



ReInHerit

Redefining the future of cultural heritage, through a disruptive model of sustainability



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101004545

Project

Project Number	101004545
Project Acronym	ReInHerit
Project Title	Redefining the future of cultural heritage, through a disruptive model of sustainability
Starting Date	01/03/2021
Duration in Months	36
Funding Scheme	Coordination and Support Action
Call (part) Identifier	H2020-SC6-TRANSFORMATIONS-2020
Topic	TRANSFORMATIONS-19-2020 <i>Culture beyond borders – Facilitating innovation and research cooperation between European museums and heritage sites</i>
Website	www.reinherit.eu

Deliverable

Work Package	WP7 Dissemination, Exploitation & Communication
Task	T7.8 Participation in EU Conferences
Deliverable	D7.13 EU Conferences Report
Dissemination Level	Public
Type of Deliverable	Report
Leader	Bank of Cyprus Cultural Foundation
Due Date	31.12.2023
Submission Date	16.02.2024
Keywords	Dissemination, exploitation, communication, activities, tools

Version History

Version	Date	Author	Notes
V1.0		Monika Asimenou (BoCCF) Katerina Patsalidou (BoCCF) George Kypridemos (BoCCF)	Review by:

Acronyms and abbreviations

European Commission	EC
Research Executive Agency	REA
Grant Agreement	GA
Consortium Agreement	CA
Description of Action	DoA
Project Coordinator	PC
Steering Committee	SC
Project Management Team	PMT
Work Package	WP

Disclaimer

This document reflects only the author's view and the Research Executive Agency is not responsible for any use that may be made of the information it contains.



Bank of Cyprus
Cultural Foundation

Arte
Sostenibile



UNIVERSITÀ
DEGLI STUDI
FIRENZE



UNIVERSITY
of NICOSIA | SCHOOL
OF LAW



MUSEUM
OF CYCLADIC
ART
NICHOLAS AND DOLLY
GOULANDRIS FOUNDATION



ARCADA



Table of Contents

Executive summary	6
1. Introduction	7
Figure 1: Table of Conferences/Workshops	7
Figure 2: Additional information (only applicable to YRKESHOGSKOLAN ARCADA AB - PA11); Demonstration and Presentations	10
2. Results	11
3. Partners' participation in scientific conferences: Record of Abstracts	12
3.1 BANK OF CYPRUS CULTURAL FOUNDATION (PA1)	12
3.2 ASOCIACION ARTE SOSTENIBLE (PA2)	15
3.3 UNIVERSITA DEGLI STUDI DI FIRENZE (PA3)	17
3.4 EUROPEAN CULTURAL TOURISM NETWORK (PA4)	29
3.5 UNIC (PA5)	34
3.6 CONSORZIO MATERAHUB INDUSTRIE CULTURELLE CREATIVE (PA6)	39
3.7 IDRYMA NIKOLAOU AND DOLLIS GOULANDRI – MOUSEIO KYKLADIKIS TECHNIS (PA7)	40
3.8 UNIVERSITY OF GRAZ (PA8)	41
3.9 RESEARCH CENTRE ON INTERACTIVE MEDIA, SMART SYSTEMS AND EMERGING TECHNOLOGIES – RISE LIMITED (PA9)	54
3.10 BLE ASPIDA (PA10)	55
3.11 YRKESHOGSKOLAN ARCADA AB (PA11)	57

Executive summary

The EU Conferences Report, documented as Deliverable D7.13, provides a comprehensive overview of the ReInHerit consortium's active participation in scientific conferences, workshops, training courses (as well as some additional information eg. presentations and demonstrations) throughout the project. Partners engaged in numerous conferences across the European Union, sharing research insights and innovative approaches developed within the project, while workshops and training courses facilitated capacity building and knowledge exchange. Through presentations, panel discussions, and interactive sessions, partners contributed significantly to the discourse on cultural heritage. The report acknowledges the vital role of workshops and training courses in fostering collaborative learning and disseminating best practices, and addresses the objectives met via these actions. Overall, the consortium's participation in these events not only enhanced its expertise but also strengthened partnerships and networks within the European cultural heritage community.

1. Introduction

As identified in the GA, Work Package 7 necessitates the satisfaction of various research objectives; this includes pursuing scientific publications in peer-reviewed journals from each research institution (PA1, PA3, PA5, PA8, PA9, PA11), establishing open dialogues between museums, heritage sites, policy makers, researchers and general audiences, as well as disseminating, exploiting and communicating all the project’s announcements, updates and results to all stakeholders.

This report documents several conferences and workshops participated in or organized by ReInherit partners, to disseminate the scientific results of the consortium. Through these conferences and workshops, circulation of knowledge has been achieved regarding high tech integration in culture, a dynamic dialogue with relevant stakeholders has been established and strategies leading to a shared policy with common vocabulary were discussed.

Figure 1: Table of Conferences/Workshops

Date	Name of the conference/workshop
15-18 September 2021	MuseiEmotivi training (workshop)
1 April 2022	Regions in Recovery Second Edition 2022
13 May 2022	Combating the illicit trade in cultural Objects: Interdisciplinary challenges and new perspectives of EU law and policy
16-18 May 2022	International Conference Florence Heri-Tech
23-24 May 2022	ReInHerit workshop in Graz (workshop)
19-24 June 2022	IEEE/CVF Computer Vision and Pattern Recognition Conference (CVPR)
30 June 2022	DIGITARCH Summer School (workshop)
25-29 July 2022	AESOP 2022 Congress ‘Space for Species: Redefining Spatial Justice’
20-28 August 2022	INTERCOM/ICOM Conference
5-9 September 2022	Cultural Property Protection Course (Multinational Peace Support Education Centre of the Hellenic Ministry of Defense in Kilkis)
10-13 October 2022	European Regions Week 2022; The ReInHerit Digital Hub
10-14 October 2022	ACM Multimedia 2022

18-19 October 2022	"Cross Cutting Topics in Armed Conflicts" seminar (CIMIC) organized by NATO
17-19 October 2022	ENCATC conference Internationalization in Focus: Theoretical, Strategic & Management Perspectives in Education, Research, Policy & Practice
19-20 October 2022	Relaunching European Tourism through Cultural Heritage and Digitalisation, Cooperation between Museums and Cultural Heritage Sites (ECTN 2022 Annual Conference)
23-27 October 2022	European Conference of Computer Vision 2022
9 November 2022	EUROMED Conference 2022
10 November 2022	27 th International Conference on Cultural Heritage and New Technologies
7-11 November 2022	EUROMED 2022
28 November 2022	Archeologia Condivisa. La Ricerca per Tutti
1-2 December 2022	Workshop Charter Alliance – Erasmus + Project (workshop)
14 December 2022	Arcada students of Cultural Production on developing a co-creation workshop concept for young adults by young adults the aim of which was to collect information on what could get young adults to visit museums and cultural heritage sites. (workshop)
28 February 2023	Digital Art History Austria Network Event: 'H2020 Project ReInHerit'
15 March 2023	Extended Intelligence for Cultural Engagement Conference 2023
20-23 March 2023	3rd International Conference on TRANSDISCIPLINARY MULTISPECTRAL MODELLING AND COOPERATION FOR THE PRESERVATION OF CULTURAL HERITAGE.
28 April 2023	5th International Tourism Marketing Conference
15 May 2023	Arcada students of Cultural Production and Online Media presenting the ReInherit digital prototypes (workshop)
24 May 2023	SmartCulTour H2020 project final conference

2 June 2023	Inclusive Museums. Museum experiences for people with hearing impairments
14-17 June 2023	2023 RSA Annual Conference Transforming Regions: Policies and Planning for People and Places
20-21 June 2023	IMPACTOUR H2020 project final conference
27-28 June 2023	International Conference on Cultural Tourism Advances (ICCTA)
26-29 June 2023	Rural Geo 2023
17-22 July 2023	Hackathon at Matera Summer School (workshop)
6 September 2023	DIGITARCH Summer School (workshop)
6-8 September 2023	Cultural Property Protection Course
10-13 September 2023	DRHA2023 conference
11-15 September 2023	International Conference on Image Analysis and Image Processing
20 September 2023	Cultural Production and Online Media workshop in Arcada (workshop)
29-30 September 2023	Macerata Festival of the Humanities (workshop)
2-6 October 2023	International Conference on Computer Vision
5-6 October 2023	The 8th Petar Šarčević International Scientific Conference
5-6 October 2023	IMET 2023
9 October 2023	MUSEUMS + AI WORKSHOP (workshop)
10-13 October 2023	Artificial Intelligence Embraced: The future of the culture and creative sector
18-21 October 2023	16th International Conference for Cultural Tourism in Europe (ECTN)
23 October 2023	CaTCH – Capturing the IntAngible of Cultural Heritage
23-27 October 2023	Era Chair Mnemosyne Summer School 2023
29 October - 3 November 2023	ACM Multimedia 2023

24-25 November 2023	Magma Fest (workshop)
24-25 November 2023	Magma Fest
27 November 2023	Blue Shield; International conference Cultural heritage, innovation and sustainable development: the contribution of ReInHerit
5 December 2023	NextUs – Culture and Research Event (workshop)
8 December 2023	Digital Skills Culture & Creative Industries Workshop (workshop)
9 January 2024	European Programmes: Culture, Creativity and Inclusive Society, participating
10-11 January 2024	CulTourData COSME Project Final Conference
16-18 January 2024	Concluding the ReInHerit Project: Results and Outcomes Towards a Sustainable Future (Final Conference)
26-27 February 2024	ICCHMMA 2024: 18th International Conference on Cultural Heritage Management, Museology and Archaeology
29 June – 4 July 2024	HCI INTERNATIONAL 2024

Figure 2: Additional information (only applicable to YRKESHOGSKOLAN ARCADA AB - PA11); Demonstration and Presentations

Role: Presenter of poster	Presentation of paper <i>Archeologies of Future Heritage: Research-Creations for Imagining Emerging Digital Technology in Museums</i> on digital tool use in museums among young adults during the Research and Innovation Days of Arcada , Helsinki, March 2023.
Role: Presenter of electronic poster.	Presentation of ReInHerit project at the Research and Innovation Days of Arcada , Helsinki, March 2022.
Role: presenter of electronic poster.	Presentation of the ReInHerit project during the Global Engagement Day in Arcada , 8.6.2022.

<p>Role: Tool presenter, coordinating technical support, collecting feedback, documenting (photo) the mini-technology fair.</p>	<p>Organising a mini-technology fair during the Research and Innovation Days of Arcada, March 2023. Collecting user feedback during digital use (additional output, not part of original deliverables).</p>
--	--

2. Results

One of the KPIs of WP7 was the successful organizing and completion of at least 15 conferences, through which the main objectives of WP7 – to disseminate, communicate and create awareness to relevant and interested stakeholders to the ReInHerit project – is met. In this respect, and as demonstrated in the table above, ReInHerit partners overachieved, organizing and/or attending a total of 59 workshops and conferences (14 workshops & **45 conferences**) over the years 2021-2024.

This work fulfilled a crucial function in the context of ReInHerit’s thrust towards creating unique avenues for knowledge exchange between CH spaces/organization and cultivating discourses and practices that address the task of modernizing CH, making it relevant to and sustainable in today’s world.

Thus, through the organization of conferences and other events, ReInHerit partners engaged in successful dissemination and knowledge exchange around the following key topics (note that this list is summative, thus non-exhaustive):

- The democratization of CH practices,
- The digitisation of museum spaces,
- Intersections of practice between CH and smart tourism initiatives,
- Sustainability in the context of CH,
- The promotion of new technologies in the context of
 - audience/visitor engagement,
 - archive enrichment & modernisation,
 - machine learning,
 - building interactive museum spaces,
- Disseminating and promoting the ReInHerit toolkit,
- Knowledge exchange and Collaboration within CH,

and more.

3. Partners' participation in scientific conferences: Record of Abstracts

3.1 BANK OF CYPRUS CULTURAL FOUNDATION (PA1)

1. **Conference:** INTERCOM/ICOM Conference, participating with presentation titled: *Collaborative practices in digital innovation: a key process of sustainable museum management as proposed by the Horizon 2020 program "ReInHerit"*, Prague, Czech Republic, 20-28 August 2022

Keynote speakers: Dr Polina Nikolaou, Dr Monika Asimenou, Dr Ioanna Hadjicosti

Abstract

Rapid societal, economic, and technological challenges necessitate an urgent adoption of democratic and inclusive practices in museum management based on digital infrastructure and innovation. Aligned with this transformation of the museum sector, the project "Redefining the future of cultural heritage, through a disruptive model of sustainability (ReInHerit)" — funded by the European Union's Horizon 2020 research and innovation program (GA No101004545, 12 partners from 7 countries in Europe) and coordinated by the Bank of Cyprus Cultural Foundation — aims to create a model of sustainable heritage management based on a digital dynamic European network of heritage stakeholders. This model will be facilitated by a digital cultural heritage ecosystem (Digital Hub) in which all the stakeholders (heritage professionals, policymakers, researchers, communities, etc.) will be provided with the tools and resources to communicate, experiment with, innovate, and disseminate European cultural heritage.

This paper presents the research results stemming from the first stage of this project: the surveys conducted between October and December 2021 in order to map the digital capacities and needs of museums and heritage sites in Europe (886 responses from 37 countries in Europe). This paper will show the emerging trends in adopting ICT tools in museum management and will identify the bottlenecks/opportunities for digital innovation in the current museum landscape. Based on the research results from the surveys (quantitative data) and enriched with qualitative data collected through focus groups, this paper will argue that the development of collaborative practices between museum professionals and ICT experts can be the facilitator of digital innovation in museums. Adopting collaborative practices in digital innovation as a core process of museum management creates an open workplace culture that enables museum professionals to actively engage and share expertise. This has the crucial potential to empower museum professionals a) to develop their skills for becoming active agents and not mere receivers of digital innovation and b) to address their challenges effectively and fulfill their democratic role in contemporary societies.

- 2. Conference:** EUROMED Conference, title: *'Digital Transformation in museums: motivations, challenges and sustainability'*, Workshop: *Data Space in Cultural Heritage during the digital transformations: The case of Greece and Cyprus*, Limassol, Cyprus, 9 November 2022

Keynote speakers: Dr Polina Nikolaou, Dr Monika Asimenou, Dr Ioanna Hadjicosti

Abstract

This paper presents the results of the project ReInHerit, “Redefining the future of cultural heritage, through a disruptive model of sustainability (ReInHerit)” — funded by the European Union's Horizon 2020 research and innovation program (GA No101004545, 12 partners from 7 countries in Europe) and coordinated by the Bank of Cyprus Cultural Foundation. The results will be presented in correlation with the digital transformation of cultural heritage sites and museums in Greece and Cyprus and in Europe in general.

- 3. Conference:** 16th International Conference for Cultural Tourism in Europe ECTN, participating with presentation titled: *The ReInHerit Project: Collaboration in the service of Cultural Heritage*, Paphos, Cyprus, 18-21 October 2023

Keynote speakers: Andrea Oratiou, Dr Polina Nikolaou

Abstract

Is the expertise of Cultural Heritage professionals relevant to the work of ICT (Information and communication technologies) professionals and vice versa? This crucial question will be addressed in this presentation using as a case study the project “Redefining the future of cultural heritage, through a disruptive model of sustainability (ReInHerit)”, which is funded by the European Union's Horizon 2020 research and innovation program (GA No101004545). The project ReInHerit aims to create a model of sustainable heritage management based on a digital dynamic European network of heritage stakeholders. This model will be facilitated by a digital cultural heritage ecosystem (Digital Hub) in which all the stakeholders (heritage professionals, policymakers, researchers, communities, Tourist destination authorities/DMOs, etc.) will be provided with the tools and resources to communicate, experiment with, innovate and disseminate European cultural heritage.

