Cultural heritage and social impact: Digital technologies for social inclusion and participation - Symposium Companion

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Edited by Danilo Giglitto, Luigina Ciolfi, Eleanor Lockley, Eirini Kaldeli

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1. Introduction

Cultural heritage is no longer seen solely as a safeguarding effort or an educational outlet but also as a form of civic and cultural representation and engagement that can contribute to social cohesion. The EU-funded collaborative project "CultureLabs" (https://culture-labs.eu/) investigates and proposes the use of novel methodologies and digital tools for facilitating the access to Cultural Heritage through tailor-made novel experiences, creative reuse, enrichment and co-creation. As part of CultureLabs, a one-day symposium was held in February 2021 to discuss how digital ecosystems shape the dynamics between institutions (including museums and academic institutions) and communities, leading to new models of collaboration and interaction around heritage and culture.

The event featured a keynote talk by Dr Jenny Kidd of Cardiff University, exploring museums, social media, and participation during the crisis caused by the COVID-19 pandemic. After an open submission process, we also selected 12 short presentations from academics, researchers, and practitioners exploring how digital technologies can support institutions to become more connected and open to different communities, and consider the challenges and opportunities brought forward by digital interactions in different settings.

2. Museums, Social Media, and Participation in a Time of Crisis

Jenny Kidd, Cardiff University

According to a 2020 ICOM survey, nearly 95 percent of global museums were closed during the early months of the Covid-19 pandemic. During this time cultural institutions stepped up their efforts to translate engagement with members of the public into the digital environment, including the varied spaces of social media. There was a sharp increase in virtual productions and remote interactions, and many existing content assets were re-packaged for social media in anticipation of a wholesale shift to digital cultural engagement by audiences. This paper presents an analysis of Twitter data shared across two hashtags – #CultureInQuarantine and #MuseumAtHome – in order to explore the parameters of engagement between cultural institutions and members of the public at that time. It explores what kinds of content were being circulated and by whom, what kinds of content gained the most traction, and whether we can begin to understand why through a thematic analysis of that content. The research begins to tell a story about the kinds of content and interaction users found valuable, and how we can begin to understand and articulate that value, during a time of crisis.

Dr Jenny Kidd is a Reader in the School of Journalism, Media and Culture at Cardiff University (UK). She has written extensively on digital cultural heritage and participatory media, including in her 2014 book *Museums in the New Mediascape: Transmedia, Participation, Ethics.* Jenny is Co-Investigator for the AHRC's Policy and Evidence Centre, and on a project exploring the impacts of Covid-19 on the UK cultural sector being led by the Centre for Cultural Value. https://www.cardiff.ac.uk/people/view/182944-kidd-jenny

3. Engagement of Disadvantaged and Marginalised Communities

3.1 Conflict Textiles Live Collection

Gillian Robinson*, Roberta Bacic, Breege Doherty, Esther Alleyne

*Ulster University; Conflict Textiles

Project description:

Conflict Textiles is home to a large physical collection of international textiles (370), exhibitions and associated events (192) which focus on elements of conflict and human rights abuses. It is also an online repository (hosted by CAIN at Ulster University since 2008). Conflict Textiles is a unique cultural heritage collection that contributes to societal impact providing space for survivors of conflict to tell their stories through textile language. It allows users the world over to learn about conflicts including, but not limited to, Chile, Northern Ireland, and Argentina.

Conflict Textiles is proactive in its outreach and engagement. The exhibitions and digital technologies stimulate and motivate communities at risk of exclusion, such as survivors of political conflict, migrants and refugees, as well as academics, museums, textile artists, activists and civil society organisations to become involved and use the collection as a source of information, for exhibitions, research and educational purposes.

Most recently – during COVID – when people cannot visit exhibitions, *Conflict Textiles*, working in partnership, has utilised digital technologies to facilitate social inclusion and participation. This has included online exhibitions, guided tours, interactive online activities, short films and a variety of civil society, practitioner, textile artist and academic events.

One example is the Embracing Human Rights: Conflict Textiles' Journey exhibition at the Roe Valley Arts and Cultural Centre, which moved online during COVID restrictions. An online guided tour and a range of associated activities – for all ages - were facilitated, one of which invited people to make their own arpillera doll. Over 50 dolls were submitted virtually leading to an online Arpillera Dolls exhibition. A local voluntary sector group, the Bogside and Brandywell Initiative, engaged and this led to a cross community arts project for women from the Triax area in Derry/Londonderry. From this a further virtual exhibition Triax Arpillera Dolls emerged.

For this exhibition, the curator Roberta Bacic reflects that the social impact was possible (even in COVID times) for a number of reasons. First, because there was a genuine strong partnership and collaboration between the collection and the RVACC. Second, the original event included a range of planned activities which were then adapted using digital technologies. Third, there was an existing set of expectations for interactive, co-creation events. Fourth, the target audiences were clearly identified.

Presenter's short bio:

Gillian Robinson is Emeritus Professor of Social Research and ARK Research Associate at Ulster University. Gillian worked with colleagues to establish ARK as a cross-university resource (with Queen's University Belfast) providing access to social and political information on Northern Ireland in 2000. Gillian has worked closely with INCORE (International Conflict Research Institute) where she was Director 2003-2008). She has worked with *Conflict Textiles* since 2008.

