Digital Humanities for the XXI Century Museum

BEST PRACTICES, NETWORKS, AND ACCESSIBILITY

In the contemporary sphere, museums have transcended their traditional role as mere repositories and exhibitors of cultural heritage. They have metamorphosed into bastions of exploration, where not only new perspectives of knowledge are sought. Interaction with works of art engenders a personal symphony of memories, emotions and enlightenment that is seamlessly woven into the fabric of culture. In deft response, the nascent field of Digital Humanities unfolds before art museums a landscape of opportunity where a unique juncture presents itself to dismantle prevailing social disparities between audiences and enrich the kaleidoscope of cultural enterprises. This volume delves into their fabric, recounts the odyssey of some museum bastions and illuminates their trajectories in recent years, a journey that weaves the fabric of their present and the tapestry of their tomorrow.

Ana María Cuesta Sánchez holds a PhD in Fine Arts from the Complutense University of Madrid, where she holds the position of Academic Secretary of the CAPIRE research group. His professional career has focused on museums, technology, and accessibility.

Ángel Pazos-López holds a PhD in Art History from the Complutense University of Madrid and is an Assistant Professor at the Rey Juan Carlos University, where he directs the INTERVISUALAB Laboratory. He has orchestrated various research initiatives related to museums, accessibility, and medieval art.

Spine

Digital Humanities for the XXI Century Museum

A.M. Cuesta Sánchez – Á. Pazos-López (eds.)

Front Cover

Ana María Cuesta Sánchez and Ángel Pazos-López (eds.)

Digital Humanities for the XXI Century Museum

BEST PRACTICES, NETWORKS, AND ACCESSIBILITY

Boleine

Digital Humanities
for the XXI Century Museum
Best Practices, Networks,
and Accessibility

Ana María Cuesta Sánchez
and Ángel Pazos-López (eds.)

Illustration de couverture : "Caronte", de Sheila Adán Lledín, lauréate du concours de la *Quarantaine Iconographique* (2020).

Crédits images : *Charon ferries the dead to Hell*.

For Isidora, with the hope that,
wherever she may be,
she can understand the meaning of this book.

To Diego, in the hope that he finds
the way these two worlds come together
in this book inspiring.

CONTENTS

Today's Museum, Tomorrow's Cultural Heritage. Challenges and Leading Actions in Digital Humanities, Networks, and Accessibility

Ana M.ª Cuesta Sánchez and Ángel Pazos-López

Museums today, in addition to being spaces for the conservation and exhibition of cultural heritage, are also spaces for research and experimentation with new forms of knowledge. As places of knowledge, learning is not only generated from the objects or artefacts that are contained, exhibited, and guarded, but is also created from the human experiences of the public. By interacting with the works, audiences establish their own connections between memories, feelings, and knowledge with the material dimension of culture. This relationship between museum audiences and the discourses presented by museums in exhibitions and displays is one of the most important challenges we must face in the 21st century. To meet this challenge, the first twenty years of the century have focused on three areas of action which, in a coordinated way, can help us to bring the cultural heritage of museums closer to society: the processes of digitisation for the establishment of innovative practices, the construction of inter-institutional networks and alliances, and the search for full accessibility for all. In this book, *Digital Humanities for the XXI Century Museum. Best Practices, Networks and Accessibility*, these three dimensions are approached in an interconnected way to compile the way in which some museum centres have approached their present and future in recent years.

The emergence of technology, computing and digitisation processes revolutionised the latter part of the 20th century through major innovations such as the internet. It also brought about changes in the way humanistic knowledge was constructed. On the one hand, new means of access to scientific information were created, and databases and catalogues of information on paper files gave way to digital information infrastructures. On the other hand, new mechanisms for preserving information emerged with the advance of technology: from photography came documentary digitisation and from digital design and creation came virtual modelling. These innovative technological processes, as a new way of approaching knowledge of the human sciences, are known today as Digital Humanities, and are consolidating as a field of work with great potential for application to museums and cultural heritage.

The advance of digitalisation and the knowledge society has also produced a social oversaturation of information in which it is more

important to know how to discriminate the sources of knowledge to navigate the infinite amount of data and the overwhelming amount of information that is accessible to all. Museums have gone from being entities connected to each other by the human relationships of those who work in each entity, to being places that generate information and data that are analysed in real time by other institutions to improve their own cultural programming. This institutional intelligence, by which data is collected and analysed, must be accompanied by programmes to share good practices in safe and responsible alliances with users, the institution, and its own workers, as part of the corporate social responsibility that any entity must keep. For this reason, the constitution of networks and alliances between museums and cultural institutions, with which to face complex challenges in a coordinated way, is and will be one of the priorities to be worked on in the coming years.

It cannot be forgotten that any cultural programme must aim to satisfy an explicit or implicit user or public demand. For this reason, museums have been working for years to redefine their open access policies, to programme "for and with audiences" and to generate safe spaces for the emotional enjoyment of people, being aware of their differences, but including all people regardless of their diversity. The introduction of universal accessibility in the museum is not just a matter of installing ramps for wheelchair access or indicators written in Braille. It must involve redefining the museum's own communication policies to include all people in its discourse, without falling into paternalism and without allowing itself to be dragged along by the hegemonic discourses created by the theories of post-modernity. In the end, the museum must stimulate the critical and creative thinking of its audiences and propose itself as a safe space for the ideological freedom that favours knowledge.

This book compiles twenty-eight good practices carried out in museums, art centres and cultural institutions that focus on solving some of the problems we have already mentioned. To this end, the book is structured in six multifaceted thematic sections: *Networks and New Challenges in Cultural Management, Building Narratives in Museums, Paradigms of Innovation with Digital Humanities, Apps and Models in Cultural Heritage and Museums, Singular Proposals for Full Inclusion* and *Experiences in Specific Audiences*. These sections allow the chapters to be arranged by thematic analogy, although in many cases different analyses are combined, creating new study perspectives that are applied both to theoretical and extrapolated cases and to individual cases of museums or institutions. For this reason, the result is a book with great richness and variety of cases, which increases and enhances the interdisciplinary

development of the specialists who have used it and who resort to their texts as a source of real experiences and applying them to other environments, but also for the general public that sees in its pages a constant enhancement of cultural heritage and a recognition of the good practices carried out by the institutions that take it.

A first section, entitled *Networks and New Challenges in Cultural Management*, includes the works of Kumar Kishinchand López, Fayna Sánchez Santana, Elena López Gil, Sol Martín, Alejandro Morán Barrio, Mariano Cecilio Espinosa, and Gemma Ruiz Ángel. All of them invite us to reflect on networks and the new horizons and challenges that 21st century society must face in terms of cultural management, mentioning unique spaces that require particular attention. Based on the development of the concept of transparency and the study of current legislation on this matter applied to museums, Kumar Kishinchand López unfolds in "El concepto de transparencia y la accesibilidad de los museos en España" a corpus of study on transparency Institutional and management of the collections in various Spanish institutions of reference such as the Thyssen Bornemisza National Museum, the TEA Tenerife Espacio de las Artes, and the Reina Sofía National Art Center Museum. Counting on the exposed models and strategies, Fayna Sánchez formulates the keys to the role of NGOs and CSOs in the conservation and preservation of the heritage of the indigenous communities of southern Mexico through the need to design a manual of good practices in sustainable acculturation, which allows counteracting the high rate of development in contrast to the rhythms of their culture.

The treatment of heritage with an inclusive and accessible perspective brings us closer to the contribution of Elena López Gil and Sol Martín, "ETPM, Encuentro Transfronterizo de Profesionales de Museos. Museos y Accesibilidad. 2012-2019", where they present the results of the ETPM as a result of a need to integrate those professionals dedicated to heritage and those focused on the study of museology and accessibility, in order to publicize cutting-edge collaboration projects in a matter of Universal Accessibility. The study of strategic management models is completed with the contribution of Mariano Cecilio Espinosa and Gemma Ruiz Ángel, focused on the case of the Sacred Art Museum of Orihuela with the line of comprehensive planning of the historical-artistic and cultural heritage of the assets of the Church. For this model, a framework based on centralization, sustainability, and efficiency is proposed, whose backbone is the museum itself, as a centre for conservation, protection, research, dissemination, and recovery of cultural assets. These lines of work are illustrated with the case study of the Sacred Art Museum of Orihuela, the

object of the development of a diversified activity that culminates in the wide dissemination of the heritage of the diocese promoting the inclusion and participation of the whole society. Finally, Alejandro Morán Barrio studies a small museum in the city of Santiago de Compostela, the Museum of Sacred Art of San Paio de Antealtares (MASSPA), from a multi-focal perspective for its future renovation, addressing the function that this exhibition space should maintain and reflecting on the possibilities for its improvement on the 50th anniversary of its foundation.