The aim of this presentation is to present key results and conclusions made so far in the research and development phases of the ReInHerit Project to show how cultural heritage and ICT professionals can effectively work together. As part of the Project, a number of professionals with different kinds of expertise (researchers, curators, educators, tourism and ICT professionals, and so on) joined forces in order to improve the visibility of Cultural Heritage through digital means. Several results of the ReInHerit research will be incorporated in the presentation to highlight ReInHerit's aim for multidisciplinary. The ReInHerit video game is a great example of the collaboration between Cultural Heritage and ICT professionals in the service of the promotion of Cultural Heritage, which is the focus of this presentation. The need for joined efforts, as indicated by the digital applications and tools generated in the ReInHerit project, will be highlighted.

- 4. Conference:** Era Chair Mnemosyne Summer School 2023, participating with presentation titled: *The quest of museums/cultural foundations: finding one's digital or other way to the audiences, Re-envisioning Cultural Heritage Documentation in the Metaverse Age*, Limassol, Cyprus, 23-27 October 2023

Keynote speaker: Dr Polina Nikolaou on behalf of Dr Ioanna Hadjicosti

Abstract

The Summer School brings together international, regional, and local experts in the field of Digital Cultural Heritage, focusing on the holistic documentation, preservation, and promotion of cultural heritage - the Mnemosyne methodology 'Memory Twin'. In line with the EU's recommendation on a common European data space for cultural heritage and the standards set by UNESCO, ICOMOS, and ICOM, the event aims to develop and enhance participants' knowledge and digital skills through knowledge-sharing and collaborative work, strengthening, and augmenting cross-disciplinary partnerships and inter-university networking.

The Summer School will consider topics including the transversal role of digital culture for sustainable development methods to protect universal cultural heritage via science, technology, and innovation-inclusive and resilient societies by promoting cultural diversity, global citizenship, and technological environments for humankind and its Memory of the Past.

This one-week fully immersive program combines lectures, seminars, practical lab sessions, and hands-on field training at heritage sites to develop practical and theoretical skills in Cultural Heritage studies.

The program accommodates new and established practitioners who wish to pursue research, training, and professional development. Drawing from a wide range of experts, stakeholders, and policymakers, the school's leaders' capacities to identify, record, protect, and manage heritage assets will be selectively showcased to attendees, enabling the active engagement of communities - including women, youth, and civil society.

<https://digitalheritagelab.eu/event/in-person-era-chair-mnemosyne-summer-school-2023-re-envisioning-cultural-heritage-documentation-in-the-metaverse-age/>

- 5. Conference:** *Cultural Heritage, Innovation and Sustainable Development: The contribution of ReInHerit*, participating with presentation titled: *ReThinking Digital and Travelling Exhibitions: The case of Craftsmanship*, organized by the Hellenic Committee of the Blue Shield, 27 November 2023

Speakers: Nefeli Bantela (Museum of Cycladic Art) and Andrea Oratiou (Bank of Cyprus Cultural Foundation).

Abstract

The aim of this presentation was to highlight the work of the three museum Partners of ReInHerit, Graz Museum, Museum of Cycladic Art, and the Bank of Cyprus Cultural Foundation regarding the Digital and Travelling Exhibitions as well as the Digital Collection. Moreover, the Craftsmanship Travelling Exhibition was used as a key study to indicate the rationale used for the creation and implementation of the Travelling Exhibitions and the various parallel activities.

- 6. Conference:** ReInHerit Final conference, title: *'Concluding the ReInHerit Project: Results and Outcomes Towards a Sustainable Future'*, organised by the Bank of Cyprus Cultural Foundation, Nicosia, Cyprus, 16-18 January 2024

Described in the respective deliverable (D7-15)

3.2 ASOCIACION ARTE SOSTENIBLE (PA2)

- 1. Conference:** *ECTN 16th Cultural Tourism Conference*, Online Presentation titled: *"The ReInHerit's handbook on Museum and Heritage Sites Collaboration and Communication"*, organised by ECTN, Paphos, Cyprus, 18-21 October 2023

Abstract

ReInHerit's Handbook on Museum and Heritage Sites Collaboration and Communication embodies a comprehensive resource aiming to facilitate improved communication and collaboration within the realm of cultural heritage management. This initiative focuses on fostering interaction among professionals in museums, heritage sites, and the cultural tourism sector, with the ultimate goal of augmenting the exchange of knowledge and insights within the professional community and enhancing visitors' cultural experiences. The guiding philosophy of the ReInHerit handbook is predicated on a holistic understanding of communication as a multifaceted conduit for transferring knowledge and experiences across all stakeholders involved in cultural heritage management. Its thematic priorities are founded on effective communication and collaboration within the diverse European cultural heritage sector, built upon four central pillars on which the objectives of the handbook are anchored: digitization, sustainability, and continuing professional development. Additionally, the ReInHerit handbook's overarching vision and thematic exploration align itself with the Sustainable Development Goals and the Horizon 2020 Programme, both of which seek to elevate the competitive positioning and operational effectiveness of cultural heritage institutions. By fostering alignment with relevant SDGs, the handbook empowers museums, heritage sites, and the cultural tourism sector to adopt an active role in fostering global sustainability while contributing to their inherent mission of cultural preservation and knowledge dissemination.

<https://www.culturaltourism-network.eu/conference-2023.html>

2. Conference: *Cultural heritage, innovation, and sustainable development: the contribution of ReInHerit*, participation in: “*ReInHerit and social sustainability*” intervening on “*Presentation of The ReInHerit's handbook on Museum and Heritage Sites Collaboration and Communication*”, and participation in “*ReInHerit and environmental sustainability*” intervening on “*Cultural Heritage and environmental sustainability*”, organised by the Hellenic Committee of Blue Shield, Athens, Greece, 27 November 2023

Abstract

Cultural heritage and environmental sustainability are inextricably linked, and their harmonious coexistence is crucial for the well-being of both humanity and the planet. This presentation explores the critical interplay between these two domains, emphasizing the need for integrated and sustainable heritage management practices that prioritize ecological consciousness and resilience in conservation efforts. To drive immediate action while aligning with Sustainable Development Goals (SDGs), ReInHerit’s project initiatives are presented, accompanied by a commitment to scale up ambitions over the long term. Investing in the training and knowledge development of museum and heritage management professionals is essential for instilling a culture of sustainable practices. At the same time, environmental protocols specific to museums and heritage sites should be developed to minimize their environmental impact and enhance their sustainability. In this sense integration of cross-cutting environmental sustainability policies into heritage management frameworks is essential to ensure that heritage conservation efforts are aligned with broader environmental sustainability goals. This holistic approach will safeguard both our cultural heritage and the environment for future generations.

<https://www.hellenicblueshield.com/en/cultural-heritage-innovation-and-sustainable-development-the-contribution-of-re%ce%b9n%ce%b7erit-2/>

3. Conference: *European Programmes: Culture, Creativity and Inclusive Society*, participating with presentation titled: “*Cultural heritage, innovation and sustainable development: the contribution of ReInHerit*”, organized by Catalan Regional Government (ACCIÓ), Barcelona, Spain, 9 January 2024

Abstract

This is a short presentation on ReInHerit and its achievements as a successful project emerging from the Horizon Europe program.

https://agenda.accio.gencat.cat/cercador/-/actes/2024/01/09/1712585/jornada-informativa-i-revisions-de-propostes-a-programes-europeus-cultura-creativitat-i-societat-inclusiva?utm_source=AG&utm_medium=email&utm_campaign=enviament-agenda&utm_content=452-Properes_13

4. Conference: *ReInHerit Final Conference*, title: ‘*Concluding the ReInHerit Project: Results and Outcomes Towards a Sustainable Future*’ participating with presentation titled: “*Exploring Cultural Heritage Horizons: ‘Museums Up’ ReInHerit’s Podcast as a Dynamic Tool for Professional Collaboration*”, Nicosia, Cyprus, 16-18 January 2024

Speaker: Jaime Lopez

Abstract

The "Museums Up" podcast is an initiative of the ReInHerit Project that aims to promote knowledge sharing, innovation, and advocacy for preserving cultural heritage. The podcast features discussions with experts, practitioners, and the wider heritage community, fostering a culture of collaboration and cross-disciplinary exchange. By providing a channel for heritage professionals to share their expertise, discuss current challenges, and explore new ideas, the "Museums Up" podcast contributes to the field of cultural heritage in several ways. It increases engagement among museum visitors, fosters digitalization, promotes lifelong learning, and raises awareness on social and environmental sustainability issues, which aligns with the ReInHerit Project's objectives to transform museums and heritage sites in the 21st century. This presentation promises an engaging exploration of Museums Up, shedding light on its role as an effective exploitation tool for the ReInHerit project and its lasting legacy in the cultural heritage field.

3.3 UNIVERSITA DEGLI STUDI DI FIRENZE (PA3)

- 1. Conference:** *International Conference Florence Heri-Tech – The Future of Heritage Science and Technologies*, title: ‘*Exploiting CLIP-Based Multi-modal Approach for Artwork Classification and Retrieval*’, Florence, Italy, 16-18 May 2022

Authors: Alberto Baldrati, Marco Bertini, Tiberio Uricchio & Alberto Del Bimbo

The Future of Heritage Science and Technologies: ICT and Digital Heritage: Third International Conference, Florence Heri-Tech 2022, Florence, Italy, May 16–18, 2022, Proceedings Springer International Publishing, Pages 140-149 <https://arxiv.org/pdf/2309.12110>

https://link.springer.com/chapter/10.1007/978-3-031-20302-2_11

Abstract

Recent advances in multimodal imaging have resulted in the creation of visual models trained with semantically dense textual supervision. These models tend to have better generalization capabilities than those trained using categorical attributes or through unsupervised techniques.

In this work, we investigate how the recent CLIP model can be applied to several tasks in the artwork domain. We perform exhaustive experiments on the NoisyArt dataset, which is a collection of artwork images collected from public resources on the web. On such a dataset, CLIP achieves

impressive results on (zero-shot) classification and promising results in both artwork-to-artwork and description-to-artwork domains.

<https://www.florenceheritech.com>

- 2. Conference:** *IEEE/CVF Computer Vision and Pattern Recognition Conference (CVPR)*, title: *'Effective conditioned and composed image retrieval combining clip-based features'*, New Orleans, USA, 19-24 June 2022

Authors: Alberto Baldrati, Marco Bertini, Tiberio Uricchio, Alberto Del Bimbo
Conference Proceedings of the IEE/CVF Conference on Computer Vision and Pattern Recognition
Pages:21466-21474

https://openaccess.thecvf.com/content/CVPR2022/papers/Baldrati_Effective_Conditioned_and_Co_mposed_Image_Retrieval_Combining_CLIP-Based_Features_CVPR_2022_paper.pdf

Abstract

Conditioned and composed image retrieval research methods extend CBIR systems by combining a query image with an additional text that expresses the user's intent, describing additional requests with the visual content of the query image. This type of search tool is interesting for e-commerce applications, e.g., in developing interactive multimodal searches and chatbots. In this demo, we present an interactive system based on a combiner network, trained using contrastive learning, that combines visual and textual features obtained from the OpenAI CLIP network to address conditioned CBIR. The system can be used to improve e-shop search engines. For example, considering the fashion domain, it lets users search for dresses, shirts, and top tees using a candidate start image and narrow search results by citing visual differences that push the engine in certain directions, e.g., asking to change color, pattern, or shape. The proposed network obtains state-of-the-art performance on the FashionIQ dataset and on the more recent CIRR dataset, showing its applicability to the fashion domain for conditioned retrieval and to more generic content considering the more general task of composed image retrieval.

- 3. Conference:** *IEE/CVF Computer Vision and Pattern Recognition Conference (CVPR) Workshop*, title: *'Conditioned and composed image retrieval combining and partially fine-tuning clip-based features'*, Nea Orleans, USA, 20 June 2022

Authors: Alberto Baldrati, Marco Bertini, Tiberio Uricchio, Alberto Del Bimbo
Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition
Pages 4959-4968

https://openaccess.thecvf.com/content/CVPR2022W/ODRUM/papers/Baldrati_Conditioned_and_Composed_Image_Retrieval_Combining_and_Partially_Fine-Tuning_CLIP-Based_CVPRW_2022_paper.pdf

Abstract

In this paper, we present an approach for conditioned and composed image retrieval based on CLIP features. In this extension of content-based image retrieval (CBIR), an image is combined with text that provides information regarding the user's intentions and is relevant for application domains like e-commerce. The proposed method is based on an initial training stage where a simple combination of visual and textual features is used to fine-tune the CLIP text encoder. Then, in the second training stage, we learn a more complex combiner network that merges visual and textual features. Contrastive learning is used in both stages. The proposed approach obtains state-of-the-art performance for conditioned CBIR on the FashionIQ dataset and for composed CBIR on the more recent CIRR dataset.

<https://www.facebook.com/ReInHerit/posts/pfbid0poAuX3CgbamNgS6nLo9oogX3U7cqXW66wzuAaNoK8Xbn69pUFiedja4K7aSz3jaAl>

4. **Conference:** *ACM Multimedia 2022*, presentation titled: *Engaging Museum Visitors with Gamification of Body and Facial Expressions*, Lisbon, Portugal, 10-14 October 2022

Authors: Maria Giovanna Donadio, Filippo Principi, Andrea Ferracani, Marco Bertini, Alberto Del Bimbo MM '22: Proceedings of the 30th ACM International Conference on Multimedia October 2022 Pages 7000–7002 <https://dl.acm.org/doi/abs/10.1145/3503161.3547744>

Abstract

In this demo, we present two applications designed for the cultural heritage domain that exploit gamification techniques in order to improve engagement with and dissemination of museum artworks. The two applications encourage users to replicate the poses and facial expressions of characters from paintings or statues to help museum visitors make connections with works of art. Both applications challenge the user to fulfill a task in a fun way, providing the user with a visual report of his/her experience that can be shared on social media, improving museum engagement, and providing information on the artworks replicated in the challenge.

<https://www.facebook.com/ReInHerit/posts/pfbid02o1Khm5Y6MrBBrPxuXbJp2vJMngiHnjCpbqM1bSdotZEXbH6uZQXnPNP1y8L8Faq9l>

5. **Conference:** *ACM Multimedia 2022*, title: *Restoration of Analog Videos Using Swin-UNet*, Lisbon, Portugal, 10-14 October 2022

Authors: Agnolucci, Lorenzo; Galteri, Leonardo; Bertini, Marco; Del Bimbo, Alberto Proceedings of the 30th ACM International Conference on Multimedia pp. 6985-6987 <https://drive.google.com/file/d/15IUNslisNdYzJpISTcDHPGJnABMYVg9X/view>

Abstract

In this paper, we present a system to restore analog videos of historical archives. These videos often contain visual degradations due to deteriorating over time; restoring these archives thus requires costly and slow manual interventions to recover the original content. The proposed system uses a

multi-frame approach and is able to deal with severe tape mistracking, which results in completely scrambled frames. Tests on real-world videos from a major historical video archive show the effectiveness of our demo system.

6. Conference: *ECCV 2022 – Vision for Art workshop*, workshop at the European Conference of Computer Vision titled: “*Is GPT-3 all you need for Visual Question Answering in Cultural Heritage?*”, Tel Aviv, Israel, 23-27 October 2022

Authors: Pietro Bongini, Federico Becattini, Alberto Del Bimbo
European Conference on Computer Vision (ECCV) Pages 268-281 Springer Nature Switzerland

<https://arxiv.org/pdf/2207.12101.pdf>

Abstract

The use of Deep Learning and Computer Vision in the Cultural Heritage domain is becoming highly relevant in the last few years with many applications for audio smart guides, interactive museums and augmented reality. All these technologies require lots of data to work effectively and be useful for the user. In the context of artworks, such data is annotated by experts in an expensive and time-consuming process. In particular, for each artwork, an image of the artwork and a description sheet have to be collected in order to perform common tasks like Visual Question Answering.

