





NETWORK_ OF DESIGN AND DIGITAL HERITAGE

OND CONTROL – THE COLLABORATIVE MUSEUM AND ITS CHALLENGES BE,

International Conference on Design and Digital Heritage Stockholm, Sweden 2013 🗲

PROGRAM

The NODEM 2013 Conference explores a wide range of key issues facing museums and culture-historical institutions today, and focuses on the new conception of museums as public spaces and communication modes and interfaces. This year theme "Beyond Control – The Collaborative Museum and its Challenges" stresses the importance of aligning museums to the new wave of changes in digital technology and media, which decisively influences the cultural heritage institutions' profiles, and calls for new forms of collaborations with innovation leadership.

The Conference is designed to bring together museum and heritage professionals (GLAM and heritage sector), innovation experts (universities, research and technology transfer centres, start-ups) and practitioners (SME sector) to facilitate exchanging perspectives and exploring new ideas, and enable discussion on the potential of collaboration and innovation.

With an exciting program which includes 11 keynote session speakers, more than 60 thematic presentations, several workshops, an exhibition showcasing the latest, cutting-edge products and services for museums, galleries and heritage sites (NODEM EXPO), numerous special events, and the beautiful framing of central Stockholm, we hope to provide a creative and productive conference.

'Beyond Control' is part of the NODEM Nordic Digital Excellence in Museums conference series under the stewardship of Interactive Institute Swedish ICT, organized in partnership with Stockholm City Museum and the Swedish Exhibition Agency.

Dear NODEM Conference Participants,

It is a great pleasure to invite you to the 7th International NODEM Conference on digital media and technology in museums and exhibitions, held between 1-4 December 2013 in Stockholm, Sweden. The NODEM Conference series is a prominent research forum in the field of cultural heritage and takes place annually in different countries all over the world. After last year's success in Hong Kong, we are truly glad to host such a prestigious event, and celebrate our milestone 10th anniversary, in the beautiful city of Stockholm.

This year, the organizing committee has chosen "Beyond Control – The Collaborative Museum and its Challenges" as the main theme for the conference, with a focus on the challenges that museums and other culture-historical institutions are facing in an increasingly digital and media saturated landscape, as well as on future developments of museum collaborations. The organizing committee has geared up for a productive, informative, but also recreational conference program including keynote sessions, special thematic sessions, workshops, poster presentations, demonstrations, exhibition and various social programs for more than 200 participants from around the world.

The success of the NODEM Conference series could not have been achieved without the commitment and hard work of our NODEM community, organizing committees, partners, reviewers, and the fantastic support of our sponsors over the years. We would personally like to thank everyone who has made this possible!

We hope that the interaction of such a wide range of expertise will generate new ideas and a better understanding of museum innovation and associated challenges.

We look forward to meeting you at the 7th NODEM Conference in Stockholm!

Sincerely,

Halina Gottlieb, PhD, Founding Director of NODEM, Interactive Institute Swedish ICT, Sweden Hans Öjmyr, PhD, Manager of Department of Exhibitions, The Stockholm City Museum, Sweden Staffan Forssell, Director General, Swedish Exhibition Agency, Sweden nodem

ORGANIZERS

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NODEM

NODEM was founded in 2002 by R&D lab Vision for Museums as the first network connecting cultural heritage and design. Born as a Scandinavian initiative, NODEM has succeeded to attract partners from beyond the Nordic countries. NODEM provides an interface between cutting-edge research in the field of digital technologies and art and education of the other. Our mission is to mediate this knowledge transfer and aid the implementation of digital tools in museums, galleries and exhibitions, as well as in natural and cultural heritage sites.

Culture Kick

Culture KICK is connected to the existing NODEM network, and builds on accumulated competencies on organizing knowledge transfer between stakeholders in research, innovation and practice. Culture KICK is a university-based network involving 8 partners from Norway, Sweden, Denmark, Finland and Iceland. The initiative is financed by the Nordic Council of Ministers as part of a focus on knowledge triangulation related to the emergence of digital media in the heritage field.

Interactive Institute Swedish ICT

Interactive Institute Swedish ICT is an experimental IT & design research institute that conducts world-class applied research and innovation. We create groundbreaking user experiences and offer expertise in interaction design, visualization, user behavior, sound design, games and entertainment. We develop new research areas, concepts, products and services, and provide strategic advice to corporations and public organizations. Our results are developed in close collaboration with industry and society, exhibited world-wide, and brought out to society through commissioned work, license agreements and spin-off companies.



PARTNERS

The Swedish Exhibition Agency

The Swedish Exhibition Agency supports museums and other exhibitors in development and collaboration through providing knowledge from global monitoring and analysis. We also develop technology and methods together with exhibitors and share what we learn through advice, courses and newsletters. Our operation also prioritizes children and young people and the development and accessibility of contemporary art. The Swedish Exhibition Agency is a government agency under the Swedish Ministry of Culture.

The partnership with NODEM is part of The Swedish Exhibition Agency's work to promote development and cooperation within the field of exhibitions. One of our five focus areas for 2013-2014 is technology, and how it can be used to create participation, accessibility, and interactivity for exhibition visitors.

The Stockholm City Museum

The Stockholm City Museum, situated in a 17th century palace next to Slussen, is a museum documenting, preserving and exhibiting the history of Stockholm. The Museum preserves the city's cultural heritage, bring it to life and convey it to Stockholm residents, visitors and future generations. The museum displays exhibitions about the current and historical Stockholm and Stockholmers.

Digital Heritage Center

Offers services and products that support innovation in digital cultural heritage. The Center is a spin-off from the Interactive Institute at Swedish ICT in Stockholm, Sweden, and was created in 1999. We collaborate with a large network of researchers, SMEs, governmental agencies, academia, museums, science centers, regional and national heritage boards, libraries and other memory institutions in Europe and Asia-Pacific. We develop research clusters at Universities and R&D institutes as well as support vocational training within digital heritage.









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CONFERENCE ORGANIZING COMMITTEE



Halina Gottlieb, PhD Founding Director of NODEM, Interactive Institute Swedish ICT, Sweden



Staffan Forssell, Director General, The Swedish Exhibition Agency, Sweden



Hans Öjmyr, PhD Manager of Department of Exhibition, The Stockholm City Museum, Sweden



The Stockholm City Museum





The Swedish Exhibition Agency



Prof. Joan Nordbotten, University of Bergen, Norway/USA

NODEM EXPO

David Berner, Exhibition technician, Sweden

NODEM Conference coordination



Silvia Istudor, Project Assistant, Interactive Institute Swedish ICT, Sweden





Magdalena Laine-Zamojska, PhD Candidate University of Jyväskylä, Finland / Junior Researcher, Interactive Institute Swedish ICT, Sweden



Lena Losell Montner, Executive Secretary, The Stockholm City Museum, Sweden

The Stockholm Music and Theater Museums, Evoking Spaces,





Emilia Alvarez Nordström, Project Assistant Interactive Institute Swedish ICT, Sweden



Johanna Rahm, Education Coordinator, The Swedish Exhibition Agency, Sweden



Dennis Josefson, Marketing Officer, The Swedish Exhibition Agency, Sweden

CONFERENCE VENUES

The Stockholm City Museum Ryssgården, 116 45 Stockholm

The Museum of Medieval Stockholm Strömparterren 3, Norrbro, 111 30 Stockholm

Hilton Stockholm Slussen Hotel Guldgränd 8, 104 65 Stockholm

SPECIAL EVENTS & MUSEUMS

Stockholm City Hall Hantverkargatan 1, 112 21 Stockholm

ABBA the Museum Djurgårdsvägen 68, Djurgården, 115 21 Stockholm

Museum of Spirits Djurgårdsvägen 38, Djurgården, 115 21 Stockholm

The Music and Theatre Museum Sibyllegatan 2, 114 51 Stockholm

The Vasa Museum Galärvarvsvägen 14, Djurgården, 115 21 Stockholm



The Stockholm City Museum is situated in Södra Stadshuset on the island of Södermalm. Their main exhibitions discuss Stockholm's history, architecture and culture, such as "Stockholm Exhibition" which tells of the historical development of Stockholm, and "The Svalan Block" - an exhibit about 17th century Stockholm and its inhabitants. Upcoming projects include "Meeting Stockholm" that looks upon the issue of boundaries mediated through the stories of immigrant children coming to Stockholm, and "Skuggsidan" an exhibition about crime and punishment from the Middle Ages until today.