The second section, *Building Narratives in Museums*, offers us an approach to narrative-making in museums, from the interactions between academic research and curating, to the influence of the museographical display on visitors' cognitive accessibility, narrative assimilation, and practical navigation of the museum. All these aspects are thoroughly addressed using case studies in America and Europe. Starting with a reflection on how academic work feeds the curatorial activity and vice versa, it is suggested that a closer and more permeable collaboration among all the disciplines in the museum benefit us all, having an impact on all stages of the creation and delivery of an exhibition. Architecture is undoubtedly a key element in this discussion. The boundaries between the museum as an architectural work and the museography that supports its content become more diffuse. This creates opportunities and tensions that, far from bringing definitive solutions, provide lessons in what works and what does not. A trial-and-error methodology that underpins all developing disciplines. Furthermore, upcoming narratives such as gender studies are getting more and more space within museums' approaches. Directly engaging with social commitment, visibility and coeducation, these perspectives challenge traditional readings of History, predominantly androcentric, and include other relevant views, such as biological-cultural cycles.

The chapter, "Linking Academic Research, Museum Architecture and Curatorial Practice: Alcino Soutinho's Exhibition at the Neorealism Museum", by Helena Barranha, opens the reflection on how we have traditionally thought of narrative-building in a museum as a succession of correlative but impermeable steps, starting in Academia and ending in the completion of the exhibition. Barranha explores the case of the Alcino Soutinho's exhibition, highlighting the particularities of exhibiting architecture, but also sharing insights on how back-and-forth, research-and-final product dynamics built the knowledge that was eventually displayed at the Neorealism Museum. As mentioned before, architecture is a recurrent both issue and solution when addressing the delivery of narratives in a museum. In the chapter "El museo contemporáneo como espacio interactivo: arquitectura, museografía y museología en el Museo del Mañana",

Bianca Manzon Lupo, Diego Enéas Peres Ricca, and Viviana Gormaz Vargas, use the Museo del Mañana of Brazil as a trigger to reflect about the interactions between the visitor and the museum as a conceptual but also architectural entity. The authors advocate for an integrative design and a real interaction. Accordingly, space is thought as a support to the narratives, aiming at generating reactions that lead to an active participation. This experience at the museum should create a bond and leave an everlasting educational and emotional impact on participants. Inclusive museography is, thus, particularly relevant, as it tackles the need to adapt content and form, and how accessible they are, seeking to be both attractive and useful for as many visitors' profiles as possible. Interactivity can be manual, cognitive, or social, and the challenge of visitors' physical but also social conditions should be considered.

Taking the focus towards upcoming and more inclusive narratives, the application of gender perspectives is addressed in the two following chapters. Firstly, in "La perspectiva de género: clave para una relectura museal", Liliane Inés Cuesta Davignon and Ester Alba Pagán bring up the experience of a project "Relecturas. Itinerarios museales en clave de género", which was developed in Valencia, Spain, in which several cultural institutions were engaged, creating holistic synergies to attract visitors while diffusing new readings on heritage, looking both at past and present social structures and behaviors. Additionally, the authors address their museographical reflections, as well as online presence and interaction with the audience. Secondly, Ana B. Herranz Sánchez, Carmen Rueda Galán, Carmen Rísquez Cuenca, Francisca Hornos Mata, and Antonia García Luque go beyond gender perspectives and also question the predominant androcentric approach in archaeology. By doing so, they aim to contribute to plural identities coeducation, acting as social agents, advocating for civic participation. This is underpinned by the impact the project had on neighbouring cultural institutions, which is also studied in the chapter. Continuing with the vision of the museum as a tool for coeducation and engagement, Michel Kobelinski presents the case of "The Iguaçu Regional Museum and its Audiences. Institutional and Autobiographical Narratives". The museum also privileges an anthropological approach to current connections with local communities but also with visitors. In this aspect, they have led an impact evaluation mechanism focusing on self-perception in social media when visiting the museum. Lastly, the author reflects on the challenge of museums' engagement with national education in Brazil.

The third thematic block, *Paradigms of Innovation with Digital Humanities*, made up of five chapters, explores the practical cases in

which there is an innovative and exemplary use of technology applied to heritage and museums. According to this line of innovation applied to heritage, the chapter "Museum Education in Cyberculture: Online Educational Activities Carried Out by the Educational Sector (SAE) of the National Museum, Rio de Janeiro, Brazil" by Frieda Maria Marti, Andrea Fernandes Costa, and Edmea Santos. In it, the authors expose us in a unique way and through a paradigmatic case study, a discussion about the interactive use of social networks in the educational area of the National Museum of Rio de Janeiro. This approach is carried out after the tragic fire of 2018, in which the museum's education strategies must be modified to ensure that its online activities are considered a benchmark of new thinking and museology in Brazil. Maintaining the common thread of the previous proposal and focused on the application of new technologies and languages for the documentation and conservation of cultural heritage, we find the chapter, "Hack the Glass. Innovation, Technology, and Heritage in the Real Fábrica de Cristales de la Granja" by María Luisa Walliser, Pablo Roger Prieto, and Susana Sancho Céspedes. In it, based on the development of the Hack the Glass project, they explore issues such as the survival of vitreous heritage and the use of technology for good conservation, not only focusing on the material point of view but also using the human potential of those of synergistic work to develop an innovative space for the conservation of intangible heritage through the survival of the glassmaker's trade.

Focusing on this aspect of new museology and dissemination of heritage, we find the chapter by Cristiana Barandoni "When Sculptures Were Coloured. Digital and Virtual Approach to Reverse Misinterpretation", focused on analyzing polychromy through the technological means deployed in the "MannInColours" research project. This study aims to promote a critical approach that investigates the methodology of design as a means of reflection and debate, thus being able to involve visitors with the different narratives to finally achieve their entertainment. To continue with a proposal focused on the new museology and technological innovation, we find the chapter by Rita Nobre Peralta and Alice Nogueira. In it, a corpus of work is developed from the material analysis of the Rafael Bordalo Pinheiro collection, which allows identifying the materials and techniques used to establish conservation protocols in addition to addressing effective strategies for the execution of digital media, such as augmented reality, that implement these new technological tools in the Rafael Bordalo Pihneiro Museum in Lisbon. And finally, we find the proposal of Juan A. Entrenas Hornillo dedicated to virtual reconstructions in the archaeological and historical heritage of the case of the fortress of Morón

de la Frontera. This approach leads us to the use of technological tools applied to heritage, which was already common in the field of archaeology, such as photogrammetric surveys, with the novelty of applying these models as the centre of the offer of accessible information values on architects, the historical, cultural, anthropological, and territorial of the place.

A fourth thematic section, *Apps and Models in Cultural Heritage and Museums*, explore models and technological frameworks in which to design and apply the caustics of museums, cultural and heritage spaces. Under this premise, this section begins with Tim Coughlan's chapter, "Designing Inclusive Innovations to Facilitate Creativity and Learning", focused on showing in a simple and effective way, how the various forms of technological design are applied to improve public participation in collaborative activities in museums, where they will be able to integrate their efforts in the different stages of the design and evaluation process through creative interaction tools. Continuing with these framework studies of technological innovation, we find the chapter by Estrella Sanz Domínguez, who bases her work on the application of these improvements in fields such as the conservation and protection of heritage based on the identification of already existing tools that allow the adaptation of resources to new challenges and threats that must be faced in case of emergencies of multiple natures. Focusing on the field of education and dissemination of museums, we find the chapter by Dorcas Weber "Art Museums on Web: An Observation at Online Educational Actions", which explores the role of the Internet and its relationship with museums in the matter of content dissemination, making an excellent and extensive reflection on how it is essential that institutions rethink their relationship with the web and the possibilities it offers them to reach different audiences.