In this paper, we propose a method for Visual Question Answering that allows the generalization at runtime of a description sheet that can be used to answer visual and contextual questions about the artwork, completely avoiding the image and the- notation process. For this purpose, we investigate the use of GPT-3 for generating descriptions for artworks, analyzing the quality of generated descriptions through captioning metrics. Finally, we evaluate the performance of Visual Question Answering and captioning tasks.

<https://visarts.eu>

7. Conference: *ExICE – Extended Intelligence for Cultural Engagement Conference 2023* (as part of the SpiceH2020 project), poster presentation on ‘*The ReInHerit Toolkit: Artificial Intelligence and a people-centered approach for cultural engagement*’, University of Bologna, Italy, 15 March 2023

Authors: Paolo Mazzanti, Marco Bertini, Alberto Baldrati, Lorenzo Agnolucci, Andrea Ferracani, Filippo Principi, Pietro Bongini

https://spice-h2020.eu/conference/papers/posters/ExICE23_paper_8462.pdf
<https://zenodo.org/record/7973664>

Abstract

In this work, we present the toolkit developed in the context of the ReInHerit project. The goal of the project is to improve the communication, collaboration, and innovation exchange between museums and cultural heritage sites. The toolkit is a set of innovative applications, instructions, and webinars that provide guidelines and prototypes for developing new, engaging experiences in the cultural domain. Digital innovation, computer vision, and artificial intelligence for cultural engagement have been identified as emergent needs to research and address; the toolkit is part of the ReInHerit Digital Hub, designed as the interactive and dynamic space that collects and shares all the resources of the project (webinars, tools, and documentation) for cultural heritage professionals. New technologies, particularly AI/CV tools, can create a stronger relationship between artworks and visitors in the new form of the "phygital museum", rethinking museums in a diversity of spaces, tools, and contexts with a plurality of people and modes of interaction. Thus, the toolkit focuses on visitor interactions to meet diverse needs and achieve greater visitor satisfaction.

<https://www.facebook.com/ReInHerit/posts/pfbid07KJLkjQWuwjS4wxjUi5id4JvZhh3wmtYkzq3h24QyDSNJ6k4PrtsVorftQF2dK5P>

8. Conference: *DRHA2023 Digital Research in Humanities and Arts conference - Performing cultural heritage in the digital present* <https://www.drha.uk/2023/>, title: 'Improving Museum Visitors' Engagement using Computer Vision Tools', University of Turin, Italy, 11-13 September 2023

Authors: Marco Bertini, Paolo Mazzanti

Abstract

To make the museum experience more engaging and captivating for visitors, essential to a people-centered approach. This involves interacting with visitors in dynamic and powerful ways, providing them with transformative learning experiences throughout their journey, from before their arrival to after their departure. Playful, interactive, and immersive experiences can be employed to evoke emotions, inspire creativity, and facilitate participatory learning. Integrating new technologies, specifically AI and Computer Vision tools, can help establish a stronger connection between artworks and visitors, leading to the development of a "phygital museum". This allows for a rethinking of museums regarding diverse spaces, tools, and contexts with various individuals and modes of interaction. Within the [ReInHerit](#) project, a toolkit that uses CV and AI technologies has been developed with the primary goal of letting visitors interact with collections and exhibitions in a playful approach based on gamification and learning-by-doing techniques. The development strategy for the ReInHerit toolkit involves using interactive tools, which will increase visitor engagement through user-centered approaches.

<https://www.drha.uk/2023/wp-content/uploads/2023/08/DRHA-Book-of-Abstracts.pdf>

9. Conference: *International Conference on Image Analysis and Image Processing*, paper accepted for presentation titled: 'OpenFashionCLIP: Vision-and-Language Contrastive Learning with Open-Source Fashion Data', Udine, Italy, 11-15 September 2023

Authors: G., Baldrati, A., Morelli, D., Cornia, M., Bertini, M., Cucchiara, R.

Book Chapter In: Foresti, G.L., Fusiello, A., Hancock, E. (eds) Image Analysis and Processing – ICIAP 2023. ICIAP 2023. Lecture Notes in Computer Science, vol 14233. Springer, Cham. https://doi.org/10.1007/978-3-031-43148-7_21

Abstract

The inexorable growth of online shopping and e-commerce demands scalable and robust machine learning-based solutions to accommodate customer requirements. In the context of automatic tagging classification and multimodal retrieval, prior works either defined a low generalizable supervised learning approach or more reusable CLIP-based techniques while, however, training on closed source data. In this work, we propose OpenFashionCLIP, a vision-and-language contrastive learning method that only adopts open-source fashion data stemming from diverse domains and characterized by varying degrees of specificity. Our approach is extensively validated across several tasks and benchmarks, and experimental results highlight a significant out-of-domain generalization capability and consistent improvements over state-of-the-art methods both in terms of accuracy and recall. Source code and trained models are publicly available at: <https://github.com/aimagelab/open-fashion-clip>.

10. Conference: *International Conference on Computer Vision*, paper accepted for presentation in the main track of the conference titled: “Zero-Shot Composed Image Retrieval with Textual Inversion”, Paris, France, 2-6 October 2023

ICCV2023 <https://doi.org/10.48550/arXiv.2303.15247> Computer Vision and Pattern Recognition (cs.CV); Computation and Language (cs.CL); Information Retrieval (cs.IR)

Authors: Alberto Baldrati, Lorenzo Agnolucci, Marco Bertini, Alberto Del Bimbo

Abstract

Composed Image Retrieval (CIR) aims to retrieve a target image based on a query composed of a reference image and a relative caption that describes the difference between the two images. The high effort and cost required for labeling datasets for CIR hamper the widespread usage of existing methods, as they rely on supervised learning. In this work, we propose a new task, Zero-Shot CIR (ZS-CIR), that aims to address CIR without requiring a labeled training dataset. Our approach, named zero-Shot composed Image Retrieval with textual inversion (SEARLE), maps the visual features of the reference image into a pseudo-word token in CLIP token embedding space and integrates it with the relative caption. To support research on ZS-CIR, we introduce an open-domain benchmarking dataset named Composed Image Retrieval on Common Objects in context (CIRCO), which is the first dataset for CIR containing multiple ground truths for each query. The experiments show that SEARLE exhibits better performance than the baselines on the two main datasets for CIR tasks, FashionIQ and CIRR, and on the proposed CIRCO. The dataset, the code and the model are publicly available at this [URL](#).

11. Conference: *International Conference on Computer Vision*, paper accepted for presentation in the 4th workshop on e-Heritage titled: “*Diffusion Based Augmentation for Captioning and Retrieval in Cultural Heritage*”, Paris, France, 2-6 October 2023

ICCV2023 <https://doi.org/10.48550/arXiv.2308.07151> Accepted at ICCV 2023 4th Workshop on e-Heritage

Authors: Dario Cioni, Lorenzo Berlincioni, Federico Becattini, Alberto del Bimbo

Abstract

Cultural heritage applications and advanced machine learning models create a fruitful synergy to provide effective and accessible ways of interacting with artworks. Smart audio guides, personalized art-related content, and gamification approaches are just a few examples of how technology can be exploited to provide additional value to artists or exhibitions. Nonetheless, from a machine learning point of view, the amount of available artistic data is often insufficient to train effective models. Off-the-shelf computer vision modules can still be exploited to some extent, yet a severe domain shift is present between art images and standard natural image datasets used to train such models. As a result, this can lead to degraded performance. This paper introduces a novel approach to address the challenges of limited annotated data and domain shifts in the cultural heritage domain. By leveraging generative vision-language models, we augment art datasets by generating diverse variations of artworks conditioned on their captions. This augmentation strategy enhances dataset diversity, bridging the gap between natural images and artworks and improving the alignment of visual cues with knowledge from general-purpose datasets. The generated variations assist in training vision and language models with a deeper understanding of artistic characteristics and that can generate better captions with appropriate jargon.

12. Conference: *ACM Multimedia 2023*, paper accepted for presentation in the demo track titled: “*Zero-Shot Image Retrieval with Human Feedback*”, Ottawa, Canada, 29 October – 3 November 2023

Authors: Lorenzo Agnolucci, Alberto Baldrati, Marco Bertini, Alberto Del Bimbo

MM '23: Proceedings of the 31st ACM International Conference on Multimedia October 2023

Pages 9417–9419 <https://doi.org/10.1145/3581783.3612664>

Abstract

Composed image retrieval extends traditional content-based image retrieval (CBIR) combining a query image with additional descriptive text to express user intent and specify supplementary requests related to the visual attributes of the query image. This approach holds significant potential for e-commerce applications, such as interactive multimodal searches and chatbots. In our demo, we present an interactive composed image retrieval system based on the SEARLE approach, which tackles this task in a zero-shot manner efficiently and effectively. The demo allows users to perform image retrieval iteratively, refining the results using textual feedback.

13. Conference: International Conference: *‘Cultural heritage, innovation and sustainable development: the contribution of ReInHerit’*, MICC Director Prof. Marco Bertini lectured on *‘Sustainability Ethics and Information Protection Strategies in ReInHerit Toolkit’*, organized by the Hellenic Committee of the Blue Shield for Horizon2020 Project ReInHerit, Athens, Greece, 27 November 2023

Abstract

The conference was organized by the Hellenic Committee of the Blue Shield (HCBS) in the framework of the Horizon2020 Project ReInHerit. It is organized in a hybrid (phygital) mode to facilitate the participation of international speakers and audiences and thus have a global impact. The Hellenic Committee of the Blue Shield, partner of the ReInHerit project, organizes an international conference on “Cultural heritage, innovation and sustainable development: the contribution of ReInHerit”, which will be held in Athens on 27th November 2023.

14. Conference: *HCI INTERNATIONAL 2024, 26th International Conference on Human-Computer Interaction*, accepted paper titled *‘Computer Vision and AI tools for Enhancing User Experience in the Cultural Heritage Domain’*, Washington Hilton DC, USA, 29 June – 4 July 2024

Authors: Marco Bertini, Paolo Mazzanti...

<https://2024.hci.international>

Workshops

1. Workshop: *MuseiEmotivi training*, Florence, Italy, 15-18 September 2021

ICC organized a MuseiEmotivi training course at Galileo Museum Florence with NEMECH New Media for Cultural Heritage Competence Center of Tuscany Region Italy (in-presence and online event). <http://nemech.unifi.it/portfolio-posts/museiemotivi6/>

ReInHerit project was introduced at the 6th Edition of the interdisciplinary training course for museum professionals “MuseiEmotivi” (emotional museums) with a talk on “ReInHerit Project: new models of cooperation and cultural sustainability” with short insights by some partners of the ReInHerit’s consortium. National museum and cultural heritage professionals, national authorities, and stakeholders were also present.

2. Workshop: *DIGITARCH Summer School*, Università di Bologna, Department History and Culture Alma Mater Studiorum 2022/23, Bologna, Italy, 30 June 2022

2022 DIGITARCH Summer School Paolo Mazzanti held a Lesson and Workshop on “Tools and emotional relationships at the museum.” This was an introduction to the ReInHerit project and Toolkit to the participants.

Musei Civici - Reggio Emilia IT

<http://nemech.unifi.it/esperienze-e-relazioni-emotive-al-muse-digitarch/>
<https://site.unibo.it/digitarch/en>

3. Workshop: *Workshop Charter Alliance – Erasmus + Project*, Florence, Italy, 1-2 December 2022

Paolo Mazzanti MICC Unifi, as stakeholder, was invited to participate in CHARTER Alliance Tuscany Regional Workshop Florence.

<https://charter-alliance.eu/charter-alliance-tuscany-regional-workshop/>,

During the Tuscany Workshop a large group of local stakeholders joined CHARTER and contributed with presentations, roundtables and active participation on focus groups to introduce project partners to the state of play in the Tuscany region. The workshop was hosted by the Regional Government of Tuscany and the Foundation for Research and Innovation of the University of Florence. At the event the ReInHerit Project was presented, and this was followed by the promotion of Reinherit webinars on the project events website. <https://charter-alliance.eu/events/>

CHARTER will build a durable cultural heritage skills alliance in Europe by mainstreaming the project's methodologies, outputs and outcomes, maximizing their impact and creating multiplier effects at the European, national and regional levels, to enable Europe to sustainably protect, promote and enhance its tangible and intangible cultural heritage.

4. Workshop: ReInHerit workshop in Graz, Graz, Austria, 23-24 May 2022

“Artificial Intelligence and Computer Vision for Cultural Heritage” | ReInHerit Workshop in Graz

During the ReInHerit workshop organized at the Museum of Graz on the 23rd and 24th of May, MICC team (Paolo Mazzanti and Marco Bertini) presented its latest research studies to students and professionals at the University of Graz. Marco Bertini introduced prototypes for museums and cultural heritage sites based on CV/AI technology.

<https://www.facebook.com/ReInHerit/posts/pfbid02HVDNtyaWFHQDWxvG1Yp6r1SCub813P858LqhAWDRaVQBmSZYTzHhjrgvDGFzDhDBI>

5. Workshop: *Hackathon at Matera Summer School titled: 'eXtended Reality and Artificial Intelligence International Summer School 2023*, Matera, Italy, 17-22 July 2023

Marco Bertini and Paolo Mazzanti from MICC - University of Florence presented a practical lecture on 'Innovative and sustainable approaches to user engagement and digital interaction with cultural heritage'. Adopting a sustainable and user-centered approach, the aim was to share relevant results on playful approaches and to present studies which were conducted within the ReInHerit H2020 research project focussing on user engagement. Cutting-edge applications utilizing artificial intelligence, developed by the Media Integration and Communication Centre, were presented to

inspire the students' project proposals. Participants were invited to use, test, and explore the Toolkit in a collaborative and interdisciplinary approach, linking technological and cultural sectors.

https://reinherit-hub.eu/news/f7e285c0-f364-403d-a09e-48618e6380f1?fbclid=IwAR2o0dJqnu_rP7SzjAk3LTwV0v58GcOJkwuUosv5sP1hHaFI8Jx8L9Deiws

<https://reinherit-hub.eu/summerschool/>

<https://xrsalento.it/xrai-summer-school-2023/index.html>

- 6. Workshop:** *DIGITARCH Summer School*, Università di Bologna, Department History and Culture Alma Mater Studiorum 2023/2024, Musei Civici – Reggio Emilia, Italy, 6 September 2023

During the 2023 DigitArch Summer School, Digital Collection Curator for Archaeology, Paolo Mazzanti and Marco Bertini (Media Integration and Communication Center / NEMECH - Univ. of Florence) gave a lecture titled "Emotions, interactions and Digitals; the museum experience" presenting innovative approaches for digital learning experience and emotional engagement, based on AI/CV tools. The Summer School offered unique, high-level international training, aimed at putting into practice the digital and technological skills of students and professionals working in the cultural heritage sector, with a special focus on the archaeological field, in line with the professional profile of the Digital Collection Curator.

The visit to the Civic Museums of Reggio Emilia - Musei Civici di Reggio Emilia - with Georgia Cantoni, the Communication Manager in the Web and New Media Area and Curator of the Ethnographic Collections of the Civic Museums of Reggio Emilia, focused on the use of ICT for communication and enhancement of cultural sites. During this visit, participants were invited to identify works of art suitable for integration into the ReInHerit H2020 toolkit. The selected artworks would serve as a working proposal for the creation of textual materials during the subsequent two-day Editathon, which involved experts from Wikimedia Italy and museum curators collaborating together. This initiative aimed to leverage technology and collaboration to preserve and promote cultural heritage effectively.

