escola das artes

EPoCH 2024

Emerging perspectives on conservation and heritage.

Documentation Practices and reflection in heritage conservation.

18–20
abr

CATÓLICA ESCOLA DAS ARTES
PORTO

CATÓLICA CIEBA • RESEARCH CENTRE FOR SCIENCE AND TECHNOLOGY OF THE ARTS
FBAUP

fct fundação para a ciência e a tecnologia

Este projeto é Financiado por Fundos Nacionais através da FCT – Fundação para a Ciência e a Tecnologia no âmbito dos projetos UIDB/04823/2020 e UIDP/04823/2020.

artes.ucp.pt

Table of Contents

Committees

Organizing Committee

Eduarda Vieira, Gonçalo Vasconcelos e Sousa, Joana Teixeira, Patrícia Moreira

Executive Committee

Christianne Mendonza, Cíntia Freitas, Clarissa Faccini

Scientific I

Andreia Nogueira, Techn&Art- Instituto Politécnico de Tomar

Athanasios Velios, English Heritage

Eduarda Vieira, UCP, School of Arts/CITAR

Frederico Henriques, UCP, School of Arts/CITAR

Gonçalo Vasconcelos e Sousa, UCP, School of Arts/CITAR

Henrique Pereira, UCP, School of Arts/CITAR

Humberto Varum, Faculdade de Engenharia da Universidade do Porto

Joana Teixeira, UCP, School of Arts/CITAR

José Guilherme Abreu, UCP, School of Arts/CITAR

Maria João Revez, UCP, School of Arts/CITAR

Mário Pastor, UCP, School of Arts/CITAR

Nuno Camarneiro, UCP, School of Arts/CITAR

Nuno Crespo, UCP, School of Arts/CITAR

Patrícia Moreira, UCP, School of Arts/CITAR

Pedro Andrade, Centro de Estudos de Comunicação e Sociedade, Uminho

Rui Bordalo, UCP, School of Arts/CITAR

Conference Opening Statement

EPoCH: Emerging Perspectives on Conservation and Heritage

EPoCH is an annual scientific conference, organized by the Heritage & Conservation and Restoration Focus Area of the Center for Science and Technology of the Arts (CITAR) of Universidade Católica Portuguesa, designed to be a forum of discussion in emerging topics in heritage and conservation and restoration research while embracing collaborative conversations driven by emerging perspectives and the exploration of a diverse array of practices, theories, and approaches.

EPoCH 2024. Documentation Practices and Critical Reflection in Heritage Conservation

Each year, EPoCH conference will explore a specific theme, providing a focused yet diverse exploration of critical issues into an intertwining tapestry of intellectual inquiry.

This years' inaugural conference will focus on heritage documentation processes.

The importance and functionality of documentation processes for heritage study, preservation and intervention entails essential reflective and critical thinking for the implementation and development of documentation practices that support access, permanence, and respect for heritage, while maintaining observance of fundamental values such as its authenticity and value.

The objectives of this inaugural conference are to establish a dialogue between all actors in this research area and to reflect on the various proposals and approaches, implemented or in the development. Our goal is to foster discussions, establish connections between theory and practice, investigate the processes, methods, techniques, and tools, aiming to advance this field in the definition of specific solutions with consequent impact on the entire community to respond to the immense challenges and needs in the field of documentation of heritage from the past, of the present and into the future.

Conference Program

April 18th

10h00m
Opening Session

10h15m
KEY NOTE
Cultural Heritage documentation challenges: a path towards 2030
Alexandre Matos

11h30m
POSTER SESSIONS I

Being a curator in a contemporary art museum. The symbiosis between art and technology in Serralves Museum
Manuel Silva, Luis Teixeira and Eduarda Vieira

Digital Humanities / Social Sciences in the era of Artificial Intelligence: The Sociology of Cultural Heritage's role and applications
Pedro Andrade

12h00m
PANEL SESSIONS I

Tear down this wall! Technology cannot make up for decision procrastination
Thierry Aubry, Miguel Almeida, Luís Luís and Sara Aliácar

Conservation and restoration practices for rock art in caves: A practical case study of La Pasiega (Cantabria, Spain)
Raquel Asiain and Eudald Guillamet

The Potential of Artificial Intelligence in the Conservation of Built Heritage. The Case Study of Freixo de Espada à Cinta (Portugal) Church Intervention
Cintia Freitas, Eduarda Vieira, Rui Bordalo and Isabel Costa

15h00m
PANEL SESSIONS II

Archival and digital preservation of Heritage: the Holy Bodies Project/ the study of corpi santi in Portugal
Eduarda Vieira, Tracy Ireland, Joana Palmeirão and Teresa Ferreira

The Sounding Heritage We Can't Hear. Reenactment as Preservation in the Musealisation of Music: a Missing Materiality
Chiara Antico

The adaptation of Intangible Cultural Heritage: The impact of heritage inventorying and the associated documentation process on the preservation of intangible cultural heritage
Ânia Chasqueira

16h30m
POSTER SESSIONS II

The indispensability of documentation: Cabrita's "Flor Negra" case study
Clarissa Facini and Joana Teixeira

Documentation Techniques in Art Conservation: a focus on non-invasive methods
Rupal Jain and Vezotolü Vadeo

17h00m
PANEL SESSIONS III

Bridging the Nature-Cultural Heritage Gap: Evaluating Sustainable Entanglements Through Cemeteries in Urban Asia
David Ocon and Wei Ping Young

The painting collection on wood-based panels at the National Museum of Contemporary Art – Inventory and practical observation as an identification methodology
Susana Duarte, Agnès Le Gac, Emília Ferreira and Carlos Chastre

Unusual documents: the xylotheque and the herbarium as repositories of the world's history
José Silva, Rui Bordalo, José Pissarra and Paloma De Palacios

April 19th

10h00m
PANEL SESSIONS IV

Biofilms colonizing stone heritage: the case of Assistenz kirkegård in Copenhagen
Michela Gambino

Documenting to preserve: the case study of Alcobaça medieval bookbindings
Ana Tourais and Maria Conceição Casanova

Challenges and prospects of collaborative approaches to conservation documentation: The case of heritage collections in Croatian libraries
Mia Perković and Dragica Krstić

Sketching Heritage – (Re)making Viarco's industrial legacy through the arts
Ana Gago and Mário Pastor

11h30m
POSTER SESSIONS III

Key issues of epistemological approach on the principles of conservation and restoration of cultural heritage
Ana Galán-Pérez and Stefano Magnolo

Document to preserve: a case study of the contemporary work of art "Radiologias" (1979), by Silvestre Pestana
Francisca Lafuente, Joana Teixeira and Diogo Tudela

12h00m
PANEL SESSIONS V

HBIM and openBIM for Management of Architectural Ceramic Tiles Information
Carlos Serra, Sílvia Pereira, Paula Couto and António Santos Silva

On documentation in the realm of contemporary art preservation: The physical versus the digital document
Andreia Nogueira

Documentation practice to stimulate critical reflection, the art market and collecting contemporary jewellery. The 'emergence' of a digital archive
Cristina Filipe

15h00m
KEY NOTE
3D-centric documentation in conservation-restoration
Marco Callieri

16h30m
Closing Session

April 20th

10h30m – 13h00m
THEMATIC VISIT

KEYNOTES

ALEXANDRE MATOS

Cultural Heritage documentation challenges: a path towards 2030

Alexandre Matos holds a Ph.D. and a Master's in Museology from the University of Porto (Portugal). He is currently Director of the Research and Training Department of Sistemas do Futuro, Lda.

He was the project manager for ICOM Portugal in the Mu.SA – Museum Sector Alliance project, he is also a researcher at CITCEM – Transdisciplinary Research Centre «Culture, Space and Memory» and also he was the Editor at the CIDOC board.

He is member of the SPECTRUM PT project and a SPECTRUM champion in the Portuguese-speaking community. Alexandre is currently the chair of the CIDOC working group on Exhibition and Performance Documentation.

He always liked museums, but he totally fell in love with them when he first worked in one and 7isualiz the interesting stories he could tell from an object as simple as a portrait. He works on museum documentation because it is the most effective way to keep those stories alive.

He writes about It at Mouseion.

Director of the Research and Training Department of Sistemas do Futuro, Lda.
alexandre@sistemasfuturo.com
alexandrematos@mac.com
@alexandrematos
www.mouseion.pt

MARCO CALLIERI

3D-centric documentation in conservation-restoration

Marco Callieri is a researcher at the Istituto di Scienza e Tecnologie dell'Informazione (ISTI) of the National Research Council (CNR) in Pisa, Italy.

He is part of the Visual Computing Laboratory, working in the framework of various national and European projects. His research interests include 3D scanning and 3D data processing, colour and appearance acquisition, large 3D dataset manipulation and rendering, 3D printing, 3D web visualization.

Most of his work is related to the use of digital technologies in the Cultural Heritage field: experimenting new technologies and methods for the documentation, measurement and diagnosis of cultural heritage artefacts, carrying out on-the-field acquisition campaigns and developing tools for the scientific community.

He is currently part of the MeshLab development team, and is the main designer and developer of 3DHOP.

Tear down this wall! Technology cannot make up for decision procrastination

Thierry Aubry, Miguel Almeida, Luís Luís and Sara Aliácar
thierryaubry@arte-coa.pt; miguel.almeida@morph.pt; luis.luis@arte-coa.pt; sara.aliacar@rewilding-portugal.com

Keywords: Rock Art; Conservation; Digital Transition; Monitorizing; Landscape

The Côa Valley's inclusion on the UNESCO World Heritage list in 1998 (following the "Battle of the Côa") imposed on the Portuguese State the responsibility for the conservation of this open-air rock art of "outstanding universal value".

Originally taken by the Parque Arqueológico do Vale do Côa (PAVC), today this responsibility constitutes the core of the Fundação Côa Parque's (FCP) mission statement: "safeguard, conservation, investigation, dissemination, and valorisation of rock art of the Côa Valley".

To accomplish this mission, PAVC and FCP progressively improved conservation practices for this heritage whose inherent characteristics (fragility, spatial dispersion, and immobility) impose particularly complex challenges (Fernandes, 2014).

Currently, an ambitious digital transition programme is under development aiming to improve our response capabilities through remote real-time monitoring using a technological combination of contextual data, remote sensing, digital modelling, artificial intelligence, and the Internet of Things (Almeida et al., 2023). This includes:

- Expanding our understanding of the territory and heritage, focusing on the engravings' rock-supports and their degenerative processes (geochemical, biogenic, and anthropogenic).

- Monitoring the area and the rock art panels with multiparametric environmental sensors.

- Setting up a communications network for real-time data transmission to a command centre.

- Building digital twins of the territory to analyse all information received from the field.

- Implementing management and alarm software and preventive and mitigation procedures against any predictable or verified threats.

However, despite this significant digital and technological shift, the success of the rock-art preservation still primarily depends on an outside contingency. The persistence of the Côa dam's cofferdam, left intact since the dam's construction halt in 1996 and completely exempt of any maintenance since, causes artificial flood events of an unpredicted frequency and magnitude: the twenty hydrological years between 1996 and 2016 delivered 65 distinct flood occurrences (very short flood return period) with an average of two flood days per occurrence, leading to a severe aggravation of deterioration risks due to physical and chemical erosion, sedimentary accumulation, and subsequent bio-colonization and gravitational movements (LUÍS, 2018). In the last ten years, the situation got even worse, with climate change increasing impacts on rainfall concentration causing almost every year the occurrence of flows above 21.23 m3/s, which causes the upstream cofferdam to overtop and, consequently, a ~7.5M m3 flooding over 9 km of the riverbed, affecting 57 engraved rocks, including some of the most emblematic Côa prehistoric panels.

Although this artificial structure has lost any relevant function upon the halt of the Côa Dam's construction and became a critical ecological hazard, disturbing water quality, flood cycles, sediment transport, and ecological flow (LEFT, 2023), thus justifying its inclusion as a priority in the Portuguese obsolete dams removal plan (VVAA, 2017), the fact remains that twenty-five years later a completely obsolete artificial structure with no economic or social purpose and enormous environmental costs still hinders the preservation of the Côa Valley's world heritage sites.

In conclusion: Technology cannot make up for decision procrastination. Tear down this wall!

References
ALMEIDA, Miguel; AIRES, Sílvia; RAMOS, Nuno; FERREIRA, André; SANTOS, André; AUBRY, Thierry; LUÍS, Luís; SILVESTRE, Marcelo (2023) — Aos ombros do último artista do Côa: Um olhar prospectivo sobre a investigação arqueológica nos vales do Côa, Águeda e Ribeira de Aguiar. In Correia, Dalila; Santos, André Tomás (Eds.) — Por este rio acima – A arte pré e proto-histórica do Vale do Côa: Estudos em homenagem de António Fernando Barbosa. Vila Nova de Foz Côa (Portugal): Côa Parque — Fundação para a salvaguarda e valorização do Vale do Côa. Pp. 267-313. FERNANDES, A., P., B., (2014). Natural processes in the degradation of open-air rock-art sites: an urgency intervention scale to inform conservation. The case of the Côa Valley world heritage site, Portugal. Oxford: Archaeopress (BAR International Series, 2609).
LEFT (2023) — Estudo de caracterização e impactes na remoção das ensecadeiras do Côa – Rewilding Portugal. Technical report. Vila Real (Portugal): LEFT – Laboratório de Ecologia Fluvial e Terrestre. 35 p.
LUÍS, Luís, (2018) — As Gravuras Ainda Não Aprenderam a Nadar – impacto das cheias na arte rupestre do Vale do Côa entre 1996 e 2016. Al-Madan Online, 2ª série (22) – t. 1. Pp. 10-28.
VVAA (2017) — Grupo de Trabalho para a Identificação, Estudo e Planeamento da Remoção de Infraestruturas Hidráulicas Obsoletas. Technical report. Lisboa (Portugal): Conselho Nacional da Água. 122 p.