Museum

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Stockholm

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It is responsible for preserving some 300,000 items of historical interest; 20,000 works of art, 3,000 oil paintings, 3 million photographs and a comprehensive library and archive. The museum offers resources to explore the history of Stockholm such as a Digital Museum, the Documentary room, Stockholm Source, Slussen Library, and archives. The museum also offers guided tours, the Millenium tour, a tour of the Woodland Cemetery Unesco heritage site, and the Abba City walking tour.

The Museum of Medieval Stockholm is situated under the Norrbro Bridge near the Royal Palace in central Stockholm and opened to the public in 1986. The museum was built around medieval findings discovered during the rebuilding of the Swedish Parliament Building in the 1970's. During this excavation, archaeologists uncovered part of the Old Town wall from 1530, skeletal remains, artifacts, boats and the remains of Helgands Huset churchyard. The discovery of these medieval remnants resulted in the establishment of the Museum of Medieval Stockholm.

The museum's work is focused on life in medieval Scandinavia and the history of Stockholm's development from the Middle Ages onwards. Their main exhibition portrays aspects of medieval life and the stories of medieval people. The exhibition extends to the medieval herb garden outside and includes a replica of one of the 11 boats found during excavations. The museum features interactive exhibits that contain audio guides, live performances, life size replicas of the Old Town, guided tours of the museum and of the city. It also offers educational activities for children and youths as well as lectures and programmes for adults.

The Museum of Medieval Stockholm

EVENTS



Millennium Walk and Old Town Guided Tour December 1, 2013 15:00 The Stockholm City Museum

Follow along in Mikael Blomkvist and Lisbeth Salander's footsteps while getting additional background information about the characters and the author. The walk starts at Bellmansgatan 1, where Mikael Blomkvist lives, then passes the Millennium editorial office, Lisbeth Salander's luxury apartment and many other locations mentioned in the books and film.

Photo: Thomas Karlsson

Welcome Reception December 2, 2013 19:00 Stockholm City Hall

The City of Stockholm will welcome NODEM 2013 Conference international participants to a reception at Stockholm City Hall which will include dinner buffet and visit to one of capital's famous tourist attractions, due to its grand ceremonial halls, and unique art collections. The Stockholm City Hall is the venue of the Nobel Prize banquet held on December 10th each year.

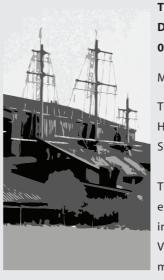


Photo: Yanan Li

The Swedish Christmas dinner is a buffet of traditional dishes decorated Swedish Christmas Dinner 'Julbord' with classic Christmas linens and white candles. A traditional buffet includes a variation of cold and warm meat and fish dishes such as 18:00 The Museum of Medieval Stockholm 'julskinka' (Christmas ham), pickled herring, meatballs, liver pâté, etc.; saffron buns and Christmas sweets for dessert, and Glögg (a Scandinavian hot spiced wine punch served with raisins and almonds) for drinks.

December 3, 2013

NEW EXHIBITIONS IN STOCKHOLM



The Vasa Museum: presentation of 'Meanwhile' December 4, 2013 09:00-09.45 The Vasa Museum

Marika Hedin, Director, The Vasa Museum

The exhibition highlights the world in the early 1600s and the ship Vasa's contemporaries. How it looks from other perspectives and other geographical vantage points than Sweden?

The exhibition is flexible and conveys stories and research through knowledge experiences in the form of film, animation and digital interactivity. The Vasa Museum is located in Djurgården, Stockholm, and exhibits the salvaged remains of the 17th century warship Vasa. The Vasa ship sank outside of Stockholm in 1628 on its maiden voyage and was, after many attempts, salvaged in 1961 almost completely intact.

ABBA the Museum: presentation of several digital stations December 4, 2013 10:00-10:45 ABBA the Museum

Ebbe Strandell, Chief Technology Officer, demonstrates how ABBA the Museum has used innovative digital technology and multi-media exhibits about the world-famous pop group. Abba the Museum is dedicated to the legendary Swedish pop group – ABBA, who topped the music charts from 1972 to 1982 and is one of the most successful pop groups in music history. The museum was born out of the ABBAWorld Exhibition that toured several countries during 2009 and 2011. The museum presents the visitor with an opportunity to experience life as a band member through interactive exhibition elements, and to follow the bands career and success through exhibits of memorabilia.

The museum features a recording studio – The Polar Studio - where visitors can try the recording equipment, a dance floor, a direct telephone line to the group members, a self-playing piano controlled remotely by Benny Andersson, a stage, and music video recordings. It also showcases everything from stage costumes, original artifacts, concert footage and gold records.

NEW EXHIBITIONS IN STOCKHOLM

Museum of Spirits: presentation of Clubkids during 150 years December 4, 2013 11:00-11:45 Museum of Spirits

Club Kids 150 years is built around three main nightlife gathering places: the dance floor, bar and toilets. In these particular spots of the exhibition, one can explore the night life's pleasures and its profiles through videos, interviews, sounds and smells. The exhibition is created by artist / club profile Makode Linde together with creative agency EGG and Museum of Spirits.

The museum is focused on the history of wine and spirits and drinking culture in Sweden. The museum's main exhibition - "Sweden: Spirits of a Nation" - explores the relationship between Swedish culture and alcohol. The exhibit is made to appeal to the visitors' senses through elements such as smells, taste sprays as well as audio and visual media and it aims to convey the whole experience of drinking. The exhibit also includes elements surrounding the culture of drinking in Sweden such as drinking songs and the production of alcohol.

The Museum of Spirits also showcases art exhibitions and the Absolut Vodka art collection, which includes artworks by Andy Warhol, Keith Haring, Dan Wolgers, and Linn Fernström.

The Music and Theatre Museum December 4, 2013 12:00-16:00

The Music and Theatre Museum was founded in 1899 and is located in the premises of Old Crown Bakery in Östermalm near the Royal Dramatic theatre. Its collection, which is displayed at the museum, covers both music and theatre and includes instruments, archives and historical artifacts. The collection contains more than 6,000 instruments from Scandinavia and Western Europe.

Current exhibitions: "Masked - The Street as Stage"

"Drum!"