<https://reinherit-hub.eu/news/db96b296-45f2-4f8c-8bc7-5d3f5dca61d1>

<https://site.unibo.it/digitarch/en/programme/1st-week>

7. Workshop: Macerata Festival of the Humanities, Macerata, Italy, 29-30 September 2023

<https://studiumanistici.unimc.it/it/ricerca/convegni/festival-humanities>

The ReInHerit toolkit was successfully presented during the Macerata Humanities Festival in September 2023. Marco Bertini from University of Florence - Media Integration and Communication Center (MICC) showcased and demonstrated the interactive applications of the ReInHerit toolkit at the Macerata Humanities Festival, organized by the Unimc / Università degli Studi di Macerata. This took place during two separate sessions on Friday, 29th, and Saturday, 30th September. At these events, the Smart Lens, VIOLA chatbot, Strike-a-pose, and Face-fit were introduced and made available through an interactive installation. The event was open to the public and aimed to emphasize how art, humanities, and social sciences play a crucial role in enhancing our understanding of contemporary society and in preserving the cultural heritage of the territory. We were especially delighted to welcome families with children who thoroughly enjoyed the Toolkit apps adding motivation and enthusiasm about the use of the apps and their potential to engage with different and special audiences.

<https://reinherit-hub.eu/news/8b82d931-2b8f-4ce5-a7aa-a33b38d83031>

https://www.unimc.it/it/unimc-comunica/events/2023/mhf2023/mhf_programmaweb

<https://www.unimc.it/it/unimc-comunica/events/2023/mhf2023>

8. Workshop: MUSEUMS + AI WORKSHOP, IULM University, Milan, Italy, 9 October 2023

Marco Bertini, Paolo Mazzanti, speakers with a history of working in AI/CV, conducted a workshop in the context of the H2020 ReinHerit Project. The topic of this workshop was: "Unlocking the Ethical Aspects of AI for Museums." Organized by InvisibleStudio & IULM AI LAB in collaboration with Museums+AI Network, this was a project overseen by Goldsmiths University London & Pratt Institute New York. The opportunity to present the ReInHerit Toolkit at the "Museums + AI Workshop" in Milan was valuable for the project, allowing us to address significant themes and establish a broader Network, connecting with new experts and professionals in the field." "Museums+AI Workshop", focused on navigating the ethical landscape of AI in museums, was organized by InvisibleStudio in collaboration with two prominent institutions, Goldsmiths University in London and Iulm Università AI Lab in Milan, on October 9, 2023, in Milan, Italy. As part of the H2020 ReInHerit Consortium, Media Integration and Communication Center - MICC University of Florence presented Italian case studies on "Increasing User Engagement and Motivating Learning in Museums with Computer Vision and AI - The ReInHerit Toolkit". The insights from this workshop will be incorporated into the Italian translation of "AI: A Museum Planning Toolkit", edited by Dr. Giuliano Gaia co-founder of InvisibleStudio in collaboration with Dr. Oonagh Murphy, co-leader of the AI+Museums Network project."

<https://reinherit-hub.eu/news/5c0b413f-51f1-40c6-9524-9dc0dc87be3b>

<https://www.invisiblestudio.net/portfolio/museums-ai-workshop>

9. Workshop: *Magma Fest*, Matera IT, 24-25 November 2023

In a celebration of interdisciplinary synergy and groundbreaking innovation, Media Integration and Communication Center MICC – Università degli Studi di Firenze, through the insightful representation of Paolo Mazzanti, took center stage in Matera, during the second edition of Magma Fest, in Matera IT on November 24-25, 2023. The annual gathering, spearheaded by *matera hub*, aimed to overcome the conventional boundaries of conferences and festivals, fostering a rich platform for meaningful dialogue, spirited debate, and the cultivation of transformative collaborations. Serving as a guiding light for those navigating the complexities of our era, Magma Fest envisions a space where diverse perspectives converge to tackle pressing global challenges. Magma Fest deviates from the traditional event format, functioning as a safe haven for discourse and cooperation. Much like the ever-shifting magma beneath our feet, individuals discover equilibrium through collective efforts, particularly amid the unprecedented challenges of our times. Magma Fest aspires to nurture an environment conducive to the creation of innovative, non-disciplinary models. This inclusive ethos encourages contributions from diverse visions, competencies, and approaches, paving the way for the emergence of unexpected solutions to complex challenges. The second day centered on the intersection of technology and cultural heritage, providing the perfect stage for Paolo Mazzanti to unveil the groundbreaking initiative, ReInHerit. As a Horizon2020 project, ReInHerit proposes a revolutionary model focused on developing a digital cultural heritage ecosystem. This visionary approach invites key stakeholders—museums, heritage sites, policy makers, professionals, and communities—into an open and collaborative space to experiment, share, and innovate. Paolo Mazzanti presented the methodology and insights derived from ReInHerit, illustrating how this initiative is poised to revolutionize the cultural heritage landscape. With a focus on the ReInHerit Toolkit, playful engagement and people-centered approach in Museums using AI/CV. The project's ultimate goal is to establish a dynamic platform that facilitates interaction and collaboration among diverse stakeholders, leveraging technology to preserve and enhance the rich experience of Matera's iconic Sassi.

<https://reinherit-hub.eu/news/07fa5b02-9213-449d-adf3-6e0725736e69>

10. Workshop: *NextUs – Culture and Research Event*, Istituto e Museo degli innocenti, Florence, Italy, 5 December 2023

On December 5th, 2023, at the Istituto e Museo degli Innocenti in Florence, the ReInHerit Toolkit was showcased during "NexUs - Culture and Research" within the context of "NexUs | Culture and Research: Connections for Innovation". Marco Bertini, director of the Media Integration and Communication Center, presented research on the Cultural Heritage sector, focusing on the ReInHerit Toolkit, in a pitch titled "Human-centered approaches for accessibility in the cultural heritage domain". This event targeted cultural institutions, creative industries, startups, bank foundations, and other public and private institutions. Organized by the URTT Regional Technology Transfer Office in collaboration with the Regione Toscana Region of Tuscany, the event aimed to

promote technologies, knowledge, and methods to address key challenges. Throughout the day, attendees participated in discussions, pitches, presentations, and networking opportunities, engaging with the three key themes of Accessibility, Cultural Heritage Valorization, and Audience Development through interdisciplinary working sessions. The event facilitated collaboration among local stakeholders and policymakers, fostering sharing of ideas and collaboration to advance innovative solutions for the preservation and appreciation of cultural heritage.

<https://reinherit-hub.eu/news/872e485b-dd7f-4d01-a8f9-55d450845feb>

https://www.regione.toscana.it/-/evento_nexus

3.4 EUROPEAN CULTURAL TOURISM NETWORK (PA4)

1. **Conference:** *ECTN 2022 annual conference* (with ReInHerit sessions) titled '*Relaunching European Tourism through Cultural Heritage and Digitalisation*', Krk/Rijeka, Croatia, 19-20 October 2022

Speakers:

- Manos Vougioukas, ECTN
- Jasmin Sandriester, Uni-Graz
- Joern Harfst, Uni-Graz
- Marco Bertini, UNIFI (video)
- Polina Nicolaou, BoCCF (video)

ReInHerit session:

- Introduction to ReInHerit, Polina Nicolaou, Bank of Cyprus Cultural Foundation, Cyprus (video)
- Cultural Heritage Management Framework and Sustainable Cultural Tourism, Ema Makarun, ECTN
- ReInHerit Toolkit, Marco Bertini, University of Firenze, Italy (video)
- ReInHerit Digital Hub, Joern Harfst, Uni-Graz, University of Graz, Austria
- Smart Tourism Policy Implications, Manos Vougioukas, ECTN
- Discussion between 3 Horizon2020 projects (IMPACTOUR, SmartCulTour, ReInHerit), on the future of Sustainable Cultural Tourism, Cultural Heritage and Smart Destinations

Also, other sessions related to ReInHerit:

- Cooperation between museums and heritage sites
- Digitalisation - Smart Tourism Destinations

The 15th ECTN conference discussed the latest trends in the field of culture, heritage and sustainable tourism, including innovation, digitalisation, creativity and cultural tourism product development. The emphasis was on the important role of cultural heritage and digitalisation in relaunching the European tourism, following the pandemic crisis since 2020.

The conference aimed to explore major challenges, risks and opportunities for sustainable and responsible tourism development related to culture and heritage assets, as well as suggest practical steps for the development and promotion of cultural tourism products and services. The theme encompassed all forms of culture, including contemporary cultural expressions and all forms of cultural heritage.

Presenters were invited to showcase relevant experience, share their best practices, give detailed examples and provide practical recommendations to preserving, restoring, deploying and promoting culture and heritage values, with innovations for sustainable and responsible tourism development.

The following topics linked to cultural and heritage tourism were included:

- Cooperation between Museums and Cultural Heritage Sites (including European Heritage Label sites), in relation to the ‘ReInHerit’ Horizon2020 CSA
- Medieval Heritage and Archaeology (supported by EAA – European Association of Archaeologists)
- Digitalisation in Sustainable Cultural Tourism, towards Smart Destinations
- Transnational Thematic Tourism Products, including European Cultural Routes (involving at least two countries)
- Promoting European Heritage to Young Visitors and Travellers (in the framework of the ‘European Year of Youth 2022’).



2. Conference: *SmartCulTour H2020 project final conference*, participation in ‘*Culture as Catalyst: Redefining Cultural Tourism for Sustainable Destinations*’ with presentation titled ‘*Closing Plenary Policy Round Table on the future of cultural tourism*’, Brussels, Belgium, 24 May 2023

Speaker: Manos Vougioukas, European Cultural Tourism Network (ECTN)

While tourism encourages access to and appreciation for the extensive collection of European cultural heritage, there are important current and future challenges and opportunities to account for, such as overtourism, digital transition, green transition, workforce shortages, accessibility, etc. This closing session explored potential trends and needs from the point of view of visitors, industry, and policy in order to help provide a roadmap for sustainable cultural tourism development.

ECTN’s recommendations were on the following priority topics:

- Involving Innovative and Digital Media, inc. AR/VR, based on ReInHerit Horizon2020 CSA Digital Hub
- Synergies with Cultural Routes of the Council of Europe
- Promoting Creative Tourism based on Cultural & Creative Industries (CCIs)
- Synergies of Smart and Sustainable Tourism with European Heritage Label sites
- Enhancing Heritage Interpretation
- Climate Action (also through the Climate Heritage Alliance and UN SDG 11)
- Transformation towards ‘Smart Tourism’ and ‘Smart Destinations’, including Sustainability, Accessibility, Digitalisation, Culture and Creativity (linked to the Smart Tourism Capital EU initiative, with Pafos 2023 European Capital of Smart Tourism – ECTN Presidency).

3. Conference: *IMPACTOUR H2020 project final conference*, participation in: ‘*IMproving Sustainable Development Policies and Practices to access, diversify and foster Cultural TOURism in European regions and areas*’ with presentation titled: ‘*Charter for Sustainable Cultural Tourism and ReInHerit Horizon 2020 Coordination and Support Action*’, Madrid, Spain, 20-21 June 2023

Speaker: Manos Vougioukas, ECTN

Abstract

The ECTN ‘Charter for Sustainable Cultural Tourism’ was first proposed in 2014 with updates in 2016 and 2018 (the latter as a contribution by ECTN to the European Year of Cultural Heritage). This Charter is a statement of principles on regional policies and strategies which guide the development, planning, management, operations and promotion of cultural and heritage tourism in the European Union and beyond, for the benefit of destinations, host communities, businesses, citizens and visitors. The Charter provides the basis for developing appropriate cultural tourism strategies at all levels, which considers economic, environmental and social sustainability of tourism linked to culture, heritage and creativity. It also provides guidance or best practices for cultural heritage and tourism strategy development.

There is a need to update the Charter given that several important developments took place in the past 5 years, including the post-pandemic relaunching of European tourism. Moreover, the digital transition has to be fully incorporated, as well as skills, resilience, smart tourism and governance. The above are strongly related to the ReInHerit Horizon 2020 Coordinaton and Support Action. The ReInHerit Digital Hub includes several resources (Toolkit, Webinars, Podcasts, Fact Sheets, Exhibitions, Games, Best Practices) that will be included in the updated Charter.

4. Conference: *International Conference on Cultural Tourism Advances (ICCTA)*, participating with presentation titled: *Cultural heritage management framework for enhanced cooperation between museums and cultural heritage sites – ReInHerit aspects*, KUL, Brussels, Belgium, 27-28 June 2023

Speaker: Manos Vougioukas, ECTN

Abstract

Guidelines for Cultural Heritage Management, with the special focus on digital technologies and communication between museum and heritage sites, and the synergies with sustainable cultural heritage tourism development and promotion in Europe. Based on several documents produced within 'ReInHerit' Horizon2020 CSA: Primary research that consists of Focus Groups and in-depth interviews with heritage professionals, and Questionnaires survey of both heritage professionals and visitors, as well as secondary research literature review. The Guidelines are meant to help comprehend the complexity of the sector that is constantly changing and to address some of the main cultural heritage management tasks, with a special focus on the pandemic period and post-pandemic regeneration; needs and challenges regarding the work of cultural heritage institutions/organizations, relation between the stakeholders, collection management, local community engagement, audience development, cultural tourism engagement, digital technologies, marketing, financing instruments and visitors' involvement. This sustainable cultural tourism aspects related to the above topics are presented, augmented by consultation with senior officers of 20 tourist destination authorities (ECTN members), tourist boards and associations, local and regional authorities' destination management organisations). The implications for 'smart tourism' and 'smart destinations' are also outlined.

KEY WORDS: cultural heritage management, cultural tourism, heritage tourism, sustainable tourism, smart tourism, tourism development, tourism promotion



5. Conference: *ECTN 2023 annual conference* (with ReInHerit theme and session), 'Smart Tourism – Smart Destinations: Cultural Heritage and Creativity, Digitalisation, Sustainability, Paphos, Cyprus, 18-21 October 2023

Pafos 2023 European Capital of Smart Tourism

Speakers:

- Manos Vougioukas, ECTN
- Polina Nicolaou, BoCCF
- Andrea Oratiou, BoCCF
- Jasmin Sandriester, Uni-Graz
- Jordi Tresserras, ECTN
- Jaime Lopez, Arte Sostenible

ReInHerit Sessions:

- Digitalisation – Smart Tourism
- Horizon2020 Cultural Tourism Projects (SPOT, IMPACTOUR, SmartCulTour, Be.CULTOUR, TExTOUR)

Abstract

The ECTN 2023 Conference was organised in the framework of [Pafos 2023 European Capital of Smart Tourism](#), the [European Year of Skills 2023](#), the [ReInHerit](#) Horizon 2020 Coordination and Support Action (CSA) and the '[Transition Pathway for Tourism](#)' co-implementation (European Commission DG GROW).

The 16th ECTN conference with main theme 'Smart Tourism - Smart Destinations: Cultural Heritage & Creativity, Digitalisation, Sustainability' discussed the latest trends in the field of culture, heritage, smart and sustainable tourism, including innovation, creativity and cultural tourism product development. The emphasis will be on the important role of cultural heritage and digitalisation in smart tourism and smart destinations. The conference explored major challenges, risks and opportunities for smart, sustainable and responsible tourism development related to culture and heritage assets, as well as suggest practical steps for the development and promotion of cultural tourism products. The theme encompasses all forms of culture, including contemporary cultural expressions, all forms of cultural heritage and smart solutions. The conference included several presentations on aspects related to ReInHerit and other H2020 projects on cultural tourism.