Relevant links:

- Conflict Textiles website
- Embracing Human Rights: Conflict Textiles' Journey Exhibition and events
- Conflict, Famine and Displacement: Then and Now Exhibition and events
- #DerechosdelNiño / #DretsdelsInfants / #ChildrensRights Exhibition and events
- Light during the darkness: Remembering the Holocaust Exhibition and associated activities

3.2 MEMories and EXperiences for Inclusive Digital Storytelling (MEMEX)

Vanessa Cesário*, Mercedes Giovinazzo, Corinne Szteinsznaider

*Interactive Technologies Institute - LARSyS (ITI)

Project description:

Strongly convinced that the Digital Cultural Heritage (DCH) has a key role in our society as a vector for transformation and inclusion, the MEMEX project promotes social cohesion through collaborative, heritage-ICT related tools that provide access to tangible and intangible cultural heritage and facilitate encounters, discussions and interactions between communities at risk of social exclusion.

It is also a strong example of how Tech & Cultural Heritage communities can inspire each other and how DCH is a key medium in shaping a more inclusive society, not only by building a new relation with Audience, but also by contributing to an inclusive action in favor of fragile communities.

MEMEX nurtures actions that contribute to recognition of differences by giving voice to individuals for promoting cultural diversity. The target communities are socially fragile people that are systematically blocked from various cultural opportunities and resources which are fundamental to social integration. The project deploys three pilots to analyse the expectations from communities in different regions of the European territory:

- Barcelona: Barcelona's migrant women and the gender perspective
- Paris: District XIX: Digital storytelling with inhabitants in priority neighbourhood of Paris
- Lisbon: Enhanced readings of shared Portuguese heritage through emancipated eyes

Those pilots aim to empower communities of people in a participatory approach by co-creating with them storytelling via the implementation of a new application welding together their experiences and memories into compelling and geolocalised storylines. MEMEX app will use personalised digital content linked to the pre-existent European Cultural Heritage. This application is co-designed by technological and social partners with inhabitants.

MEMEX project is therefore about how to develop a relation with people but also how to adapt Tech to needs of citizens and how to deal with Ethical issues: all Pilot partners developed a shared Ethical Protocol validated by each Pilot's Ethic Board, focusing both on the process, the relation with the participants, and in respect of the data protection rights (GDPR).

Presenter's short bio:

Dr Vanessa Cesário is a Research Scientist holding a PhD in Digital Media. She focuses on Human-Computer Interaction (HCI) research in cultural heritage sites and participatory design methods (it involves stakeholders, end-users and the team into the design process to help ensure that the end-product meets the needs of users). Currently, Dr Vanessa Cesário is a Postdoctoral Researcher in the MEMEX project. Her role is mainly being the link between the social and tech partners from the project, and at the same time designing, deploying and evaluating co-design and re-design workshops with the communities to inform the MEMEX app.

Mercedes Giovinazzo graduated in Archaeology from the Università degli Studi "La Sapienza" in Rome, Italy, and holds a Master's in Arts Management from the École Supérieure de Commerce - ESC Dijon, France. She is director of Interarts and president of BJCEM – Biennale des Jeunes Artistes d'Europe et de la Méditerranée. She has been deputy director of Customer Services at the Universal Forum of Cultures – Barcelona and administrator of the Directorate for Culture and Cultural and Natural Heritage of the Council of Europe in Strasbourg; board member of the Teatro di Roma; president of Culture Action Europe and president of the "Access to culture" platform of the European Commission. She has co-led the international campaign for the inclusion of culture in the UN 2030 Sustainable Development Agenda. In the MEMEX Project, Interarts is coordinating the Pilot of Barcelona.

Corinne Szteinsznaider is the coordinator of Michael Culture - European Network for Digital Cultural Heritage valorisation. Previously, Corinne was general secretary of Relais Culture Europe in charge of the French Contact Point of the DG Culture of the European Commission. She was also in charge of European projects focused on the role of culture and creative sectors in social innovation, environment and empowerment. She also developed projects for the Educational sector and projects on CH in conflict and post-conflict areas. She is MCA representative in the EC Heritage Expert Group as well as in the Heritage Alliance 3.3, is a member of Europeana Pro and she's board member of Culture Action Europe. In the MEMEX project, MCA is in charge of communication and dissemination and is co-leading The Pilot of Paris.

Relevant links:

- [MEMEX Website](#)
- [MEMEX Pilots on YouTube](#)
- [MEMEX flyer](#)

3.3 Digi-Mapping: Unpacking Meaning of Place Through Creative Technology

Tanis Grandison*, Tom Flint, Kirstie Jamieson

*Edinburgh Napier University

<u>Project description:</u>

Examining heritage can provide opportunities for marginalised communities to consider and valorise both their collective past and the relationality of more personal and mundane experiences (Rose, 2016). This paper argues that design methods offer heritage scholars new ways of exploring marginalised identities, experiences and relationships, extending a dialogic approach that supports the testing and realization of heritage futures (Jamieson & Discepoli, 2020). This paper describes a co-produced Digi-Mapping project with Edinburgh arts organisation WHALE Arts. This placemaking project developed a method called Digi-Mapping in partnership with primary school children in Wester Hailes Edinburgh, UK an area deemed in the top 10% of multiple deprivation (SIMD, 2020).