Thierry Aubry
Ph.D. in Quaternary Geology and Prehistory in 1991 from the University of Bordeaux. Since 1996, he has been responsible for the study of the Palaeolithic occupation in the Côa Valley and established the chronology the main artistic phases and context of the Palaeolithic open-air rock art. He has participated in several archaeological works in Brazil, Portugal and France, was responsible of archaeological survey and excavations, scientific projects and organized scientific meetings. Membership of the international Upper Palaeolithic Commission of the International Union of Prehistoric and Protohistoric Sciences. Author of more than 200 articles of which 25 in ISI journals. Since 1996 he has been working at the Côa Valley Archaeological Park, 2010 at the Côa Museum, and 2011 at the Côa Foundation, and since April 2020 is the Technical and scientific responsible for the Côa Museum and Côa Valley Archaeological Park.

Miguel Almeida
Miguel Almeida has a Diplôme d'Études Approfondies en Anthropologie, mention Paléthnologie, from the Université de Paris I – Panthéon/Sorbonne and is a doctoral candidate at the Faculty of Arts of the University of Lisbon / Uniarq. He is the founder of Dryas/Octopetala, a private group of ICC and intense technology SMEs working both in Preventive Archaeology and collaborative multidisciplinary R&D projects. Specialized in Prehistory, with extensive field-Archaeology experience, Miguel Almeida has worked in the areas of Archaeological surveying, Lithic technology, Palaeolithic Palethnology, and, recently, technology-based Rock Art documentation projects. Deeply involved in multidisciplinary applied research, his present main interests concern Southwestern Europe Upper Palaeolithic Palethnology (focusing on the Iberian Atlantic façade, the Côa Valley and the Claise basin), Lithic technology, and Past childhood and knowledge transmission.

Luís Luís
Archaeologist working at the Côa Parque Foundation since 2000, dedicated to the study of rock art, rock art conservation and human occupation in the Côa Valley, ranging from the Paleolithic period to the present, and particularly focused on spatial analysis. Master in Archeology from the Faculty of Arts of the University of Coimbra. Author of two books on archeology, including a guide to the art and archeology of the Côa Valley, with two editions. Author and co-author of more than 80 papers published in chapters of monographs, scientific proceedings, and national and international journals. Member of the management bodies of the Center for Prehistoric Studies of Beira Alta.

Sara Casado Aliácar
Sara Casado Aliácar has a Bachelor and MSc in Environmental Sciences from the University of Alcalá and studied an MSc in Biodiversity and Conservation at the University of Leeds, in 2016. In 2013 and 2014 she worked as a wolf monitoring technician in the LIFE MEDWOLF project with Grupo Lobo, in Portugal. After this experience, she developed an increasing interest in carnivores, human-wildlife coexistence, and rewilding, as well as having a more rural lifestyle. So she came back to the Côa to work with the NGO ATNatureza from 2016 to 2018 as Rewilding Officer and Project Manager of LIFE Landowners Club for the Conservation of Western Iberia, in the private protected area of Faia Brava. Since 2019, she works as Head of Conservation at Rewilding Portugal, scaling up rewilding in the Côa Valley and promoting a positive coexistence with wildlife.

Conservation and restoration practices for rock art in caves: A practical case study of La Pasiega (Cantabria, Spain)

Raquel Asiain and Eudald Guillamet
raquel.asiain@ucm.es; eguillamet@yahoo.es

Keywords: Rock art; Conservation; Restoration; Original patina; Reversibility

Rock art is a significant form of artistic and cultural expression, but it is also quite delicate. These artworks were created using mineral and organic materials that were applied to the walls, ceilings, and floors of caves and outdoor shelters. The pigments used were mixed with water and applied to the wet rock walls inside the caves or carefully incised with stone tools. Throughout thousands of years, natural and human factors have caused various changes to the parietal art. Unfortunately, these changes have caused damage to the artwork of varying degrees, and in some cases, the rock art has even disappeared entirely.

This work discusses the conservation-restoration of La Pasiega cave (Puente Viesgo, Cantabria, Spain), which had undergone a damaging intervention by the "Board of Prehistoric Caves of the Province of Santander" (Cantabria, Spain) in the 1960s to accommodate tourist visits. To make the cave more accessible to visitors, the construction workers used metal picks and shovels to reduce the original ground level. They also built false brick, cement, and mud walls to conceal the lighting installation they planned to install in the cave. However, the cave was never open to the public and is only accessible for research purposes.

As a result of these accommodation works of the cave, the main artistic complex of La Pasiega located in Gallery A suffered a significant number of damages. There are numerous splashes, ranging from a few millimetres to 2-3 centimetres, of dark brown and grey-black colour throughout this gallery. Most of them are composed of mud and some of cement and are present in almost all the groups. In some points, losses of the pictorial layer and even the rocky surface are observed due to human action, such as incisions with metal objects.

While these damages may not impact the stability of the paintings, they cause significant distortion to the overall view. They disrupt the accurate perception of the painting groups, resulting in a disordered and unclean appearance and obstructing the correct articulation of the paintings.

Preserving the original patina of the rock surface and avoiding the original paint strokes was a big challenge in this project, as there were more than 400 figures depicted in the gallery. To achieve this, we worked only on the backgrounds of the paintings. Our approach used a cleaning methodology that relied on using the cave water as a cleaning agent and minimally thick brushes. We also used digital tools to enhance the pigment colour (Dstrech app), revealing figures invisible to the naked eye. The original patina was fragile and could interact with the pigment, so we followed the criteria of minimal intervention to ensure its protection.

We achieved a highly satisfactory outcome without using chemical or artificial cleaning products in the cavity. Only water was used for cleaning. This conservation intervention could serve as an example for similar approaches based on the principles of minimal intervention and absolute reversibility.

References

BRUNET, J., GUILLAMET, E., PLASSARD, J. y VIDAL, P. 1993. Elimination des surcharges des tracés préhistóriques : quelques exemples de la grotte du Cro de Granville a RouTignac (Œuvres). Preprints 10th Triennial Meeting of ICOM CC, Washington, 837-841.

- 1996. Réhabilitation des œuvres préhistoriques de RouTignac. Coré, 1: 5-9

ONTAÑON PEREDO, R. 2013. Protección, conservación y gestión sostenible de las cuevas con arte rupestre en la Cornisa Cantábrica in M. Burón Álvarez y J. M. del Val Recio (11isual.) Actas. Jornadas técnicas. La conservación del Arte rupestre: Sostenibilidad e integración en el paisaje. Salamanca, Siega Verde, 17 de octubre de 2013, pp. 121-130. Salamanca: Consejería de Cultura, Turismo y Deporte de la Junta de Castilla y León.

Raquel Asiain

She graduated and received a Doctorate in Fine Arts from the Complutense University of Madrid. She graduated in Conservation and Restoration of Cultural Heritage from the Complutense University of Madrid and received a Master's in Prehistoric Archeology from the same university. Extraordinary PhD Award 2021- 2022. She has enjoyed state competition predoctoral and postdoctoral research grants. She is currently the beneficiary of a training and research scholarship from the Iberdrola Foundation-Museo Nacional del Prado in the Technical Documentation Department to conduct technical studies of works of art. In addition to participating as a restorer in research projects in the Olduvai Gorge (Tanzania), the El Castillo cave (Cantabria) or the La Garma cave (Cantabria). She is the author of articles in prestigious scientific journals such as Antiquity and of diTerent presentations at national and international congresses and conferences. For more than five years, his career has been linked to the conservation and intervention in Paleolithic and Levantine rock art, participating together with Eudald Guillamete, in the restoration of archaeological sites of World Heritage by UNESCO such as the La Pasiega cave (Cantabria), the El Castillo cave (Cantabria) of Paleolithic art or the La Vieja cave (Albacete) or the Prado del Tornero (Albacete) of Levantine art.

Eudald Guillamet

Eudald Guillamet (Andorra, 1952) specialises in restoring universally recognised cave paintings and mural paintings. He studied Fine Arts in Barcelona and later obtained a Bachelor's Degree in Conservation and Restoration of Cultural Assets at the Sorbonne University in Paris. His concern for conserving Andorran cultural heritage came from his work with Pere Canturri around 1970. Later, he was head of the Restoration Service of the Government of Andorra between 1975 and 1992 and continues to be linked to the country as a member of the Heritage Commission. At the beginning of his professional activity, he was part of the team that discovered the mural paintings of Sant Semi de Nagol (1976) and participated in their restoration (2011). He is a consultant for international organisations such as UNESCO and has worked in Egypt, Jordan, Yemen, Mongolia, Bolivia, France and other countries as part of international missions. In Spain, he has participated in the restoration of a large part of the mural paintings in the Levantine area (Ulldecona, Cogull, Valltorta, La Sarga, Minateda, etc.) and various restoration works of Romanesque mural painting. He also participated in the restoration of Joan Miró's studio in Son Boter (Mallorca) and the project of the Dome design by Miquel Barceló of "The Human Rights and Alliance of Civilizations Room" in Geneve United Nations Palace (2008).

The Potential of Artificial Intelligence in the Conservation of Built Heritage. The Case Study of Freixo de Espada à Cinta (Portugal) Church Intervention

Cíntia Freitas, Eduarda Vieira, Rui Bordalo and Isabel Costa
s-csafreitas@ucp.pt; cintix.xp@gmail.com

Keywords: Buil Heritage; Artificial Intelligence; Intervention Management; Preventive Conservation

Artificial Intelligence (AI) is rapidly establishing itself as a pivotal tool, prompting a controversial but promising shift in traditional practices. Considering that conservation/restoration works are multifaceted works, we would like to approach how recent technological advancements may contribute to more a well-organized workshop management. In this context, AI seems to have the potential to streamline procedural workflows associated with conservation needs and enhance the precision of data acquisition and management. Exploring these potentialities may significantly contribute to increased productivity and efficiency within the conservation field. This communication aims to explore the recent impact of AI on the conservation of built heritage, incorporating scholarly insights and practical applications. Emphasis will be placed on understanding the evolving role of this technology in Portugal, particularly in augmenting the management and intervention methods employed by institutions such as the Northern Regional Directorate of Culture (DRCN) in safeguarding the nation's cultural heritage.

The application of AI algorithms in developing predictive models for conservation Interventions offers significant benefits. Firstly, it aids in discerning deterioration patterns and trends, enabling conservators to adopt a proactive approach. By leveraging AI, conservators can anticipate and navigate deterioration stages, facilitating the implementation of preventive measures. Secondly, AI can also be utilized in the phase of intervention preparation management by assisting in organizing and optimizing the planning and execution of conservation interventions. Conservators can enhance the efficiency and effectiveness of their intervention strategies, ensuring that resources are allocated appropriately and that interventions are carried out with maximum precision and efficacy.

According to Akyol e Avcı, AI provides cost-effective and practical restoration methods that contribute to the preservation of sites. Its implementation in built heritage outspreads beyond mere data analysis for risk mitigation. The integration of AI algorithms in Building Information Modeling (BIM) has allowed for a comprehensive evaluation of structural integrity, material behavior and data analysis. This integrated approach plays an important role in identifying vulnerabilities and provides crucial support for well-informed decision-making and control within the realm of conservation planning for interventions.
As a tangible manifestation of successful AI implementation on a national scale, the Artificial Intelligence Risk Detection and Alert System (SIAP) project serves as a case study. Focused on the preservation and in-depth study of the cultural heritage of the Main Church of Freixo de Espada-à-Cinta, the project involved diverse tasks such as document digitization, InSAR data acquisition, and seismic analysis. The documentation spanning from 1936 to the present day unveiled a diversity of procedures. The SIAP project identified document typologies, shedding light on budgets, official letters, and adjudications. The integrated analysis of these documents presented a comprehensive overview of interventions that significantly shaped the church, and its surroundings from the 20th century to the early 21st century.

Critical examination of ethical considerations and challenges associated with the integration of AI in art conservation is paramount. Issues pertaining to data privacy, algorithmic bias, and the potential displacement of traditional conservation methodologies are scrutinized. Recognition of these challenges is imperative for fostering responsible and sustainable AI implementation in the field, ensuring the preservation of cultural heritage in an ethically sound manner.

References

AKYOL, G. & AVCI, A. B. (2023). AI Applications in Cultural Heritage Preservation: Technological Advancements For The Conservation. 4 Baskent International Conference on Multidisciplinary Studies, August 2023, Ankara, Turkey, DOI: 10.6084/m9.figshare.24077862

Borg, B., Dunn, M., Ang, A., & Villis, C. (2020). The application of state-of-the-art technologies to support artwork conservation: Literature review. Journal of Cultural Heritage, 44, DOI: 10.1016/j.culher.2020.02.010
Calderón, P. O., Puerto, F. P., Verhagen, P. & Prieto, A. (2019). Science and Digital Technology for Cultural Heritage – Interdisciplinary Approach to Diagnosis, Vulnerability, Risk Assessment and Graphic Information Models. Proceedings of the 4th International Congress Science and Technology for the Conservation of Cultural Heritage (TechnoHeritage 2019), March 26-30, 2019, Sevilla, Spain. CRC Press, DOI: 10.1201/9780429345470
Ioannides, M., Fink, E., Moropoulou, A., Hagedorn-Saupe, M., Fresa, A., Liestøl, G., Rajcic, V., & Grussenmeyer, P. (Eds.). (2016). Digital Heritage. Progress in Cultural Heritage: Documentation, Preservation, and Protection. Springer, DOI: 10.1007/978-3-030-01765-1
Pires, H., Vale, C., Sousa, O., & Cardoso, H. (2022). Seminário Sobre o Projeto SIAP. Sistema de Inteligência Artificial para Deteção e Alerta de Riscos sobre o Património. AI do Património!, Casa das Artes – Porto

Cíntia Freitas
Cintia is a PhD candidate in Conservation of Cultural Heritage at the School of Art from Universidade Católica Portuguesa. She has a BA in Painting (2019) from the Faculty of Fine Arts of the University of Lisbon and a MSc in Conservation and Restoration of Cultural Heritage (2022), with a focus on Built Heritage, from Universidade Católica Portuguesa (UCP). Currently, she is a non-permanent member of UCP's Research Center for Science and Technology of the Arts (CITAR) and works as a Research Fellow at Património Cultural, I.P.. She has contributed her expertise as a Conservation and Restoration technical specialist in both the private and museum sectors.