6. Conference: *CulTourData COSME project final conference*, participating in ‘*Supporting Data-driven innovation for tourism SMEs in European Capitals of Culture*’ with presentation titled: ‘*Charter for Sustainable Cultural Tourism Updating -ReInHerit Horizon2020 Coordination and Support Action Digital Hub*’, 10-11 January 2024

Speaker: Manos Vougioukas, ECTN

Abstract

Synergies between tourism, culture, and innovation through a data-driven approach. Exploring the pivotal role of incorporating data and analytics into tourism business strategies as well as in urban and regional development. Initiative that forges connections between tourism destinations and small to medium-sized enterprises (SMEs). CulTourData specifically targets European Capitals of Culture, extending the event's impact over a decade – from the initial bid to a lasting legacy. Co-creation process with tourism SMEs, fostering sustainable tourism and development. Shaping the future of European cultural tourism, where every connection and insight contributes to an enduring legacy. ECTN’ contribution regarding the updating of the Charter for Sustainable Cultural Tourism in 2024 (10 years after its launch), including data, analytics and smart solutions. Inputs from and synergies with the ReInHerit Horizon 2020 CSA Digital Hub.

3.5 UNIC (PA5)

- 1. Conference:** *Combating the illicit trade in cultural Objects: Interdisciplinary challenges and new perspectives of EU law and policy*, Opole, Poland, 13 May 2022.

Paper abstract: *Cultural Heritage Management for Museums and the Illicit trade in cultural objects*

Keynote speakers: Irini Stamatoudi, Konstantinos Roussos

Abstract

Cultural Heritage Management (CHM) is the main vehicle for helping museums to face challenges, secure sustainable competitiveness, and redefine themselves in a constantly changing world. In this context, CHM can support museums to play a vital role in fighting illicit trafficking of cultural property, through processes such as collection management, due diligence, provenance research, cooperation with law enforcement agencies, international cooperation and networking, education, and training. This paper discusses how museums can benefit from the various advantages offered by CHM in developing policies that can foster trust and transparency. In this context, the issue of the 'universal museum' will also be examined to the extent that it may work as a legitimising factor to antiquities acquired under conspicuous circumstances and without any proper due diligence. In fact, in the light of the recent developments concerning major restitution cases from various museums in the world, this paper discusses a shift from the universal towards the 'ecumenical museum', i.e., a museum that may not combine examples of different civilisations but which is relevant to humanity. The ecumenical museum promotes the unity of culture (i.e., preservation of heritage for the humanity) through the respect of national identities, cultural diversity, and multiculturalism. It emphasises on ethics, by bringing museums in line with the ICOM Code of Ethics for Museums, and by supporting an ethical engagement with communities around the world.

This work derives from the research project Redefining the future of cultural heritage, through a disruptive model of sustainability (ReInHerit), which has received funding from the European Union's Horizon 2020 research and innovation program.

2. **Conference:** *EUROMED 2022: Workshop "Data Space in Cultural Heritage during the digital transformations: the case of Greece and Cyprus"*, Limassol Cyprus, 7-11 November 2022, <https://euromed2022.eu/>

Paper abstract: *Sustainable Management Model for Museums and Cultural Heritage Institutions*, 8 November 2022, Limassol Cyprus, <https://euromed2022.eu/workshops/>

Keynote speakers: Irimi Stamatoudi

Abstract

The presentation will discuss copyright issues pertaining to the digitization of cultural heritage materials. We shall first discuss what constitutes the subject matter of protection, which may vary from writings and works of art to works of architecture, photographs, audiovisual works, 3D models and so on. We will then examine the prerequisites for their protection. We shall then proceed with the content of protection and how this is relevant to digitisation, including relevant exceptions and limitations, and lastly, we shall focus on methods of enforcement of such protection and tips for the effective transfer of rights and the avoidance of infringing third party rights while digitising cultural heritage material.

Keynote Speech: *Copyright issues pertaining to the digitization of cultural heritage materials (Keynote Speech)*, 9 November 2022, Limassol Cyprus

Speaker: Irini Stamatoudi

Abstract

The presentation will discuss copyright issues pertaining to the digitization of cultural heritage materials. We shall first discuss what constitutes the subject matter of protection, which may vary from writings and works of art to works of architecture, photographs, audiovisual works, 3D models and so on. We will then examine the prerequisites for their protection. We shall then proceed with the content of protection and how this is relevant to digitisation, including relevant exceptions and limitations, and lastly, we shall focus on methods of enforcement of such protection and tips for the effective transfer of rights and the avoidance of infringing third party rights while digitising cultural heritage material.

3. **Conference:** *3rd International Conference on TRANSDISCIPLINARY MULTISPECTRAL MODELLING AND COOPERATION FOR THE PRESERVATION OF CULTURAL HERITAGE. Recapturing the World in Conflict through Culture, promoting mutual understanding and Peace, Athens, Greece, 20-23 March 2023, <https://www.tmm-ch.com/>*

Keynote speakers: Irini Stamatoudi, Konstantinos Roussos

Abstract

Cultural Heritage Management (CHM) is the main vehicle for helping museums and cultural heritage (CH) institutions to face challenges, secure sustainable competitiveness, be resilient to climate change, natural hazards and pandemic risks, and redefine themselves in a constantly changing world. The paper will present a state-of-the-art management model for museums and CH institutions that takes into account the latest developments in the field. It aims to bring forward the main issues that need to be taken into account in a CHM Plan and a) explores current state-of-affairs of professional practice in the CH sector across Europe, b) offers clear and concise information on the CH sector needs, challenges and bottlenecks, and c) eventually, provides measures in the form of practical recommendations that need to be taken into account so as to develop long-term cultural policies and strategies within the digital transformation and innovation context in order for museums and CH institutions to be relevant to contemporary societies. This model has been developed in the context of the research project “Redefining the future of cultural heritage, through a disruptive model of sustainability” (ReInHerit), which has received funding from the European Union’s Horizon 2020 research and innovation program (<https://www.reinherit.eu/>). More specifically this model aspires to disrupt the current status quo of communication, collaboration, and innovation exchange between museums and heritage sites. The ReInHerit project proposes an innovative and inclusive model of sustainable heritage management, through which a dynamic network will be born; this network will comprise of CH professionals, innovation and CH solution tech experts, researchers, national museums, regional and local museums, and representative managers of Heritage Label sites.

4. **Conference:** *The 8th Petar Šarčević International Scientific Conference “Cultural Heritage and Legal Regulation: From Global Aspirations to Local Challenges”*, University of Rijeka, Faculty of Law/online, 5-6 October 2023.

Keynote speakers: Irimi Stamatoudi, Konstantinos Roussos

Paper abstract: *A Cultural Heritage Management Plan for Museums*

Abstract

The paper will present a state-of-the-art management model for museums and cultural heritage (CH) institutions that takes into account the latest developments in the field. It aims to a) offer clear and concise information on the CH sector needs, challenges and bottlenecks, and b) provide some practical recommendations that need to be taken into account so as to develop cultural policies and strategies within the digital transformation and innovation context. This model is developed in the context of the research project “Redefining the future of cultural heritage, through a disruptive model of sustainability” (ReInHerit - <https://www.reinherit.eu/>).

5. **Conference:** *International conference Cultural heritage, innovation and sustainable development: the contribution of ReInHerit, Hellenic Committee of the Blue Shield*, Athens, Greece, 27 November 2023

Keynote speakers: Irimi Stamatoudi, Konstantinos Roussos

Paper abstract: *A Cultural Heritage Management Plan for Museums*

Abstract

The paper will present a state-of-the-art management model for museums and cultural heritage (CH) institutions that takes into account the latest developments in the field. It aims to a) offer clear and concise information on the CH sector needs, challenges and bottlenecks, and b) provide some practical recommendations that need to be taken into account so as to develop cultural policies and strategies within the digital transformation and innovation context. This model is developed in the context of the research project “Redefining the future of cultural heritage, through a disruptive model of sustainability” (ReInHerit - <https://www.reinherit.eu/>).

6. **Conference:** *Concluding the ReInHerit Project: Results and Outcomes Towards a Sustainable Future*, BoCCF, 16-19 January, Nicosia, Cyprus.

Abstracts of papers:

- i) *IP Management for Museums and Cultural Heritage Institutions*

Speaker: Irimi Stamatoudi

Abstract

This presentation will deal with issues of IP Management concerning Museums and Cultural Heritage Institutions. It will essentially focus on how museums can benefit most from their intangible assets and how they can ensure that they do not infringe third-party rights. It will also refer to issues of raising awareness, education, and dissemination of content.

ii) *Cultural Heritage Management Plan and Audience engagement*

Speaker: Konstantinos Roussos

Abstract

Cultural Heritage Management (CHM) is the main vehicle for helping museums to face challenges, secure sustainable competitiveness, be resilient to climate change, natural hazards and pandemic risks, and redefine themselves in a constantly changing world. This presentation aims to a) emphasize the critical role of CHM for museums, b) bring forward the main issues and principles that need to be taken into account during the drafting procedure of a CHM plan, and c) discuss how museums can attract young audiences. This study has been developed in the context of the research project “Redefining the future of cultural heritage, through a disruptive model of sustainability” (ReInHerit), which has received funding from the European Union’s Horizon 2020 research and innovation program (<https://www.reinherit.eu/>).

7. **Conference:** *ICCHMMA 2024: 18th International Conference on Cultural Heritage Management, Museology and Archaeology*, 26-27 February 2024, Tokyo, Japan,

Keynote speakers: Irini Stamatoudi, Konstantinos Roussos

Paper abstract: *A sustainable model of Cultural Heritage Management for Museums and cultural heritage institutions*, <https://publications.waset.org/abstracts/171061/a-sustainable-model-of-cultural-heritage-management-for-museums-and-cultural-heritage-institutions>

Abstract

Cultural Heritage Management (CHM) is the main vehicle for helping museums and cultural heritage (CH) institutions to face challenges, secure sustainable competitiveness, be resilient to climate change, natural hazards and pandemic risks, and redefine themselves in a constantly changing world. The paper will present a state-of-the-art management model for museums and CH institutions that takes into account the latest developments in the field. It aims to bring forward the main issues that need to be taken into account in a CHM Plan and a) explores current state-of-affairs of professional practice in the CH sector across Europe, b) offers clear and concise information on the CH sector needs, challenges and bottlenecks, and c) eventually, provides measures in the form of practical recommendations that need to be taken into account so as to develop long-term cultural policies and

strategies within the digital transformation and innovation context in order for museums and CH institutions to be relevant to contemporary societies. This model has been developed in the context of the research project “Redefining the future of cultural heritage, through a disruptive model of sustainability” (ReInHerit), which has received funding from the European Union’s Horizon 2020 research and innovation program (<https://www.reinherit.eu/>). More specifically this model aspires to disrupt the current status quo of communication, collaboration, and innovation exchange between museums and heritage sites. The ReInHerit project proposes an innovative and inclusive model of sustainable heritage management, through which a dynamic network will be born; this network will comprise of CH professionals, innovation and CH solution tech experts, researchers, national museums, regional and local museums, and representative managers of Heritage Label sites.

3.6 CONSORZIO MATERAHUB INDUSTRIE CULTURELLE CREATIVE (PA6)

1. **Conference:** *Magma Fest*, organizer Materahub, 24-25 November 2023

Abstract

Magma Fest is an annual Materahub event about how innovation can be generated by facilitating collaboration among artists, new technology experts, creatives, and tourism and cultural workers. Materahub was also among the speakers of day 2 of the event (*Exploring Innovation for Culture*), we hosted Paolo Mazzanti from UniFirenze and he gave a keynote on Experiences of Hybridation exploring how this topic was covered in Reinherit in particular on the research on user experience in museum through innovation and technologies, presenting the app developed for Reinherit.

More info at:

<https://www.magmafest.it/>

<https://www.materahub.com/magma-fest-2023-report/>

2. **Conference:** *BlueShield Conference* – participation in ‘*Cultural heritage, innovation and sustainable development: the contribution of ReinHerit*’, Athens, Greece, 27 November 2023

Speaker: Giusy Cardia

Abstract

Materahub was presented by Researcher Giusy Cardia, who gave a presentation on SMEs and cultural economy and a second one on culture and circular economy. In both topics Cardia covered the potential of culture to foster the development of local economy making it more green, sustainable and inclusive but also on how culture and cultural professionals are able to foster innovation in other sectors.

<https://www.hellenicblueshield.com/en/cultural-heritage-innovation-and-sustainable-development-the-contribution-of-re%ce%b9n%ce%b7erit-2/>

- 3. Conference:** *CulTourData Final Conference*, Materahub was the organiser of the conference and coordinator of the project, Chemnitz, Germany, 10-11 January 2024

Abstract

CulTourData Final Conference explores the pivotal role of incorporating data and analytics into tourism business strategies as well as in urban and regional development.

On day 2 Manos Vougiakis from ECTN gave a keynote on cultural tourism in ECoC and presented, among the projects under implementation Reinherit and its unique approach to co-creation of experiences involving stakeholders from local audiences and experts of cultural heritage.

More info at:

<https://reg.eventmobi.com/cultour-data-final-conference-en>

- 4. Conference:** *"Concluding the ReInHerit Project: Results and Outcomes Towards a Sustainable Future"*, Materahub participated with a presentation on *"Skills development of professionals in cultural heritage. The case study of EUHeritage initiative"*, Nicosia, Cyprus, 16-18 January 2024

Speaker: Giusy Cardia

Abstract

"Cultural Heritage, as all cultural and creative sectors, are facing a series of challenges posed by the relationship with technologies, innovation and the potential of exploitation of the inner value of cultural assets to be exploited by cooperation and cross-contamination with other sectors in culture and outside culture. In this scenario professionals of the sector have been asked to develop new competences. We will explore an initiative who tried to explore these new competences and design a training program to fill the gaps."

3.7 IDRYMA NIKOLAOU AND DOLLIS GOULANDRI – MOUSEIO KYKLADIKIS TECHNIS (PA7)

- 1. Conference:** *"Inclusive Museums. Museum experiences for people with hearing impairments"*, organised by the Archaeological Museum of Thessaloniki, European project SignGuide, Thessaloniki, Greece, 2 June 2023

Key Speaker: Marina Plati

Abstract

The Museum of Cycladic Art had the opportunity to raise awareness on the aims and goals of ReInHerit among key stakeholders in the field of education, culture and technology and explore future collaborations. Special reference was made to the accessibility actions taken by the Museum of Cycladic Art in the framework of the ReThinking exhibitions of the ReInHerit project among other activities of the museum which promote inclusion and sustainability.

- 2. Conference:** *“The right to accessibility in museums and the ReInHerit project”, ‘Cultural Heritage, Innovation and Sustainable Development: The contribution of ReInHerit’*, organized by the Hellenic Committee of the Blue Shield, 27 November 2023

Key Speakers: Nefeli Bantela (Museum of Cycladic Art) and Andrea Oratiou (Bank of Cyprus Cultural Foundation).

Abstract

The presentation focused on the importance of accessibility in museums for all and presented the accessibility and inclusion actions which are in place at the Museum of Cycladic Art in Greece. The second part of the presentation presented certain activities which made ReInHerit's exhibitions more accessible and also suggested policy recommendations for more accessible museums in the future.

*In February 2024, the Museum of Cycladic Art, along with UNIC and ICOM Greece, will host at the premises of ICOM Greece an event and roundtable discussion with museum and CH professionals in key positions raising awareness on ReInHerit and its results.

