primary information sources preserved by the municipal archives, which can be reused by digital humanists, is still in infancy. The reasons may be due to the complexity of the transition from the analogical to the digital environment, as the digitization projects do not end with the publication of the online content. On the contrary, they should be a long-term investment, because it is necessary to predict issues related not only to the preservation of physical/analogue material but also to long-term preservation and continued access to digital information (digital-scanned and digitized).

In short, in the context of a global society, where access to information, knowledge and culture are increasingly relevant as economic and social development factors, there is a responsibility for memory institutions, including municipal archives, to respond to the user's information needs. From this point on, archives could obtain important indicators about the impact and sustainability of digital collections in the DH that justify the financial and human resources investment that the Municipal Archives are undertaking in digitization projects.

## REFERENCES

- [1] Bearman, D. 1989. Archives and manuscript control with bibliographic utilities: challenges and opportunities. *American Archivist*. 52, (1989), 26-

39. DOI=<http://dx.doi.org/10.17723/aarc.52.1.3g5q3755300r755r>
- [2] Borgman, C. L. 2009. The digital future is now: A call to action for the humanities. *DHQ: Digital Humanities Quarterly*. 3, 4 (2009).
- [3] Borowiecki, K.J. and Navarrete, T. 2017. Digitization of heritage collections as indicator of innovation. *Economics of Innovation and New Technology*. 26, 3 (2017), 227-246. DOI=<http://dx.doi.org/10.1080/10438599.2016.1164488>
- [4] Bulger, M.E., Meyer, E.T., De la Flor, G., Terras, M., Wyatt, S., Jirotko, M., Eccles, K. and Madsen, C.M. 2011. Reinventing Research? Information Practices in the Humanities: a RIN Report. Research Information Network.
- [5] Comissão Europeia 2014. Comunicação da Comissão ao Parlamento Europeu, ao Conselho, ao Comité Económico e Social Europeu e ao Comité das Regiões: rumo a uma abordagem integrada do património cultural europeu.
- [6] Conselho da União Europeia 2013. Decisão do Conselho de 3 dezembro 2013 que estabelece o programa específico de execução do Horizonte 2020 – Programa-Quadro de Investigação e Inovação (2014-2020). *Jornal Oficial da União Europeia*. (2013).
- [7] Direção-Geral de Arquivos (DGRQ) 2008. Programa de Apoio à Rede de Arquivos Municipais (Relatório de avaliação).
- [8] Freitas, C. and Marinho, V. 2014. Arquivos Municipais: nótulas ao 4o inquérito nacional. 11o Encontro de Arquivos Municipais / atas de conferência (Esposende, 2014).
- [9] Freitas, C. and Marinho, V. 2016. Situação dos arquivos municipais: resultados do inquérito. 12o Encontro de Arquivos Municipais (Castelo Branco, 2016).
- [10] Guardado, M.C. and Borges, M.M. 2012. Digital History in Portugal: A Survey. Science and the Internet. Düsseldorf University Press. 43-54.
- [11] Guardado, M.C.G. 2015. A «oficina do historiador» na era digital: práticas e perceções na comunidade historiográfica portuguesa. Universidade do Porto, Universidade de Aveiro.
- [12] Ministère de la Culture e de la Communication (MCC) 2016. Qui sont les publics des archives? Enquête sur les lecteurs, les internautes et le public des activités culturelles dans les services publics d'archives (2013-2014).
- [13] Peixoto, A.M. 2002. Arquivos Municipais: evolução e afirmação. *Cadernos BAD*. 2 (2002), 96-104.
- [14] Pereira, P.S. 2015. Academia, Geopolítica das Humanidades Digitais e Pensamento Crítico. *Revista do Programa de Doutoramento em Materialidades da Literatura*. 3, 1 (2015), 111-140. DOI=[http://dx.doi.org/10.14195/2182-8830\\_3-1\\_7](http://dx.doi.org/10.14195/2182-8830_3-1_7)
- [15] Poole, N. 2010. The cost of digitising Europe's cultural heritage: a report for the Comité des Sages of the European Commission.
- [16] Rede Portuguesa de Arquivos: 2014. <http://arquivos.pt/>.
- [17] Schellenberg, T.R. 2003. Modern archives: principles & techniques [PDF].
- [18] Stroeker, N. and Vogels, R. 2014. Survey report on digitisation in European cultural heritage institutions.
- [19] Viiri, S. 2014. Digital Humanities and Future Archives. Finnish Institut