Influenced by critical heritage and place theory, Digi-Mapping combines psychogeography with map-making using digital media tools. The Digi-mapping project afforded participants a new way to construct and perform meaning by appropriating their own cultural knowledge as part of the process. Over a period of two years, Digi-Mapping enabled school children to share personal meanings of place through digital media, which subsequently articulated contested narratives that framed Wester Hailes in polyvocal terms (Farman, 2018) and creatively mined the 'processual nature of heritage' and the sociality of its making (Graham, 2016).

Attributing meaning, or ensoulment (Blevis & Stolterman, 2007) plays a key role in understanding the complexities of meaning to place, particularly when the ensoulment is at a community level rather than an individual act. As digital media tools develop and become easier to use, they afford new critical methods to investigate local heritage and discourse through participation (Farman, 2018). This paper argues that attributing meaning, or ensoulment (Blevis & Stolterman, 2007) plays a key role in understanding the complexities of community heritage and its relation to place. The artefacts created by participants were large scale tactile interactive maps that combined conductive drawings that triggered stories recorded by participants about where they live.

The project's successes and failures are reflected upon through a 4P's Framework: Participatory, Performative, Playful and Polyvocal. We argue that this framework can support heritage scholars and communities unfamiliar with digital media tools. Moreover, we suggest that the 4P's Framework complements the goals of critical heritage and creative placemaking.

Presenter's short bio:

Tanis Grandison is a research student in the School of Computing at Edinburgh Napier University. Her area of interest is how digital media can complement critical heritage and creative placemaking in order to unpack geographies of meaning with children. Central to Tanis' research is the use of psychogeography and tangible computing to elicit and share stories from young participants. Tanis has undertaken her research in partnership with a local arts organisation and three primary schools in Edinburgh to co-create interactive talking maps of their community.

Relevant links:
- WhaleArts
- Tweet 1
- Tweet 2
- Tweet 3

4. Inclusion and Cultural Heritage Institutions

4.1 Digital Prospects for Inclusive Civic Museums

Lara Perry*

*University of Brighton

Project description:

Digital Prospects for Inclusive Civic Museums is an AHRC funded UK-US collaboration to explore digital interfaces for smaller museums with a local or civic remit. The project was designed to recognize the changing focus of museum-community relations for such institutions, including a new focus on promoting good mental health and well-being, renewed recognition of the impact of legacies of colonialism and racism on museum community relations, and changing standards of accessibility including recognition of the 'digital divide'. Originally planned as a series of blended face-to-face and digital programmes, the work has been moved to online only activity and the inquiry and nature of the findings have been significantly affected by the pandemic. The proposal rested on some assumptions about the relations between civic museums and their communities, one of which was that physical sites (including architecture) created a barrier to participation for some audiences, that digital interfaces might resolve. The condition of the pandemic meant that the physical site was no longer either a barrier nor a point of access for the museum, and that questions of accessibility became much more focussed on the issue of digital divide including both material assets and competences (of both the cultural organization and the audience). Two elements of the project which have been completed - the Peale Center's RedefineABLE which presented an exhibition in a variety of online formats and the Royal Pavilion and Museum Mindful Garden Tour, have given us some insights into accessibility and digital provision, including observations about the use of a range of commercial platforms (from Zoom to Instagram). As we develop the final elements of the project with the DeLaWarr Pavilion, issues of process as well as product are at the forefront. The conclusions of the research are likely to return us to the questions of the functions of a civic museum and how its commitments to community can be met through digitally delivered programming.

Presenter's short bio:

Lara Perry is the Associate Dean for Education and Student Experience in the School of Humanities and Social Sciences at the University of Brighton. She is the PI on the DigiPich project, which was initiated in February 2020 and is a partnership between the University and three civic museums: the Royal Pavilion and Museums Brighton; the DeLaWarr Pavilion in Bexhill-on-Sea; and the Peale Center for Baltimore History and Architecture (Maryland, USA). The project evolves from her work as a historian of museums and in particular gender equity issues relating to collections and displays, together with a history of partnership working with museum professionals and organizations including those involved most directly in the programme. The DigiPich programme partners include Kevin Bacon (RPM); Rosie Cooper (DeLaWarr Pavilion) and Dr. Nancy Proctor (Peale Center).

Relevant links:
- DigiPiCH Civic Museums Project
- The Peale Center – for Baltimore History and Architecture
- De La Warr Pavilion
- Brighton MuseumsLara Perry — The University of Brighton

4.2 The #iziTRAVELSicilia Participatory Project

Elisa Bonacini*

*University of South Florida; University of Córdoba

Project description:

The #iziTRAVELSicilia project deals with the topic of participatory strategies and co-production of museum audio-guides and city audio-tours published within a large regional-scale process. First main aim of this project was to bridge the gap of digital communication and enhancement of Sicilian cultural heritage through izi.TRAVEL and participatory and co-creative processes with local stakeholders and communities.

izi.TRAVEL is a global free storytelling platform to create museum audio guides and audio tours for cities and territories, based on democratization of cultural contents and languages, and born with the aim to help organizations in the heritage and tourism sectors to bring their stories to life. It could be considered as a mix of Facebook, Wikipedia and TripAdvisor. It is based on participatory culture, creativity and storytelling and thanks to its gratuity - both from the content's producer side and from the user's side - izi.TRAVEL is also a digital key tool: it offers institutions the opportunity to upload and manage self-generated content to enhance on-site visits or to facilitate itinerary planning and any further studies. In this way, it plays a great key role in democratization and promotion of culture and territories, through storytelling, allowing people to discover culture and tourist places via the web platform and via the izi.TRAVEL general app, available from the main app stores.