3.8 UNIVERSITY OF GRAZ (PA8)

- 1. Conference:** *Regions in Recovery Second Edition 2022 - Re-imagining Regions*, participation with presentation on *‘A driver of growth? The role of heritage institutions in small and medium-sized towns’*, RSA Online, 1 April 2022

Speaker: Jörn Harfst

Abstract

The role of cultural heritage in connection to regional development has been much stressed in the last decades (Lykogianni et al., 2019), even seen by some as a driver of local growth (Gustafsson, 2019). While these findings are mostly associated with urban settings, some studies have also raised the issue in the context of small and medium-sized towns (Hristova et al. 2015).

Accordingly, local and regional heritage institutions should play an important role in providing outreach and multiplier effects in regard to promoting cultural heritage, fostering local awareness and identities, as underlying pre-condition to valorise cultural assets. Nevertheless, this raises the question if heritage institutions can actually fulfil this role, esp. when situated outside the urban context and major tourist attractions, where such institutions often have even smaller capacities and resources (Capriotti, 2010).

Drawing on preliminary results from the EU's ReInHerit and SPOT projects (grant no. 101004545 and 870644), this contribution will shed a light on the challenges of local heritage institutions in small and medium-sized towns, questioning their attributed role of generating local growth incentives around cultural assets.

References

- Capriotti, P. (2010): Museums' communication in small- and medium-sized cities. *Corporate Communications: An International Journal*, 15 (3), 281-298.
- Gustafsson, C. (2019): CONSERVATION 3.0 Cultural Heritage as a driver for regional growth. *Sci. Res. Inf. Technol.*, 9, 21–32.
- Hristova, S., Dragičević Šešić, M., Duxbury, M. (eds.) (2015): *Culture and Sustainability in European Cities*. Routledge: London.
- Lykogianni, E., Airaghi, E., Krohn, C., Vanhoutte, C. (2019): Material Cultural Heritage as a Strategic Territorial Development Resource: Mapping impacts through a set of common European socio-economic indicators. *Working Paper*. ESPON EGTC: Luxembourg.

- 2. Conference:** AESOP 2022 Congress 'Space for Species: Redefining Spatial Justice', participation with presentation on "Cultural heritage a driver of sustainable development in peripheral region? Observations from Austria", Tartu, Estonia, 25-29 July 2022

Keynote speakers: Jörn Harfst, Sandriester, Jasmin

Abstract

Heritage, especially under the cover of Europeanisation, has become an essential strategy in EU place-based policies in recent years (e.g. Faro Convention). Its valorisation through tourism is no new concept, yet the focus recently seems to have shifted towards immaterial goods (Petronela, 2016). This offers new opportunities and prospects for the development of a society, for its identity and belonging (Gustafsson 2019). Especially regarding rural and peripheral regions, literature often ascribes the valorisation of cultural heritage to an important role; both in the preservation of heritage and a more sustainable, general regional development (e.g. Yilmaz & Yilmaz, 2019).

Drawing on results from two Horizon projects, this article will re-assess the role of cultural heritage in regional development along a peripheral case-study region from Austria (Harfst et al., 2021). Here, industrial remains form an important part of cultural heritage, which affects potential visitors as well as inhabitants (Vargas-Sánchez, 2015). Based on a qualitative analysis, this contribution will discuss the importance of industrial heritage in the context of sustainable regional development. It will

highlight, especially, its social value for fostering regional identity and appreciation for its cultural heritage, which benefits social cohesion.

This contribution is based on the European Union's SPOT and ReInHerit projects, funded by the European Union's Horizon 2020 programme (www.spotprojecth2020.eu and <https://www.reinherit.eu/>).

Keywords: cultural heritage; peripheral areas; regional development; sustainability; industrial tourism

References

Gustafsson, C. (2019): Conservation 3.0 – Cultural heritage as a driver for regional growth. In: *Scientific Research and Information Technology*, 9, 1, p. 21-32.

Harfst, J., Sandriester, J., Fischer, W. (2021): Industrial Heritage Tourism as a Driver of Sustainable Development? A Case Study of Steirische Eisenstrasse (Austria). *Sustainability*, 13, 3857

Petronela, T. (2016): The Importance of the Intangible Cultural Heritage in the Economy. *Procedia Econ. Financ.*, 39, 731–736.

Vargas-Sánchez, A. (2015): Industrial Heritage and Tourism: A Review of the Literature. In: Emma Waterton; Steve Watson (Eds.): *The Palgrave Handbook of Contemporary Heritage Research*. Basingstoke: Palgrave Macmillan, p. 219-233.

Yilmaz, E., Yilmaz, E. (2019): The Role and Importance of Rural Tourism on the Development and Promotion of Cultural Heritage Tourism. In: Surabhi Srivastava (Ed.): *Conservation and Promotion of Heritage Tourism*. Hershey: IGI Global, p. 108-126

Available via <https://proceedings.aesop-planning.eu/index.php/aesopro/issue/view/13>

- 3. Conference:** *European Regions Week 2022; The ReInHerit Digital Hub*, participation with presentation, Brussels, Belgium, 10-13 October 2022

Speaker: Chiara Zuanni

Abstract

No abstract required.

- 4. Conference:** *Relaunching European Tourism through Cultural Heritage and Digitalisation, Cooperation between Museums and Cultural Heritage Sites*, participation with presentation, topic: *Cooperation between Museums and Cultural Heritage Sites*, ECTN, Kirk, Croatia, 20 October 2022

“A successful model? Small cultural heritage associations and its stakeholder network in peripheral regions in the case of the Styrian Iron Route”

- Competition, Light house model
- Mapping stakeholders

- Successful formats
- Internal evaluation
- Impact on tourism/regional development
- Evaluation

Speaker: Jörn Harfst

Abstract

The role of cultural heritage in connection to regional development has been much stressed in the last decades (Lykogianni et al. 2019), even seen by some as a driver of local growth (Gustafsson 2019). While these findings are mostly associated with urban settings, some studies have also raised the issue in the context of small and medium-sized towns (Hristova et al. 2015). Nevertheless, visibility and budget issues are among the many challenges small cultural heritage institutions in peripheral areas have to face (Capriotti 2010).

In these challenging settings, cooperation between heritage institutions have been often identified as a key to a better use of resources available (Harfst et al. 2021). Yet, not all cooperation forms may be benefiting every partner involved, as further challenges like co-opetition (Pasquinelli 2012) and management issues may arise. Especially big players might be overshadowing smaller ones (see 'lighthouse model', Pröbstl-Haider 2014) and therefore minimizing added value. Also, as a non-profit institution, commitment is a crucial factor and not being able to pursue a top-down strategy another barrier.

Against this background this contribution will discuss along an Austrian case-study the networking between heritage institutions in peripheral regions. Building on research conducted in the Horizon2020 SPOT and ReInHerit projects, it will be pointing out challenges and weaknesses related to its location and cooperation forms. Further, it will analyze the impact on this networking for a more sustainable regional development in general.

Keywords: Cultural heritage, associations, stakeholder network, peripheral regions, sustainable regional development, cooperation forms

References

- [Capriotti, P.](#) (2010): Museums' communication in small- and medium-sized cities. In: [Corporate Communications: An International Journal](#), 15 (3), 281-298.
- Harfst, J.; Sandriester, J.; Fischer, W. (2021): Industrial Heritage Tourism as a Driver of Sustainable Development? A Case Study of Steirische Eisenstrasse (Austria). In: *Sustainability*, 13, p. 3857. <https://doi.org/10.3390/su13073857>
- Hristova, S.; Dragičević Šešić, M.; Duxbury, M. (2015): Culture and Sustainability in European Cities. London: Routledge.

Lykogianni, E.; Airaghi, E.; Krohn, C.; Vanhoutte, C. (2019): Material Cultural Heritage as a Strategic Territorial Development Resource: Mapping impacts through a set of common European socio-economic indicators. *Working Paper*. ESPON EGTC: Luxembourg.

Pasquinelli, C. (2012): Competition, cooperation and co-opetition: unfolding the process of inter-territorial branding. In: *Urban Research & Practice*, S. 1-20.

Pröbstl-Haider, U.; Melzer, V.; Jiricka, A. (2014): Rural tourism opportunities: strategies and requirements for destination leadership in peripheral areas. In: *Tourism Review*, 69, 3, p. 216–228.

- 5. Conference:** *Relaunching European Tourism Through Cultural Heritage and Digitalisation*, participation with presentation, topic: *Digitalization in Sustainable Cultural Tourism, towards Smart Destinations*, ECTN, Kirk, Croatia, 20 October 2022

Digitalization in cultural heritage tourism as a game changer for peripheral regions? Aiming for sustainable regional development in the case of the Styrian Iron Route.

Speaker: Jasmin Sandriester

Abstract

COVID has severely affected tourism (Sandriester et al., forthcoming), showcasing the sector's weaknesses and raising voices for a more sustainable and smart future. Especially the cultural heritage sector was hit hard, as not only small institutions saw themselves confronted with closure but also well-known representatives seemed to struggle. Additionally, an increasingly important challenge for museums constitutes the issues of relevance and attracting a younger audience. Thereby, smart digital solutions, often perusing a gamification approach, seem a promising and efficient tool (O'Connor et al. 2020).

In contrast to urban cores, peripheral areas hereby do not possess such an easily accessible concentration of cultural assets. Meaning, the relevance of the attraction must be high enough for the visitors to overcome certain distances (Hall 2006). Further, the small structured, often privately run institutions do not have the same resources and know-how. Yet, cultural heritage is still seen as a popular tourism form in peripheral areas (Dey et al. 2020) and a tool for fostering sustainable regional development (Harfst et al. 2021).

Drawing on research insights from the Horizon2020 SPOT and ReInHerit projects, this contribution takes a closer look at the possible impact of digitalization for the cultural heritage sector in more peripheral areas based on an Austrian case-study. It will further question its role of heritage institutions in enabling sustainable development and creating an added touristic value.

References

Dey, B.; Mathew, J.; Chee-Hua, C. (2020): Influence of Destination Attractiveness Factors and Travel Motivations on Rural Homestay Choice: The Moderating Role of Need for Uniqueness. In:

International Journal of Culture, Tourism and Hospitality Research 14, 4, p. 639–66.
<https://doi.org/10.1108/IJCTHR-08-2019-0138>.

Hall, C.M. (2006): North-South Perspectives on Tourism; Regional Development and Peripheral Areas. In: *Tourism in Peripheries: Perspectives from the Far North and South*, edited by Dieter K. Müller and Bruno Jansson, p. 19–38.

Harfst, J.; Sandriester, J.; Fischer, W. (2021): Industrial Heritage Tourism as a Driver of Sustainable Development? A Case Study of Steirische Eisenstrasse (Austria). In: *Sustainability*, 13, p. 3857.
<https://doi.org/10.3390/su13073857>

O'Connor, S.; Colreavy-Donnelly, S.; Dunwell, I. (2020): Fostering Engagement with Cultural Heritage Through Immersive VR and Gamification. In: Liarokapis, F., Voulodimos, A., Doulamis, N., Doulamis, A. (eds) *Visual Computing for Cultural Heritage*. Springer Series on Cultural Computing. Springer, Cham. https://doi.org/10.1007/978-3-030-37191-3_16

Sanriester, J.; Kern, C. Harfst, J. (forthcoming):_The impact of the COVID-19 crisis on tourism development in peripheral areas in Austria. In: *Tourism, Culture & Communication*. Special Issue on Cultural Tourism Dynamics During a Pandemic.

Keywords: Digitalization, cultural heritage tourism, peripheral regions, sustainable regional development

6. Conference: 27th *International Conference on Cultural Heritage and New Technologies*, participation with presentation, topic: *The H2020 ReInHerit Project and its Digital Hub*, Vienna, Austria, 10 November 2022

Redefining the future of cultural heritage, through a disruptive model of sustainability

Speaker: Chiara Zuanni (CHNT Reference: Zuanni, C. 2022). ‘The H2020 ReInHerit Project and its Digital Hub. Redefining the future of cultural heritage, through a disruptive model of sustainability’, in CHNT Editorial board. *Proceedings of the 27th International Conference on Cultural Heritage and New Technologies*, November 2022. Heidelberg: Propylaeum.

The H2020 ReInHerit project is a 3-years project (2021-2024), funded under the EU Horizon programme (grant agreement no 101004545). It is led by the Bank of Cyprus Cultural Foundation and it includes 11 other partners (Arte Sostenible, Spain; MICC, University of Florence, Italy; European Cultural Tourism Network; School of Law, University of Nicosia, Cyprus; Materahub, Italy; Museum of Cycladic Art, Greece; ZIM and Institute of Geography, University of Graz, Austria; CYENS, Cyprus; Blue Shield, Greece; Arcada, Finland; Graz Museum, Austria).

ReInHerit aims to innovate the possibilities for communication, collaboration, and innovation exchange between museums and cultural heritage sites. It addresses both heritage stakeholders (museums, cultural tourism, policy makers) and their audiences, with the aim of developing a sustainable model for cultural heritage management. This model is based on primary research, on the development of a digital ecosystem with resources and possibilities of sharing experiences and experiment.

The project consists of 8 Work Packages, of which Work Package 2 (including a state-of-the-art review, surveys and focus groups), Work Package 3 (including the development of digital tools and webinars), Work Package 4 (including the Digital Hub and immersive performances), and Work Package 6 (including travelling and digital exhibitions) are of particular interest in regards of their contribution to digital heritage research. The results of WP2 research, the resources for professionals developed in WP3, and the exhibitions in WP6, will all be hosted on the ReInHerit Digital Hub, which has been developed by researchers at the University of Graz.

The Digital Hub, which has been launched in 2022 and will be enriched with content by all project partners during late 2022 and 2023, has been developed at the Centre for Information Modelling of the University of Graz. Chiara Zuanni is responsible for Work Package 4 and has coordinated the analysis of the requirements and the development process, while Sebastian Stoff has been the lead developer preparing the Digital Hub. Sina Krottmaier, Jörn Harfst, Jasmin Sandriester, and (since October 2022) Clemens Kröll have further contributed to the development of the Digital Hub.

The Hub includes a section targeted at heritage professionals, in which all the resources developed in the project will be presented with step-by-step guidance on their adoption and implementation. These resources will include mobile applications, using computer vision to foster engagement with museum collections (and a presentation of the key components of these apps and their use); a digital game (with guidance on the design process, the development of the story and its technical development); documentation of the two immersive performances produced within the project; recordings of the webinars and a presentation of the “best practices” emerging from the research. In parallel, the digital exhibitions, an online participatory collection, and an eShop will address a broader public. An open forum – with a flexible and adaptable structure – will foster communication and exchanges between the users of the ReInHerit resources, who will be able to receive support and present the results of their experiments with the ReInHerit Toolkit; and stakeholders addressed by the project.

This presentation will introduce the ReInHerit project and the Digital Hub, discussing the first results of the project and the possibilities for collaboration and participation in the ReInHerit Hub.

Funding

This project has received funding from the European Union’s Horizon 2020 Research and Innovation programme under grant agreement no 101004545.

References

(n.d.), ‘H2020. Redefining the future of cultural heritage, through a disruptive model of sustainability’, CORDIS Portal. Available at: <https://cordis.europa.eu/project/id/101004545/de> (Accessed: 07 October 2022).

ReInHerit.eu (2021), ReInHerit website. Available at: <https://www.reinherit.eu/> (Accessed: 07 October 2022).