Eduarda Vieira
(orcid 0000-0002-0620-080X) holds a PhD in Conservation and Restoration of Historic and Artistic Heritage by the Polytechnic University of Valencia (Spain), and a master's degree in Architectonic Conservation by the Évora University (Portugal). She is currently Assistant professor at the School of Arts of the Portuguese Catholic University (Conservation of Inorganic Materials), where she coordinates de PhD of Conservation and Restoration of Cultural Heritage program. She was the director of the Research Centre of Science and Technology of the Arts (CITAR) between 2019 and 2022 and editor of the Studies in Conservation and Restoration -ECR-Estudos de Conservação e Restauro journal. She is also a member of ICOMOS and ICOM and researcher in several projects related with Preventive Conservation and Green Conservation besides supervising several PhD and master thesis.

Rui Bordalo
(orcid: 0000-0003-2852-1345) Rui Bordalo graduated in Conservation and Restoration in 2003 and earned his Ph.D. in Heritage Science from the Courtauld Institute of Art, University of London, in 2011. His doctoral thesis focused on the consequences of laser cleaning of oil paintings and the molecular changes in pigments induced by laser. He also holds a postgraduate degree in Computer Science Applied to Organizations (specializing in Information Systems Development) from ISCTE. He taught at the Universidade Portucalense from 2009 to 2012, later pursuing a postdoctoral fellowship at the HERCULES Laboratory with a project title "19th-century artistic materials in Portugal: analytical and statistical characterization" from 2013 to 2016. He has experience using various analytical techniques (XRF, SEM-EDX, XRD, FTIR, Raman spectroscopy, FORS, colorimetry, and microscopy) while developing non-destructive in-situ analytical methodologies. Currently, he is an integrated member of CITAR, where he is conducting research on a CEEC project focused on the study public sculpture in Porto. In addition to his teaching experience, he has supervised several MSc and PhD in his areas of expertise.

PAINEL SESSIONS II

Archival and digital preservation of Heritage: the Holy Bodies Project/ the study of corpi santi in Portugal

Eduarda Vieira, Tracy Ireland, Joana Palmeirão and Teresa Ferreira
evieira@ucp.pt; tracy.ireland@canberra.edu.au; joana.palmeirao@uevora.pt; tasf@uevora.pt

Keywords: Relics; Reliquaries; Roman catacombs; Devotion; Heritage Value; Ethics

The study of corpi santi (holy bodies) and their simulacra in Portugal is groundbreaking, both nationally and internationally. These religious assets captivate interest due to their diverse materials, including human remains, and the application of intricate production techniques. Moreover, they hold unique historical, religious and cultural contextual significance. Despite their historical context and remarkable artistic craftsmanship, this category of relics/reliquaries in Portugal has remained hidden or overlooked, fading into obscurity (Palmeirão, 2023) This scarcity of national and international scientific research has contributed to misconstrued interpretation and, consequently, the irreversible loss of this religious heritage.

The Holy Bodies project (2022.0148".PTD') will subject these assets to a discussion encompassing multi-, inter, and transdisciplinary perspectives, overseen by its specialized and proficient team, consultants, and advisors. The HERCULES Laboratory | University of Évora, in collaboration with CITAR | Universidade Católica Portuguesa, supported by the José de Figueiredo Laboratory, CIDEHUS, CHAM, and Open University, actively participates in this project through its team of researchers representing diverse field of study. This collective approach allows for an integrated and multidisciplinary study of both the material and cultural aspects associated with these items.

This innovative project endeavors to deepen cultural understandings of, and contribute new knowledge about, corpi santi and simulacra in Portugal, with the aim of recognizing, safeguarding, and enhancing this overlooked heritage, all within a best practice ethical approach.

One key aspect involves the detailed documentation of these assets, employing archival research alongside three-dimensional and radiographic recording methods. Additionally, the project incorporates digitalization and 3D printing for analytical, interpretative and public outreach initiatives. To guide these processes, the team has developed ethical principles and an ethical decision-making framework based on the Australian Burra Charter (Australia ICOMOS 2013). The charter stresses the need to understand the specific nature of the cultural values attached to particular items, noting that their different religious, community, secular and museum contexts, as well as their diverse life histories, ownership and the forms of care applied to them, means that a 'one size fits all' approach to ethical principles is not 15isualizati for this category of material heritage. Instead, the ethical framework ensures that the process for understanding the specific values of each corpi santi responds to its rare composite nature as simultaneously human remains, religious relic, community heritage, museum object etc, assisting in their improved care, curation and management in research processes, in religious practice and in their context as cultural heritage.

This holistic approach aims not only to preserve the relics/reliquaries but also to contribute to a comprehensive understanding of their cultural, social, historical and artistic significance through the integration of cultural analysis, archival research and advanced technological applications.

The authors propose to present the study already underway, using examples from the centre of the country, and emphasizing the importance of this type of research for this religious heritage, currently at risk of disappearance due to changing religious practice and dynamic cultural values and associations.

References

Palmeirão, J. do C. (2023) Simulacra Corporum Sanctorum Martyrum. Estudo de um património em risco e estratégias para a sua valorização e salvaguardaTese de Doutoramento em Conservação eRestauro de Bens Culturais. Universidade Católica Portuguesa. Porto.

Australia ICOMOS 2013, The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, Australia ICOMOS. Available at chrome extension://efaidnbmnnibpcajpccglclefinddmkajhttps://15isualiza.icomos.org/wpcontent/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf

Eduarda Vieira
(orcid 0000-0002-0620-080X) holds a PhD in Conservation and Restoration of Historic and Artistic Heritage by the Polytechnic University of Valencia (Spain), and a master's degree in Architectonic Conservation by the Évora University (Portugal). She is currently Assistant professor at the School of Arts of the Portuguese Catholic University (Conservation of Inorganic Materials), where she coordinates de PhD of Conservation and Restoration of Cultural Heritage program. She was the director of the Research Centre of Science and Technology of the Arts (CITAR) between 2019 and 2022 and editor of the Studies in Conservation and Restoration -ECR-Estudos de Conservação e Restauro journal. She is also a member of ICOMOS and ICOM and researcher in several projects related with Preventive Conservation and Green Conservation besides supervising several PhD and master thesis.

Tracy Ireland
(orcid: 0000-0001-6131-9689) Is Professor of Cultural Heritage at the University of Canberra and President of Australia ICOMOS. Tracy is known internationally for her research on heritage values and practice and the relationship between archaeology, conservation and heritage across the settler colonial world. Her research has influenced public policy and practice in Australia and abroad in the areas of ethics, social value, Indigenous historic heritage and archaeological sites conservation. Since 2009 she has led the University of Canberra's undergraduate and post graduate programs in heritage and conservation and the cultural industries. Tracy is Editor of Historic Environment and a Fellow of the Society of Antiquaries, London. Her publications and projects can be found here.

Joana Palmeirão
(orcid: 0000-0002-3572-1292) Is currently a postdoctoral research fellow within the scope of the project "Santos Corpos" / "Holy Bodies" (2022.01486.PTDC), funded by FCT. She holds a PhD in Conservation and Restoration of Cultural Heritage from the School of Arts at the Universidade Católica Portuguesa (Oporto, Portugal). Since 2013, her primary focus has been the study, conservation, and valorization of the holy martyrs' simulacra (Lat.: "simulacra sanctorum martyrum"), which arrived in Portugal between the 18th and 19th centuries, containing the exhumed bones ("corpi santi") from the catacombs of Rome. Since 2016, she has been a member and consultant for the International Crusade for Holy Relics (ICHR).

Teresa Ferreira
(orcid: 0000-0001-7902-8900) Is a Chemistry Assistant Professor at the University of Évora, where she is involved in Analytical Chemistry, Material Science, and Chemistry applied to Cultural Heritage programs. She is an integrated member of HERCULES Laboratory and IN2PAST Laboratory. She has supervised multiple undergraduate, MSc and PhD theses. She has also coordinated and participated in various research and educational projects funded by the Portuguese Foundation for Science and Technology and other funding agencies. Her main research areas include graphical documents, like paper and iron gall inks and illuminated manuscripts, relics, historical textiles, photographic items and tiles.

The Sounding Heritage We Can't Hear. Reenactment as Preservation in the Musealisation of Music: a Missing Materiality

Chiara Antico
chiara.antico@campus.fcsh.unl.pt

Keywords: Aesthetics of music; Ephemerality; Preservation; Reenactment; Recording

Music is to be considered as a one-time moment in life. Every performance is unique: it can be repeated innumerable times and feel always different. Music depends on the space, the acoustics, the people who are involved, the quality of the instrument, and many other aspects. We are now used to having immediate access to the repetition of a music excerpt because of digital transformation, but in the past, all the artistic gestures were unrepeatable and contextualized. Talking about aesthetics, the recording is already a totally different form of art. It retains the 17isualizatio essence of the art but it happens without the musicians "here and now". This paper seeks to investigate the process of reenactment by contemporary musicians to supply and support the ephemerality of music. If the material to be preserved is the sound, is the remembrance of sounds enough? Is the recording an acceptable midpoint? The methodology of this investigation intertwines musicology and philosophy, inquiring about aesthetics, phenomenology, and memory studies.

We are about to celebrate the 200th anniversary of Beethoven's Ninth Symphony première, and we only preserve the picture of the theatre and the program of the concert, to prove that the event happened. The impermanence of this art doesn't allow the audience to meet personally the masterpiece, the original finalized materiality in a unique fixed form, as it happens in the case of paintings or monuments, for instance. There is no one Ninth Symphony: there are many interpretations, and there are names of orchestras and maestros who are as important as Beethoven, on that occasion. The audience meets the musicians, their mastery, and sensitivity. So, what is the materiality of what they do? The impossibility of the sounds of hanging around implies that all the discussion about the preservation of musical moments (artifacts) has to be reinvented through new criteria. Is recording helping music? Is it changing it's materiality and the aesthetic itself? Can a contextualized recreation bear witness to the authentic artistic activity? Does the new interpretation symbolize the first creative act and the emotional implications? How do new performances bridge the gap of time? This paper aims to elaborate on the ethics and aesthetics of reenactment – the artistic gesture made of sounds, or communicating with sounds, of something that had already happened – during its history of several repetitions from a preservation optic, thinking of musical performance as an artifact without materiality, that cannot be conserved into a museum in a completed and fixed form.

References

Barenboim, D. (2007) La musica sveglia il tempo, Milano : Feltrinelli.
Brelet, G. (1949) Le temps musical, Paris : Presses Universitaires.
Levinson, J. (2015) Essais de philosophie de la musique. Ithaca, NY: Cornell University Press
Mazzoni, A. (2004). La musica nell'estetica 17isualization17. Milano: Mimesis.

Chiara Antico

Italian viola player and musicologist, Chiara Antico is a DMA candidate at Universidade NOVA in Lisbon, focusing on the musical activity during the Holocaust, aesthetic value and memorialization. She presents papers at international conferences intertwining artistic research and memory studies, and her educational project about the women's orchestra in Birkenau deserved an award at the Auschwitz-Birkenau Memorial State Museum in 2021. The author has an active career as a chamber music player and viola teacher. She holds a MA summa cum laude in Music Performance and a Master's degree in Pedagogy.

The adaptation of Intangible Cultural Heritage: The impact of heritage inventorying and the associated documentation process on the preservation of intangible cultural heritage

Ânia Chasqueira
al.chasqueira@ipt.pt; al.chasqueira@gmail.com

Keywords: Intangible Culture Heritage; Adaptation; Lists of ICH inventory; Preservation

The main objective of this reflection is to analyse how the inventory and its entire documentation process does or does not interfere with the preservation of intangible cultural heritage (ICH).

As stated in the 2003 Convention for the Safeguarding of the Intangible Cultural Heritage (ICH), the safeguarding of ICH includes its identification, documentation, research, preservation, among others (UNESCO 2022, p.6). This convention also considers that to safeguard this heritage, it is essential to identify and document it, especially through inventories, both national and international (UNESCO 2022, p.10), especially because they require a safeguarding plan. Furthermore, the ratification of this convention by state members and the inclusion of their ICH in these inventory lists requires that the ICH in question be compatible with European requirements, particularly in terms of human rights, mutual respect between communities, groups and individuals and sustainable development (UNESCO 2022, p.5).

Since inventory is an essential process for safeguarding ICH, it should be noted that safeguarding is not synonymous with protection, but rather a dynamic concept that allows ICH creators and owners freedom of expression (Lenzerini 2011, p. 109), as envisaged by the convention. In other words, as living heritage is passed down through generations and constantly recreated by the community, groups or individuals (UNESCO 2022, p.5).

Based on the Portuguese case study of the domain of skills in the field of traditional processes and techniques, specifically the examples of the Bisalhães black pottery manufacturing process and the Manufacture of cowbells, it can be seen that heritage owners take a different approach to complying with the rules in order to keep their ICH on nationally and internationally recognised inventory lists. This is the case with the National Inventory Lists and the UNESCO Inventory Lists.

In the case of the Bisalhães black pottery manufacturing process, the artisans' refusal to modernise some of the manufacturing processes (which would help with the arduous manufacturing process and thus attract more artisans), because they believe that it goes against traditional practice and what was documented and inventoried when it was included in the urgent protection lists. Even though it could lead to the crystallisation of the heritage and its eventual disappearance.

On the other hand, in the case of Manufacture of cowbells, since it is a traditional practice that has been carried out mainly by men over time, after being included in the inventory lists, the proposal of strategies for the empowerment of women in the context of this craft emerges as a safeguard measure.

While a 'strictu sensu' interpretation of the rules can lead to the crystallisation and eventual disappearance of the heritage, a 'lato sensu' interpretation can lead to the de-characterisation of ICH. Thus, it is argued that the so-called 'safeguarding' of ICH may not be so much a form of preservation as a form of transformation and adaptation, or even fabrication of ICH (Berliner 2013; Muñoz-Viñas 2023).