CONFERENCE PROGRAM COMMITTEE

Coordinator: Joan Nordbotten, University of Bergen, Norway/USA

Ingvill Andreassen, PFI/InterMedia, University of Oslo, Norway
Bodil Axelsson, Linköping University, Sweden
Anne Balsamo, The New School for Public Engagement, USA
Johanna Berg, Digisam, National Archives, Sweden
Luigina Ciolfi, Sheffield Hallam University, UK
Line Daatland, Bergen Art Museum, Norway
Hermina Din, University of Alaska, USA
Sigurjón Baldur Hafsteinsson, University of Iceland, Iceland
Ane Hejlskov Larsen, Århus University, Denmark
Thomas Hillman, Gothenburg University, Sweden
Wim Hupperetz, Allard Pierson Museum, University of Amsterdam, Netherland
Harald Kraemer, Zurich University of the Arts, Switzerland
Gunnar Liestøl, University of Oslo, Norway
Mats Persson, Association of Swedish Museums, Sweden
Sofia Pescarin, CNR ITABC, Italy
Perttu Rastas, The Kiasma Museum of Contemporary Art, Finland
Mariana Salgado, Aalto University, Finland
Neil Silberman, President of the ICOMOS International Scientific Committee on Interpretation and (ICIP),
University of Massachusetts Amherst, USA
Jyrki Simovaara, University of Applied Sciences HUMAK, Finland
Rachel Smith, Århus University, Denmark
Ole Smørdal, University of Oslo, Norway
Marcin Szeląg, Adam Mickiewicz University, Poland
Krzysztof Walczak, Poznan University of Economics, Poland
Kevin Walker, Royal College of Art, UK
Lena Wilhelmsson, Dunkers kulturhus, Sweden

CONFERENCE SESSIONS & WORKSHOPS	
Hilton Stockholm Slussen Hotel / Auditorium	
Welcome and Opening Remarks	

9:00-9:30	Welcome and Opening Remarks
9:30-11:30	Chair: Anne Balsamo Future Museum and Collaborations, Gerfried Stocker Fetishisms to Digital Incarnations, Amareswar Galla Museums, Media and Human Rights, Richard Sandell The Question Concerning Ontology - How the values of dive
	can be embraced in the digital age, Ramesh Srinivasan
11:30-11:45	Discussions
11:45-13:00	Lunch
13:00-14:30	Chair: Maria Economou Every book tells a story, but what can 68.000 books tell you? N Curation at Library and Cultural Heritage Institutions, Nora N Supporting the Museum's Mission through Mobile, Allegra E Balancing Act: Object, Interpretation and Technology, Hermi
14:30-14:45	Discussions
14:45-15:15	Coffee Break
15:15-16:35	Chair: Kevin Walker
	New Approaches to Exhibition Design: Temporary and Perma Dramaturgy in Interaction, Nils Wiberg Bringing the Digital Museum to Your Home, Bartek Gudows User Interactivity at ABBA The Museum, Ebbe Strandell
16:35-16:50	Discussions



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KEYNOTE SESSION December 2, 2013

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New Perspectives on Digital Collections and

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CONFERENCE SESSIONS & WORKSHOPS

Hilton Stockholm Slussen Hotel / Auditorium

2013

SPECIAL AND THEMATIC SESSIONS

December 3, 2013

Time	Hilton Stockholm Slussen Hotel	Hilton Stockholm Slussen Hotel	Hilton Stockholm Slussen Hotel	Stockholm City Museum
9:00-10:30	Experience Design Inside / Outside Museums	Collaboration, Partnership and Participation in Museum Innovation	Novel and Virtual Museums	Support for Archiving, Documenting, Preservation, Visualization and Recreating
10:30-11:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break
11:00-13:00	Curatorial Challenges	Collaboration, Partnership and Participation in Museum Innovation	Experience Design Inside / Outside Museums Rethinking Design of Museums and Exhibitions	Support for Archiving, Documenting, Preservation, Visualization and Recreating
13:00-14:00	Lunch	Lunch	Lunch	Lunch
14:00-16:00	Participation and Learning in Museums		Rethinking Design of Museums and Exhibitions	Social Media for Creative Expression, Communication and Content





KEYNOTE SESSIONS December 2, 2013 09:00-17:00 Hilton Stockholm Slussen Hotel

The Keynote Speaker Sessions at NODEM2013 will look upon three areas of interest: - Museum Innovation through Digital Media and Collaboration

- Digital Curating and its Role in Supporting Cultural Heritage Institutions Today
- Experience Design and its Role in Communication with Audiences

The sessions explore museum innovation, digital curating and experience design from a variety of perspectives, relaying the importance of integration of new media and new technology in both communication and increasing visitor and user participation. All 11 keynote speaker presentations aim to discuss today's rapid expansion of communication media, demonstrating how new and developing digital media can improve and diversify the visitor or user experience within cultural heritage, support the educational mission of museums, and the challenge it poses to curators and museum practitioners. The discussions will address important issues such as interdisciplinary collaboration, digital media collection and curating, visualization of data, non-site specific exhibits, new media as a tool for storytelling, the use of digital media to express cultural values and development of new modes of interaction for cultural heritage institutions, etc.

KEYNOTE SESSIONS' CHAIRS



Anne Balsamo

Dean of the School of Media Studies The New School for Public Engagement, USA

Anne Balsamo is the Dean of the School of Media Studies in the New School for Public Engagement in New York City. Her recent book, "Designing Culture: The Technological Imagination at Work (Duke, 2011)" examines the relationship between culture and technological innovation, with a particular focus on the role of the humanities in cultural innovation. Previously, she was a Full Professor at the University of Southern California where she held joint appointments in the Annenberg School of Communication and the Interactive Media Division of the School of Cinematic Arts. From 2004-2007, she served as the Director of the Institute for Multimedia Literacy at USC where she created one of the first academic programs in multimedia literacy across the curriculum. In 1998, she left a tenured faculty position at Georgia Institute of Technology to join a research-design group at Xerox PARC that created experimental reading devices and new media genres. In 2002, she co-founded, Onomy Labs, Inc. a Silicon Valley technology design and fabrication company that builds cultural technologies. Her first book, "Technologies of the Gendered Body: Reading Cyborg Women (Duke UP, 1996)" investigated the social and cultural implications of emergent bio-technologies.



Maria Economou Lecturer in Museum Studies University of Glasgow, UK

Dr Maria Economou is Lecturer in Museum Studies at the University of Glasgow, where she is based at the Hunterian Museum and the Humanities Advanced Technology and Information Institute (HATII). She has previously worked at the universities of the Aegean in Greece and Manchester, Glasgow and Oxford (at the Pitt Rivers Museum) in the UK. She has collaborated with several cultural heritage institutions around the world, particularly on the use of new technologies for public engagement. Her research focuses on evaluation and visitor studies, as well how digital technologies are reshaping cultural organisations and the ways they communicate with different audiences



Kevin Walker Head of Information Experience Design Royal College of Art, UK

Kevin Walker leads the new Information Experience Design programme at the Royal College of Art in London (http://ied.rca.ac.uk). He is a researcher, designer, writer and artist working at the boundaries of digital and physical – specifically in curation and computation in physical spaces, grounded in cognitive and cultural theory. Author of Hackers and Slackers (2012), co-editor of Digital Technologies and the Museum Experience (2008), his background is in journalism, design, interactive media and education research.

Kevin studied journalism and media, before moving into advertising and graphic design in the 1980s. He obtained a BA in Anthropology and Mass Communications from the University of California, Berkeley in 1992, before working in radio. He then gained a Masters in Interactive Telecommunication from New York University, focusing on physical computing, applying this subsequently as Senior Software Designer for Exhibitions at the American Museum of Natural History in New York in the late 1990's.