7. Conference: *Archeologia condivisa. La ricerca per tutti* , Paper title: *Archeologia pubblica e comunicazione digitale: dalla ricostruzione virtuale all'archeologia partecipata*; participation with presentation, University of Bologna, Italy, 28 November 2022

Program via: <https://magazine.unibo.it/calendario/2022/archeologia-condivisa-2192-la-ricerca-per-tutti/archeologia-condivisa-2192-la-ricerca-per-tutti>

Archeologia pubblica e comunicazione digitale: dalla ricostruzione virtuale all'archeologia partecipata

Speaker: Chiara Zuanni (Karl-Franzens Universität Graz)

Abstract

Le ricostruzioni di un sito o di un contesto per fini di ricerca e presentazione al pubblico, sono state usate in archeologia per decenni. Negli ultimi anni, la maggiore accessibilità di tecnologie e di piattaforme, utili per la realizzazione e condivisione delle ricostruzioni digitali (anche con soluzioni di realtà aumentata e virtuale), ha moltiplicato le possibilità in questo campo. Tuttavia, queste ricostruzioni propongono anche una serie di questioni in relazione al loro potenziale per raggiungere ed interagire con pubblici diversi, alla loro attendibilità scientifica e alla loro sostenibilità. Questa presentazione discuterà una serie di esempi recenti, relativi a progetti europei (INTERREG Danube's Archaeological eLandscapes; H2020 ReInHerit), nazionali (Virtual Gipsmuseum in BMBWF DiTAH) e emersi da una ricerca su attività digitali nei musei durante i lockdown del 2020-2021. Saranno valutate le esperienze del pubblico e le conseguenze sulle pratiche e strategie digitali dei musei.

Nota biografica

Chiara Zuanni è un assistant professor in informatica umanistica, con un focus sulla museologia digitale, all'Università di Graz, Austria. Dopo la laurea in Lettere Classiche e la laurea magistrale in Archeologia del Mondo Antico a Bologna, ha conseguito un dottorato in Museologia all'Università di Manchester. Successivamente è stata assegnista di ricerca all'Università di Liverpool e nel dipartimento di ricerca del Victoria & Albert Museum a Londra, visiting professor all'Università di Bergamo, e dal 2018 lavora in Austria. La sua ricerca verte sull'uso di metodi digitali per la digitalizzazione, la modellazione e analisi dei dati, e la presentazione del patrimonio culturale nei musei, in parallelo allo studio dei pubblici digitali dei musei.

8. Conference: *Digital Art History Austria Network Event: 'H2020 Project ReInHerit'*, Graz, Austria, 28 February 2023

Speakers: Chiara Zuanni, Sina Krottmaier (ZIM)

Programme via: <https://www.darthist.at/newsreader/24-vernetzungstreffen-graz.html>

No abstract required.

9. Conference: *5th International Tourism Marketing Conference*, participating with presentation, topic: *A smart approach? Digitalization in the cultural heritage sector and its impacts on cultural tourism in peripheral regions*, Pecs, Hungary, 28 April 2023

Speakers: Sandriester, Jasmin, Bsc Msc, Jörn Harfst, Dipl.-Geogr. Dr., Wolfgang Fischer, Ass. Prof. Mag.phil. Dr.rer.nat.

Abstract

Today, digital outputs in the form of apps or platforms trying to enhance the visitor's experience became a standard in tourism related European projects. Also, in the cultural heritage sector, the discussion of digitalization is far from new, but has gained additional momentum due to the COVID-19 pandemic, especially in regard to the presentation and digital use of cultural objects and experiences, when access to those was limited (Strimmer 2021; Zuanni 2022). Thereby advantages of digital tools quickly emerged, as those, mostly bigger institutions, who had already invested in digitalization were still able to attract online visitors (Tan et al. 2021), while smaller ones, lacking possibilities related to costs, resources and technical know-how, were struggling to survive. This has triggered a vicious cycle, as it was found that especially those with financial difficulties were more likely to cut costs related to digitalization (Small 2020; Marty and Buchanan 2022). Therefore, facing disadvantages in a competitive market. Especially smaller cultural heritage institutions, a predominantly form in peripheral regions, often privately run, may not have the capacities to follow these trends, limiting forms of cultural heritage tourism and its visibility.

Therefore, this contribution aims at shedding light on both the opportunities and the limitations of digitalization in the cultural heritage sector in peripheral regions. Furthermore, it analyses the impact of digitalization on heritage institutions for enabling a more sustainable development and creating added touristic value.

Keywords: Cultural heritage, cultural tourism, digitalization, peripheral regions

Acknowledgements

The research is based on the Horizon2020 project ReInHerit (grant agreement no. 101004545).

Marty, P.F., Buchanan, V. (2022): Exploring the Contributions and Challenges of Museum Technology Professionals during the COVID-19 Crisis. In: *Curator the Museum Journal*, 65, p.117-133.

Small, Z. (2020): The pandemic was just the final straw: The hard-hit arts sector is facing a brain drain as ambitious workers seek greener pastures. Accessed on 15.12.2022 under <https://news.artnet.com/art-world/artindustry-brain-drain-1907518>

Strimmer U. (2021): Digital und partizipativ ins Museum. In: *Upgrade - Das Magazin für Wissen und Weiterdenken der Universität für Weiterbildung Krems*. Accessed on 15.12.2022 under [https://www.donau-uni.ac.at/de/aktuelles/upgrade-das-magazin-fuer-wissen-und-weiterdenken-der-universitaet-fuer-weiterbildung-krems/alle-ausgaben/upgrade-3-21-alles-\(k\)eine-kunst/digital-und-partizipativ-ins-museum.html](https://www.donau-uni.ac.at/de/aktuelles/upgrade-das-magazin-fuer-wissen-und-weiterdenken-der-universitaet-fuer-weiterbildung-krems/alle-ausgaben/upgrade-3-21-alles-(k)eine-kunst/digital-und-partizipativ-ins-museum.html)

Tan, GS. / Ab. Aziz, K. / Ahmad, Z. (2021): Ensuring Resilience Using Augmented Reality: How Museums Can Respond During and Post COVID-19? In: Geroimenko, V. (Hrsg.): Augmented Reality in Tourism, Museums and Heritage. Springer Series on Cultural Computing. Cham: Springer, p.195–210.
Zuanni, C. (2022): Museum connections during the COVID-19 pandemic. In: Archeostorie. Journal of Public Archaeology 4.

10. Conference: *2023 RSA Annual Conference Transforming Regions: Policies and Planning for People and Places*, participating with presentation, topic: *Cultural heritage, Digitalisation and the Periphery – The road towards a more sustainable regional development?*, Ljubljana, Slovenia, 14-17 June 2023

Speaker: Jasmin Sandriester

- What does digitalization mean and what impact does it have for cultural heritage institutions in peripheral areas?
- Can it be seen as a game changer?
- How can it contribute to a more sustainable direction?

Abstract

Cultural heritage and related tourism activities are pursued for long as a viable development option for more rural and peripheral regions. COVID has severely affected both the tourism and the cultural heritage sector, emphasizing the ongoing (need) for digitalization efforts in the cultural sector. While cultural heritage is a popular form of tourism in peripheral areas and digitalization in the sector is rapidly advancing, opening new opportunities; heritage institutions in the periphery often have limited capacities and resources. This makes digitalization efforts in such institutions usually a trade-off between other services.

Drawing on research insights from the Horizon ReInHerit project, this contribution takes a closer look at the possible impact of digitalization for the cultural heritage sector in more peripheral areas and their general transformation. The contribution will be based on an Austrian case-study. It will question its role of heritage institutions in enabling sustainable development by creating an added touristic value.

Keywords: Digitalization, cultural heritage tourism, peripheral regions, sustainable regional development

Conference: *Rural Geo 2023*, participating with presentation, topic: *'Digitalization in cultural heritage tourism as a game changer for peripheral regions? Insights from Austria'*, Groningen, The Netherlands, 26-29 June 2023

Speaker: Jörn Harfst

Abstract

Cultural heritage and related tourism activities are pursued for long as a viable development option for more rural and peripheral regions. COVID has severely affected both the tourism and the cultural heritage sector, emphasizing the ongoing (need) for digitalization efforts in the cultural sector.

While cultural heritage is a popular form of tourism in peripheral areas, heritage institutions in more rural and peripheral places are often smaller, privately run organizations. They usually lack resources and know-how, compared to many bigger, urban institutions. This makes digitalization efforts in such institutions usually a trade-off between other services.

Drawing on research insights from the Horizon ReInHerit project, this contribution takes a closer look at the possible impact of digitalization for the cultural heritage sector in more peripheral areas, based on an Austrian case-study. It will question its role of heritage institutions in enabling sustainable development by creating an added touristic value.

Keywords: Digitalization, cultural heritage tourism, peripheral regions, sustainable regional development

References

Capriotti, P. (2010): Museums' communication in small- and medium-sized cities. *Corporate Communications*, 15:3, 281-298.

Harfst, J., Sandriester, J., Zuanni, C., & Krottmaier, S. (2022): Digitalisierung und nachhaltiges Kulturerbe- Management. *Ökologisches Wirtschaften - Fachzeitschrift*, 37:4, 30–34.

Harfst, J.; Sandriester, J.; Fischer, W. (2021): Industrial Heritage Tourism as a Driver of Sustainable Development? A Case Study of Steirische Eisenstrasse (Austria). *Sustainability*, 13, 3857

Sandriester, J.; Kern, C. Harfst, J. (2022):_The impact of the COVID-19 crisis on tourism development in peripheral areas in Austria. *Tourism, Culture & Communication*. Special Issue on Cultural Tourism Dynamics During a Pandemic.

11. Conference: *ECTN Cultural Heritage*, participating with presentation, topic: *Digitalization, Cultural heritage and Regional Development. Impacts on peripheral regions*, Paphos, Cyprus, 18-21 October 2023

Keynote speaker: Ms Jasmin Sandriester, Mr Jörn Harfst

University of Graz, Department of Geography and Regional Science, Graz, Austria

Categories

1. Digitalisation advances and digital transition in Sustainable Cultural Tourism, including Smart Tourism and Smart Destinations initiatives closely involving culture and heritage

Abstract

Digitalization is deeply embedded in European strategies and by national governments often seen as an ideal tool for transformation and sustainability (Austrian Council for Sustainability, 2022). It further helps to address the sector's pressing needs as gaining relevance, reaching younger target groups and perusing a more inclusive approach. Yet, especially smaller institutions, dominant in

peripheral regions, often privately run, face a lack of staff as well as funding and do not possess the necessary technical-know how for a digital transformation. Further, peripheral regions often do not constitute a flourish environment for such institutions, due to location factors and related infrastructure but as importantly, the absence of a proper destination management (Lane et al, 2013). The implementation of digital strategies in the cultural heritage sector has been widely emphasized and its positive effects stressed in literature (Domínguez-Jiménez et al, 2021; Beel and Wallace, 2023; Cassidy et al. 2019; Fanea-Ivanovici, 2018). Also, the cultural institution's role in regional development proved to be an important one (Beel et al., 2014; Del Barrio-Tellado et al., 2023) and cultural heritage even seen as a driver of local growth (Gustafsson, 2019). Yet, the connection between cultural heritage institutions, digitalization and regional development has so far not been prominent in scientific literature, revealing a research gap, this contribution will address. It will further present empirical insight as well as discuss arising opportunities and challenges. The overall impact will be analyzed and success factors identified.

Keywords: Cultural heritage, regional development, peripheral regions, digitalization, sustainability

12. Conference: CaTCH – Capturing the Intangible of Cultural Heritage (organised by H2020 Projects VAST and INTAVIA), *The ReInHerit Digital Hub: #makeityourown, participating with presentation*, topics: "Values awareness through CH", "Approaches and technologies for cultural engagement", "Digital Technologies and inclusion in cultural heritage", "Artificial Intelligence and CH", Maribor, Slovenia, 23 October 2023

Speakers: Sina Krottmaier, Pamela Frasson, Chiara Zuanni

Keywords: cultural heritage management, digital hub, AI applications, collaboration, exhibitions

Abstract

The H2020 ReInHerit project is a 3-years project (2021-2024), funded under the EU Horizon programme (grant agreement no 101004545). ReInHerit aims to innovate the possibilities for communication, collaboration, and innovation exchange between museums and cultural heritage sites. The project addresses both heritage stakeholders (museums, cultural tourism, policy makers) and their audiences, with the aim of developing a sustainable model for cultural heritage management. This poster aims to present the project and its results, introducing the resources and possibilities for collaboration offered by the ReInHerit Digital Hub.

The project consortium includes partners from seven different countries, belonging to museums, cultural associations, policy networks, and universities. These diversity and far-encompassing experiences are also enhanced by the different fields of the involved researchers - including departments of computer science, digital humanities, ethnography, geography, and law - and by the types of museums - a private foundation with collections ranging from antiquity to the modern period; a museum of archaic Greek art; and an Austrian city museum. By bringing together this heterogeneous group of stakeholders, the project has developed a comprehensive examination of the multi-faceted and complex challenges cutting across the sector; it has developed a series of resources for supporting small and medium-size museums and heritage sites; and it has explored different approaches to interdisciplinary collaboration.

To foster this collaboration, a digital platform was created, presenting resources and results of the project - the ReinHerit Digital Hub (<https://reinherit-hub.eu/>). In this digital ecosystem, all stakeholders can experiment and share their experiences. Developed by the team at the Centre for Information Modelling, University of Graz, the Hub was launched in late summer 2022 and, as of autumn 2023, it has been enriched with a variety of content by all consortium partners.

This content includes thematic factsheets and webinars addressing current challenges and needs in cultural heritage management, especially in relation to the adoption of new technologies, and a toolkit consisting of a set of AI-driven apps – which enhances the museum-experience for visitors with applications drawing on a gamification approach and offering additional information on the objects, while the Toolkit also supports professionals with image retrieval and video restoration applications. Furthermore, Hub visitors can discover the documentation and the necessary applications of the two immersive performances developed in the project, using haptic and proximity-reactive audio installations to inform sounds and experiences during the events, as well as a videogame, in which players take on the role of a museum manager. Crucially, the applications are not only presented and promoted through the Hub – but they are also documented in detail so to enable further reuse and development.

Moreover, the model proposed by ReInHerit for collaboration in the cultural heritage sector has been piloted through an e-Shop, an online collection and three digital and travelling exhibitions on the themes of identities, craftsmanship, and conflicts – developed by the three partnering Museums. The choice of themes aimed to address contemporary social challenges, fostering reflection on visitors' attitudes and values in relation to questions of gender, immigration, traditions, local crafts, and conflicts. An interactive quiz – present both in the digital and in the travelling exhibitions – bridges physical and online visitors, showing their responses to provocations on these themes in a common map. Other museums are invited to contribute to the debate on these themes by adding their objects to an online collection, which also serves to encourage digitization of the collections.

In short, the Hub's information architecture addresses the needs of both professionals and visitors, presenting them with a broad range of content, all clearly documented so to enable other organisations to adopt and experiment with it. In this poster we will present the ReInHerit Digital Hub, its resources, and the possibilities for further collaboration. At the same time, we aim to contribute to the themes of the CaTCH conference with our experience in working on approaches to engagement with cultural heritage through new technologies – in particular artificial intelligence applications and their potential for the inclusion in the digital transformation of small and medium-size museums and their audiences.

Workshops

1. **Name of the workshop:** Digital Skills Culture & Creative Industries Workshop, titled: Digital Competences in Museums: from engagement to sustainability – hybrid, Politehnica University of Timișoara, Romania, 8 December 2023

No abstract required.

Short bio: Dr Chiara Zuanni is an assistant professor in Digital Museology at the University of Graz. She studied classics and archaeology in Italy and has a PhD from the University of Manchester. She worked at the University of Liverpool and at the Victoria and Albert Museum, before moving to Austria. She was local PI of the Erasmus+ DigiCulture, and she is currently local PI and WP leader for the H2020 project ReInHerit. Besides, she works on digitisation of museum collections, data-driven research in museums, digital curation, and digital audiences research in the cultural heritage sector.