In this aspect of the use of new technologies at the service of the public and society, we find the chapter by Clara Reigosa Lombao "Google Arts & Culture. Has the Imaginary Museum Come to Life?", in which virtual museums are considered as new spaces for the conservation and transmission of cultural heritage, despite their exclusion from the official definitions of museums. However, the author exposes us in an exceptional way as platforms such as Google Arts & Culture represent a paradigm of the virtual museum, capable of democratizing culture thanks to its location in the network and inclusion within the Google brand. To conclude this thematic section, Professor Ángel Pazos-López presents the innovative digital exhibition 'Ars Rituum', about medieval liturgy on the Pilgrims' Roads to Santiago de Compostela. The initiative provides, through immersive technologies and with different reading levels, a current vision of artefacts linked to Christian worship in the Middle Ages.

Through objects, images and melodies, virtual visitors can discover a new way of approaching the culture of the pilgrimage and a different way of experiencing virtual knowledge.

The fifth thematic section is devoted to *Singular Proposals for Full Inclusion*, gathering museum initiatives aimed at improving accessibility and social inclusion. On many occasions, accessibility is aimed at specific audiences that have traditionally been neglected by museums. In other cases, it is a way of building inclusive projects based on creativity and universal design. This is the case of the MiniTEA Space, developed in the chapter by Paloma Tudela Caño. It is an interesting project for the development of creative abilities, aptitudes and skills that contribute to the happy and complete growth of people in Tenerife Espacio de las Artes (TEA). The initiative goes beyond traditional educational programs, allowing young people to experiment with their creative side and fully develop their visual and plastic skills in a safe space. A parallel proposal was developed at the Museo Universidad de Navarra and is the subject of the following chapter entitled "Hacia una abstracción inclusiva: el Proyecto Kandinsky y los círculos personales", by Fernando Echarri Iribarren and M.ª Teresa Torres Pérez-Solero. This university museum has been working for years on inclusive initiatives that aim to encourage the discovery of the participants' inner world and link it to the spheres of their own experiences. The intention of their project to encourage discovery as a method of approaching art was complemented with the use of a creative plastic language.

Universal design and integration must address all phases of exhibition design. Eni Soriano and Óscar López Jiménez tell us in "Museo, integración social y educación crítica. Una propuesta lúdica desde el Castillo de Falset-Museo Comarcal (Tarragona, España)", how they approached the renovation of the Municipal Museum of Falset, being responsible with the environment and with the users. In this sense, the vision of a museum centred on people and not on the objects themselves is in line with the new trends for museums in the 21st century. In other cases, the museum faces the challenge of engaging in dialogue with viewers through artefacts that are not simply objects. Nicole Crescenzi raises this question about "The Problem of Accessibility in Musealising the Human Remains from Leopoli-Cencelle (Viterbo, Italy)". The difficulty of exhibiting human remains in current museum discourses is not new and is related not only to post-colonial currents, but also to current sensitivities to the dignity of the human person. Hence, the museumization of human remains must be approached with scientific rigour and social responsibility for a proper understanding of the historical function of the material artefacts.

Finally, the sixth section of this book, *Experiences in Specific Audiences*, deals with work related to the specific audiences at which certain museum activities are aimed. Programmes with and for all people require the singularity of certain groups which, due to their special characteristics, are not usually represented in the hegemonic discourses of museums. People on the autism spectrum were the target audience of the activity "A detective in my kitchen", carried out at the Museo de Artes Decorativas de Madrid and which is the subject of the chapter by Carmen Molina Villalba. This museum, organised by the Sinteno Association, an entity focused on the universal accessibility of autistic people, mainly in cultural fields and specialised in museums and exhibitions, has designed an inclusive visit attending to the characteristics of people in the autism spectrum. The same group was the target of a "Workshop of the senses" presented by Beatriz Alcántara Alcalde and Victoria Díaz Zarco. Considering the paradigms of design for all people, the experience shows an interesting activity that gathers the sensorial expression of arts and focuses it to the target public of people with autism. For this purpose, they design an interesting activity to be developed in the exhibition rooms using pictograms and sensorial routes.

In some cases, the Digital Humanities help us to fully include specific groups through the design of interactive resources, such as those carried out by The Alto de la Cruz Archaeological Site at Cortes in Navarre. The chapter by Patricia Castellanos Pineda and Glòria Munilla Cabrillana addresses the challenges of bringing an archaeological heritage site closer to groups with special accessibility, specifically to people in situations of special vulnerability. The exhibition exhibits a milestone in the protohistory of Europe and does so in a responsible way with its audiences through a digital exhibition and 3D modelling. Finally, the chapter by M.ª Elisa González García presents some conclusions regarding the Crepitantes project, an initiative to make cystic fibrosis visible through artistic initiatives. The need to recognise and raise awareness in society about certain rare diseases and minority diversities makes this proposal a unique action in which the individual is given a voice and shows through artistic work their relationship with their disease, which can help to communicate their own experience and contribute to raising social awareness about it.

The initiatives compiled in this monograph show the sensitivity of researchers, museum professionals, company employees and social groups to improving the living conditions of citizens, always reminding us that the main mission of culture is its connection with the society of the present. For this reason, readers of the book will find a marked bias towards a more practical than theoretical orientation and special attention

to the problems related to the diversity of audiences, a latent concern in today's museums. This spirit of concern that inspires design for all people was the central argument of the international congress *The Museum for All People: Art, Accessibility and Social Inclusion*, held in the city of Madrid in April 2019. With the participation of more than 400 national and international specialists, the activity produced a series of remarkable reflections on the social function of museums and the need to plan cultural initiatives with all audiences in mind. Some of the texts in this monograph were discussed at this international congress in a preliminary version which, after the respective blind peer review process, now take the form of a book aimed at reflecting on the challenges of the museum in the 21st century, which completes an interesting programme of publications, some of which have already seen the light of day.

Finally, this book is dedicated to all museum professionals who spend their lives to preserving, studying, and disseminating the cultural heritage of today's museums so that it can be enjoyed by the citizens of tomorrow. To them, in a very special way, this monograph is dedicated in the hope that they will find in some of the twenty-eight initiatives that are compiled some good practice that they can replicate in their museums,

some experience that will make them reflect on their work or some initiative that will open their eyes to a more inclusive view, using technology in a responsible way to be able to solve the challenges of the museum in the 21st century.

II.
BUILDING NARRATIVES
IN MUSEUM

Linking Academic Research, Museum Architecture and Curatorial Practice: Alcino Soutinho's Exhibition at the Neorealism Museum

Helena Barranha[1]

1. Introduction

In 2018, the Neorealism Museum (MNR) established a partnership with the José Marques da Silva Foundation Institute (FIMS) with the aim of organising an exhibition about the Portuguese architect Alcino Soutinho (1930-2013), who had designed the museum building opened to the public in 2007, in Vila Franca de Xira, a municipality in the Greater Lisbon metropolitan area, roughly 35 km north-east of Lisbon.

The curatorial proposal was based on the idea that the building was representative of how museums had always been a central theme in the architect's work. In fact, during more than fifty years of academic and professional activity, Soutinho undertook continuous research in the fields of museology and museum architecture, visiting and studying galleries in different countries and designing seventeen exhibition spaces, including several projects that were never realised. Before the exhibition, many of those designs remained unpublished and unknown to the public and, therefore, one of the major challenges facing the curatorial project was to shed light on the context under which the MNR building was produced.

In order to identify, study and document those related designs, comprehensive research was undertaken not only at the MNR archive, but mainly at FIMS, in Porto. Founded by the University of Porto in 2009, FIMS has become "a reference institution in the fields of architectural and artistic culture, in heritage project intervention, in the study, treatment, conservation and dissemination of architectural documents, both at a national and international level, cooperating with other institutions or organisations with similar purposes".[2] In 2014, the institution received the donation of Alcino Soutinho's professional archive and, since then, has been promoting its digitisation, preservation, and study.

1 Instituto Superior Técnico, Universidade de Lisboa and IHA-NOVA FCSH / IN-2PAST.
E-mail: <helenabarranha@tecnico.ulisboa.pt>.
ORCID: <https://orcid.org/0000-0003-0250-1020>.
2 FIMS, "José Marques da Silva Foundation Institute", accesessed 5 November 2022, <https://fims.up.pt/index.php?cat=1&subcat=13&lang=2>.