Since then Kevin has continued to design museum exhibits and media as well as work with artists to help them realise their technical ambitions. Kevin moved to London in 2003 to pursue doctoral research in Museums and Technology, completing this in 2010. Simultaneously he participated in funded research projects involving sensor networks, mobile technologies and science education. Before coming to RCA, he served as Course Director of the MRes in Information Environments at London College of Communication, University of the Arts London, and worked as an artist.



KEYNOTE SESSIONS



Kimmo Antila Museum Director Finnish Postal Museum, Finland Twitter: @KimmoAntila



Kimmo Antila (born 1966 in Kiikoinen) is the Director of Finnish Postal Museum (2013) and he has been previously working as a Curator and Project Manager in Museum Centre Vapriikki, Tampere, as a lecturer at the Finnish University Network for the History of Science and Technology, and as a researcher for the Finnish National Road Administration. He has graduated from the University of Tampere and studied industrial heritage at the Royal Institute of Technology in Stockholm and Museum Management in Deutsches Museum.

Antila is a member of the board of ICOM-CIMUSET (Committee for Science and Technology Museums), Finnish National Museum of Technology and of the Finnish Society for the History of Technology and a Vice President of Trafiikki network of Finnish communication and transport museums. He has published extensively on the history of technology, museology, industrial heritage, e-learning and on the history of traffic and infrastructure.

New Approaches to Exhibition Design: Temporary and Permanent Exhibitions

Museum Centre Vapriikki Tampere is one of the largest and the most popular museums in Finland with its 13 000 square meters of museum space and over 140 000 annual visitors. Vapriikki has gone through major renovations during the last five years. All the permanent exhibitions have been totally renewed and at the same time the concept of permanent exhibitions has been radically changed.

The future development of the Museum Centre Vapriikki has now started. It includes the coming of the three special museums (National Postal Museum, Mineral Museum and Mediamuseum Rupriikki) under the roof of Vapriikki from 2014 onwards.

In my presentation I will focus on the ideas, concepts, dramaturgy and implementation of the new exhibition design in four different exhibitions in Vapriikki. Tampere 1918 exhibition on the Finnish Civil War was the first of the major renovation projects of the permanent displays in Vapriikki. This project was followed by the exhibitions "City of Tammerkoski Rapids" (2009) and "Innovations" (2008–2012). All of these exhibitions are shedding their light on special themes related to the history and contemporary life in Tampere and all of these permanent exhibitions were made with different museological ideas and approaches. I will elaborate these aspects more deeply and concentrate first on the European Museum of the Year special commendation awarded Tampere 1918 exhibition, and discuss how to create strong emotional feelings in the exhibition. I will then go more into detail to the other exhibitions with some international comparison and reveal some secrets and new perspectives of my current project: creating the permanent and temporary exhibitions of the Finnish Postal Museum to be opened in September 2014.

I will be mainly looking at the changes in the exhibition design through three aspects: 1) Storytelling and the sharing of information; 2) Experiences; 3) Participatory aspects. Moreover I will present some viewpoints on the use of technology and on the physical and digital interfaces in the exhibitions.

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KEYNOTE SESSIONS



Allegra Burnette Creative Director, Digital Media The Museum of Modern Art, USA



Allegra Burnette is the Creative Director of Digital Media at The Museum of Modern Art, New York, overseeing design and production for the museum's website, MoMA.org, as well as mobile devices, interpretive kiosks and digital displays. Online projects include two complete site redesigns, creating the online collection and audience-specific sites for teachers, teens, and kids, overseeing an ongoing series of award-winning exhibition sites, and extending the reach of MoMA's content through social media, mobile web and apps, and elsewhere. Offline projects include the lobby display screens program and the launch of MoMA.guide, a series of interactive kiosks and the new MoMA Audio+ mobile guide. Prior to working at MoMA, Ms. Burnette created and ran a media department at the renowned museum exhibition design firm Ralph Appelbaum Associates.

She has an MFA in museum exhibition planning and design from the University of the Arts, where she has also taught graduate courses in museum media. She is included in the book, Mobile Apps for Museums: The AAM Guide to Planning and Strategy, currently teaches in the online graduate program for Museum Studies at Johns Hopkins University, and also serves as president of the board of the Museum Computer Network (MCN).

Supporting the Museum's Mission through Mobile

Art museums have been utilizing mobile in the form of transportable audio programs to support exhibition content since the earliest documented audio tours in the 1950s. Those early initiatives set the foundation for many of today's mobile websites and applications for museums. The Museum of Modern Art's own mobile program was launched after the onsite wand-based audio program was made free in 2004, providing a core content base upon which to build. Throughout subsequent projects that include various apps and mobile websites, MoMA has striven to support the educational mission of the museum, which is focused on encouraging an ever-deeper understanding and enjoyment of modern and contemporary art by the diverse local, national, and international audiences that the museum serves.

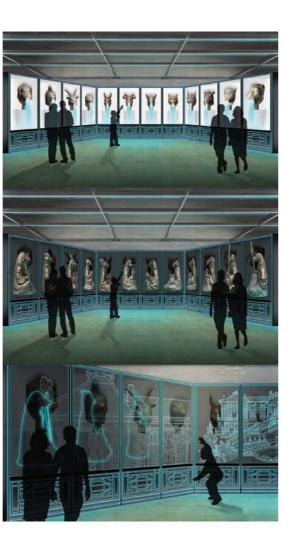
This session will explore how the various mobile apps and websites support, enhance, and extend the interpretive programs of the museum. Integral to all of MoMA's projects has been an ongoing research effort that analyzes visitor behavior, knowledge, and interests, combined with continuous monitoring of best practices in the fast moving and everchanging mobile landscape. Undeniably, mobile has become integrated into our everyday lives. We find directions and answers to questions that arise in casual conversation; we communicate with friends and family; we share images, links and news items; we read magazines, books, and blogs. Mobile has untethered us from our desktops and laptops and enabled us to be digitally connected at all times. The question for museums and cultural organizations is what role do we play in this new mobile landscape? How do we use these new tools to support the museum's curatorial goals and programs? And how do we organize ourselves to undertake these new initiatives?

KEYNOTE SESSIONS



Herminia Din Professor of Art Education, Department of Art University of Alaska Anchorage, USA

Dr. Din is an associate professor of art education at the University of Alaska Anchorage. She was the Web producer at the Children's Museum of Indianapolis and education technologist at the Indianapolis Museum of Art. In 2005, she partnered with the University of Alaska Museum of the North in Fairbanks on the LearnAlaska project, and facilitated a docent-training program using Internet2 videoconferencing for a distance-delivered program. She presented at SIGGRAPH Educator's Program on educational gaming for museums, and delivered a speech on using animation and interactive virtual technology to enhance museum learning at SIGGRAPH ASIA 2008. She collaborated with colleagues at the Metropolitan Museum of Art, American Museum of Natural History, California Academy of Sciences, and de Young Fine Art Museum to offer teacher development programs focusing on art and science integration. In 2007, she co-edited The Digital Museum: A Think Guide that offers an in-depth investigation into how and why museums are experimenting with new technology, and co-authored Unbound by Place or Time: Museums and Online Learning (2009) and All Together Now: Museums and Online Collaborative Learning (2011). Her research focuses on object-based learning and evaluation of the effectiveness of museum online resources. She addresses the transformation of teaching and learning by using new technologies, and aspects of emerging technology for implementing creative initiatives to enhance museum education. She holds a doctorate in art education from Ohio State University and presents regularly on museum and technology at national and international conferences



Balancing Act: Object, Interpretation, and Technology

The rapid advancement of technology has transformed modern society. In the museum field, these advancements have had a significant influence on learning and experiencing cultural objects and the heritage associated with those objects. Museums throughout the world have adapted various digital media strategies in exhibition design, spatial and floor planning, educational outreach, and social media interaction to take advantage of this shifting paradigm. Consequently, integrating new media interpretation into exhibition planning has become a standard practice for enhancing the museum experience.