Link to event page: <https://elearning.upt.ro/en/event/workshop-digital-skills-2023/>

3.9 RESEARCH CENTRE ON INTERACTIVE MEDIA, SMART SYSTEMS AND EMERGING TECHNOLOGIES – RISE LIMITED (PA9)

1. **Conference:** [IMET 2023](#), presentation titled: *ReInHerit a Museum: Enhancing Museum Experience and Broadening Audience Participation Through an Immersive Performance using Media-Art, and Augmented Reality, October 2023*

Authors:

Stefanos Papadas CYENS - Centre of Excellence

Andreas Papapetrou CYENS - Centre of Excellence

Fotos Frangoudes CYENS - Centre of Excellence, Cyprus and University of Cyprus, Cyprus

Alexis Polydorou CYENS - Centre of Excellence

Christodoula Gavriil CYENS - Centre of Excellence, Cyprus and University of Cyprus, Cyprus

Niki Kyriakou CYENS - Centre of Excellence, Cyprus

Kleanthis Neokleous CYENS - Centre of Excellence, Cyprus

Abstract

This paper delves into the immersive performance, “ReInHerit a Museum” held at the Bank of Cyprus Cultural Foundation. Through exploration and analysis of the conceptual framework and the audience’s interaction with an augmented-reality[1]based mobile application, it examines the ways in which artistic expressions blended with elements from emerging technologies aimed to enhance visitors’ experiences and engage a broader audience. By integrating interactive sound installations, live music performers, augmented reality, real-time generated visuals, and projection mapping, visitors immersed in a multisensory environment that deepens their understanding and emotional connection with cultural heritage. The performance, aimed to break away from traditional modes of spectatorship and encourage active participation and interaction, blending the limits between

observer and participant. All the material and documentation for the performance are made available for open access.

3.10 BLE ASPIDA (PA10)

1. **Conference:** *Cultural Property Protection Course*, participating with presentation of the ReInHerit project, Multinational Peace Support Education Center of the Hellenic Ministry of Defense in Kilkis, Greece, 5-9 September 2022

Speaker: Elena Korka

Abstract

The President of the Hellenic Committee of the Blue Shield, Mrs Elena Korka participated in the Cultural Property Protection Course (05 – 09 Sep 2022) of the Multinational Peace Support Education Center of the Hellenic Ministry of Defense in Kilkis. The President had the opportunity to present the ReInHerit Project and informed attendees concerning the project's mission, goals and scope of work.

2. **Conference:** CIMIC *"Cross Cutting Topics in Armed Conflicts"* seminar, participating with presentation of the ReInHerit project, organised by NATO, 18-19 October 2022.

Abstract

The aim of the seminar was to get military staff familiar with a range of topics, which affect a mission and fall outside of the military's primary responsibilities: Protection of Civilians, Cultural Property Protection, Children and Armed Conflicts, Women, Peace and Security and Building Integrity.

The seminar comprised a combination of dedicated lectures, carried out by the representatives of International Committee of Red Cross (ICRC) and Transparency International Greece, the President of the Hellenic Committee of Blue Shield, distinguished professors of the Academic community and NRDC-GR/Communication Division and LEGAD staff officers.

3. **Conference:** *Cultural Property Protection Course*, Multinational Peace Support Education Center of the Hellenic Ministry of Defense in Kilkis, Greece, 6-8 September 2023

Speaker: Elena Korka

Mrs Korka participated in the Cultural Property Protection Course (6 – 8 Sep 2023) of the Multinational Peace Support Education Center of the Hellenic Ministry of Defense in Kilkis, where she once again had the opportunity to present the ReInHerit Project. Dr Korka informed attendees concerning the latest developments and the progress of the project in order to disseminate the project's results and activities in the most effective way.

4. **Conference:** *"Cultural heritage, innovation and sustainable development: the contribution of ReInHerit"*, organised by Blue Shield, Athens, Greece, 27 November 2023

Abstract

The topics of this conference will be cultural heritage management and innovation in culture in the light of ReInHerit methodology and outcomes.

The Conference (hybrid model) aimed at bridging the project findings with the broader efforts of the international community within the framework of the Agenda 2030 and in the light of the 2022 MONDIACULT Declaration concerning the nexus of cultural heritage and sustainable development as well as European Commission's follow up, its Communication entitled "the cultural dimension of sustainable development in EU actions" released in December 2022, taking into account UN Secretary General's initiative on inclusive and networked multilateralism (focusing on cultural governance).

Our committee intended to engage a variety of stakeholders including Universities and research institutes, Ministries of Culture and Sports, Education, Foreign Affairs, international and civil society. The topics, chosen in close collaboration with the coordinator and the members of the consortium, covered the thematic axes of the ReInHerit project, and they had an impact both in terms of dissemination of the scientific results of the project and to gain valuable feedback from participants and various audiences. The post-conference survey conducted will also give us the possibility to have valuable feedback on the ReInHerit project.

At the opening session of the event, the President of the Hellenic Committee of the Blue Shield, Dr Elena Korcka extended to the attendees the welcome address of the Minister of Culture, Mrs. Lina Mendoni, and then delivered a welcome speech herself. Welcome addresses were also delivered by Mrs. Andrea Oratiou representing the Bank of Cyprus Cultural Foundation, which is the leading partner of the Project, and Mr. Fergus Maclaren, President of the International Cultural Tourism Committee of International Council on Monuments and Sites (ICOMOS). The ReInHerit partners had the opportunity to present their work, in the light of the sustainable development goals and in particular the pillars of social, economic, environmental sustainability, peace and security; areas which are inextricably linked to the goals of the project.

The conference also featured the following distinguished speakers:

- Alexandra Xanthaki, Professor, Brunel University London and UN special rapporteur in the field of cultural rights
- Dr Celia Martinez Yanez, International Council on Monuments and Sites (ICOMOS) International Committee on Cultural Tourism, ICOMOS Board Member
- Angela Gerekou, President, Greek National Tourism Organisation
- Amra Jaganjac, Head of the Tourism Board of the City of Tuzla, ECTN Board member, Bosnia and Herzegovina
- Morien Rees, Interim Chair of the ICOM Europe International Committee on Museums and Sustainable Development
- Mathew Trinca, Director, National Museum of Australia, Chair, Blue Shield Australia
- Peter Stone, President, The Blue Shield, UNESCO Chair in Cultural Property Protection and Peace · Newcastle University

- Aparna Tandon, ICCROM, Senior Programme Leader, First Aid and Resilience for Cultural Heritage in Times of Crisis Programme
- Višnja Kisić, Europa Nostra, Member of the Advisory Panel 7 MOST ENDANGERED programme
- Erik Kleijn, Head of Library and Archives Department, Cultural Heritage Agency, The Netherlands

3.11 YRKESHOGSKOLAN ARCADA AB (PA11)

1. **Conference:** *Artificial Intelligence Embraced: The future of the culture and creative sector.* Presentation titled: *Future Perfect in the Education and Research session Artificial Intelligence: impact on cultural policy, management, education, and research*, ENCATC, Helsinki Finland, 10-13 October 2023.

Role: Presenter of paper together with Tomas Träskman and Richard Sillin.

2. **Conference:** *“Cultural heritage, innovation and sustainable development: the contribution of ReInHerit”.* Presentation title: *ReInHerit: A Democratised and Inclusive Approach to Heritage*, International Conference Athens, Greece, November 27, 2023.

Role: Presenter (online).

Abstract

The teaching demonstration will present how we have used creative and material prompts to elicit information on digital technology use of young adults in museums of the future with students in Arcada. We organized a series of workshops where we created speculative imaginaries around the futures of digital tools and the museum environments they will be used in. These prompts were designed to help students imagine the future of digital innovations and their link to cultural heritage as part of something we create in our daily lives. They were also meant to initiate a thought process and discussion on what the museum of the future could look like, simultaneously encouraging them to imagine a radically different museum. Learning objectives of the teaching include 1. insight into future studies, 2. application of "research-creations" for better understanding of how to approach, think and enact technology in everyday life. The impetus for this theme were questionnaire results of the Horizon 2020 financed ReInHerit project, that Arcada is a partner of. The results indicated that young adults (18-29) were more likely, than older survey respondents, to use digital technologies while visiting museums. We were interested in knowing what role emerging digital technologies can in the future play in museums and how they would impact on the motivation of young adults to visit museums. An additional interest of ours was to get information on what types of digital technologies young adults imagine to be in use in the museums of the future. During the teaching demonstration there will be a presentation followed by a rapid workshop where participants can test the method of using creative and material prompts. The new and innovative angle of the teaching method is 1. The use of material and creative prompts as part of teaching, 2. Using student experiences and

perspectives to investigate future developments within the field of cultural management 3. Including students in on-going research, combined with using hands-on workshop-based methods as a means of tapping into their knowledge.

3. Conference: *Archeologies of Future Heritage: Research-Creations for Imagining Emerging Digital Technology in Museums*, Representing the ReInHerit project through the presentation of a paper in Panel 4: *Archeology at the Digital Research in the Humanities and Arts (DRHA2023) Conference Performing Cultural Heritage in the Digital Present*, Torino, Italy, 10-13 September 2023.

Role: Main presenter together with Tomas Träskman from Arcada.

<https://www.drha.uk/2023/wp-content/uploads/2023/09/DRHA-Programme.pdf>

Abstract

Interest is growing in using information and communication technologies (ICT), like mobile-based apps, and virtual reality (VR), and combining them with game techniques and gamification in museums. This is hardly surprising and echoes dominant debates and digitization and digital inclusion strategies in Europe that have been long underpinned by the notions that engagement with technologies can engage, educate and motivate people (Burke B 2012, Davies and Eynon 2018). Games are used in schools (Bragg 2007), VR is used in the training of practice skills of the Child welfare workforce (Davis, et al. 2021), and gamified “Prevention games” are used to change the behavior of youths (Schoech, et al. 2013) so why not in museums?

We conducted a mini-research project where we employed sociotechnical imaginaries (Jasanoff and Kim 2013) to identify future-oriented predictions about novel technologies to be used in museums and cultural heritage sites. Our starting point for designing this project was in a survey conducted in the Horizon 2020 ReInHerit project where museum visitors were asked whether they use digital technologies while visiting museums. The survey results showed that young adults (18-29) were more likely, than older survey respondents, to use digital technologies. These results were not surprising and nor did they tell us whether the use of digital technologies would motivate young adults to attend museums. This is a question that generates a substantial amount of discussion in the cultural heritage sector, which is why we wanted to use novel approaches to elicit this information.

We were interested in knowing what role emerging digital technologies can in the future play in museums and how they would impact on the motivation of young adults to visit museums. What types of digital technologies do young adults imagine to be in use in the museums of the future?

Through a series of workshops with students we created speculative imaginaries around the futures of digital tools and the museum environments they will be used in. Taking our inspiration from the work of Deborah Lupton and Ash Watson (2022; 2020), we designed and used creative writing prompts with the students to elicit data on how they imagine emerging digital technology in museums of the future. They also enacted gamified mobile applications as a form of material prompt. Research creations reveal how technology provides meaning to youth through their everyday lives,

an aspect that some scholars (Smith and Iversen 2014) have highlighted as a fruitful and necessary focus for museums and cultural heritage institutions.

On a conceptual level our aim was to explore how youth make sense of new technologies; how they engage in digital materiality that, in its turn, shapes embodied cognition. We bring together the literature of sociomateriality, co-design, and the method of 'research-creations' to better understand how youth imagine, think and enact technology in their everyday life, but also how they come to sense, feel, and live with sociotechnical imaginaries. Our approach is a creative investigation and falls under the banner of 'new empiricisms' (Lupton and Watson 2022, Rousell 2020).

4. Conference: *ENCATC conference Internationalization in Focus: Theoretical, Strategic & Management Perspectives in Education, Research, Policy & Practice*, representing ReInHerit, presentation of paper on *Disruptive Innovation: Case Lusto* in Education & Research session 1 on Sustainable business models for cultural and creative sectors, Brussels, 17-19 October 2022

Role: Main presenter, in person at the conference.

<https://www.encatc.org/en/events/detail/2022-encatc-congress-internationalization-in-focus-theoretical-strategic-and-management-perspectives-in-education-research-policy-and-practice/>

Abstract

ReInHerit is a currently running Horizon2020 project aspiring to disrupt the current status between museums and cultural heritage sites in order to attract visitors and also developing new business models. According to Unesco (2009) Cultural Heritage (hereafter CH) includes i.e artefacts, monuments, buildings and sites, museums that have a diversity of values (i.e historic, artistic, scientific or social significance), meaning that CH in itself includes both of the sectors that the project wants to develop. During the first year of the project there has been robust research, both primary research and an extensive literature review to set a baseline for the future of CH in Europe and its development towards the future. It is of utmost importance for the sector to remain relevant in tomorrow's world, working towards a sustainable future on all levels.

Our aim for this paper is to look into different theories of disruptive innovation and service ecosystems both in the CCI and in business, building models to develop the sector to be able to expand the visitor base. We also want to consider how these models might answer to the sustainable development goals set by the UN. The result from the research conducted earlier in the project shows that the CH sector needs to develop relevant content in museums in order to attract and engage new visitor segments. We are interested in investigating how disruption might function: for whom, at what stage of audience engagement and within which temporal framework.

As a means of discussing and illustrating how disruptive innovation works in practice, as well as highlighting and testing some of the theories found in the literature referred to we utilise the Finnish forest Museum Lusto as a case study. Lusto is working with a dynamic museum model and involving stakeholders and the surrounding society during the development process (Koski, Karhunkorva and

Paaskoski 2020), as well as using futures thinking (Paaskoski et al. 2022) when developing the role of the museum.

The theoretical framework for this paper is both pragmatic (the case study describing models adaptable to other entities) and also bridging different disciplines like business models, disruptive innovation (Christensen 2006, 2015), cultural ecology (i.e. Valkokari, Holden), design anthropology (Gunn, Otto and Smith 2013) and Cultural Heritage management (see preliminary list of references).

Keywords: Disruptive Innovation, Heritage, Cultural Ecology, Business Models, LUSTO, ReInHerit

Workshops

1. Organizing **workshop in Arcada** with Arcada students in Cultural Production and Online Media presenting the ReInherit digital prototypes, 20 September, 2023. **Role:** Teacher, facilitator, documenting the process, data collection together with Tomas Träskman.
2. Organizing **workshop in Arcada** with Arcada students Cultural Production and Online Media presenting the ReInherit digital prototypes, 15 May, 2023. **Role:** Teacher, facilitator, documenting the process, data collection together with Tomas Träskman.
3. Organizing **workshop in Arcada** with Arcada students of Cultural Production on developing a co-creation workshop concept for young adults by young adults the aim of which was to collect information on what could get young adults to visit museums and cultural heritage sites. **Role:** participating in and coordinating the trial run of the workshop concept together with Maria Bäck and Richard Sillin.

Presentations

1. Presentation of paper *Archeologies of Future Heritage: Research-Creations for Imagining Emerging Digital Technology in Museums* on digital tool use in museums among young adults during the **Research and Innovation Days of Arcada**, Helsinki, March 2023. **Role:** Presenter of poster.
2. Presentation of ReInHerit project at the **Research and Innovation Days of Arcada**, Helsinki, March 2022. **Role:** Presenter of electronic poster.
3. Presentation of the ReInHerit project during the **Global Engagement Day in Arcada**, 8.6.2022. **Role:** presenter of electronic poster.

Demonstrations

1. Organising a mini-technology fair during the **Research and Innovation Days of Arcada**, March 2023. Collecting user feed-back during digital use (additional output, not part of original deliverables). **Role:** Tool presenter, coordinating technical support, collecting feedback, documenting (photo) the mini-technology fair.