However, when the investigative work began, the born-digital drawings produced after the 1990s had not yet been transferred to FIMS and, consequently, the preparation of the exhibition required the processing and cataloguing of approximately 800 images. In this context, the curatorial project contributed towards the archive's expansion just as much as the archive provided the contents for the exhibition. This reciprocity was also reflected in the temporary dual display of a significant number of sketches and technical drawings, which were simultaneously accessible in the museum space and in the FIMS online database.

By analysing the process leading up to the exhibition *One Building, Many Museums. Alcino Soutinho and the Neorealism Museum* (on show from 9 February to 29 September 2019), this text seeks to discuss the advantages and challenges of linking academic research and curatorial practice in the specific field of museum architecture. Moreover, it highlights the importance of institutional collaboration in establishing connections within and between different archives, thus enabling new interpretations and providing new ways of making collections accessible to wider audiences. One central question underlies this reflection: how can architecture exhibitions foster academic research and, at the same time, stimulate the interest of non-specialised audiences in museums as architectural works?

2. Alcino Soutinho's life and work

Alcino Peixoto de Castro Soutinho, a leading figure of the renowned Porto School of Architecture, was born in Vila Nova de Gaia, Portugal, on 6 November 1930. In 1948, he enrolled at the Porto School of Fine Arts, where he completed his degree in Architecture and defended his thesis in 1959, being awarded the outstanding final classification of 20 out of 20. As the architect explained in his autobiography: "the 10 years it took him to complete his course had nothing to do with a lack of dedication to his studies, but rather with his political forays. His participation in demonstrations, the distribution of documents, and other anti-fascist activities led to his being arrested and tortured by the State Police [PIDE – *Polícia Internacional e de Defesa do Estado*] and forced him to interrupt his studies".[3]

A few months after obtaining his degree, Alcino Soutinho travelled to Italy to study museology on a scholarship from the Calouste Gulbenkian Foundation. In 1960 and 1961, he visited museums designed

---

3 Alcino Soutinho, "Autobiografia", in *Alcino Soutinho*: *Representações de Arquitectura* (Vila Franca de Xira: Associação Promotora do Museu do Neo-Realismo, 2007), 5 (translated).

by such prominent architects as Carlo Scarpa, Franco Albini, Ignazio Gardella and the BBPR collective, which allowed him to directly observe the innovative approaches to heritage and museography that were emerging in Italy at that time. At the end of his career, he acknowledged that "this experience proved to be highly enriching and decisively influenced his preferences as an individual and as a professional".[4]

When he returned to Portugal, he resumed his architectural practice, working with Arménio Losa, José Carlos Loureiro, Viana de Lima, Januário Godinho, Octávio Filgueiras, Rolando Torgo, João Andresen, and Fernando Távora, among other architects. After three decades of fruitful collaborations with various colleagues, he established a new office in Porto in 1993, in association with his younger daughter, the architect Andrea Soutinho.[5]

His vast architectural production, distinguished with several national and international awards, comprised a wide range of building types, most notably the Amadeo de Souza-Cardoso Museum in Amarante (1970-1988, AICA Prize 1984), the intervention at the Castle of Vila Nova de Cerveira (1970-1974, Europa Nostra Prize 1982), the Neorealism Museum in Vila Franca de Xira (2001-2007), and the iconic building of Matosinhos City Hall (1981-1987), later linked to the cultural complex of the Municipal Library and Gallery (1994-2005), confirming "the dominance of an architectural language characterised by technical knowledge, constructive solidity and a remarkable suitability in terms of place and function".[6]

Throughout his career, Alcino Soutinho always combined his design practice with his teaching activity, being a Professor at ESBAP (Porto School of Fine Arts) and later at FAUP – the Faculty of Architecture, University of Porto, from 1972 until he retired in 1999. He actively participated in the discussion and dissemination of architecture, giving lectures, and showing his work at exhibitions in Portugal and abroad.[7] Furthermore, he occupied important positions at public institutions, such as the Portuguese Design Centre (1998-2001), the Árvore Cooperative for Artistic Activities (2003-2006), and the Portuguese Architects' Association (1999-2002).

Soutinho was awarded the Medal of Merit from the City Councils of Matosinhos (1988) and Vila Nova de Gaia (1992), the Commendation

---

4 Soutinho, "Autobiografia", 5.
5 See FIMS, "Alcino Soutinho, Arquitecto", AToM "Access to Memory" Information Management Platform, University of Porto, accessed 5 November , 2022, <http://arquivoatom.up.pt/index.php/alcino-soutinho-arquitecto>.
6 FIMS, "Alcino Soutinho Information System", accessed 5 November, 2022, <https://fims.up.pt/index.php?cat=19&subcat=66>.
7 FIMS, "Alcino Soutinho Information System".

of the Military Order of Saint James of the Sword (1993), the title of Honorary Citizen of the City Council of Matosinhos (2007), a Doctorate *Honoris Causa* from the University of Aveiro (2011), and the Medal of Cultural Merit from the Portuguese Secretary of State for Culture (2013).[8]

3. The museum and the curatorial approach

Opened to the public in 2007, the Neorealism Museum is an important milestone in the work of the architect Alcino Soutinho, as well as an urban and cultural landmark in Vila Franca de Xira.

The history of the institution dates back to the 1980s, when a group of Portuguese intellectuals linked to the neorealist movement founded the Installing Committee and the Association for the Promotion of the Neorealism Museum (APMNR).[9] Their main objective was to create a centre for the preservation, study, and communication of the neorealist legacy, considering its literary, artistic, social, and political dimensions, with the aim of highlighting the importance of this movement for contemporary Portuguese culture. Initially based upon literary and bibliographical archives, including important bequests from writers and artists, the museum's collections were made accessible to the public in 1993, when the Documentation Centre opened in temporary premises, in Vila Franca de Xira. On the recommendation of the APMNR, in 1997, the municipality invited Alcino Soutinho to design the museum headquarters, which were to be built in the city centre (see Fig. 1).

Over the following years, in parallel to the construction of the new building, the collections gradually expanded, in line with the wider scope of the museum's programme and mission. Since its inauguration, in 2007, the Neorealism Museum has sought to go beyond the boundaries of its original vocation, encompassing the broader territory of twentieth-century culture, in order to promote a critical interpretation of the neorealist movement and its influence on several generations of Portuguese artists, writers, and thinkers.[10]

---

8   UPORTO, "University of Porto Famous Alumni – Alcino Soutinho", SIGARRA Information System, accessed 5 November, 2022, <https://sigarra.up.pt/up/en/WEB_BASE.GERA_PAGINA?p_pagina=antigos%20estudantes%20ilustres%20-%20alcino%20soutinho>.
9   Museu do Neo-Realismo, "História", accessed November 5, 2022, <http://www.museudoneorealismo.pt/pages/1056>.
10   Museu do Neo-Realismo, "História".

Figure 1. Neorealism Museum, Vila Franca de Xira (Portugal), 2018.
Source: author.

Following the commemorations of the museum's tenth anniversary, a temporary exhibition[11] accompanied by a catalogue dedicated to the building and its architect provided a unique opportunity to further explore the project's background, relating the museum building to other designs and studies by the author.

The curatorial project was inspired by Rafael Moneo's interpretation of the role of typology in architectural production. As he insightfully pointed out: "Architecture […] the world of objects created by architecture –is not only described by types–; it is also produced through them. If this notion can be accepted, it can be understood why and how the architect identifies his work with a precise type".[12] Drawing on this idea, the exhibition sought to reveal how Soutinho persistently addressed the museum as a particular building type throughout his career.

In the 1950's, while he was still a student at the Porto School of Fine Arts, Soutinho made his first forays into museum architecture, starting to pursue a line of research that he would deepen further in the following years, when he had the opportunity to study museology in Italy with a grant from the Calouste Gulbenkian Foundation. His interest in the museum as an architectural typology did not diminish with the subsequent demands of his professional activity. On the contrary, over approximately five decades, his research involved "frequent trips and visits to museums, which motivated and informed a continuous practice of design",[13] translated into a significant number of proposals for exhibition spaces

---

11 The exhibition was curated by Helena Barranha.
12 Rafael Moneo, "On Typology", *Oppositions* 13 (1978): 23.
13 Helena Barranha, *One Building, Many Museums. Alcino Soutinho and the Neorealism Museum* (Vila Franca de Xira: Neorealism Museum, 2019).