As part of technology evolution, museums are facing constant innovation in digital media. This presents both challenges and opportunities. If properly harnessed these can offer museums great potential but must be used wisely. Employing the vast array of interpretive media in the museum exhibit must be carefully and "thoughtfully" planned. It should assess their target audience and consider the use of only such technologies and practices appropriate for a given exhibit that is consistent with the purposes of the exhibition and core values. The selection of technology tools and the desired goals must be clearly defined. However, the quality of digital content is more important than technology - this should be a guiding principle. Sustaining the aesthetic is the core value that makes a museum exhibit what it truly is; yet balancing educational interpretation with entertainment in the application of new technologies is critical.

This session focuses on the intricate balance among objects, interpretation, and technology in the context of preserving cultural heritage. It describes the process of planning, developing, and organizing the Yuan Ming Yuan-Qing Emperors' Splendid Gardens exhibit, as an example of a comprehensive approach in applying new media tools for storytelling. In addition, it will also address issues raised in the context of digital curation especially digital preservation and sustainability.

KEYNOTE SESSIONS



Amareswar Galla

International Institute for the Inclusive Museum, India / Denmark

Professor Dr. Amareswar Galla is the Executive Director of the International Institute for the Inclusive Museum, Hyderabad & Copenhagen. Former appointments include Professor of Museum Studies, UQ, Brisbane; Professor of Sustainable Heritage Development at ANU, Canberra, Australia; and Vice President of ICOM, Paris, France. His heritage work in post war reconstruction spans across Vietnam, Cambodia, Bangladesh and Afghanistan; and postcolonial indigenous and inclusive heritage development in Australia, South Africa, the Netherlands and other parts of the world. His extensive publication record ranges from World Heritage: Benefits Beyond Borders, Cambridge University Press & UNESCO Publishing 2012 to Heritage Curricula and Cultural Diversity, Office of Multicultural Affairs, Prime Minister & Cabinet, Canberra, 1993. He is the Editor-in-Chief of two refereed academic journals dealing with Sustainable Heritage Development: International Journal of the Inclusive Museum (www.museum-journal.com) Chicago; and International Journal on Environmental, Cultural, Economic and Social Sustainability (www.sustainabilityjournal.com), Chicago.



He was the co-founder and 2nd & 3rd Editor-in-Chief of the International Journal of Intangible Heritage (2007-2011) (www.ijih.org) Paris/Seoul. In 2011 Prof Galla brought all the knowledge communities he founded into one seamless Knowledge Community under the banner of the International Institute for the Inclusive Museum (http://inclusivemuseum.org/) His work on the use of ecomuseology as a methodological tool for sustainable heritage development and poverty alleviation has been listed as best practice in the 2009 World Culture Report by UNESCO. Similar work includes the establishment of museums at World Heritage sites as culture in poverty alleviation projects at Ha Long Bay and Hoi An in Vietnam and Darjeeling Himalayan Railway in India. Awards range from Outstanding Conservationist of the year award by the Vietnamese Government, 2002; European Best in Heritage Award, 2008; to Outstanding Achievement Award for Human Rights promoting tangible and intangible heritage for corrections in prisons by the New South Wales Government, Australia, 2011.

Fetishisms to Digital Incarnations Things - Access, Engagement and Digital Heritage

The focus of this presentation is the fundamental question - How do we facilitate participatory democracy in the digital domain? How do we frame civic spaces promoting digital democracy for the triangulation of Collections – Connectivity – Communities. Collections are perceived as embedded knowledge systems with layers of significance, visualised as predominantly 'tangible' things in the digital domain. The intangible elements once digitised become only documentary heritage, museumising that which is living. Connectivity provides the means, and not the end, for access, engagement and interactivity through the affordances and possibilities in the digital domain. However, stakeholder communities, in all their meanings, manifestations, cultural understandings; and the multitude of publics and audiences remain in the liminal space between the collections and connectivities. The Inclusive Museum Knowledge Community is an open ended project that endeavours to bring the three elements into a discourse to address the complexity and triangulation and situating it in the shifting paradigm of culture in sustainable development.

The ICOM Cultural Diversity Charter underlines the axiomatic principle - DIGITAL DOMAIN: To understand the differences between digitisation, digital access and digital heritage, to support digital access in all activities, and to recognise that digital access is not a substitute for return, restitution and repatriation'. (http://inclusivemuseum.org/wpcontent/uploads/2013/04/ICOM Cultural Diversity Charter.pdf)

The 28th General Assembly of ICOM, meeting on 17 August, 2013, in Rio de Janeiro, Brazil, resolved to 'Evaluate the extent to which programs and ICOM activities are in accordance with the 2010 Cultural Diversity Charter of ICOM adopted in Shanghai and implement a policy of gender equality as an integral part of the strategic directions of ICOM'. In this context the Inclusive Museum Knowledge Community endeavours to facilitate discursive crossings in the range of cultural borders that we either cross, or transgress if you will, as we create meanings that appear seamless but nevertheless hegemonic. especially digital preservation and sustainability.

KEYNOTE SESSIONS



Bartek Gudowski Innovator, Stockholm, Sweden

Bartek is a technology veteran with background from various digital initiatives over the past 15 years. In the early days of his career he was part of building the Nobel e-museum, developing online virtual spaces in Los Alamos National Laboratory, and started his own company focusing on 3D virtual space environments and interactive navigation environments. At later years, he co-founded Jaycut a cloudbased video editing distribution platform that was sold to RIM, creators of the Blackberry smartphones. Today, Bartek is Chief Technology Officer at a major European broadcaster and continues his innovations by enhancing the TV experience and launching satellite space rockets.



Bringing the Digital Museum to Your Home

Imagine creating a virtual exhibition space in your own house and being able to make the perfect place to expose your favorite digital art. Bartek is using +35 screens to create a seamless virtual display area in different compositions and shapes without a hint of a technology installation, all hidden by translucent mirrors. Being at the forefront of technology, digital art is exposed in 4K Ultra HD resolution and motions are put to moving 360 degrees displays - creating a strong immersive experience, all controlled from your lpad. This installation is a perfect place to expose Bartek's big passion to capture magic moments by flying his drones to the most distant place on earth and creating stunning videography. In this keynote, you will see how technology can bring your home to life in a completely different way and admire beautiful video photography from ancient limestone cliffs, archipelagos in Thailand, to waterfalls and volcanoes in Hawaii.

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KEYNOTE SESSIONS



Nora McGregor Digital Curator British Library, UK



Nora McGregor is a Digital Curator in the Digital Scholarship Department at the British Library. Her work explores how new technologies are re/shaping academic research processes and environments in the 21st century and how that in turn shapes provision of digital content and services to scholars. In 2010 she delivered the exhibition Growing Knowledge: The Evolution of Research showcasing technical innovations underway in both research library spaces and digital collections. Her current focus is on delivering a major two-year training programme to ensure curatorial staff are fully versed in the opportunities digital technologies afford cultural heritage institutions and gain the practical skills to keep pace with a rapidly changing research environment.