The project #iziTRAVELSicilia, launched on this platform since May 2016, has been soon transformed into a participatory process, by involving +4.000 native people as "digital Ciceroni", representing the "heritage communities" cited by the Faro Convention, coming from different ranges of Sicilian "heritage communities", from students to scholars and museum curators. +300 audio-guides have been created.

As used in this pilot project, izi.TRAVEL could encourage both Cultural and Tourist institutions to digitally enhance their heritage and attractions, by using this innovative tool for stimulating emotional and creative involvement of people in the co-creation of app contents, and tourists to enjoy cities, landscapes and cultural resources, making tourism experience better overall through storytelling and in experiencing the territory through a close contact with cultural resources and everyday life.

#iziTRAVELSicilia could be recognized as a good practice of cultural content and value co-creation, so revealing a serious impact on civil society made by izi.TRAVEL platform and app.

Presenter's short bio:

Elisa Bonacini is an Archaeologist, she has a first BA in Classics (2001) and a second one in Enhancement of Archaeological Heritage (2010); specialized in Classical Archaeology (2005). She has a first PhD in Humanities and Cultural Heritage (2014) and was a Research Fellow (2015-2017) in the Humanities Department of Catania University researching on Digital Enhancement of Cultural Heritage. She is now, for the second time, a PhD student in Lenguas Y Culturas (since October 2019) in the University of Cordoba on "Digital storytelling as a teaching tool for transmission and cultural enhancement". Since 2017, she is Courtesy Visiting Adjunct Professor for IDEx, the University of South Florida's Institute for Digital Exploration, and project manager for USF within a digitization project in Sicily.

Elisa is an expert in digital cultural communication (with some digital project, such as the pilot project for the "Paolo Orsi" Museum in Syracuse and the Mount Etna catalogue) and in digital enhancement and co-creative participatory storytelling through heritage communities: since 2013, she is the ideologist and the regional coordinator for Sicily of the national project #DigitalInvasions (#InvasioniDigitali); since 2016, she is the coordinator, in Sicily, for the #iziTRAVELSicilia project, by creating participatory and co-created multimedia audio guides for museums and tours on izi.TRAVEL. She is currently working as consultant on cultural heritage dissemination and enhancement through new technologies and storytelling participatory projects. She participated in many national and international conferences and published many papers and books.

Relevant links:
- iziTravel: Sicilia
- Faro Venezia: #iziTRAVELSicilia
- Museo Archeologico Regionale "Paolo Orsi" Siracusa
- AirWorks: Etna

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4.3 ANGLES – Engaging Multiple Perspectives for Reapproaching and Reappropriating Colonial Audio-Visual Archives Preserved at KU Leuven

Jonas Van Mulder*, Sofie Taes, Fred Truyen, Kim Christiaens

*KU Leuven

Project description:

In this presentation, we unfold the story of ANGLES: a brand-new project of KU Leuven university using AV heritage to reflect about Belgium's colonial history.

In 2021, KADOC Documentation and Research Centre on Religion, Culture and Society and CS Digital (a research group focusing on digitized cultural heritage) will be joined by KU Leuven's research group Modernity & Society 1800-2000 (MoSa) and the Institute for Anthropological Research in Africa (IARA) in ANGLES: a project funded by the university's Global Minds program, aiming at the creation of a space for collaborative reflection about the future of colonial archives held at KU Leuven. The project ties in with the growing awareness within the university of the need to critically engage with its colonial heritage and to push forward with a decolonial diversity policy.

The broader social importance of reflection on the colonial past and its persistent impact on the present at KU Leuven and other universities - international crossroads for scholars, students and scholarly practices - can hardly be overestimated. Moreover, heritage has proved to play a fundamental role in current societal debates about Belgium's colonial past. To strengthen KU Leuven's position in this public debate as well as in international research collaborations, it is not only vital to recognize the importance of the colonial heritage and archival collections present at the university, but also to develop an active, substantiated approach to this heritage that is in line with its pursuit of diversity and inclusion.

The starting point is the recently restored and digitized film collection of the Missionaries of Africa (the White Fathers), preserved at KADOC: an exponent of the post-war Belgian colonial and missionary film. The fund consists of 954 objects constituting 80 mission films, dating from 1946-1967 and mainly shot in today's Democratic Republic of Congo, Rwanda and Burundi. It's a genre-diverse collection, including feature films, reportages, educational films, ethnographic films and nature documentaries, made with the purpose of raising funds and attracting volunteers. Many of the films were intended for local consumption, as after WWII, Belgian colonial policies became more lenient regarding native film consumption, and allowed for colonial film productions to be made specifically for local audiences.

As suggested by the project title, ANGLES wants to shed light on the complex context of the creation of these films and the social relations they reflected and perpetuated. In this sense, 'film angles' represent the viewpoints of the missionary film makers and their attitude towards local groups, but equally the positions of those being filmed. ANGLES also stands for the multi-angled approach to the subject that the project wishes to achieve.