(see Table 1). In addition to receiving invitations to design museums, he participated in architectural competitions, which resulted in several unbuilt projects.

In this context, the exhibition presented the Neorealism Museum as "a space of convergence of the various trips, researches, and museological projects that marked the life and work of Alcino Soutinho".[14] Bringing together a selection of drawings and photographs that he produced during his visits to museums in different countries, as well as his own designs for exhibition spaces, this display sought to demonstrate how the Neorealism Museum reflects and synthesises those multiple references, linking them to the urban context of Vila Franca de Xira and to a very specific museological programme. At the same time, the complementarity between the architectural drawings, whose interpretation requires a certain level of technical knowledge, and more intuitive materials, such as photographs, sketches, and 3D models, was intended to facilitate the access and engagement of different audiences, including those who were less familiar with architecture exhibitions. This approach reflects the current relevance of intellectual access in museums, considering that these institutions should create "contents that allow non-experts to get an introduction, to become aware of and interested in issues that are new to them or to acquire more knowledge or a different interpretation on things they thought they already knew".[15]

Although the exhibition concept was clearly defined at an early stage of the process, its elaboration and materialisation proved to be much more complex than initially expected, requiring extensive research work. The first challenge was to answer an apparently simple, yet fundamental question: how many museums and exhibition spaces did Alcino Soutinho design during his career?

4. The research process

The research leading up to the exhibition began in March 2018, approximately one year before its inauguration. Drawing on the curator's academic background in museum studies and museum architecture, the investigation started with a comprehensive review of the literature written about the Neorealism Museum and the architect Alcino Soutinho,

---

14 Barranha, *One Building, Many Museums*.
15 Maria Vlachou, "Intellectual Access and Not an Easy Way Out", *Musing on Culture*, 20 September 2015, accessed 5 November, 2022, <http://musingonculture-en.blogspot.com/2015/09/intellectual-access-and-not-easy-way-out.html>.

including articles and interviews published in journals, magazines, and newspapers, as well as books, catalogues, and academic dissertations.[16]

An essential part of the research took place at the Neorealism Museum, whose library houses not only very relevant publications, but also original documents and correspondence relating to the museum's history and architecture. The institution's digital photographic archive was equally decisive for the development of the curatorial project, as it enabled a representative selection of images of the building, illustrating, and documenting the construction process, the opening ceremony, and the diversity of spaces that make up the museum.

In parallel to the bibliographical and iconographical selection and analysis, the preparation of the exhibition entailed a complete survey of the designs for museums and galleries produced by Alcino Soutinho. A preliminary list was then drawn up, distinguishing built and unbuilt projects organised in chronological order (see Table 1). Although the FIMS online database was especially helpful in preparing this draft version of the thematic timeline, the completion of the survey required a systematic search through Alcino Soutinho's professional archives in Porto.

As already mentioned, Soutinho's archive and library were bequeathed to the José Marques da Silva Foundation Institute by his family, in 2014, a few months after the architect's death. The collections reflect his vast architectural production between 1958 and 2012, including documents, drawings, and models, together with a set of books and periodicals on architecture.[17] "These records of public interest, containing personal memories and evidence of creative activities of this prominent Portuguese architect […] represent a further important contribution to the knowledge of the process of Architecture in Portugal".[18] It is important to note that, since 2014, FIMS has already digitised all of his 3711 drawings on paper, corresponding to a total of 166 inventoried projects.

During the investigation carried out in Porto, it was possible to gather important information about Soutinho's projects and also to select documents, drawings and photos to be included both in the exhibition and in the catalogue. Moreover, the archives revealed many interesting aspects of the architect's work in the field of museology. In addition to

---

16   In this first phase of the research, two references stood out in particular: Helena Barros Barroco, *Os museus desenhados por Alcino Soutinho: pensamento, obra e evolução* (Lisbon: Instituto Superior Técnico, Universidade Técnica de Lisboa, 2010); and Roberto Cremascoli, ed. *Alcino Soutinho* (Vila do Conde: Verso da História, 2013). Cremascoli also curated the retrospective exhibition *Alcino Soutinho: Comfortable Realism*, held in Porto in 2014.

17   FIMS, "Alcino Soutinho Information System".

18   FIMS, "Alcino Soutinho Information System".

the visual and written documentation included in each of the project files, other items in the collections were also considered relevant for the exhibition, notably a huge number of photographs taken by the architect during the course of his specialisation in museology, in Italy (1960-1961), and also on his subsequent visits to museums in various countries. However, in 2018, most of those pictures had not yet been inventoried by FIMS and, thus, identifying, digitising, and cataloguing them ended up being a demanding, but also highly productive, task.

Another unforeseen challenge was the lack of information about more recent unbuilt designs. It soon became evident that the collections housed at FIMS did not cover most of the projects produced in born-digital formats, in particular those submitted to architectural competitions, which still remained stored in the computers and servers of the architect's studio. Currently, the priority given to the conservation and digitisation of material records in detriment to born-digital files tends to be a common issue for researchers and curators working on contemporary architecture. Furthermore, the preservation of collections of this type poses entirely new questions for cultural institutions, often requiring additional human and technical resources. As Sedrez and Martino observe:

> In the pre-digital era the architectural draft was performed analogically by hand-drawing and later by printing. In these cases, the storage and the preservation of work produced on paper represents a massive challenge […], because of the fragility of paper and the demand of adequate storage space and conditions. However, this is somehow facilitated in comparison with the preservation of digital files […], which might require less space for storage but […] are far more fragile than paper due to their accessibility […] and to fast changes in technologies.[19]

To overcome this problem, it was necessary to conduct complementary research at Alcino Soutinho's office in Porto, with the collaboration of his daughter, the architect Andrea Soutinho, who played a fundamental role in locating, identifying, and reproducing born-digital drawings, images, and text files with project descriptions. Moreover, the fact that she had participated in most of the selected works contributed to a

---

19 Maycon Sedrez and Jarryer Martino, "The Future of Architects' Digital Records: How to Preserve Algorithmic Design?" in *Proceedings of the 22nd Congress of the Iberoamerican Society of Digital Graphics* (SIGraDi), ed. David M. Sperling and Simone Vizioli (São Paulo: Universidade de São Paulo, 2018), 5 (adapted), <https://www.doi.org/10.5151/sigradi2018-1267.

better understanding of the unbuilt projects, most of which were hitherto unknown to the public and even to researchers themselves.[20]

The cooperation of the architect's family was also decisive for the discovery of two original sketchbooks which eloquently illustrate part of Soutinho's journey around Italy, when he was studying museology and museum architecture on a scholarship from the Calouste Gulbenkian Foundation. During the research process, these sketchbooks were transferred to FIMS, where they were fully digitised and catalogued. The grant report, conserved at the Gulbenkian Archives in Lisbon, was also specially digitised for the exhibition (see Fig. 2).

At the end of this twofold research in the architect's archives, the preliminary list had increased considerably from 10 to 17 projects, eleven of which were unbuilt (see Table 1). With a view to gathering additional images of some of the designs to be included in the exhibition and its catalogue, the last stage of the research involved contacts with other institutions, namely: the Documentation Centre at the Faculty of Architecture, University of Porto; Guerra Junqueiro House Museum, Porto; Amadeo de Souza-Cardoso Municipal Museum, Amarante; Matosinhos Municipal Gallery; Museum of Aveiro; Arraiolos City Council, and Carregal do Sal Town Council.

Preliminary list of projects
Academic project – Museum of Popular Arts and Traditions. CODA, ESBAP (1959, unbuilt)
Amadeo de Souza-Cardoso Municipal Museum, Amarante (1970-1988)
Guerra Junqueiro House Museum, Porto (1990-1997)
Matosinhos Municipal Library and Gallery, Matosinhos (1994-2005)
Museum of Aveiro/Princess Saint Joana (1994-2009), Aveiro
Tram Museum, Porto (1997-2003, unbuilt) *
José Rodrigues Culture House, Alfândega da Fé (1999-2004)
Aristides de Sousa Mendes Museum, Cabanas de Viriato, Carregal do Sal (2001-2003, unbuilt) *
Neorealism Museum, Vila Franca de Xira (2001-2007)
FC Porto Museum, Porto (2003, unbuilt) *
Other projects selected after the research process

---

20 Helena Barranha, coord., *Um edifício, muitos museus. Alcino Soutinho e o Museu do Neo-Realismo* (Câmara Municipal de Vila Franca de Xira, 2019), 15 (translated).