Every book tells a story, but what can 68,000 books tell you? New perspectives on digital collections and curation at library and cultural heritage institutions

The British Library is the national library of the United Kingdom and one of the world's greatest research libraries with a rich and diverse collection exceeding 150 million items representing every age of written civilisation. Books, journals, manuscripts, maps, stamps, music, patents, photographs, newspapers, sound recordings and now UK websites make up this vast and growing cultural heritage resource.

With millions of digitised and digital items held and counting, the role of the curator as custodian of an increasingly electronic collection continues to evolve. The sheer scale of these complex digital collections poses unique opportunities and challenges for cultural heritage staff and requires fresh skillsets and perspectives to ensure these resources are leveraged to their full potential. This presentation will explore some of the key shifts underway in traditional curatorial practice through the lens of the exciting work undertaken by the Digital Curator team at the British Library.

KEYNOTE SESSIONS



Richard Sandell Professor of Museum Studies University of Leicester, UK



He has published five books; the most recent (2012) (with Eithne Nightingale) is entitled Museums, Equality and Social Justice. He is currently working with colleagues on a research project, funded by the Wellcome Trust and in collaboration with the Science Museum, London, Hunterian Museum and Royal College of Physicians that interrogates the potential for medical collections and museums to offer new ways of seeing and understanding disability and to inform contemporary debates about rights and equality.

Richard Sandell is Professor in the School of Museum Studies at the University of Leicester where he teaches across the School's Masters programmes, supervises doctoral students and works with colleagues in the Research Centre for Museums and Galleries on a range of projects. His research, frequently carried out in collaboration with museums, focuses on the potential that museums might play in supporting human rights, social justice and equality. He has been awarded fellowships at the Smithsonian Institution (2004/2005) and the Humanities Research Center of the Australian National University (2008) to develop projects around these themes.

Museums, Media and Human Rights

The dynamic processes through which human rights are sought and claimed, awarded and denied, are not confined to discrete legal or governmental domains but rather embedded in the values and practices of individuals and institutions across a variety of social, cultural political and media spheres. With this understanding of human rights, museums – it can be argued – have occupied a unique (indeed, privileged) position as highly trusted and visible institutions that hold the capacity to not only reflect but to challenge and reconfigure normative ways of thinking and talking about equality.

Museums are sites which embody and publicly articulate moral standpoints on rightsrelated issues, sometimes explicitly – for example in human rights museums – but also implicitly in the narratives and silences that museums of all kinds shape and present. The effects and consequences of these morally loaded narratives, though diffuse and often difficult to capture and measure, can extend beyond museum visitors to reach much broader audiences through a variety of networks and media.

However, a suite of interrelated trends – including the proliferation of media forms made possible through digital innovation; changes in the way audiences interact and engage with diverse media; and a turn towards more participatory and co-creative practices within the cultural sector – are opening up new challenges, and well as opportunities, for museums that take on human rights and related issues of social justice, fairness and equality. Drawing on a range of examples and recent research this paper explores how these trends are impacting museum practice, audiences and, more broadly, the climate within which human rights can be claimed and denied

KEYNOTE SESSIONS



Ramesh Srinivasan

Associate Professor, Department of Information Studies and Design|Media Arts, University of California, USA

Ramesh Srinivasan, Associate Professor at UCLA in Design and Media/Information Studies, studies and participates in projects focused on how new media technologies impact political revolutions, economic development and poverty reduction, and the future of cultural heritage. He recently wrote an op/ed at the Washington Post explaining the complex nature of social media in revolutions and riots, such as those in Egypt and in London, and also a column for the Post's Sunday Outlook section on the 5 Myths of Social Media. Additionally, he has written multiple front page articles for the Huffington Post, including a piece on Internet Freedom. He has had his work featured on the front page of the UCLA and USC websites. Recent public outreach has built on his response in the New Yorker (from his blog: http://rameshsrinivasan.org) to Malcolm Gladwell's writings critiquing the power of social media in impacting revolutionary movements. He has worked with bloggers, pragmatically studying their strengths and limitations, who were involved in recent revolutions in Egypt and Kyrgyzstan, as discussed in a recent NPR interview. He has also collaborated with non-literate tribal populations in India to study how literacy emerges through uses of technology, and traditional Native American communities to study how non-Western understandings of the world can introduce new ways of looking at the future of the internet. His work has impacted contemporary understandings of media studies, anthropology and sociology, design, and economic and political development studies. He has given several major invited talks, including recently at LIFT in 2009. He holds an engineering degree from Stanford, a Master's degree from the MIT Media Lab, and a Doctorate from Harvard University.

The Question Concerning Ontology - How the values of diverse communities can be embraced in the digital age

Professor Srinivasan argues that we must re-think the global expansion of technologies away from simple ideas of access and embrace diverse cultural and community-based value systems. This talk explores the ways in which diverse communities on the margins of today's world are re-making and subverting technologies, shaping literacy and development in rural India, indigenous knowledge systems in Native American digital museums, and political revolutions within the Arab Spring. This talk argues that to empower diversity and support social justice and democratization we must pay attention step away from the design laboratories of Silicon Valley and look at the vast ways in which cultures and communities are attempting to engage with the digital age.

KEYNOTE SESSIONS



Gerfried Stocker Artistic and Managing director, Ars Electronica Linz Institution: Ars Electronica Linz



He has been chiefly responsible for conceiving and implementing the series of international exhibitions that Ars Electronica has staged since 2004, and, beginning in 2005, for the planning and thematic repositioning of the new, expanded Ars Electronica Center.

Gerfried Stocker is a Media Artist and Telecommunications Engineer. In 1991, he founded x-space, a team formed to carry out interdisciplinary projects, which went on to produce numerous installations and performances featuring elements of interaction, robotics and telecommunications. Since 1995, Gerfried Stocker has been Artistic Director of Ars Electronica. In 1995-96, he headed the crew of artists and technicians that developed the Ars Electronica Center's pioneering new exhibition strategies and set up the facility's in-house R&D department, the Ars Electronica Futurelab.

Future Museum and Collaborations

Collaboration has been a major issue for museums ever since, for reasons of knowhow, prestige or budget constraints. And since out local governments more and more often redirect our budget demands towards EU programs, networks for exchange and collaboration between our institutions have been successfully established.

But in a world of Google, Wikipedia, facebook etc. we have new kids on the block and participation has become not just a keyword, but a real demand, something that our visitors expect.

But how could such a new collaboration between museum and its audience look like?

Ars Electronica Linz GmbH is a corporation owned by the City of Linz. It consists of the following operative divisions: Ars Electronica Festival-Prix-Exhibitions, Ars Electronica Center, Ars Electronica Futurelab and AE Solutions as well as Management Services.

The Center is the Museum of the Future – the place where all the diverse blends of artistic genres, scientific domains and technological directions are displayed and processed. Biotechnology and genetic engineering, neurology, robotics, prosthetics and media art are juxtaposed here on equal terms and form experimental arrays conducive to testing ways in which we might be interacting and communicating with our surroundings and other human beings in the very near future, and getting the impression of what these changes will mean for us and our society. All exhibitions focus on issues having to do with how people can deal with their environment, and offer a variety of perspectives on our nature, our origins and our world. An extensive set of methodological tools is available to provide visitors with multifarious approaches to and ways of looking at the challenges posed by everyday life. Here, the emphasis isn't just on interaction with exhibits on display; it's on participation. The exhibitions are continuously being reworked and updated. What you won't find here is a bunch of "Do Not Touch" signs; you're cordially invited to enjoy a hands-on experience.