ANGLES proposes a combination of archival and artistic research that dovetails with important developments situated at the intersection of research and artistic practice. The project entails four core activities. First, a creative research residency program will be installed through an open call for proposals. Three grants of € 6,000 will be assigned to creative practitioners (preferentially but not exclusively) residing in Congo, Rwanda or

Burundi, or of Congolese, Rwandese or Burundian heritage, with proven experience with and curiosity for archives, audio-visual media and colonial history. The selected creator will produce an artwork that uses and stems from a reflective dialogue with the film archive. Secondly, the work of art will be embedded in a physical exhibition in KADOC. In October2021, a symposium will be organized in Leuven. Both the individual members of the project team, as well as KADOC and the external partners (meemoo, Afrika Film Festival, European Film Gateway) boast of a wide network of scholars, film makers and other artists that will collectively create a diverse, attractive and multimedial programme. The dissemination of the project results to a wider audience (a.o. via a printed catalogue) will conclude the 12 months effort.

Presenter's short bio:

Jonas Van Mulder is a postdoctoral associate of KADOC-KU Leuven, where he currently coordinates a broad portfolio of research and curation projects that engage with archival collections that emerged from contexts beyond Europe. He has published papers on the intersection of religious culture, critical heritage and decentralizing archival methodologies.

Relevant links:
- KADOC
- KU Leuven CS Digital
- Inward Outward, Critical Archival Engagements with Sounds and Films of Coloniality
- Filmcollectie Sociëteit van de Missionarissen van Afrika (Witte Paters)
- Case Study: meemoo Flemish Institute for Archives

5. Digital Innovation in Cultural Heritage Practices

5.1 Game and Play: A Gateway to the Past?

Daniel J. Finnegan*, Daniela De Angeli, Lee Scott

*Cardiff University; Echo Games

Project description:

Cultural heritage encompasses both tangible culture (e.g. places, monuments, and artifacts) and intangible culture (e.g. folklore, knowledge). It is preserved and shared locally, nationally, and internationally by cultural organizations as well as by communities of people with a shared heritage. The evolution of the Internet has also supported the creation of virtual communities around significant culture. Culture must be experienced: it is difficult to express its meaning in words and communicate verbally to those who have not encountered it in their daily lives. One strong, embodied, and globally accessible resonating medium for sharing and expressing cultural heritage - both onsite and online - is play. Games and play are a potent expressive force in the domain of cultural heritage, and can help connect people to their shared past or to different communities. We have been instrumental in many projects incorporating digital technology and games to drive debate and critical reflection among cultural organisations (e.g. museums) and citizens engaging with culture. Our work has focused on how games can encourage strangers, young and old, to play together and reflect on cultural heritage (e.g. past events) by roleplay and adversarial engagement. We have studied how game design is effective at engaging young children and students with cultural heritage through participatory design methods. In this presentation we will discuss 3 case studies. The first two focus on a local context, namely the 'Sacred Springs' of the world heritage centre in the city of Bath, UK, and Dyrham Park where we have used simple gadgets and low-fi technology to incorporate embodied interaction and elements of play. The third focuses on a shared context involving european history and heritage in the city of Essen, Germany. We will present our approach and methodologies, and discuss how we have engaged various stakeholders throughout the game development process.

Presenter's short bio:

Dr Daniel J. Finnegan is an Assistant Professor (Lecturer) at Cardiff University. His research focuses on human behaviour in virtual worlds, encompassing virtual learning environments, virtual reality, and games. While based as a postdoctoral researcher at the University of Bath, he formed a community interest company Echo Games CIC with colleagues Dr Daniela De Angeli (University of Bath) and Dr Lee Scott (Bath Spa University): the goal was to translate their research interests to real world impact while infusing their passion for public engagement. Dan is passionate about combining his research and skills in software engineering to create digital experiences for museums and cultural heritage institutions to help them engage new audiences and convey their message in new and exciting ways.

Relevant links:
- [Dr Daniel J. Finnegan's homepage](#)
- [Daniela De Angeli's website](#)
- [Lee Scott's profile](#)
- [Agonistic Games paper](#) (requires login)
- [Sacred Springs: Teaching Children Local History via a Game Jam](#)

5.2 Democratising Digitisation: Empowering Culture From the Community Up

Alan Dix*, Rachel Cowgill, J. Stephen Downie, Christina Bashford, Mike Twidale, Maureen Reagan, Simon McVeigh, Rupert Ridgwell

*Swansea University

Project description:

Until comparatively recently to be 'cultured' was the mark of the elite, separating them from both peasant and nouveau riche. Even in current academic language and media 'culture' is often a term used about others "youth culture", "European culture"; indeed, this is almost by definition – according to the Oxford Dictionary of Philosophy, culture is often "too pervasive to be readily noticed from within".   More progressive views upend these distinctions helping grassroots communities claim their own cultural heritage.

When it comes to the digitisation of cultural heritage there are still wide gaps. Crowdsourcing can harness community effort, but often by sucking data into centralised repositories. Projects to create resources close to communities often fall into disuse once external funding ends or a local champion leaves. There are rich resources in treasury boxes, filing cabinets and community museums, but missing out from the benefits and exposure of being part of the rich growing digital network.