References

Lenzerini (2011). Intangible Cultural Heritage: The Living Culture of Peoples. In The European Journal of International Law, 22(1), pp. 101-120. https://doi.org/10.1093/ejil/chr006

Berliner, D. (2013). New Directions in the Study of Cultural Transmission. In: Arizpe, L., Amescua, C. (eds) Anthropological Perspectives on Intangible Cultural Heritage. SpringerBriefs in Environment, Security, Development and Peace, vol 6. Springer, Heidelberg. https://doi.org/10.1007/978-3-319-00855-4_6

Muñoz-Viñas (2023). A theory of cultural heritage. Beyond the intangible. Routledge https://doi.org/10.4324/9781003288121

UNESCO (2022). Basic Texts of the 2003 Convention for the Safeguarding of the Intangible Cultural Heritage 2022 Edition. UNESCO. https://ich.unesco.org/doc/src/2003_Convention_Basic_Texts-_2022_version-EN_.pdf

Ânia Chasqueira

Ânia Chasqueira is a Researcher at TECHN&ART - Centre for Technology, Restoration and Art Enhancement (Polytechnic University of Tomar, Portugal), with a doctoral scholarship funded by the Portuguese Agency for Science, Research and Technology (UI/BD/151231/2021). She is a PhD candidate in Heritage Studies at the University of the Algarve and a conservator-restorer. Her research currently focuses on the preservation of Intangible Cultural Heritage, in its intersection with the methodology of creative conservation and sustainable development.

PANEL SESSIONS III

The painting collection on wood-based panels at the National Museum of Contemporary Art – Inventory and practical observation as an identification methodology

Susana Duarte, Agnès Le Gac, Emília Ferreira and Carlos Chastre
sms.duarte@campus.fct.unl.pt; alg@fct.unl.pt; emiliaferreira@mnac.dgpc.pt; chastre@fct.unl.pt

Keywords: Wood-based panels; Inventory; Supports; Museum; Collection

The issue we are going to develop is part of a PhD research project in Heritage Conservation and Restoration, in partnership with the National Museum of Contemporary Art (NMCA), looking at the subject of wood-based supports in contemporary painting.

According to its inventory, this Museum has a collection of paintings on wood-based panels, mainly from the second half of the 20th century. With a great diversity of Portuguese artists, this collection is made up of works by Joaquim Rodrigo (1912-1997), Marcelino Vespeira (1925-2002) and Cândido Teles (1921-1999). The living painters Jorge Pinheiro (1931-) and Pires Vieira (1950-), who are also represented in this core collection, also stand out. There are fewer works from the first half of the 20th century by Dórdio Gomes (1890-1976), Jorge Barradas (1894-1971), Carlos Botelho (1899-1982) and Júlio Pomar (1926-2018) [1].

The most representative support is hardboard – Platex®, but there are also composite supports.

The existing inventory at the NMCA provides a brief insight into the history of the works, in terms of how they were incorporated into the collection. Acquired works are accompanied by a technical file. In the case of bequests, that do not have a technical file, the museum classifies them. If the artist donates the work, he or she provides the information for the technical file.

Given that there is a wide variety of wood-based products that are little known to heritage managers [2], the immediate question is how to identify these materials, particularly for inventory purposes [3,4]. Recognising this difficulty, the aim was to establish a methodology that would allow us to validate the information contained in the inventory and obtain reliable results, so as not to compromise the art works.

The study was based on a universe of forty-eight paintings, whose supports are made of wood derivatives, but also other rigid materials with a certain similarity, such as wood and cardboard, because of the risk of confusion that these supports can create [5].

The methodology consisted of comparing the information in the inventory with the observation of the works in-situ and the use of photographic documentation.

The results show, it is easy to see that a considerable part of the materiality of the paintings does not correspond to the documentary record, which can be misleading in the dissemination media (exhibitions, catalogues, articles, etc.) and have serious consequences in terms of preservation and intervention.
This work proved to be extremely important, as it allowed us to come into contact with the paintings and, at the same time, to see their state of conservation.

In this way, the methodology established is based on an inventory, but also on the visualization of the works, combining documentary records with practical observation as a means of validating information.

References

[1] http://www.matriz.dgpc.pt/pt_matriz30.php.
[2] DUARTE, Susana – A utilização das placas de derivados de madeira como suporte à pintura contemporânea: contributos para o estudo das placas de aglomerados de fibras duros. Lisboa. Universidade de Lisboa, Faculdade de Belas Artes. 2019. Tese de Mestrado.
[3] Normas de Inventário – Pintura – Artes Plásticas e Artes Decorativas. Instituto dos Museus e da Conservação. 1ª edição, novembro 2007. ISBN: 978-972-776-356-6.
[4] SULLIVAN, Lynne P.; CHILDS, S. Terry. Managing curated collections. Museums and Archaeology, 2022, 47.
[5] THOEMEN, Heiko, IRLE, Mark, SERNEK, Milan – Wood-Based Panels. An Introduction for Specialists. Brunel University Press. 2010. ISBN: 1902316827.

Susana Duarte
(Lisbon, 1972). Graduate in Management, ISCTE. Started her career in the financial sector. She later pursued an academic and professional career in her favourite field, wood conservation and restoration. She holds a degree in Conservation and Restoration from the School of Decorative Arts, Ricardo Espírito Santo Silva Foundation, and an M.Sc. in Sciences of Conservation, Restoration and Production of Contemporary Art from the Faculty of Fine Arts, University of Lisbon. Since February 2022, she has been working on her Ph.D. in Heritage Conservation and Restoration at the NOVA School of Science and Technology. She is a researcher at the Fine Arts Research and Study Centre of the University of Lisbon (CIEBA). From the various fields related to the conservation and restoration of contemporary art, he developed an interest in wood-based materials used as supports in contemporary painting. The work carried out in this area includes laboratory tests at the National Laboratory of Civil Engineering (LNEC), interviews with plastic artists and surveys of national and international museums of contemporary art. The most frequently used terms in the contextualisation of scientific, technological, and artistic-cultural production are wood-based materials, conservation, restoration, preservation, preventive conservation, contemporary painting, support, degradation, and accelerated ageing.

Agnès Le Gac
(Paris, 1961) Ph.D. in Conservation-Restoration (FCT-NOVA), M.Sc. in Cultural Heritage/Painting-Sculpture (MST, Paris/Université Louvain), DEA Contemporary Art (Paris). Assistant Professor at FCT-NOVA and Integrated researcher at LIBPhys-UNL. She has 30 years of experience in teaching and research related to the preservation of paint layers involving the most diverse supports and material coatings from the 15th-21st centuries. She has been supervising Doctoral, MA/M.Sc. and BA students' theses and has been regularly participating in Jury for Doctoral thesis and Master dissertations. She has authored 3 books, and written 12 book chapters, 60 articles in peer-reviewed international journals. She has participating in three triennial international projects funded by the European Community DGX and three triennial national projects funded by FCT. Since 2010, as team-leader, she has coordinating over 20 independent projects in collaboration with museums, cultural institutions, and scientific research units. She has curating four exhibitions aimed at the public: Museu Militar de Lisboa, 08/11/2018–27/01/2019, Arpad Szenes Vieira da Silva Foundation, Lisbon, 31/10/2019– 26/01/2020, Centro Cultural Casapiano, Lisbon, 01/07–12/11/2022 and 07/09- 17/11/2023. Another exhibition is being prepared at FCT-NOVA, Caparica, scheduled in Octobre-December 2024. She held key positions in the Conservation and Restoration field in Portugal and its development in Europe.

Emília Ferreira
(Lisbon, 1963) Major in Philosophy (FLL), Master and PhD in Contemporary Art History (FCSH/NOVA)). Integrated researcher at IHA NOVA FCSH/IN2PAST; associated researcher at the Social Sciences and Humanities Research Council project (University of Victoria, BC, Canada), and at CIEG/ISCSP-ULisboa. Representative of the European Museum Academy, in Portugal. Member of Bank of Contemporary Art Advisory Board, Lisbon. Since December 2017, she is the Director of the National Museum of Contemporary Art and of House Museum Dr. Anastácio Gonçalves. Author of, among other volumes, Paula Rego. Rehearsal. Essay on Love (2019), Lisboa em Festa. The retrospective exhibition of Portuguese and Spanish Ornamental Art, 1882. Antecedents of a Museum (2017), Paula Rego or Alice's Vertigo (2011), as well as hundreds of texts on museums, education, gender issues, Portuguese art and artists, dictionary entries and chapters in national and international books. Co-editor with José Quaresma of Soirée chez lui. New Perspectives on Columbano's Painting. Lisbon: MNAC/FBAUL, 2022; co-editor with Raquel Henriques da Silva and Joana d' Oliva Monteiro, of the Dictionary Who's who in Portuguese museology. Lisbon: IHA/FCSH/Nova, 2019 and 2021; and coeditor, with Carlos João Correia, of Aesthetics, Art and Intimacy. Lisbon, CFUL, 2021.

Carlos Chastre
(Lisbon, 1966) Ph.D. in Civil Engineering / Structures (NOVA University of Lisbon), M.Sc. in Structural Engineering and B. Eng in Civil Engineering (IST/ University of Lisbon); Associate Professor with Habilitation at Department of Civil Engineering of NOVA FCT and Integrated researcher at CERIS. Since December 2022, he is the ViceDean for Campus and Infrastructures of NOVA FCT. Carlos Chastre has supervised to completion 35 master students, 6 Ph.D. students, and 5 Postdoc researchers. He has authored more than 300 publications, of which 80 in WoS or Scopus journals, where he is ranked as h-32, with 2655 citations. He has authored 4 books, has edited 18, and has written 19 book chapters. He is member of the Editorial Board of Heritage journal and other 16 international journals. Since 2021 he is the Section Editor-in-Chief (Civil Engineering Design) of Designs journal. He has won the BES National Award for Innovation in the area of New Materials and Industrial Technologies in 2009.

Unusual documents: the xylotheque and the herbarium as repositories of the world's history

José Silva, Rui Bordalo, José Pissarra and Paloma De Palacios
jlamorimdasilva@gmail.com

Keywords: Documentation; Digital Preservation; Wood; Xylotheque; Herbarium

The presentation delves into the profound significance of wood collections, specifically focusing on xylotheques and herbaria, as pivotal forms of documentation for natural and cultural heritage. The aim is the exploration of the various facets of these assortments, spanning from documentation processes, methodological intricacies, interdisciplinary collaboration, digital preservation, open-access databases, and the presentation of best practices. Furthermore, it also expands into the realm of digital preservation, discussing how technological advancements contribute to the accessibility and longevity of these collections.

The process of documenting wood specimens and plant materials has evolved over centuries, reflecting advancements in scientific methodologies and technological tools. We examined the documentation processes employed in creating and maintaining xylotheques and herbaria, shedding light on the historical evolution of these practices and the contemporary techniques utilized in their execution. However, these valuable collections are not without their methodological limitations and challenges. This presentation critically examines the hurdles faced in the creation and upkeep of wood collections, addressing issues such as specimen identification, preservation methods, and the ethical considerations surrounding the acquisition of rare and endangered plant specimens.

Archives and open-access databases are key in democratizing knowledge, allowing researchers from the most diverse fields and the general public to benefit from the wealth of information stored within xylotheques and herbaria. Moreover, acknowledging the intricacies of the topic, the emphasis is on the significance of interdisciplinary and transdisciplinary collaboration. The presentation explores how integrating expertise from various fields, such as botany, ecology, conservation, and cultural heritage, can improve the thoroughness and precision of wood collections.

However, the impact and importance of wood and herbarium collections extend beyond the confines of academic study, as these collections play a critical role in historical and ecological preservation, the protection of endangered species, and conservation-restoration interventions, among many others. By serving as repositories of biological diversity and cultural heritage, xylotheques and herbaria become indispensable tools in addressing contemporary environmental sustainability and biodiversity conservation challenges.

In essence, this presentation is a comprehensive exploration of wood collections, emphasizing their role in documenting and preserving the rich tapestry of natural and cultural heritage and their far-reaching implications for current and future conservation efforts.

References:

British Columbia Ministry of Forests. (1996). Techniques and Procedures for Collecting, Preserving, Processing, and Storing Botanical Specimens. https://www.for.gov.bc.ca/hfd/pubs/docs/wp/wp18.pdf

Perkins, K. (2022). Preparation of Plant Specimens for Deposit as Herbarium Vouchers. University of Florida Herbarium (FLAS). https://www.floridamuseum.ufl.edu/herbarium/voucher.htm

RHS – Royal Horticultural Society. (2013). RHS Herbarium guide to making Herbarium Specimens. https://www.plantheritage.org.uk/media/1894/rhs-guide-to-makingherbarium-specimens.pdf

Schmitz, N., et al. (2019). General sampling guide for timber tracking. How to collect reference samples for timber identification. https://doi.org/10.13140/RG.2.2.26883.96806

Vieira, C. (2023). Hortus Siccus – o herbário como um testemunho botânico visual, científico e técnico. In Modos de Editar – Arquivo em Aberto (pp. 88–96). Edições i2ADS – Instituto de Investigação em Artes, Design e Sociedade Faculdade de Belas Artes da Universidade do Porto.

Luís Silva
(orcid: 0000-0002-7430-2912) José Luís Silva has a BSc in Landscape Design (2003) at the Instituto Politécnico de Viana do Castelo, and a BSc (201x) and MSc (201x) in Conservation and Restoration at the Universidade Católica Portuguesa. His focus was on conservation-restoration procedures, specifically addressing the treatment of polychromed wooden sculptures, which also involved a case study on wood identification in artworks. Working since 2007, José is an experienced conservatorrestorer specialized in wood, having gained experience at several companies, both national and international. Currently, he is undertaking a PhD in Conservation-restoration titled "Scientific identification of the woods used in Portuguese sculpture from the 16th to the 19th centuries: Contribution to the knowledge of techniques, materials, and environmental factors.". His primary research focus lies in the conservation of wooden artworks, wood technology, and wood identification adapted to art objects.

Rui Bordalo
(orcid: 0000-0003-2852-1345) Rui Bordalo graduated in Conservation and Restoration in 2003 and earned his Ph.D. in Heritage Science from the Courtauld Institute of Art, University of London, in 2011. His doctoral thesis focused on the consequences of laser cleaning of oil paintings and the molecular changes in pigments induced by laser. He also holds a postgraduate degree in Computer Science Applied to Organizations (specializing in Information Systems Development) from ISCTE. He taught at the Universidade Portucalense from 2009 to 2012, later pursuing a postdoctoral fellowship at the HERCULES Laboratory with a project title "19th-century artistic materials in Portugal: analytical and statistical characterization" from 2013 to 2016. He has experience using various analytical techniques (XRF, SEM-EDX, XRD, FTIR, Raman spectroscopy, FORS, colorimetry, and microscopy) while developing non-destructive in-situ analytical methodologies. Currently, he is an integrated member of CITAR, where he is conducting research on a CEEC project focused on the study public sculpture in Porto. In addition to his teaching experience, he has supervised several MSc and PhD in his areas of expertise.