KEYNOTE SESSIONS



Ebbe Strandell CTO ABBA The Museum, Sweden

ABBA THE MUSEUM

Ebbe Strandell is the Chief Technical Officer of ABBA The Museum. He received his MSc in Media Technologies from Linköping University in 2007 and started his career as a Software and System Developer. He worked in Taiwan as Assistant Researcher developing a system to distribute live image data from coral reefs to marine biologists across the globe. Two years later he returned to Sweden where he worked with flight simulators, specifically with communication exercises between pilots and flight controllers. In 2010, Ebbe joined the touring exhibition called Abba World and worked with software development and integration between software and hardware. When the touring exhibition finally found its home in Stockholm, he had a leading role in planning and building the new museum.

User Interactivity at ABBA The Museum

ABBA The Museum opened in May 2013 to tell the story of one of the greatest pop bands in history. In classic museum format, the museum features environments that resemble the places where the stars lived, worked and created the music, showcasing original clothing and props as well as interviews with the band members and their closest friends and colleagues. But unlike the classic museum, technology plays a vital role in the exhibition to aid telling the story and including the visitor with interactive features used to activate them and to challenge their skills. The exhibition features an interactive application system where visitors are invited to take on different roles in the band with singing, dancing and even stage performances. Visitors' experiences are saved by each application in various formats onto the visitor's ticket and the visitor can later enjoy them and download them from the website.

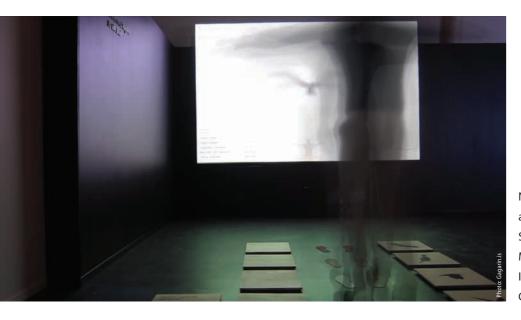
This talk will focus on the interactive applications and the system architecture used in the museum and highlight some of the gains and difficulties of using interactive applications in public places.

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KEYNOTE SESSIONS



Nils Wiberg Interaction Designer, Gagarin.is Iceland



Nils Wiberg is an Interactive Artist and Interaction Designer from Sweden based in Iceland holding a Master degree in Human Computer Interaction and a Master degree in Cognitive Science.

His design work focuses on bringing Tangible Computing to the realm of exhibition design. As an Interaction Designer he specializes in the creation of immersive experiences where people reach insight through an unconscious process of intuition which leads to an insight. In this he strives to poeticize the distance between man and technology. His art is likewise focused on generating insights and questions on complex matters of artifice, ideas, theories or prospects. Intangible design fictions through a range of media; be it a dress that adapts top the dow jones index, a government institute that collects the echoes of abandoned buildings or letting dancers explore the fidelity of interactive space. He hopes therefore to achieve parafunctional aha moments where the pretense of the design is the object of attention.

Dramaturgy in Interaction

Gagarin develops rich interactive media experiences for museums and institutions that allow people to experience stories vividly, to understand interesting content, and to share their discoveries with others.

How can one use interactive installations to further the narrative in exhibitions? And how this can be achieved through a dramaturgy in interaction?

There is a vague maxim out there saying that learning through interaction is better, but why is that exactly? This is not a strictly intellectual process. Seeing as learning, or rather, the will to learn is not an intellectual task. It has to do with emotion, motivation, somatic markers. This is why the audience needs to be engaged to learn.

To create a provocative narrative is essential; to surprise, to reveal, to... Yes provoke. How to leverage those elicited emotions and fit them into a dramatic arc of the overall exhibition?

Institutional knowledge and the access to institutional knowledge will be touched upon with regards to how existing data can more easily lend itself to narrativization and or visualization.

Also the Wittgenstein concept of private language will be discussed in terms of the knowledge sharing aspect from science to technology. Where to narrative is needed in order to create an ease with which their knowledge can be transferred. The use of semiotic signaling to communicate interaction will be analyzed and also how this squares with the projected future of flattening the design, where objects are no longer supposed to communicate their purpose in a vulgar way anymore. Here the difference between consumer products in continuous use will be compared with the daunting experience of stepping into a museum for the first time. What can exhibition design allow itself and what are its prerogatives and unique affordances?

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SPECIAL SESSIONS

The NODEM 2013 program of Special Sessions will examine different aspects of the general theme "Beyond Control – The Collaborative Museum and its Challenges", bringing up issues, challenges, and opportunities for new types of collaboration and development opportunities in cultural heritage institutions.

The Speakers' Presentations within the Special Sessions are organized and broken down into eight key topics:

- Curatorial Challenges
- Participation and Learning in Museums
- Experience Design Inside and Outside Museums
- Social Media for Creative Expression, Communication and Content
- Support for Archiving, Documenting, Preservation, Visualization and Recreating
- Collaboration, Partnership and Participation in Museum Innovation
- Rethinking Design of Museum and Exhibition
- Sovel and Virtual Museums

These Thematic Sessions will consist of short presentations followed by group discussions, and will deal with a range of different subjects such as: audience participation/collaboration, digital data collection, experiential learning, participation through social media, the museum in the public space, new museum concepts, new technologies and intangible heritage, the role of curator's, visualization of data, the interactive museum experience, etc.

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PAPER PRESENTATIONS



Andrew Ellis, The Public Catalogue Foundation (PCF), United Kingdom

Constructing National Identity in Facebook – Museum Visitor's Perspective Linda Lotina, University of Applied Sciences, Latvia Krista Lepik, University of Tartu, Estonia	Discussions on Inclusive, Participative and Open Museums Mariana Salgado, Aalto University, Finland Sanna Marttila, Aalto University, Finland
Craft Heritage and Digital Documentation: The Research Project Contemporary Authentic Eleonora Lupo, Politecnico di Milano, Italy	DIGITAL Repository of Museum Heritage in Croatia Višnja Zgaga, Museum Documentation Center, Croatia
 Critical Visualization in a Museum Context Karin von Ompteda, Royal College of Art, United Kingdom Kevin Walker, Royal College of Art, United Kingdom Curators Don't Have All the Answers Magdalena Tafvelin Heldner, National Museum of Science and Technology, Sweden 	 Digitization and Impact: A Balancing Act Babak Davarpanah Varnosefadarani, University of East I Do's and Don't on Facebook Across Museums Sarah Grøn, SMK/National Gallery of Denmark, Denmar Maria Holst Mouritzen, Experimentarium, Denmark
Deconstructing the Online Collection: the Value in Creatively Repurposing the Past John Coburn, Tyne & Wear Archives & Museums, United Kingdom	Linea Hansen, National Museum of Denmark, Denmark Esa ja esineet (Oswald and the Objects): Engaging Children in Hanna Kapanen, Design Museum, Helsinki
 Design & New Models of Archiving, Documenting, Visualizing and Enhancing the Design Culture: Towards a "Digital Archive of Cultural Temporary Exhibitions" Eleonora Lupo, Politecnico di Milano, Italy Raffaella Trocchianesi, Politecnico di Milano, Italy Alessandra Spagnoli, Politecnico di Milano, Italy Neva Pedrazzini, Politecnico di Milano, Italy Neva Pedrazzini, Politecnico di Milano, Italy Rachel Smith, Aarhus University, Denmark 	Exeter Time Trails Gabriella Giannachi, University of Exeter, United Kingdor Will Barrett, University of Exeter, United Kingdom Rick Lawrence, University of Exeter, United Kingdom Thomas Cadbury, University of Exeter, United Kingdom Helen Burbage, University of Exeter, United Kingdom Andy Chapman, University of Exeter, United Kingdom Paul Farley, University of Exeter, United Kingdom
Designing Interactive Exhibitions with Innovative Narrations Guided by Architectural Space and Digital Technologies Simge Esin Orhun, Ozyegin University, Turkey	Experience and Re-experience without Boundaries in Time an Eva Lena Bergström, Nationalmuseum, Sweden Joakim E. Werning, Nationalmuseum, Sweden
Digitization and Digital Interaction as a Barrier to Democratic Heritage? Joel Taylor, Norwegian Institute for Cultural Heritage Research (NIKU), Norway	