Academic project for a museum/exhibition centre (c. 1955, unbuilt)
Museum of the Sea/Sea Science and Technology Centre, Matosinhos (1999, competition/unbuilt)
Museum and Headquarters of the Portuguese Numismatic Society, Porto (2002, unbuilt) *
Arquipélago – Contemporary Art Centre, Ribeira Grande, Azores (2007, competition/unbuilt) *
Água Vida Cultural Centre/Temple, Oeiras (2009, competition/ unbuilt)
Arraiolos Carpet Interpretation Centre, Arraiolos (2010, competition/ unbuilt) *
Municipal Auditorium and Museum of the Portuguese Language, Matosinhos (2011, competition/ unbuilt)

Table 1. Alcino Soutinho's projects for museums and other exhibition spaces, in chronological order.* Existing institutions, even though Soutinho's designs were never realised. Source: author.

5. Production and layout of the exhibition: from the archives to the gallery space

> Exhibitions large and small held in major museums, architecture schools, veritable hole-in-the-wall galleries, and as part of multi-national biennales and more regional art festivals have played, and continue to play, a major role in architecture culture. Not only have they introduced new architectural ideas and resurrected forgotten architects but they have embodied the inherent paradox of such an undertaking: how, indeed, can architecture be exhibited?[21]

Unlike painting and other visual arts, exhibiting architecture almost always involves dealing with the inevitable absence of the material works. In view of this inescapable circumstance, the curator's task lies in evoking the buildings through texts, models, drawings, photographs, and films, to communicate an argument which is fundamentally supported by representations. In fact, architectural collections are basically composed of representations produced in three different phases: throughout the design process, during the construction of the building, or after its completion.

---

21   Robert A. M. Stern, "Preface", in *Exhibiting architecture: a paradox?*, ed. Eeva-Liisa Pelkonen (Yale School of Architecture, 2015), 5.

Bringing architectural collections to the gallery space has become even more complex over the last few decades, with the increasing diversity of formats generated by the progressive digitisation of design processes. Moreover, the rapid obsolescence of digital technologies has raised unprecedented problems for architects, archivists, researchers, and curators.

As already mentioned, one of the main problems that occurred during the research for the Alcino Soutinho exhibition related to the technical drawings of more recent projects, i.e. those that were designed from the mid-1990s onwards, being produced directly on the computer, and of which there were no digital or printed copies in the FIMS archive. This situation, which nowadays tends to affect many cultural institutions, adds to the debate about the conservation and display of architectural collections, emphasising the ambiguity between originals and reproductions. In this context, some archivists argue that: "if the native digital file is the original, and certain file types cannot be preserved in their original format, maybe the practice of producing archival PDF files for each drawing is not such an outrageous idea for architectural offices to implement as part of their workflow when a project closes".[22]

Following this principle, creating PDF files for all born-digital drawings to be included in the exhibition seemed to be the best option, as the files were still accessible in the servers of the architect's office and Andrea Soutinho agreed to manage the process. Her cooperation was therefore crucial not only for enabling the display of the unbuilt museum designs, but also for guaranteeing the conditions for the adequate preservation of those digital architectural records.

In order to establish a common criterion for the presentation of technical drawings produced in different decades, ranging from hand-made plans, cross sections, and elevations to born-digital models, the curatorial option was to exhibit all of them as printed reproductions. Notwithstanding this material similarity, the differences in the graphic expressions that characterise those successive designs remained absolutely clear.[23]

In parallel to the work carried out by the staff of the Neorealism Museum, the production of the exhibition required the permanent assistance of FIMS, in particular with regard to those items which had not yet been studied and inventoried under the scope of Alcino Soutinho's bequest.

---

22   Inés Maria Zalduendo, "Paradigm Shift: Curatorial Views on Collecting and Archiving Architectural Drawings in an Evolving Born Digital Landscape", paper presented at the Society of American Archivists Conference, Washington D.C., August 2014, 8, accessed 5 November, 2022, <http://nrs.harvard.edu/urn-3:HUL.InstRepos:13442962>.
23   Barranha, *Um edifício, muitos museus*, 14-15 (translated).

Based on the initial concept, as well as on the results of the research process, the exhibition was organised into six topics (see Figs. 2, 3 and 4):

– Introduction: focusing on the background, programme and construction of the Neorealism Museum.
– Alcino Soutinho (1930-2013): offering an overview of the architect's life and work, including his autobiography, selected publications, and an illustrated timeline of his designs for museums and exhibition spaces.
– Neorealism Museum: being the epicentre of the exhibition, this section presented the architectural project, including sketches, technical drawings, and two models, together with a selection of photographs showing different spaces of the building. In addition to these visual representations, a text on the wall suggested possible links with other contents of the exhibition, while also inviting the visitor to explore the building itself.
– Other museums-interventions in architectural heritage. In contrast with the Neorealism Museum, which is an entirely new construction, most of the museum spaces designed and built by Alcino Soutinho are associated with interventions in pre-existing buildings. The three projects in this section were representative of how the reuse and reinterpretation of architectural heritage was a fundamental theme in the architect's career: Amadeo de Souza-Cardoso Municipal Museum, Amarante (1970-1988); Guerra Junqueiro House Museum, Porto (1990-1997); Museum of Aveiro/Princess Saint Joana, Aveiro (1994-2009).
– Travel and research: the central exhibit in this topic was a slide show featuring a collection of images from Soutinho's travel albums. It also included his proposal for a Museum of Popular Arts and Traditions, submitted to the Competition for Obtaining the Diploma of Architect (CODA, Porto School of Fine Arts, 1959), and documentation (in digital format) relating to his subsequent specialisation in Museology, in Italy (1960-61).
– Selected unbuilt projects: Tram Museum, Porto (1997-2003); Museum of the Sea/Sea Science and Technology Centre, Matosinhos (1999); Arquipélago-Contemporary Art Centre, Ribeira Grande, Azores (2007); Arraiolos Carpet Interpretation Centre, Arraiolos (2010).

The exhibition layout was designed to create an open, flexible, and relatively informal space which would enable visitors to follow different according to their preferences or the thematic focus of the guided tours, workshops, and educational activities that would take place over

the following months (see Figs. 3, 4 and 5). Based on the premise that "the ambience plays an important role in promoting understanding of the works [and] in raising the intellectual curiosity of the users",[24] the design of the exhibition panels, tables, and display cases was intended to evoke the space of an architect's studio, being inspired by the pieces of furniture that Soutinho specifically created for the museum.[25]

As many visitors to the Neorealism Museum do not have a background in architecture, the exhibition combined various contents, ranging from sketches to technical drawings, and models, from printed photos to digital projections, and from curatorial texts to excerpts from the project descriptions written by Alcino Soutinho. In this way, the curatorial proposal sought to create a system of relations between the contents on display rather than a unidirectional narrative, inviting visitors to build up their own interpretation of the exhibition's concept. As Fátima Vieira observed:

> The fact that this exhibition is held at the Neorealism Museum is particularly significant because of the way in which it creates a *mise en abyme* narrative: in the foreground, the museum building […] provides the visitor with an immersive experience; in the background, the documents that refer to the architect's specialisation period in Italy […]; and, at a third [in-between] level, the development of each design process, a *before* (the idea, the concept, communicated through drawings and models) and an *after* (the photographs of the built work). This is an endless process, because, as the visitor walks through the exhibition, equipped with more interpretive tools, he is encouraged to re-evaluate what he has seen before – the models and drawings, the documents, the building itself.[26]

---

24 Margherita Sani, "Making Heritage Accessible: Museums, Communities and Participation", paper presented at the *Council of Europe Framework Convention on the Value of Cultural Heritage for Society*, Fontecchio, Italy, 2017, 3-4, accessed November 5, 2022, <https://rm.coe.int/faro-convention-topical-series-article-5-making-heritage-accessible-mu/16808ae097>.