This presentation describes new work focused on local musical society archives in Yorkshire and Belfast and also the locally-based audience communities at University venues in York and Illinois. We plan to combine high-quality professional digitisation of some archive material with more basic digitisation using off-the-shelf hardware by members of the musical societies. We are seeking to both serve the direct communities involved, but also use this as a springboard to understand more general needs and challenges. What are the appropriate processes, tools and infrastructure that empower and engage communities but also create collections that can feed into scholarly study? Indeed, is it possible to marry local autonomy and expert authority?

We believe it is possible to bring these together and we look forward to this opportunity to discuss new modes of scholarship rooted in models of social capital and common ownership that enrich through active engagement.

Presenter's short bio:

Alan Dix is Director of the Computational Foundry, a £31M initiative by Swansea University, the Welsh Government and the European Union to nurture foundational digital research that makes a positive difference in the world. He is known for his text book on human–computer interaction (HCI) and numerous research publications in HCI and related areas. He founded Tiree Tech Wave, a biannual maker/meeting event on a remote Scottish island drawing designers, technologists, artists and more from as far afield as Malaysia and Canada. It is now a peripatetic event including Techwave Cymru. Tiree Tech Wave has been the focus of a variety of community technology projects including Frasan, a Nesta funded project to bring the contents of An Iodhlann, the island archive, out to the windswept corners of the island. He also works with musicologists on the InConcert project and the new collaboration reported here. His interests are eclectic and recent work has included a textbook on statistics, a book on physicality in design and a video course on technical creativity. His methodologies are equally unconventional and in 2013 he walked a thousand miles around Wales as part personal journey and part research exploration of the nature of community technology at the margins.

Relevant links:
- InConcert
- Techwave Cymru (TTW19)
- The Frasan App
- Creativity: Methods to Design Better Products and Services
- Alan Walks Wales

5.3 Metadata as a Diversity Tool: Sámi Traces in Institutional Archives Online

Vendela Grundell Gachoud*, Karin Hansson

*Stockholm University

Project description:

This paper lends its title from an article in progress, presenting results of a recent study for the project The Politics of Metadata. The project ex-plores how metadata affects cultural heritage institutions' image collections online, and the study focuses on how metadata affects diversity within a framework of democracy and identity formation. To this end, we home in on Sami images from the Swedish National Heritage Board on Flickr Commons: i.e., images representing an indigenous ethnic mi-no-r-ity in conflict with the Swedish state, found at the government agency for cultural heritage and displayed on a social media plat-form to reach a diverse audience.

By gathering data from the SNHB collection on Flickr Commons and from its source in the image database Kulturmiljöbild, we capture the archive's organisation across two sites with different metadata policies and practices. We thus address images of cultural heritage as cultural he-ritage since their contents and contexts of circulation and display keep public memory alive in a digital world where visuality is vital to stay relevant in a community. To share archival images of cultural heritage online enables a broad distribution and reuse of this heritage. However, if the metadata is incorrect, insufficient, or otherwise problematic, it is hard to even retrieve the image. What is not described in text does not exist in digital reality. Meta-data lets us find the image and interpret it through a description that may imply biased or omitted information, simplifying the complex narratives that images reflect and generate. Emerging in our analysis, such information points up a mismatch between images and metadata as a problem with transformative potential. By following Sami traces across two versions of the SNHB archive, we pinpoint problems and potentials with metadata as a diversity tool: i.e., a tool to enable the spectrum of perspectives that underpins diversity and to investigate strategies of its implementation. Our case suggests that metadata becomes a diversity tool insofar as it points out a link between available meta-data and the production of knowledge. This link is key to image searches in online archives since it steers what we find there. A dominant narrative, expressed in metadata fitted to fixed modes of classification, affects not only minorities that it may exclude – it affects everyone.

The study homes in on how metadata, and in particular user-generated descriptions, shapes the conditions of cultural heritage images in online archives since the issue of diversity is explicit yet contested there. The inclusion of materials is determined by a decision of what not to include, yet diversity is necessary for a sustainable democracy where social relevance depends on social recognition – that the SNHB complies with by committing to the UNESCO Uni-versal De-claration on Cultural Diversity. We second the declaration's em-phasis on diversity as the embodiment of identities at once unique, dynamic and varied: i.e., a spectrum of perspectives (UNESCO 2001).

Our attention to how metadata represents diversity supports alternatives to the "authorized heritage discourse" by which official institutions hegemonically recognize or ignore certain types of heritage (Smith 2009). We do so with a framework of identity formation through democratic participation theorized as recognition, redistribution, and representation – i.e.,

as acknowledging worldviews and symbolic roles, creating opportunities, and facilitating a plurality of expressions (Fraser 2005). Democratic justice hinges on diversity, to which the production of cultural heritage is key. Our take on this nexus expands on re-search whose concerns we share about sub-verting ex-clusion-ary narratives in image archives online (e.g., Cairns 2013, Loukissas 2017, Clarke & Schoon-maker 2019). We also respond to urgent developments for the Sami and the SNHB. Sami artists feature in major cultural events, and the Swedish church plans an apology to the Sami this year – still, signs of colonial trauma persist. As Kulturmiljöbild will close in 2021, we highlight a minority as it gains the majority's interest yet also risks losing the narratives it participates in.

This paper presents how metadata may hinder a democratic effort towards diversity but also offers a tool to support it as part of a sustain-able archive. In doing so, we contribute to several symposium themes: in short, exploring digital methods and models for facilitating interaction between institutions and communities engaged in the social impact of cultural heritage.