José Pissarra
(orcid: 0000-0002-9489-9904) José Pissarra graduated in Biology - Scientific Branch - from the Faculty of Sciences of the University of Porto (FCUP). His research is focused on the study of cell differentiation using electron microscopy and obtained a doctoral degree in Biology from the University of Porto in 1993. He was member of the Scientific Border (2018-2022), Director of the Master in Cell and Molecular Biology (2011-2016), President of the Department of Botany - FCUP (2006-2009), member of the Scientific Committee - FCUP (2009, 2010), member of the Evaluation Coordinating Council - FCUP (2008 -2010), Director of the Master in Biology (2007-2010) and coordinator of the Master in Biology for Teaching (2002-2006). Maintaining regular activity of theoretical and practical teaching he has been responsible for creating several undergraduate and master courses. He participated in jury boards, being principal opponent in numerous MSc and PhD examinations, as well as supervisor of MSc dissertations and PhD theses. He has given numerous lectures in the biology area in various institutions. Presently, being retired, he is invited Associate professor at the Department of Biology, FCUP, and an integrated researcher at GreenUPorto.

Paloma de Palacios
(orcid: 0000-0003-1907-0992) Paloma de Palacios, PhD in Forest Engineering, Senior Lecturer at Universidad Politécnica de Madrid. Her lines of research focus on wood anatomy and identification, wood physics, physical and mechanical characterisation of wood and wood-based products and the application of artificial neural networks to wood identification, and processes of the wood industry. She has participated in numerous research and technology transfer projects and published more than 60 articles in JCR journals. Her research group is currently working with researchers specialising in artificial intelligence to develop an app to identify wood using photos taken with a lens attached to a smartphone, intended for use to monitor the trade in timber and protected species and preserve cultural heritage.

Biofilms colonizing stone heritage: the case of Assistenz kirkegård in Copenhagen

Michela Gambino
mgam@kglakademi.dk

Keywords: Microbiome; Biofilm; Stone heritage

Biofilms colonize any kind of surface and environment, including all those artefacts, monuments and sites with an artistic, aesthetic, ethnological or anthropological value that constitute our cultural heritage. Biofilms can be particularly problematic when the heritage piece is situated outdoors, because of limited or no possibilities of controlling climate, and thus the biofilms' growth. Because of biofilms' tolerance to chemical and physical stress, biocides are only partially and temporarily efficient, forcing conservators to repeat treatments with increasingly aggressive and toxic compounds. Innovative approaches for biofilm removal based on a detailed knowledge of microorganisms' interaction with our heritage material are thus needed. In addition, simplified model systems to simulate these interactions in the laboratory are required to avoid testing new solutions directly on valuable heritage pieces.

Here, we Introduce a new longitudinal study (September 2023 to August 2024) to describe and monitor the evolution of bacterial and fungal biofilms colonizing the stone surface of six tombstones at the Assistenz Kirkegård in Copenhagen. Biofilms colonizing stones are known for being complex communities of both phototrophic and heterotrophic microorganisms, supporting each other metabolism and resilience to a broad variety of stress. With a conservation treatment in October 2023, the biofilm was removed from the six tombstones, but, nevertheless, is expected to grow again in the next year.

To identify the pioneer species and monitor the biofilm development, we are collecting samples for microbiome analysis just before the treatment and for a year after. In addition, pre-conservation samples have been processed for isolation of phototropic and heterotrophic microorganisms to then reproduce similar communities in the laboratory and investigate strategies for biofilm and fungal removal. The project is expected to shed light on the interactions among microorganisms responsible for degradation of our heritage, on the evolution of these communities and response to conservation treatments.

Michela Gambino
Is an artwork conservator and a trained microbiologist with a PhD in Biological and Molecular Sciences from the University if Milano. She worked in several fields of microbiology and since March 2023, she is happily employed as associate professor in microbiology for the conservation of cultural and natural heritage at the Insitute of Conservation, part of The Royal Danish Academy, in Copenhagen, Denmark.

Documenting to preserve: the case study of Alcobaça medieval bookbindings

Ana Tourais and Maria Conceição Casanova
a.tourais@campus.fct.unl.pt; mccasanova@fct.unl.pt

Keywords: Medieval bookbinding; Book conservation; Monastery of Alcobaça; Documentation process

Recent studies conducted under the scope of the Cistercian Horizons research project (PT PTDC/ART-HIS/29522/2017), attained, to date, the most complete description of medieval bindings from the collection of codices of the Monastery of Alcobaça (Portugal). This brought to light many features/details of production previously disregarded or at least not fully recorded, even within a wider European and global context. Current research is demonstrating how these features/details are relevant parts of the structure of a medieval Alcobaça binding. It is crucial that all these structural elements are properly distinguished and fully documented to i) further develop research on the field by relating this case study with others; ii) better define and trace the evolution of the Alcobaça bookbinding practices, and contribute to understand these books' biographies, and finally to iii) ensure that such characteristics are duly recognized and preserved, contributing to higher standards of conservation practices. This is especially important considering the number of interventions carried out in the collection, not only throughout the life of these codices but also in recent times.

This communication will address the process of study, exam, record, and fully document the medieval bindings of the Alcobaça Monastery as a contribution to the field of the history of medieval binding and its preservation practice. This multi-step process encompasses i) the codicological examination of the bindings, allowing the thorough determination and identification of their characteristics, ii) the preliminary evaluation of their conservation condition, and iii) the complete documentation of the previous steps, which is going to allow the comparison of case studies, inside and outside the collection, and support the conservation decision-making process for the Alcobaça bindings. Thus, the main characteristics of the medieval bindings of Alcobaça will be presented as the main results of the research carried out so far; and the documentation process, not only of the codicological study, but also of the conservation condition of these bindings, will be fully explained and presented as a new tool for the development of medieval binding studies.

References

Casanova, Conceição. "Novas abordagens para o estudo e conservação da encadernação: o caso de estudo das encadernações do Mosteiro de Alcobaça." Manuscritos de Alcobaça ed C. Barreira, Lisboa: IEM & DGPC (2022): 104-133.

Lenz, Philipp. "Die romanischen eindbänd der Stiftsbibliothek St. Gallen. Teil 1 & 2." Eindband-Forcschung 46 & 47 (2020): 11-23.

Lévêque, Élodie. "Les reliures romanes de la bibliothèque de Clairvaux. Étude Archéologique et biocodicologique." PhD diss., Université Paris Nanterre, 2020.

Nascimento, Aires and António Diogo. Encadernação Portuguesa Medieval: Alcobaça [Medieval Portuguese Bookbinding: Alcobaça]. Lisboa: Imprensa Nacional and Casa da Moeda, 1984.

Tourais, Ana. "Development of a material characterization method for the Medieval codices of the collection from the Monastery of Alcobaça" (MA thesis, NOVA University of Lisbon, 2020)

Ana Tourais

É atualmente estudante de Doutoramento em Conservação e Restauro do Património Cultural, pela Universidade Nova de Lisboa, instituição em que completou também a sua Licenciatura (2017) e o seu Mestrado (2020). Desde 2019, Ana tem-se dedicado ao estudo de encadernações medievais, em particular da coleção Alcobacense, tendo primeiramente integrado a equipa do projeto de investigação Horizontes Cistercienses e atualmente fazendo parte da equipa Livros, rituais e espaço num mosteiro feminino. No seu trabalho tem abordado questões relativas à terminologia e ao desenvolvimento de ferramentas para descrição de encadernações medievais, assim como o estudo codicológico e material destes livros e o seu estado de conservação.

Maria da Conceição Casanova

Doutorada em Conservação e Restauro pela Faculdade de Ciências e Tecnologia da Universidade NOVA de Lisboa (FCT-NOVA), uma pósgraduação em Estudos de Conservação pela Camberwell School of Arts and Crafts /Arts London University e a licenciatura em História / Variante de Arte e Arqueologia, pela Faculdade de Letras da

Universidade do Porto. Foi consultora em instituições como a Fundação Calouste Gulbenkian, responsável pelos serviços de Conservação e Restauro da Biblioteca Nacional de Portugal (1989-1998), Chefe de Divisão e Diretora de Serviços, na mesma área, no Arquivo Nacional Torre do Tombo (1999-2004) e Diretora de Serviços, com responsabilidades sobre a conservação do património científico e arquivos, do Instituto de Investigação Científica Tropical (2005-2015), onde, em 2012, passou para a carreira de investigação. Em finais de 2017 passou para a carreira de Professora, no Departamento de Conservação e Restauro da FCT-NOVA, onde já era docente convidada.

Challenges and prospects of collaborative approaches to conservation documentation: The case of heritage collections in Croatian libraries

Mia Perković and Dragica Krstić
mperkovic@nsk.hr; krdrag10@gmail.com

Keywords: Collaboration; Terminology; Conservation; Documentation; Data sharing; Llibraries

There is growing recognition among conservators and restorers that database/systems for conservation documentation need to be integrally linked to others information systems/databases of collected various data of library/preservation activities because of isolated and restricted access to recording data. One of the main questions that arises and interests of conservators-restorers is – How is it possible to improve preservation and access through documentation practices?

This paper aims to investigate and discussed the current state of recording and documenting for preservation of special collections in Croatian libraries and related projects with special focus on National and University Library in Zagreb. It is important to understand that there is difference between library and cultural heritage information, since the latter is more complex. This complexity brings more challenges in records creation and data sharing. Due to multidisciplinary nature of cultural heritage, as a result of recording and documenting each activity on special collection materials, documentation consists of different types of records produced by conservators-restorers and people from different fields of expertise and interests. Therefore, documentation systems and practices in libraries need interprofessional and in some cases intersectoral collaborative practices when interoperability of those systems must be considered.

Based on the existing literature, annual reports and plans of libraries, conservation reports, legal framework, strategic documents, public policies, human rights, standards, ethical codes, and other related documents, this study identifies key challenges and highlights potential opportunities for implementation of collaborative approach to documentation in libraries and provide better understanding the importance of documentation within all areas of preservation practice.

References

McCann, Laura (2013). Conservation documentation in research libraries: Making the link with MARC data. Library Resources & Technical Services, 57(1), 30–50.
Velios, Athanasios and St John, Kristen (2022). Linked Conservation Data: Driving Change in Documentation Practice. Studies in Conservation, 67 (sup1). pp. 293-300.
Ligatus, The Language of Bindings Thesaurus. http://w3id.org/lob/concept/2833 (accessed 27 December 2023).
Sarris, Nikolas (2022). A conservation documentation system at the National Library of Greece. https://www.youtube.com/watch?v=moSWMUpen38 (accessed 27 January 2024).
Krstić, Dragica (2015). The features of conservation-restoration activities in National and University Library in Zagreb. Vjesnik bibliotekara Hrvatske, 58(3-4), 1-35

Mia Perković
Graduated in 2018 with the rector's award at the University of Dubrovnik, majoring in paper restoration and conservation. From 2019. to 2020. she works in the Protection and Storage Department of the National and University Library in Zagreb. In 2022., she is working on the preventive protection of the library of the Franciscan monastery of St. Ante in Split on Poljud, financed by "The international trust for Croatian monuments" by Lady Jadranka Beresford Pierce. In January 2023., she was employed at the Croatian Institute of Librarianship as a conservator for heritage collections with the aim of determining the condition of heritage libraries and making decisions on the nature of cultural property that serve as a basis for entry into the register of cultural property. During the previous year, she held a total of six lectures with the aim of educating librarians on the basics of preventive protection of heritage libraries.

Dragica Krstić
PhD, consultant conservator (retired 2022), is member of the council IIC Croatian group since 2022. She graduated in chemical engineering and technology and has the doctorate in information and communication. In her working career she has worked as paper conservator-restorer in National and University Library in Zagreb, as conservation chemist in the Croatian Conservation Institute and lecturer in the Arts Academy of the University of Split. Her previous work

experience also includes being head of the Natural Science Laboratory of Croatian Conservation Institute with a research interest in deterioration diagnostics and evaluation of conservation treatments and head of Preservation and Storage Department in National and University Library in Zagreb (until her retirement in 2022) with wide ranging experience in heritage protection. Today, her interest remains in the field of preservation and conservation of material heritage but more oriented on their interface with issues of management and community needs. In last decade she has been active in risk management and heritage protection in cases of various emergencies and disasters by organising many workshops, training courses, seminars, conference, and working on guidelines for protection of library materials in crisis conditions.

Sketching Heritage - (Re)making Viarco's industrial legacy through the arts

Ana Gago and Mário Pastor
algago@gmail.com; mbrunopastor@gmail.com

Keywords: Heritage-making; Refunctionalization; A-i-R programming

Located just around 40 km South of Porto, São João da Madeira is the smallest municipality in Portugal. Nonetheless, in the early 20th century, as an increasingly vibrant industrial village, it conquered its political autonomy and, in 1926, its own city hall, independent from its former municipality centre, Oliveira de Azeméis. At that time, São João da Madeira's major industries were mainly shoemakers and hatters [1]. Since then, it has attracted many other industries, namely OLIVA, a foundry company specialized in the production of industrial machinery, as well as small domestic equipment, and VIARCO, a celebrated pencil manufacturer.

In the last four decades, the nationwide deindustrialisation process affected most companies in the municipality. The refunctionalization challenge has, since then, been directed to touristic and artistic (re)uses of São João da Madeira's (post) industrial heritage [2]. The former OLIVA factory is now part of the municipality's industrial tourism route, which features three museums and 13 still operating (manu)factories, including VIARCO. Alongside its main activity as a pencil manufacturer, from 2006, and, on a more regular basis, since 2016 until the present day, VIARCO has hosted around 30 artists from different backgrounds (drawing, painting, sculpture, video, photography, sound arts...), art exhibitions, workshops, guided tours, and other public activities. Furthermore, OLIVA has become a "Creative Factory", hosting an Art Brut Museum, working and accommodation spaces for artistic and creative industries' residents, and supporting partner for other "industrial heritage sites" in the municipality.