25 The exhibition design was created by Carla Félix, who works for the Municipal Council of Vila Franca de Xira.

26 Fátima Vieira, "A memória exemplar e dinâmica da obra arquitetónica de Alcino Soutinho", in *Um edifício, muitos museus. Alcino Soutinho e o Museu do Neo-Realismo* (exhibition catalogue), ed. Helena Barranha (Câmara Municipal de Vila Franca de Xira, 2019), 10 (translated).
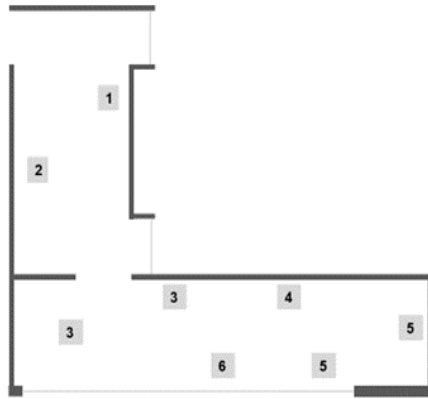
Figure 2. Exhibition layout. 1. Introduction: background, programme, and construction of the Neorealism Museum. 2. Alcino Soutinho (1930-2013). 3. Neorealism Museum. 4. Other museums-interventions in architectural heritage. 5. Travel and research. 6. Selected unbuilt projects.
Source: author, 2019.

Figures 3 and 4. Views of the exhibition: Sections 1 and 2, and Sections 3 to 6.
Source: author, 2019.

Figure 5. Visitors watching the projection of Soutinho's travel albums.
Source: author, 2019.

6. Expanding the archive and reaching new audiences: digital interactions within and beyond the exhibition

Architectural archives and databases tend to be oriented toward specific audiences, mostly architects, researchers, and university students. As the interpretation of technical drawings requires a certain knowledge of graphic representation codes, the fact that such collections are available online does not necessarily mean that they are accessible to non-special-ised users. In reality, unskilled audiences are unlikely to fully explore these open access archives because, more often than not, they are simply unaware of their existence. Therefore, if cultural institutions aim at reach-ing wider audiences, they should not only invest in digitisation and open access policies, but also in communication strategies designed to dissemi-nate architectural heritage beyond specialised circles. If, as Inés Zalduendo suggests, "the strength of an institution's collection is not in files kept in isolated silos, but in the context within which those files are described and made accessible",[27] architecture exhibitions should be regarded as an effective contribution towards creating and expanding that framework.

Alcino Soutinho's exhibition at the Neorealism Museum has demon-strated how a thematic approach to the architect's work offered the oppor-tunity to link and contextualise different collections. On the one hand, this curatorial project joined together architectural records from several insti-tutional collections and brought them to the public space of the museum, making them accessible to new audiences. On the other hand, the research carried out for the exhibition also led to the incorporation of new con-tents into those collections (see Fig. 6). This was particularly evident in the case of FIMS, as almost 800 items (including photographs, drawings, and texts) were digitised and/or catalogued during the preparation of the exhibition. In addition to the architectural records already available in the FIMS online database, those recently inventoried items are also being gradually uploaded and shared with web users.

In order to foster the visitors' engagement with the contents on dis-play, and also to optimise the use of the relatively small area of the gallery, the exhibition included digital presentations in three different situations:

– A video with a sequence of photographs showing the progression of the museum's construction, which was specially produced for this purpose and installed in the exhibition's first section-Introduction.

27   Zalduendo, "Paradigm Shift: Curatorial Views on Collecting and Archiving", 6.
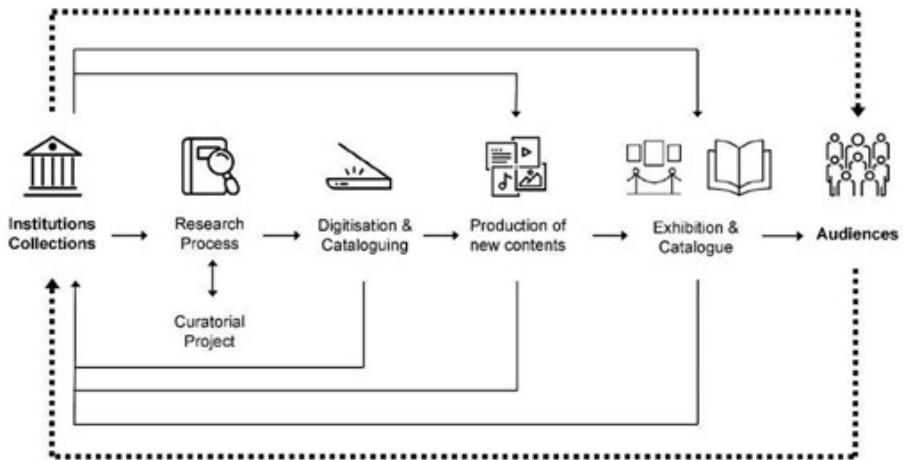
Figure 6. Production and outcomes of the exhibition. Icons: Noun Project.
Source: author, 2019.

 – A projection of three series of pictures from Soutinho's travel
   albums, featuring his visits to museums in Italy (1960-1961),
   Germany (1997), and the United States of America (1992 and
   1998) (see Figs. 4 and 5).
 – A full digital copy of Soutinho's scholarship report (from
   the Gulbenkian Foundation Archives), together with the two
   sketchbooks also related to his academic journey around Italy
   (1960-1961), which were discovered during the research and digi-
   tised by FIMS. In both cases, the presentation made use of interac-
   tive screens, so that visitors could browse through those works and
   magnify certain details (see Fig. 7).

Figure 7. Digital interactive reproductions of Soutinho's scholarship report and
sketchbooks included in the exhibition. Source: author, 2019.

The digitised albums invited visitors to discover the architect's archives, thus experiencing part of the research process carried out by the curator. In doing so, visitors could also choose the drawings, photos or texts that they might consider to be the most significant, depending on their own memories, motivations, and interests. This strategy is in line with the notion of "pull content", a term used by "educators […] to designate information that learners actively seek or retrieve based on self-interest".[28] As Nina Simon explains:

> Pull techniques emphasize visitors' active roles in seeking out information. Visitors are always somewhat active in their pursuit of interpretation, deciding whether or not to read a label or play with an interactive. But when you invite visitors to retrieve interpretative material rather than laying it out, it gives them a kind of participatory power. They choose what to reveal and explore.[29]

As previously noted, the large majority of the exhibition contents corresponded to reproductions of digitised or born-digital drawings and photographs from the FIMS archives, many of which could also easily be found in the institutional open access database. This happened, for instance, with Soutinho's sketch for the main façade of the Neorealism Museum, which was prominently displayed in the second gallery and was used in the exhibition's promotional material, namely in flyers, postcards, and outdoor advertisements (see Figs. 8 and 9). However, the opportunities for digital interaction within and beyond the display also encompassed other institutional archives. A good example is Soutinho's academic project for a Museum of Popular Arts and Traditions (CODA, 1959) which was already available in the repository of the University of Porto.[30] Conversely, most of the institutions that loaned contents for the exhibition also published information about this event on their websites and social media, with hyperlinks to their online collections.

28   Nina Simon, *The Participatory Museum* (Santa Cruz, California: Museum, 2010), 37.
29   Simon, *The Participatory Museum*, 37.
30   See UPORTO, "Repositório Temático. Alcino Soutinho: Museu de Artes e Tradições Populares (Museu Etnográfico do Douro Litoral), CODA, ESBAP, 1959", accessed 5 November, 2022, <https://hdl.handle.net/10405/48156>.

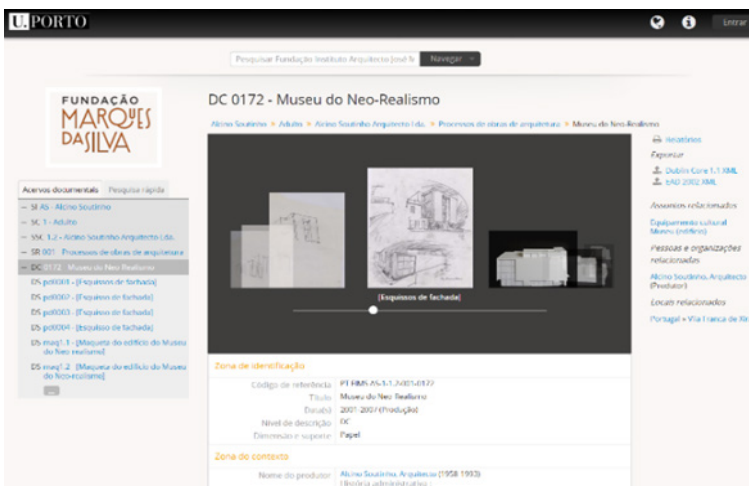Figure 8. Soutinho's sketch for the Neorealism Museum (Section 3 of the exhibition). Source: author, 2019.