Presenter's short bio:

Vendela Grundell Gachoud is a researcher, teacher and artist focused on photography in relation to digital seeing and being. Her PhD in art history (2016) explored how digital interfaces shape spectatorship and how this process is revealed in glitch art online, an interest in disruptive user positions that continued in her postdoc on visually impaired photographers (2018-2020). Driven by societal concerns about the integration of technics and aesthetics, she works in international interdisciplinary settings from her base at Stockholm University. Beyond academia, her work features in circa thirty exhibitions and twenty publications since 1998.

Relevant links:
- [Metadata Research Group](#)
- [The Politics of Metadata](#)
- [The Swedish National Heritage Board](#)
- [The Swedish National Heritage Board image database](#)
- [The Swedish National Heritage Board on Flickr Commons](#)

6. Cultural and Digital Heritage Educational Opportunities

6.1 Learningful Play: Exploring the Design of Technology, Learning and Play to Enhance Children's Engagement With Cultural Heritage in Schools and Museums

Sally McHugh*, Tony Hall, Fiona Concannon

*National University of Ireland, Galway

<u>Project description</u>:

This research explored the design, development and evaluation of a Technology-enhanced Cultural Heritage Education (TECHe) learning model to enhance children's engagement with their local heritage and place. Using a design-based research (DBR) methodology, this research set out to explore if learningful play could enhance children's engagement with heritage and place. The DBR process was predicated on the theoretical work of Resnick (2006), specifically 'learningful play'. Through three design cycles, the research explored the development of learningful play using an experiential participatory approach that included a physical field trip/museum tour and a digital storytelling (DST) workshop for children. 131 young people (97 in schools and 34 in museums) participated in the study. These seven interventions were undertaken in four Irish primary schools, two in a local museum and one in The Exploratorium, San Francisco. The design process employed a range of methodological tools, including questionnaires, surveys, daily reflections, reflective journals, ethnographic observations, focus groups, video and audio recordings. The TECHe prototype design model which emerged from the first six interventions and two design cycles describes five criteria, twelve design sensitivities and eight supporting design informants for implementing learningful heritage play in a museum or school setting. A significant contribution of this research is the adaptation of the TECHe design model to an American setting. In the final seventh intervention the TECHe model was adapted to a new localised museum context resulting in a new model Sense of Place. Both models offer potential for integration into heritage and place learning programmes in schools and museums. Currently, due to the global pandemic, schools and museums are faced with rolling closures and are dealing with new digital directions. Both prototype models from this research can be adapted to hybrid (physical and digital) learning resources for educators in schools and museums.

Presenter's short bio:

Sally Mc Hugh recently obtained her PhD from the School of Education, National University of Ireland (NUI), Galway. Her PhD research explored children's creative engagement with cultural heritage using constructionist technologies across formal and informal learning environments. She holds a M.A. in Digital Media and a B.A. in Archaeology and Information Technology from NUI Galway. She was awarded an inaugural Fulbright Creative Ireland Museum Fellowship in 2018-19 to the Exploratorium: Museum of Science, Art and Human Perception in San Francisco, U.S. A. which enabled her to develop and expand her research interests within an international setting.

Relevant links:
- Sally McHugh's profile - Fulbright
- A place of play: Designing 'learningful' technology for children's cultural heritage education
- Exploratorium: The Museum of Science, Art and Human Perception, San Francisco | Exploratorium

6.2 Inclusive E-Learning to Understand Collective Memories and Identify New Uses of African Plantations Heritage

Sara Eloy*, Stefania Stellacci

*Instituto Universitário de Lisboa (ISCTE-IUL), ISTAR

Project description:

Digital globalization has been changing and increasing the flow of information, reshaping perspectives, and actions worldwide, with countless benefits in socio- economic, political, environmental, and cultural realms. However, less-developed countries or historically areas subjected to foreign dependency, such as former colonies, have not benefited from sustainable economic development arising from digital globalization. Moreover, historical biases and underrepresented narratives should be also brought to light, especially in Europe. This ongoing project provides new insights on the *Roças*, which were built from the mid-19th century in São Tomé and Príncipe (STP) for the production of soft-commodities – mainly cocoa and coffee. This study tackles timely aspects about *Roças* and its ethical reanalysis by the transnational community. Then, it explores how audio-visual storytelling, serious board game or immersive authentic multisensory tools for visual and auditory stimuli, can be used for making accessible and preserving the value of African plantations heritage. Overcoming the difficulties to reach far and different communities, this project attempts to raise awareness on the tangible and intangible value worldwide. It proposes to pave the way for a dialogue among STP's community (both local and now living in Portugal) with researchers, policy-oriented organizations, policymakers, local entrepreneurs, and archival curatorial staff. In fact, these groups are often disconnected from consuming and discussing the legacies of colonialism in their twofold aspects, as architectures of violence and as part of the most promising production system. This study offers the opportunity to use inclusive e-learning tools for promoting reflexivity and resilience of STP and European communities when addressing dichotomous values of built heritage. In line with recent research paths on digital cultural heritage conducted by ISTAR team, it is shown how mixed and augmented reality tools enable to convey both inclusive e-learning for a broad community and promote sustainable development.