In this communication, we will analyse the specific example of VIARCO's practices of reinterpreting, reusing and recreating its industrial heritage. In this sense, we will focus on its annual artist-in-residence programme and discuss its contribution for the heritage-making process that followed the incorporation in the municipality's touristic route. Furthermore, we will investigate the ways how artistic research can contribute to embracing different forms of documenting heritage, exploring its performative and symbolic dimensions.
Firstly, we will briefly go through examples of collaborations between artists, archaeologists (and others), and its political/social impact(s), throughout contemporary History. We will then move on to critically analyse how artists might play an important role today, as action-heritage [3] practioners [4], by promoting the (des)construction of discourses and social processes around heritage and heritage-making processes.

On a final note, we will look into how the factory workers' (individual and collective) memory has played an important role as the leitmotiv for artistic creation, and how this underlies or manifests itself in the process of documenting of the creative work of the artists. Following this analysis, we will then close by discussing the problematics around the rhetoric of participation, commonly associated with these types of activities, and related to issues around (community) tokenism [5] and the commodification of artistic work [6] through its (quite literal) incorporation in the mechanical production system.

References

[1] Barbosa, R. & Paulino, F. (2018). Recording the intangible Heritage of the city in the Metropolitan Area of Porto. In A. Catalani, Z. Nour, A. Versaci et al. (Eds.), Cities' Identity Through Architecture and Arts. Routledge.
[2] Otgaar, A. (2010, November 30). Industrial Tourism: Where the Public Meets the Private (No. EPS-2010-219-ORG). ERIM Ph.D. Series Research in Management
[3] Marwood, K., Cleall, E. et al (2019). From Researching heritage to action heritage. In J. Vergunst and H. Graham (Eds.), Heritage as community research. Legacies of coproduction ,171-186. University of Bristol, Policy Press.
[4] Clark, K. (2019). Ten Principles of Values-Based Heritage Practice. In P. M. Messenger and S. J. Bender (Eds.), History and Approaches to Heritage Studies, 150-153. University Press of Florida.
[5] Waterton, E. & Smith, L. (2010). The recognition and misrecognition of community heritage. In International Journal of Heritage Studies 16(1-2), 4-15. https://doi.org/10.1080/13527250903441671.
[6] La Berge, L. (2019). Wages Against Artwork: Decommodified Labor and the Claims of Socially Engaged Art. DUKE University Press.

Ana Gago
Is a research fellow at the Centre of Science and Technology of the Arts (CITAR), UCP Porto, and PhD Candidate in Heritage Studies, with the support of the Portuguese Foundation for Science and Technology. Her research focus on the crossfertilizations between Art and Heritage, as potential platforms for cultural participation. More recently, she co-organised a seminar devoted to the "State(s) of Play - Contexts, mappings and programming strategies" of artistic residencies, and co-edited a thematic volume in Cadernos de Sociomuseologia, titled "Heritage for All: Sociomuseology, Art and Inclusion" (2022). Member of engage - National Association for Gallery Education and ICOM Portugal. Author of experimental literature and independent curator.

Mário Bruno Pastor
Is a researcher at the Centre of Science and Technology of the Arts (CITAR), UCP Porto. He holds a PhD in Heritage Studies, focused on the industrialisation legacy in Northern Portugal, from the School of Arts of the Portuguese Catholic University, and a master's degree in Heritage and Cultural Tourism from the Institute of Social Sciences of the University of Minho. He is a graduate in History and Archaeology, post-graduated in Economic Structures and Industrialisation from the Faculty of Arts of the University of Porto. He is a member of the TICCIH (The International Committee for Industrial Heritage), the APPI (Associação para o Património Industrial) and the MSA (Memory Studies Association).

HBIM and openBIM for Management of Architectural Ceramic Tiles Information

Carlos Serra, Sílvia Pereira, Paula Couto and António Santos Silva
cserra@lnec.pt; spereira@lnec.pt; pcouto@lnec.pt; ssilva@lnec.pt

Keywords: openBIM; HBIM; Architectural Ceramic Tiles; Heritage Information

This research aims to develop HBIM (Heritage or Historic Building Information Modelling) and openBIM methodologies for managing the information regarding historic architectural tile panels, that are relevant for registering, assessing and monitoring their conservation state. The architectural ceramic tiles have different types of heritage information to register in BIM (Building Information Modelling) objects, such as their location on the building, historic information, classification, production characteristics, decoration information, dimensions, its materials characterization, conservation state, existence and type of restoration treatments and images. It is also relevant to store building related information such as geographical location, building condition, ownership, or architectural style. The possibility to manage all these several types of information through an BIM methodology can greatly enhance the effectiveness of architectural tile safeguard measures.

The methodologies are based in digital techniques, namely the BIM that is being debated, tested and implemented across the built environment sector worldwide. In this case, more specifically, the HBIM context is more suitable, given the nature of the information to be recorded and the objects to be studied. HBIM can be applied to model historic buildings, to damage and decay area surveys management, to assisted planning tools for restoration, recovery, protection, conservation and maintenance of existing heritage assets.

HBIM tools can be used as a comprehensive data set of information, but the storage of that information must be done in a standardised way using openBIM and IFC (Industry Foundation Classes) format. The collaborative process openBIM is inclusive for all participants, promoting interoperability, to benefit projects and assets, throughout their lifecycle. Open international standard for BIM, will be implemented, namely the IFC for wall coverings digital objects. These IFC will be studied, adapted and evolved for architectural ceramic tiles, and proposals for new developments of IFC can be presented to the buildingSMART organization.

To achieve the proposed objective, the methodologies developed will be applied to a case study that is part of the Congress Building in LNEC campus, which has part of its facades covered by ceramic glazed tiles. Blender BIM software will be used to implement the HBIM methodology in this case study. The use of openBIM guarantees that the information stored will remain accessible and usable by all the stakeholders.

On documentation in the realm of contemporary art preservation: The physical versus the digital document

Andreia Nogueira
andreia_tinta@hotmail.com

Keywords: New media art; Electroacoustic music; Paper; Creativity; Document

More and more we live in a world of information abundance but memory scarcity. This happens because, despite the gigantic amount of digital information produced nowadays and the believe that it may survive forever, the fact remains that digital resources are susceptible to early loss because of its dependence on always-changing and evolving digital technologies, which pose a clear risk of obsolescence. This is a major concern considering that heritage professionals have not been able to develop timely and informed digital documentation strategies for preservation in the long-term. This is clearly evident in the realm of contemporary art conservation with an increasing number of artworks getting lost in recent years, not only because of their reliance on digital technologies, but also because of the use of the digital document/ digital documentation workflow as the main tool for long-term preservation, with several cases of loss being reported, as will be demonstrated. Departing from this backdrop the questions that need asking are: What type of documentation should, then, be produced for long-term preservation purposes? What about a possible return to the physical document, on paper? And last but not least: Is it possible or even desirable to creatively reuse documentation produced for preservation purposes as to foster its sustainable preservation into the future?

In a word, the aim of this communication is to present a reflection on the relationship among the practices of memory documentation applied for the preservation of contemporary art, in the realms of the visual arts and the performing arts, such as music. The cross-sectional analysis presented also aims at discussing the unexplored relationship between the physical document, on paper, and the digital document, in its articulation with sustainable development and with an intentionally creative conservation approach.

References

GOMES, D. (2021). "PART I – The Era of Information Abundance and Memory Scarcity", em The Past Web. Exploring Web Archives, GOMES, D.; DEMIDOVA, E. WINTERS, J. & RISSE, T. (eds.). Springer Cham, 1-3. https://doi.org/10.1007/978-3-030-63291-5.

JABR, F. (November 1, 2013). "The Reading Brain in the Digital Age: Why Paper Still Beats Screens". https://www.scientificamerican.com/article/the-reading-brain-in-the-digital-agewhy-paper-still-beats-screens/. [consulta: 24/6/2022]. Originally published as "Why the Brain Prefers Paper", Scientific American 309 (5): 48-53. Doi:10.1038/scientificamerican1113-48.

MALSSEN, K.; TANDON, A. & HAZEJAGER, K. (2021, November). The Digital Imperative: Envisioning the Path to Sustaining our Collective Digital Heritage. SUMMARY OF RESEARCH FINDINGS & OPPORTUNITY ASSESSMENT, ICCROM report. https://www.iccrom.org/publication/digital-imperative-envisioning-path-sustaining-ourcollective-digital-heritage-summary.

NOGUEIRA, A.; MARQUES, C. M.; MANSO, A. & ALMEIDA, P. (2023). "NFTs and the danger of loss". Heritage, 6 (7): 5410-5423. Doi: 10.3390/heritage607028. https://www.mdpi.com/2571- 9408/6/7/285.

PRESSMAN, J. (2020). Bookishness: Loving Books in a Digital Age. New York: Columbia University Press.

ROSENZWEIG, R. (2003). "Scarcity or Abundance? Preserving the Past in a Digital Era". American Historical Review, 108 (3): 735-762.

Andreia Nogueira
Holds a PhD (2018) in Conservation and Restoration of Cultural Heritage from the NOVA University of Lisbon. She is currently engaged in critical and reflective work on the meaning and significance of our contemporary cultural heritage (connecting both music and the visual arts) and on the relationship between sustainable development and creative conservation. She is conducting the postdoctoral project "ARTinBetween: Bridging the Gap for the Long-Term Sustainability of Multimedia Artworks in between Music and the Visual Arts" (2021–2024), funded by FCT and hosted at the TECHN&ART research centre, from the Polytechnic University of Tomar, Portugal.

Documentation practice to stimulate critical reflection, the art market and collecting contemporary jewellery. The 'emergence' of a digital archive

Cristina Filipe
acfilipe@ucp.pt

Keywords: Heritage/Conservation; Digital Archive; Collecting; Researching; Contemporary Jewellery

This paper presents a case study on a discipline that has struggled to gain its place in art history. Thanks to research work I carried out for my doctoral thesis and forty years of artistic practice as artist, author and programmer, I have collected a large number of documents that should be preserved in a digital archive for all to access.

It comprises photographs of original artworks generally unknown to the public, the majority of which I photographed or digitalised, as well as documents pertaining to exhibitions, schools, galleries, letters between artists and institutions, catalogues, brochures and invitations, previously digitalised press cuttings, together with a vast and precious quantity of interviews with artists, art historians and specialists, in audio and written form, that support and give consistency to the investigation.

Considering that this matter is not generally given much thought in Portugal, the prime aim of this investigation has been to bring together as much documentation as possible and record its history. This documental archive has to be preserved now so as to ensure that the work of all those involved and the projects they developed should get the attention they deserve.

This documentation is essential to encourage not only academic research but also collecting and the art market. What must be done to guarantee that this documentation is preserved together in digital archive format? What legal obligations with regard to the proprietors of the original documentation and possible confidentiality of some documents? It must be systemized to make it accessible to other researchers, artists, collectors, gallerists, museum. But how?

Could the solution lie in organising a digital archive that guarantees the preservation of this documentation? With what partners and support? The acquisition and integration of jewellery in different collections of contemporary art, whether public or private, Portuguese or international, is crucial. How to maintain a dialogue with institutions that consider this is no priority nor even reply?
We need sponsors that invest in, buy and donate to museums. Which ones?

It's also imperative that there should be more publications and researchers, and that at least one university includes a jewellery course in its curriculum at Bachelors, Masters and PhDs level. Which?

These important issues prompted this research. It is crucial that the vast documentation should continue an incentive to research, the art market and collection of contemporary jewellery in Portugal.

Setting up a digital archive that guarantees its preservation and free accessibility to all would be the solution. It is now important to reflect on possible formats for this archive in structure and possibilities of integration.

This paper presents at first hand a number of strategies for organising this digital archive; it defines the principle aims and possible formats and looks into how and where the means and support may be found in the near future to make it all possible.

Cristina Filipe
(Lisbon, 1965) Holds a PhD with Suma Cum Laude in Heritage Studies from the UCP/SA (2018) and is a researcher at UCP/EA/CITAR. Master in Arts & Design by the SIAD (2001), with grants from the FCT and the FCG, respectively. She studied jewellery at Ar.Co (PT, 1984-1987), Gerrit Rietveld Academie (1987-1988) and the Royal College Art (1992). She was a lecturer on the jewellery course at Ar.Co (1989-2015), which she directed between 2004 and 2015, and at ESAD, Matosinhos (2001-2007) and has been a guest lecturer/artist at numerous international schools and main examiner of several master and doctoral theses. She received the Susan Beech Mid-Career Artist Grant from the AJF (2017) to publish the book Contemporary Jewellery in Portugal. From the 1960s Avant-Garde to

the Early 20th Century (2019). She has exhibited internationally since 1984, and has been and independent programmer and curator of exhibitions, symposiums and colloquia since 2005. She founded and was chairperson /president of the board of PIN – Associação Portuguesa de Joalharia Contemporânea (2004- 2023); creator and general curator of the 1st Lisbon Contemporary Jewellery Biennial (2021) and author of articles and essays, editorial and scientific coordinator of several books, namely the Coleção J from INCM.

Being a curator in a contemporary art museum. The symbiosis between art and technology in Serralves Museum

Manuel Silva, Luís Teixeira and Eduarda Vieira
manusil06@gmail.com; lteixeira@ucp.pt; evieira@ucp.pt

Keywords: Curatorship; Contemporary Art; Technology; Public Interaction; Artistic Process

The role of the curator in contemporary art museums is crucial within the mediating between artists, works of art, and the museum. In this communication, we will analyze the results of a set of interviews carried out during our ongoing doctoral project at the Serralves Museum. These interviewees highlight the essential role of construction and mediation of various discursive platforms, such as exhibitions, publications, and talks, aiming to facilitate the understanding of works and promote interaction between artists, curators, and the public. This role is complex, involving constant research, dialogue, and reflection.

Curatorship in Contemporary art museums faces challenges related to the dynamic nature of contemporary art, including funding and logistics issues. The boundaries between permanent collections and temporary exhibitions require flexibility from curators. Awareness of these limits varies, but there is a consensus that curating needs to be adaptable to follow the evolution of contemporary art.