Figure 9. The same sketch in the FIMS collections, available online through the University of Porto's AToM platform. Source: Arquivo é administrada pela Unidade de Administração e Operação de Sistemas da Universidade do Porto http://arquivoatom.up.pt/index.php/museu-do-neo-realismo (access 26 August 2019).

Ideally, the exhibition captions should have included QR codes whenever a content on display was also accessible online, particularly in the FIMS open access archive. This or any other interactive system would also have been interesting as a means of establishing a connection

between Soutinho's projects for existing museums and their websites; in this way, new layers of related information would have been added to the visitors' experience, creating alternative possibilities of interpretation and allowing for a virtual extension of the exhibition.

The absence of QR codes or augmented reality applications did not, however, prevent many visitors from searching the web for additional details about the exhibition contents, before, during or after their visit to the museum. In the event of the exhibition travelling to other venues in the near future, it would be enriching to further explore the links between offline and online contents, as a way of (re)contextualising institutional collections and open access architectural archives. As Carole Palmer and other authors anticipate: "[…] curated digital collections will become increasingly important as anchors for meaningful engagement with digital information".[31]

7. Conclusions

> For cultural institutions that hold collections for the benefit of the public, the opportunity to provide open access now or in the future to works in a digital format is an exciting new frontier in their mission to preserve and transmit knowledge, culture and history for present and future generations.[32]

Architecture exhibitions offer important opportunities to study, document, and communicate public and private collections, thus contributing to the transfer of knowledge from academic and specialised circles to wider audiences. Drawing on architects' archives and museum collections, these events provide unique conditions for institutional cooperation, which can significantly expand the contextual information about each of the selected works.

In the case of the exhibition *One building, many museums…*, the partnership established between the Neorealism Museum and the José Marques da Silva Foundation Institute enabled a new interpretation of the museum building, based on Alcino Soutinho's vast work in the field of museology. Although the exhibition was centred on the archives of

---

31   Carole L. Palmer, Oksana L. Zavalina, and Katrina Fenlon, "Beyond Size and Search: Building Contextual Mass in Digital Aggregations for Scholarly Use", *Proceedings of the American Society for Information Science and Technology* 47, no. 1 (2010): 1, <https://www.doi.org/10.1002/meet.14504701213.

32   "ReACH 2017 Declaration", in *Copy Culture: Sharing in the Age of Digital Reproduction*, ed. Brenan Cormier (London: V&A Publishing), 1, accessed 5 November, 2022, <https://www.vam.ac.uk/research/projects/reach-reproduction-of-art-and-cultural-heritage>.

these two institutions, the research work and the curatorial project soon brought other sources and collaborations into play. The thematic focus of the curatorial proposal eventually created a system of relations between the different collections, which was materialised in, but not limited to, the exhibition layout.

Considering that many of the participating museums and archives invested in digitising and sharing their collections online, this exhibition paved the way for the addition of new data and hyperlinks to those institutions' websites and databases, increasing the possibility of finding related information for each work. Moreover, the exhibition showed that online archives should not be limited to digitised materials, i.e., digital reproductions of drawings, photographs, texts, and models that were originally produced in physical formats. Today, the preservation of born-digital architectural records is also a crucial issue for cultural institutions. Access to this intrinsically immaterial heritage is, in fact, indispensable for researchers and curators, and the development of strategies for studying, conserving, and disseminating such records is therefore essential for the history of contemporary architectural production.

At the same time, as has been argued throughout this text, digital interaction within and beyond the exhibition space fosters dialogue with a variety of audiences before, during and after the visit to the museum. This engagement was also a key factor in the design of the exhibition, based on a flexible, clear, and inclusive space, suggesting multiple relationships and layers of meaning, in which each visitor could easily find their own way to explore, and be inspired by, museum architecture.

8. Bibliographical references

Barranha, Helena. *One Building, Many Museums. Alcino Soutinho and the Neorealism Museum* (exhibition text). Vila Franca de Xira: Neorealism Museum, 2019.

Barranha, Helena, ed. *Um edifício, muitos museus. Alcino Soutinho e o Museu do Neo-Realismo* (exhibition catalogue). Câmara Municipal de Vila Franca de Xira, 2019.

FIMS. "Alcino Soutinho, Arquitecto". AToM "Access to Memory" Information Management Platform, University of Porto. Accessed 5 November, 2022. <http://arquivoatom.up.pt/index.php/alcino-soutinho-arquitecto>.

FIMS. "Alcino Soutinho Information System". Accessed 5 November, 2022. <https://fims.up.pt/index.php?cat=19&subcat=66>.

FIMS. "José Marques da Silva Foundation Institute". Accessed 5 November, 2022. <https://fims.up.pt/index.php?cat=1&subcat=13&lang=2>.

Moneo, Rafael. "On Typology". *Oppositions* 13 (1978): 22-45.

Museu do Neo-Realismo. "História". Accessed 5 November, 2022. <https://www.museudoneorealismo.pt/o-museu/galeria-36>.

Palmer, Carole, Oksana Zavalina, and Katrina Fenlon. "Beyond Size and Search: Building Contextual Mass in Digital Aggregations for Scholarly Use". In *Proceedings of the American Society for Information Science and Technology* 47, no. 1 (2010): 1-10. <https://www.doi.org/10.1002/meet.14504701213.

"ReACH 2017 Declaration". In *Copy Culture: Sharing in the Age of Digital Reproduction,* edited by Brenan Cormier, 1. London: V&A Publishing. Accessed 5 November, 2022. <https://www.vam.ac.uk/research/projects/reach-reproduction-of-art-and-cultural-heritage> (accessed 26 November 2020).

Sani, Margherita. "Making Heritage Accessible: Museums, Communities and Participation". Paper presented at the Council of Europe Framework Convention on the Value of Cultural Heritage for Society, Fontecchio, Italy, 2017. Accessed 5 November, 2022. <https://rm.coe.int/faro-convention-topical-series-article-5-making-heritage-accessible-mu/16808ae097>.

Sedrez, Maycon and Jarryer Martino. "'The Future of Architects' Digital Records: How to Preserve Algorithmic Design?" In *Proceedings of the 22nd Congress of the Iberoamerican Society of Digital Graphics (SIGraDi)*, edited by David M. Sperling and Simone Vizioli, 5-10. São Paulo: Universidade de São Paulo, 2018. <https://www.doi.org/10.5151/sigradi2018-1267>.

Simon, Nina. *The Participatory Museum*. Santa Cruz, California: Museum, 2010.

Soutinho, Alcino. "Autobiografia". In *Alcino Soutinho: Representações de Arquitectura.* Vila Franca de Xira: Associação Promotora do Museu do Neo-Realismo, 2007.

Stern, Robert. "Preface". In *Exhibiting architecture: a paradox?*, edited by Eeva-Liisa Pelkonen, 5. Yale School of Architecture, 2015.

UPORTO. "Repositório Temático. Alcino Soutinho: Museu de Artes e Tradições Populares (Museu Etnográfico do Douro Litoral), CODA, ESBAP, 1959". Accessed 5 November, 2022. <https://hdl.handle.net/10405/48156>.

UPORTO. "University of Porto Famous Alumni – Alcino Soutinho, SIGARRA Information System". Accessed 5 November, 2022. <https://sigarra.

up.pt/up/en/WEB_BASE.GERA_PAGINA?p_pagina=antigos%20 estudantes%20ilustres%20-%20alcino%20soutinho>.

Vlachou, Maria. "Intellectual Access and Not an Easy Way Out". *Musing on Culture*, 20 September 2015. Accessed 5 November, 2022. <http://musingonculture-en.blogspot.com/2015/09/intellectual-ac-cess-and-not-easy-way-out.html>.

Zalduendo, Inés Maria. "Paradigm Shift: Curatorial Views on Collecting and Archiving Architectural Drawings in an Evolving Born Digital Landscape". Paper presented at the Society of American Archivists Conference, Washington D.C., August 2014. Accessed 5 November, 2022. <http://nrs.harvard.edu/urn-3:HUL.InstRepos:13442962>.