Presenter's short bio:

Sara Eloy focuses on interdisciplinary challenges related to Digital Technologies applied to Architecture. Her main areas of research include shape grammar design systems, Virtual and Augmented Reality, CAAD and Digital Heritage. Eloy develops research activities in ISTAR (Information Sciences Technologies and Architecture Research Center) where real software prototypes are developed. Eloy has led teams developing digital solutions based in VR and AR for heritage visualization. Eloy organized several exhibitions in collaboration with international researchers, including Lisbon Architecture Triennale (2013, 2019), whose digital contents were applied to visualize, interact, and immerse multiple end-users into architectural and heritage context. Examples are the exhibitions "School of Chicago: digital skyscrapers" and "Artificial Realities: Virtual as an aesthetic medium in architectural ideation" an Associated Project of Lisbon Architecture Triennale 2019. Eloy graduated in Architecture (1998) and has a PhD in Architecture (2012). She was director of the Department of Architecture and Urbanism (2013-2016), director of the Integrated Master in Architecture (2013-2016), and director of the ISTAR since 2017. She is an Assistant Professor at Iscte with teaching experience on CAAD, Drawing, new technologies applied to Architecture and Research Methodologies. Eloy is an expert evaluator for the European Commission H2020 programme since 2015.

Stefania Stellacci graduated in Architecture (2006), obtained a postgraduate degree in Conservation of Built Heritage (2007), and has a PhD in Architecture (2018). She has worked in Regional Directorate for Cultural Heritage and Activities and Tourism of Puglia (Bari, Italy) in 2007. From 2008 to 2014 and after her doctoral studies, she has worked as architect and team leader in a number of international architecture competitions, preliminary and executive projects of single-family houses and public equipment in different architecture companies, among which barbiniarquitectos and Mangado architects. Her research interests include architectural history, cultural built heritage, sustainable urban development, traditional craftsmanship, building pathology, adaptive architecture, and timber-framed buildings. Her studies also address priorities and challenges for historic building rehabilitation using multiple-criteria decision analysis (MCDA) and seismic risk assessment. Stellacci has been acting as reviewer for a number of different journals, including *International Journal of Architectural Heritage*, *Sustainability*, *Symmetry*, *Buildings*, and *Cidades, Comunidades e Territórios*. Stellacci is author of several publications in both conferences and specialized journals. She has currently interested in promoting initiatives engaging underrepresented communities towards the safeguard of built heritage or its memory.

Relevant links:
- ISTAR-Information Sciences and Technologies and Architecture Research Center
- School of Chicago: Digital Skyscrapers
- Artificial Realities: Virtual as an aesthetic medium in architectural ideation
- Fundação Mário Soares e Maria Barroso
- mén non

6.3 Interacting with Museum Content Through Picturebooks: A Study of Children's Engagement with Orientalist Paintings in Pera Museum, Istanbul

Betül Gaye Dinç*, Özge Subaşı, Ilgım Veryeri Alaca

*Koç University

<u>Project description</u>:

A picturebook is often the earliest object to introduce artistic sensibilities and multimodal literacies to children and builds children's engagements on narratives, material, aesthetic, and cultural explorations [3, 6]. Picturebooks have become one of the main tools to address children in online and onsite exhibitions.This study investigates the possibilities of an interactive picturebook prototype in fostering children's exposure to artworks featured in a permanent exhibit presenting historic and cultural content. As museums have been crucial informal learning settings in the HCI community, the technologies in museums and heritage sites often take the form of mobile guides, games, interactive installations, and cultural probes with various educational and participatory approaches [1, 2, 4, 5]. While these studies reveal how museums use HCI to facilitate children's interactions with the exhibit through mobility, playfulness, and active participation [1, 4], it is necessary to incorporate knowledge from other disciplines to diversify the educational, aesthetic, narrative and affordable tools for children. To perceive how the interplay of the Picturebook studies and HCI studies benefit museums, we prototyped an interactive picturebook for the Pera Museum Orientalist Painting Collection, describing the cultural, aesthetic and historical implications of the artworks from different eras to arouse the child's interest. 7 children aged 9-10 years old interacted with the artworks and used the prototype during their museum visit. Our results show the challenges and benefits of the interactions based on the ability of the narratives extracted on the selected collection to challenge children in critical thinking while rising their engagement with the artworks.

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<u>Presenter's short bio:</u>

Betül Gaye Dinç is a graduate student at Erasmus Mundus International Master in Children's Literature, Media, and Culture at the University of Glasgow. She contributed to the edited volumes, *Verbal and Visual Strategies in Nonfiction Picturebooks* and *VEKAM Cultural Heritage Studies for Children (0-18) Workshops*. She worked in the Women's Museum Istanbul and Pera Museum Learning Programs.

Özge Subaşı is an Assistant Professor at Koc University, and the Director of the "Futurewell", the first Co-creation and Wellbeing Group in Turkey. Ozge's research is at the intersection of design and collaboration with underserved populations.

Ilgım Veryeri Alaca is an Associate Professor at Koç University, and the Director of Artistic Research Studio and its subgroup Picturebook Studies. Her articles appeared in Bookbird, Leonardo, International Journal of Child-Computer Interaction and International Journal of Education through Art. She contributed to The Routledge Companion to Picturebooks and The Routledge International Handbook of Early Literacy Education.

<u>Relevant links:</u>
- [Pera Museum](#)
- [Futurewell](#)
- [Picturebook Studies | Koç University](#)
- [Artistic Research Studio | Koç University](#)