Technology increasingly plays a vital role in the communication and dissemination of contemporary art. Augmented Reality (AR) and Virtual Reality (VR) emerge as enriching tools, providing immersive experiences that can improve the interaction of the public with artworks. Curators recognize the importance of keeping up with technological advances, but there are variations in the level of information and experience between them. In the creative process, technology is seen as a challenging tool, requiring in-depth understanding from artists.

In the context of AR, our survey outcomes indicate a strong positive response towards the regular use of AR systems in museums and cultural organizations. A significant majority (81%) of the respondents agree or totally agree with the idea of having regular access to AR systems in museums and cultural organizations. This suggests a high level of acceptance and interest in the integration of AR technology in these settings. The data support the potential for AR to enhance visitor engagement and enrich the museum experience.

Both AR and VR are considered forms of documenting artworks, offering an additional experience to the public. These technologies contribute to a deeper understanding of works by providing additional context. However, challenges include the need to engage the public with the technologies and ensure that the virtual experience does not completely replace the in-person enjoyment of the artwork.

Digital technology goes beyond its primary communication function and can become an integral part of the artistic process. Digital experiences, such as interactive or technology-based works, are not just communication tools, but intrinsic elements of artistic creation. However, their successful addition require a deep understanding and close a collaboration between artists and curators.

In summary, curation in contemporary art plays a fundamental role in the communication between artists and the public, while digital technology, especially AR and VR, emerges as a promising tool for enriching the public's experience with works of art. The positive response to AR in our survey underscores its potential as a valuable tool in the curator's arsenal.

Documentation Techniques in Art Conservation: a focus on non-invasive methods

Rupal Jain and Vezotolü Vadeo
intachiciresearch@gmail.com

Keywords: Art Conservation; Non-invasive; Scientific Analysis; Transdisciplinary; Documentation

Art conservation thrives on an intricate cross-pollination of knowledge from diverse disciplines like chemistry, physics, art history, and material science. This inherent transdisciplinarity fuels collaborative practices, informing meticulous yet innovative approaches to preserving cultural heritage at the INTACH Conservation Institute. Documentation of an art object's material composition and condition lays the cornerstone for any conservation intervention. This paper delves into the role of non-invasive documentation techniques in art conservation extending to various materials like textiles, canvas paintings, metals etc., highlighting existing practices within our institute and proposing potential advancements that could be practiced.

Traditional documentation processes, from visual examination to X-ray radiography, offer valuable insights into the structure and deterioration. However, the need for minimally invasive methods that minimize sample removal and potential harm to the object is paramount. Techniques that provide valuable morphological information without compromising the integrity of the artifact have been discussed.

The paper proposes investigating the potential of emerging non-invasive technologies like photogrammetry for digital imaging and documentation in art conservation. These methods, coupled with advancements in machine learning and data analysis, can offer detailed spatial and spectral information on fabrics, potentially revealing hidden structures, pigments, and degradation patterns. Integrating these novel techniques with established practices can broaden the scope of heritage documentation, enriching our understanding of objects and informing more targeted conservation strategies.

The paper further emphasizes the importance of tailoring existing analytical techniques to suit the specific needs of art conservation. While methods employed in other scientific fields like forensics offer valuable tools, adaptations are often necessary to ensure minimal sample manipulation and compatibility with the often-delicate nature of historical artifacts. This necessitates ongoing collaboration between conservation scientists, material scientists, and analytical chemists to refine and optimize existing techniques for the unique challenges of heritage preservation.

By fostering knowledge exchange and exploring new possibilities in non-invasive documentation, we can empower conservators to make informed decisions, minimize intervention, and ensure the longevity of our treasured art heritage. This paper aims to spark dialogue, inspire further research, and pave the way for increasingly robust and adaptable documentation practices in the fascinating realm of art conservation.

Rupal Jain
Is a Research Officer and Textile Conservator at the INTACH Conservation Institute, New Delhi, India. Her areas of interest lie in documentation, scientific analysis and research of historic textiles. She has a Master of Science in Fabric and Apparel Science from the University of Delhi, New Delhi, India.

Vezotolü Vadeo
A Textile Conservator at INTACH, Delhi, merges her diverse background in Art Conservation, Fine Arts, Fashion Management and Fashion Technology to underscore a strong commitment to preserving and promoting the cultural legacy within textiles and clothing.

Digital Humanities / Social Sciences in the era of Artificial Intelligence: The Sociology of Cultural Heritage's role and applications

Pedro Andrade
pjoandrade@gmail.com

Keywords: Social Sciences; Digital Humanities; Sociology of Cultural Heritage; Artificial intelligence; Mixed Methods; Publics of Cultural Heritage

Objectives: The project presented here considers the current context of Artificial Intelligence emergence, in regards to its scientific-technological and artistic instruments impact. In particular, the AI application on research, processing and dissemination of information and knowledge is debated, within the area of Digital Humanities / Social Sciences.

In both substantive and practical terms, it is important to develop AI innovative implementation, but also under realistic and critical ways, on content essentially focused on Cultural Heritage and its conservation. From this perspective, an aspect that is still little explored is the Sociology of Cultural Heritage in the era of A.I., a process that poses attractive and promising potential, but also varied challenges and risks.

Theories. With regard to professional qualifications for heritage conservation, the dimensions of judgment, method and decision-making are central (Caple, 2023). Furthermore, it is urgent to discuss the issue of the transnationality concerning the cultural heritage of the so-called 'global South', as is the case in African heritage sites designated by UNESCO (Houehounha, 2023). The future of such new reality was debated in scientific and technological terms, with regard to design, monitoring and simulations, on the slippery slope of emerging virtual cultural heritage (Furferi, 2022). In addition, various practical digital applications have been on the rise for some years, through software for archiving, processing and disseminating heritage within various cultural institutions (Hemsley, 2017). Artificial Intelligence tools are some of these instruments, that may augment advantages, but as well provoke major controversies.

Methods: Among other procedures, the purposes mentioned above can be implemented through mixed, qualitative and quantitative methods, such as content and discourse analysis, in the treatment of textual, audiovisual, 2D and 3D sources and content, or developed via Virtual and Augmented Realities, or from media arts. For example, in the case of the conservation of heritage buildings, digital modeling constitutes an irreversibly indispensable methodology (Marzouk, 2023).

Applications and Results: the practical and final products are varied: for example, e-books and apps aimed at the conservation of material and intangible heritages; sustainability of cultural tourism; interactivity in museums; citizen and ecological participation against climate change via urban and/or digital public arts, etc.

Impact: such a project could constitute one of the solid steps necessary to strengthen relationships with varied stakeholders: audiences readers of cultural heritage, such as citizens, tourists and migrants, but also administrative entities, organizations and associations, at local, regional, national and international levels, inside the areas of Digital Humanities/Social Sciences, etc., in terms of more robust connections with the respective networks, be they European (Europeanna), global (Unesco), etc.

References

Caple, Chris; Williams, Emily. (2023). Conservation Skills for the 21st Century: Judgement, Method, and Decision-Making. Taylor & Francis.
Furferi, Rocco; Governi, Lapo; Volpe, Yary; Gherardini, Francesco; Seymour, Kate. (2022). The Future of Heritage Science and Technologies: Design, Simulation and Monitoring. Springer Nature.
Hemsley, James. (2017). Digital Applications for Cultural and Heritage Institutions. Routledge.
Houehounha, Dodé; Moukala, Edmond. (2023). Managing Transnational UNESCO World Heritage Sites in Africa. UNESCO Publishing.
Marzouk, Mohamed. (2023). Heritage Building Conservation: Sustainable and Digital Modelling. Taylor & Francis.

Pedro Andrade
Is a Sociologist and Researcher at the University of Minho, CECS. He taught at the Universities of Coimbra and Lisbon, on Critical Sociology of Culture, Communication, Sociological Methods, Digital Humanities. Research about urban cultures, art communication, art/science museums, literacies, digital social networks (Web 2.0/3.0), methodologies. Coordinator of international projects (e.g. Scientific-Technological Literacy and Public Opinion, 2005, on science museums publics; Public Communication of Arts, 2011, about art museums and its relationships with audiences, tourism, digital/virtual sociological methodology, hybrimedia interaction, sociological/cultural games, social networks, virtual/augmented reality), funded by Foundation for Science and Technology-FCT. Average evaluation: Excellent. Participation within international university networks e.g. Virginia Commonwealth Univ., USA; member of the project Manifesto Art and Social Inclusion in Urban Communities (UK). Author of 214 published texts, books and scientific papers published in international and national journals with peer review, indexed in global bibliographic databases (Web of Science, etc.). Director of the first PortugueseFrench scientific journal, Atalaia-Intermundos (since 1995). ORCID: https://orcid.org/0000-0003- 4550-0562

POSTER SESSIONS II

The indispensability of documentation: Cabrita's "Flor Negra" case study

Clarissa Facini and Joana Teixeira
s-clfalima@ucp.pt

Keywords: Contemporary Art; Conservation-restoration Intervention; Decision-making; Documentation; Interview with the artist

The conservation of contemporary works of art continually challenges professional practices through the use of unconventional supports and materials, which often prove to be incompatible with each other, altering the aesthetic reading of the works and making their exhibition unfeasible. The contemporary painting "Flor Negra", by portuguese artist Cabrita, made in 1999, is a large format work in aluminum and industrial paint, with structural problems and an interruption in the material reading, making it the subject of research as part of a doctoral thesis in Conservation and Restoration of Cultural Goods at the Portuguese Catholic University.

It is a clear example of a work that has evolved over time in such a way that it cannot be exhibited due to damage and alterations that drastically change its aesthetic reading. The lifting and the presence of cracks in the chromatic layer, as well as obvious detachments and losses of considerable size, show the incompatibility of the materials used or the use of non-artistic materials, making a conservation-restoration intervention mandatory.

Upon first encountering the work, several questions arose regarding the specifics of the materials used, such as the type of paint and the aluminum alloy, the execution techniques, and the intention associated with the entire creative process. Given this limited information, it is essential to conduct an interview with the artist as a fundamental tool for correctly interpreting the work and its material specificities. The interview would aim to gather more detailed information about the work's creation, materials, and intended meaning.

In addition to the interview, established research methods and guidelines for the conservation of contemporary art will be followed, such as those provided by the Dutch Cultural Heritage Institute and INCCA. These guidelines will be useful for approaching the work in a systematic and informed way and will allow for concrete data to be obtained on its materials and condition.

Using this new set of data, combined with the Decision-Making Model, it will be possible to define a concrete path for the conservation of the work. The Decision-Making Model is a tool that helps balance the need for intervention with respect for the work's formal language and creative intent. Based on this model, the necessary treatments to restore a correct reading of the work will be chosen, while preserving its original character and integrity.

The path mapped out will be based on the intersection between the process of research and documentation of contemporary art, the interview with the artist, the decision-making model, the identification of materials, and the execution of the necessary treatments to restore a correct reading of the work. This approach will ensure that the work is conserved in a way that respects its original intent and artistic value.

References

Cologne Institute of Conservation Sciences (CICS). (2021). The Decision-Making Model for Contemporary Art Conservation and Presentation (TH Köln, Ed.; 1.2). y Cologne Institute of Conservation Sciences, TH Köln (University of Technology, Arts and Sciences). https://www.thoeln.de/mam/downloads/deutsch/hochschule/fakultaeten/kulturwissenschaften_/f02_cics_gsm_fpdmmcacp_190613-1.pdf

Giebeler, J., Sartorius, A., Heydenreich, G., & Fischer, A. (2021). A Revised Model for Decision-Making in Contemporary Art Conservation and Presentation. Journal of the American Institute for Conservation, 1–11.https://doi.org/10.1080/01971360.2020.1858619

Marçal, H., Macedo, R., Nogueira, A., & Duarte, A. (2013). Whose decision is it? Reflections about a decision making model based on qualitative methodologies. CeROArt, HS. https://doi.org/10.4000/ceroart.3597

Netherlands Institute for Cultural Heritage. (1999). Concept Scenario Artists' Interviews. Foundation for the Conservation of Modern Art

INCCA Guide to Good Practice Artists Interviews (2002) | INCCA. (n.d.). https://incca.org/incca-guide-good-practice-artists-interviews-2002

Clarissa Faccini
Is a PhD candidate in Conservation of Cultural Heritage at the School of Art from Universidade Católica Portuguesa. She has a BA in Fine Arts (2018) from the the Universidade Federal do Rio Grande do Sul, Brazil (UFRGS) and a MSc in Conservation and Restoration of Cultural Heritage (2022), with a focus on Contemporary Art, from Universidade Católica Portuguesa (UCP). She has worked with Conservation and Restoration in both the private and museum sectors. Currently, she is a non-permanent member of UCP's Research Center for Science and Technology of the Arts (CITAR).

Joana Teixeira
Is a contemporary art conservation researcher and a PhD in Conservation and Restoration of Pictorial Heritage. She is an Auxiliary Professor at the School of Artes, Universidade Católica Portuguesa, where she coordinates the master's degree in Conservation and Restoration of Cultural Heritage and she is an investigator in CITAR- Research Center of Science and Technology of the Arts-, with special interest in the conservation of contemporary art, focusing on the relationship between theoretical reflection and acting practices and documentation process. Collaborates with contemporary artists and various institutions, such as the Serralves Museum and the Faculty of Fine Arts of Porto, in the conservation of their works. https://orcid.org/0000-0003-0330-2090 / https://ciencia.ucp.pt/en/persons/joana-teixeira

Bridging the Nature-Cultural Heritage Gap: Evaluating Sustainable Entanglements Through Cemeteries in Urban Asia

David Ocon and Wei Ping Young
davidocon@smu.edu.sg

Keywords: Nature and Cultural Heritage; Urban Asia; Heritage and Sustainability; Heritage Preservation; Cemeteries in Asian Cities

The expanding footprint of urban Asian settlements and increasing living standards have put pressure on cemetery sites. Public health narratives and the sanctity associated with death matters in Asian urban landscapes have fed into the rhetoric of cemeteries as undesirable heritage spaces. Often lacking protection, many cemeteries have been exhumed, cleared, and relocated to allow room for new developments and infrastructure, risking the survival of this quiet element of the urban cultural patrimony.

Within an Asian context, nature and cultural heritage preservation synergies are not prevalent in major cities like Singapore, Hong Kong, Tokyo, Manila, Kuala Lumpur, and Bangkok. In light of the increasing recognition of urban cemeteries as multi-valued sites with both natural and cultural heritage values, this paper turns to deconstructing the nature-cultural binary and the concept of entanglement to frame an investigation of collaborative interactions. A focused study on Asian urban cemeteries follows, examining existing trends and adapted mix-uses and highlighting the region's unique conservation challenges. The analysis reveals three major typologies encapsulating the region's current nature-cultural heritage entangled preservation approaches: sustainable compromises, memories, and everyday sustainability. To conclude, the paper distils respectful alternative futures for these spaces to be better integrated into the modern textures of the cities, unlocking functional recourses to destruction or oblivion.

David Ocón
Is an interdisciplinary cultural historian and anthropologist who works on the intersections of Asian cultural heritage with preservation, tourism, geopolitics, and sustainability. He also analyses cultural diplomacy and cooperation in the Asian region, particularly between China, Japan, South Korea, and the ASEAN countries, as well as with external parties like the EU.

David has twenty years of experience in the arts, culture, and heritage sectors. As a practitioner, he led departments at organisations such as the *Asia-Europe Foundation* (ASEF, Singapore), ENCATC (Belgium), and *Cervantes Institute* (Beijing, China), where he was the head of culture.

David is currently an Assistant Professor at *Singapore Management University*'s School of Social Sciences, where he teaches and researches Cultural Diplomacy in Asia, Urban Cultural Anthropology, and Cultural Heritage and Social Sustainability, amongst others. He is also a visiting faculty at the *University of Barcelona*'s International Cultural Cooperation and Management Postgraduate Programme and has previously worked at *City University of Hong Kong* and *James Cook University*. David regularly provides strategic advice and support for cultural organisations worldwide.

Document to preserve: a case study of the contemporary work of art "Radiologias" (1979), by Silvestre Pestana

Francisca Lafuente, Joana Teixeira and Diogo Tudela
s-flafuente@ucp.pt

Keywords: Documentation; Contemporary Art; Technological Obsolescence; Conservation of radiographs

The information on the poster showcases the different stages of the documentation process of the contemporary artwork "Radiologias" (1979), by the portuguese artist Silvestre Pestana (1940, Funchal, Madeira), which belongs to the collection of the Fundação de Serralves (Porto, Portugal). This preservation strategy was motivated by the conservation and restoration intervention conducted on the artwork, developed in the context of the Master's Dissertation: "Documentação e intervenção de conservação e restauro da obra "Radiologias" (1979), de Silvestre Pestana: a obsolescência tecnológica e a conservação de radiografias."

The work is an artistic installation composed of 8 painted metal pieces of different dimensions that contain tubular halogen lamps inside. Rectangular openings made in the metal sheet allow viewing of the intermittent illumination of various radiographs.

Initially, documenting the work will inevitably involve understanding its concept and all the aspects related to its exhibition, as well as identifying the materials and techniques used by the artist. To this end, an in-depth study of the work was developed, and its historical and artistic context was defined, which, in turn, influences the definition of the distinctive properties of its identity and authenticity. This investigation was performed through bibliographical research based on exhibition catalogs, other publications, and conversations with the artist.

The interview step of the documentation process was crucial, providing access to information that would otherwise remain omitted. The artist clearly expressed his intentions when designing the work, indicating his stance on the natural aging process of the piece's materials. In identifying them, different examination and analysis methods were performed, including FTIR (Fourier Transform Infrared), routinely used to analyse the constituents of radiographs.

The critical questions of this investigation, which must be included in the documentation, pertain to finding an alternative lighting system to replace the current one, which will soon become obsolete since it comprises multiple tubular halogen lamps that are no longer manufactured and sold. Additionally, the radiographs are in an advanced state of degradation.

The complete details regarding the pattern and luminance produced by the light emitted from the halogen lamps that are part of the original lighting system, as well as their mode of operation and constituents, have been documented in full, as this lighting system will soon be replaced by LED, designed to enhance the life of the work and ensure its transmission to future generations. Besides providing documentation, video and audio recordings of both the original lighting system and the alternative LED system were produced.

As it is not feasible to halt the natural aging process of the radiographs, and since they cannot be replaced, photographic records of their current state of conservation were created for future reference.

References

Castro, E. (1980). Poesia Experimental. In Exposição de Poesia Experimental Portuguesa – PO.EX. 80 (pp. 40-43). Galeria Nacional de Arte Moderna – Belém.
Cyr, M. (2008). Conservation Issues: The Case of Time-Based Media Installations. WAAC Newsletter, 30(2), 10-15. https://cool.conservation-us.org/waac/wn/wn30/wn30-2/wn30-203.pdf
Jimenez, M. (2021). A querela da arte contemporânea. Orfeu Negro.
Oliveira, M. (2008). A documentação como ferramenta de preservação da memória. Programa Monumenta / Iphan.
Ribas, J. (2016). Tecnoforma: Silvestre Pestana. Fundação de Serralves.

Francisca Lafuente
(Lisbon, Portugal, 2000) concluded the degree in Painting from the Faculdade de Belas-Artes of the Universidade de Lisboa (2022), where she also completed the Minor's degree in Aesthetics and Theories of Art (2022). She is currently attending the 2nd year of the Master's degree in Conservation and Restoration of Cultural Heritage at the School of Arts of the Universidade Católica Portuguesa (Oporto, Portugal). During her degree, she enrolled in the ERASMUS+ program (2021), which allowed her to attend one semester at the Facultad de Bellas Artes of the Universidad Complutense de Madrid (Madrid, Spain).

Key issues of epistemological approach on the principles of conservation and restoration of cultural heritage

Ana Galán-Pérez and Stefano Magnolo
agalan07@ucm.es; stefano.magnolo@unisalento.it

Keywords: Principles; Conservation and Restoration; Epistemology

This paper proposes a theoretical reflection on the epistemology of heritage conservation and restoration.

By definition, Epistemology, which belongs to Philosophy and focuses on the acquisition and authentication of knowledge, plays an essential role in the theoretical field of heritage conservation and restoration. It functions as an intellectual tool that facilitates the assimilation of new studies and allows us to reflect on the theory and practice of this discipline. Its usefulness lies in understanding and proposing alternative approaches or ways of interpreting the way in which cultural heritage is conserved or intervened, taking into account , both the object itself and the subjects that interact in this discipline. By reviewing the foundations that make up the corpus of conservation-restoration, we can analyse its soundness and thus debate, redefine and formulate it. That is, to study its peculiarities and to rethink its theoretical lines.

The epistemological construction in the field of conservation and restoration of the cultural heritage presents several challenges and some proposals for overcoming them, which we list below and which we will discuss in depth in subsequent works: (1) The origin or starting point of the discipline as we know it today. (2) The method of monumental intervention as the basis for intervention on movable goods or objects. (3) The importance of Brandian theories and new approaches to them. (4) The importance of the concept of heritage in relation to the object of the act of restoration. (5) More than a single method, the interdisciplinary character offers a sum of disciplines on the same object of study. (6) The search for a method of its own, in which conservation-restoration is a mode of knowledge and a mode of consciousness. (7) The principle of reproducibility of the scientific method. (8) The concept of the restorable object as a unit of knowledge. (9) The restorative act. (10) The interrelation of theory and practice. (11) The concept of the resignification of the restorative act. In conclusion, the present work aims to reflect on and offer a series of theoretical aspects necessary for the research and profession of conservation-restoration in the 21st century.

References

Franch, J. F. (2014). Propuestas para una epistemología del patrimonio. DevenirRevista de estudios sobre patrimonio edificado, 1(2), 10-26.

Hernández, A. A. S. (2003). Epistemología en la conservación del patrimonio edificado. Diseño y Sociedad, (15), 46-50.

Mauricio Benjamín Jiménez Ramírez, (2004) "El objeto de la restauración. Fundamentos teóricos de una práctica" Tesis doctoral

Mazzocchi, F. (2022). Diving Deeper into the Concept of 'Cultural Heritage'and Its Relationship with Epistemic Diversity. Social Epistemology, 36(3), 393-406. https://doi.org/10.1080/02691728.2021.2023682

Curthoys, L., Cuthbertson, B., & Clark, J. (2012). Community story circles: An opportunity to rethink the epistemological approach to heritage interpretive planning. Canadian Journal of Environmental Education (CJEE), 17, 173-187. https://cjee.lakeheadu.ca/article/view/1105

Peters Núñez, T. (2020). Sociología (s) del arte y de las políticas culturales. Ediciones Metales Pesados. Vega Cárdenas, A. (2017) ¿Es la restauración una disciplina patrimonial? Notas acerca de un cambio de paradigma. Conserva. Chile: Editorial Conserva CNCR, 22, 7-21.

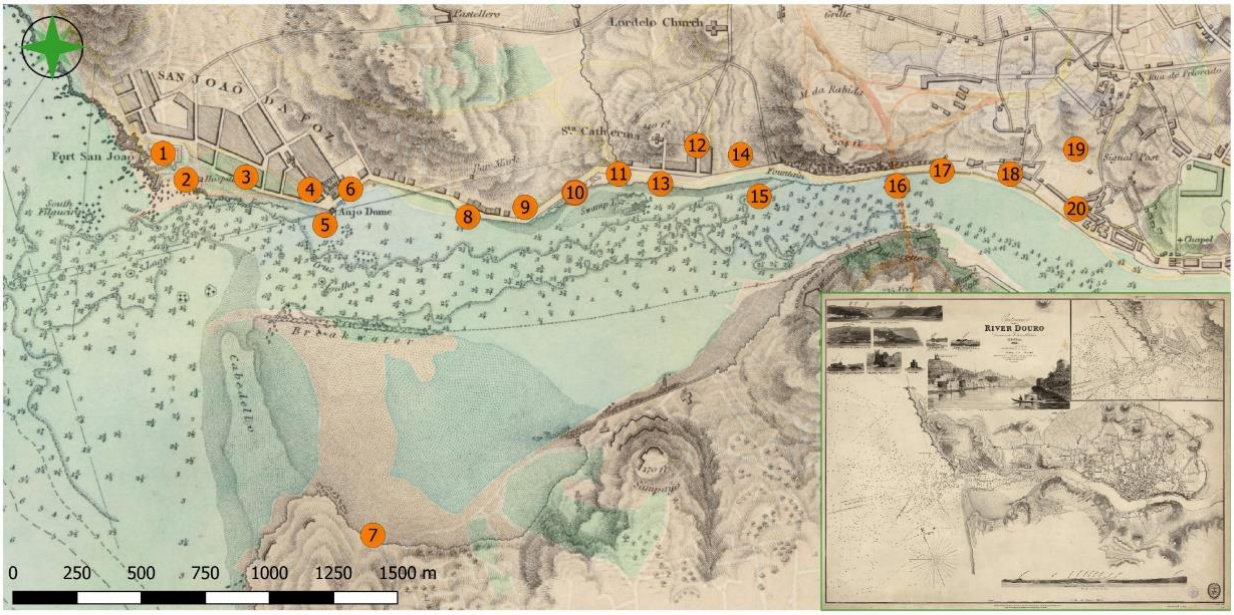
Vega Cárdenas,A.(2011) Restauration Epistmologique. CeROArt, 6. Disponible en: http://ceroart.revues.org/2120

Ana Galán-Pérez
Phd, is associate lecturer at the Department of Painting and Conservation-Restoration at Faculty of Fine Arts of the Complutense University of Madrid (UCM). She is an integrated researcher member of CITAR, research member of GREPAC, Cultural Heritage Risk and Emergency Management research group at the UCM. She is a member of CroMe "Culture as a good and as a medium" research group. She coordinates the Teaching innovation Project "Cabinet: Cybernetic Archive for the Conservation of Cultural Heritage". http://orcid.org/0000-0002-4583-3108

Stefano Magnolo
Is Visiting Researcher at the Faculty of Fine Arts of the Complutense University of Madrid (UCM). He is assistant professor of Sociology of Law at the Law Faculty of the University of Salento (Lecce – Italy) and has been visiting researcher in german and spanish Universities and Research Centres. His research is currently shifting from socio-juridical to socio-cultural topics. He is a member of GREPAC, Cultural Heritage Risk and Emergency Management research group at the UCM and coordinates the CroMe "Culture as a good and as a medium" research group of the Department of Legal Sciences, University of Salento. https://orcid.org/0000-0001-7252-8822

THEMATIC VISIT

The walk is about 4 kilometres with a duration of above 2 hours. It will run along the right bank of the River Douro, from the Foz to the Tramcar Museum in Massarelos. Along the way, we'll learn about the history and heritage of the place, from the 16th century bastion fort, the Renaissance church and lighthouse, the romantic gardens, the maritime heritage and the industrial and workers' memory of the area; the traditions and transformations of the 19th and 20th centuries, as well as the new conservation challenges and emergencies of our era. It ends with a visit to the Tramcar Museum of approx. 40 min.



1. São João da Foz fortification
2. Sanatorium
3. Passeio Alegre and Nasoni's obelisks
4. Poet Eugénio de Andrade's house and tram terminus
5. São Miguel-o-Anjo lighthouse, river pilots house, telegraph tower and tide gauge
6. Senhora da Lapa's chapel
7. Cabedelo natural reservation and tower of Bacalhau
8. Irene Vilar's The Messenger (sculpture)
9. English water treatment facilities in Sobreiras
10. Monument to the conquest of Ceuta and migrant birds observation post
11. Ribeira da Granja river mouth and the English sewer ventilation cabbin
12. Royal Arsenal of the Portuguese Army
13. Lordelo do Ouro's shipyard
14. City former gasometer facilities
15. The Gandufe barge
16. Arrábida Bridge
17. The Bicalho harbour
18. Fridge warehouse for codfish
19. The tram museum
20. General fish fridge warehouse

CATOLICA
ESCOLA DAS ARTES
PORTO

CATOLICA
CITAR · CENTRO DE INVESTIGAÇÃO
EM CIÊNCIA E TECNOLOGIA DAS ARTES
PORTO

Fundação
para a Ciência
e a Tecnologia