PAPER PRESENTATIONS



niversity of East London, United Kingdom

enmark, Denmark

ging Children in the Design Museum Helsinki

ter, United Kingdom

daries in Time and Space; The Extension of a Practical Tool

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General Cemetery



 \odot Galata Sea and Migration Museum: an Immersive and Interactive Visitor Experience

Daniela Petrelli, Sheffield Hallam University, United Kingdom

Fabio Caparrelli, Sheffield Hallam University, United Kingdom Mark T. Marshall, Sheffield Hallam University, United Kingdom

Luigina Ciolfi, Sheffield Hallam University, United Kingdom

Nick Dulake, Design Futures, United Kingdom

Matt Willox, Design Futures, United Kingdom

Toumas Mäkilä, University of Turku, Finland Seppo Helle, University of Turku, Finland

Lauri Viinikkala, University of Turku, Finland Teijo Lehtonen, University of Turku, Finland

Olli I. Heimo, University of Turku, Finland

Päivi Nikkola, University of Turku, Finland

Veijo Pönni, University of Turku, Finland

Juha-Pekka Arimaa, University of Turku, Finland

Timo Korkalainen, University of Turku, Finland

Robin Goldberg, University of Stuttgart, Germany

Roberto Frasca, ETT S.p.a., Italy Davide Pantile, ETT S.p.a., Italy Matteo Ventrella, ETT S.p.a., Italy

\odot 'Here we go again': Co-construction of Museums and Audiences on Facebook

Erik Kristiansen, Roskilde University, Denmark Kirsten Drotner, University of Southern Denmark, Denmark Sigurd Trolle Gronneman, University of Southern Denmark, Denmark



Lars Ulrik Tarp Hansen, KUNSTEN Museum of Modern Art Aalborg, Denmark Tobias Golodnoff, Danish Broadcasting Coorporation (DR), Denmark

PAPER PRESENTATIONS

\odot Implementing CollectionSpace - Experiences in Open Source Development

Kim Brasen, Statens Museum for Kunst, Denmark

Indoors and Outdoors: Designing Mobile Experiences for Cité de l'Espace \odot

Stefan Rennick Egglestone, University of Nottingham, United Kingdom Patrick Brundell, University of Nottingham, United Kingdom Vassilis Kourtis, University of Athens, Greece Maria Roussou, University of Athens, Greece Christophe Chaffardon, University of Nottingham, United Kingdom Boriana Koleva, University of Nottingham, United Kingdom Steve Benford, University of Nottingham, United Kingdom

Interactive Poetry Experiences

Zsófia Ruttkay, Moholy-Nagy University of Art and Design, Hungary

Interpretive Handling Objects for Stimulating Creative Thinking in Museum Galleries \odot Caroline Claisse, Royal College of Art, United Kingdom

Introducing iPads in Danish Natural Science Museum Settings: A Youthful User Perspective \odot Sigurd Trolle Gronneman, University of Southern Denmark, Denmark

\odot Investigating a Design Research Landscape through Exhibition

Li Jönsson, The Royal Danish Academy School of Design, Denmark Maarit Mäkelä, Aalto University of Art, Design and Architecture, Finland Flemming Tvede Hansen, The Royal Danish Academy School of Design, Denmark Petra Ahde-Dahl, Copenhagen School of Design & Technology, Denmark



Theis Vallø Madsen, Aarhus University, Kunsten Museum of Modern Art, Denmark

Learning Outside the Museum: Challenges in Digital Museum Education in the Danish Secondary Classroom Sanne Margerete de Fine Licht Raith, Roskilde University & DREAM

Exploring Historical, Social and Natural Heritage: Challenges for Tangible Interaction Design at Sheffield



 \odot Leaving Marks – How Does a Participatory Museum Feel? Martin Hegel, Museum Angewandte Kunst, Germany Steven Sasseville, Orange Hive GmbH, Germany

 \odot **Making Online Cultural Heritage Accessible** Sten-Åke Sändh, Stockholm City Museum, Sweden

 \odot Mechanics of Wonder: Scripting Visitor Experiences with Technology Kevin Walker, Royal College of Art, United Kingdom Suzy Hogg, Brunel University, United Kingdom David di Duca, University College London, United Kingdom

\odot Mixed Reality and the Holy Ghost Church in Turku

Lauri Viinikkala, University of Turku, Finland Timo Korkalainen, University of Turku, Finland Juha-Pekka Arimaa, University of Turku, Finland Teijo Lehtonen, University of Turku, Finland Seppo Helle, University of Turku, Finland Tuomas Mäkilä, University of Turku, Finland Veijo Pönni, University of Turku, Finland Olli Heimo, University of Turku, Finland

\odot **Museum Without Walls**

Karolina Ziulkoski, New York University, Brazil

 \odot **Museums, Social Media and The Canon**

Tintin Hodén, Linköping University, Sweden

 \odot **Open Data – Participation in Online-Collections** Bianca Bocatius, University of Düsseldorf, Germany

PAPER PRESENTATIONS

\odot Patterns of Interaction: Exploring the Institutional Communication of Museums on Facebook

Anne Rørbæk, DREAM, Roskilde University, Denmark Christian Hviid Mortensen, DREAM, University of Southern Denmark, Denmark Ditte Laursen, DREAM, State Library, Denmark Kim Christian Schrøder, DREAM, Roskilde University, Denmark Oluf Danielsen, DREAM, Roskilde University, Denmark

\odot Preservation of World Cultural Heritage through Playing Serious Game

Young Yim Doh, GSCT, KAIST, Republic of Korea Jimin Rhim, GSCT, KAIST, Republic of Korea MinSeok Do, GSCT, KAIST, Republic of Korea Hyejeong Yeom, GSCT, KAIST, Republic of Korea Minseok Kim, GSCT, KAIST, Republic of Korea Yoonji Song, GSCT, KAIST, Republic of Korea Seul Lee, GSCT, KAIST, Republic of Korea Jungwha Kim, GSCT, KAIST, Republic of Korea

\odot Slussen Project - Archiving the ephemeral, Field recording as an Archival Practice

Jacek Smolicki, Malmö University, Sweden

\odot TACIT RECORD - Documentation Methods to Access Traditional Blacksmiths Skills

Gunnar Almevik, University of Gothenburg, Sweden Patrik Jarefjäll, University of Gothenburg, Sweden Otto Samuelsson, University of Gothenburg, Sweden

 \odot **Teachers Like Curators**

Marcin Szelag, The National Museum in Poznań, Poland

 \bigcirc Technologies for Supporting the Inter-religious and Inter-cultural Dialogue at Religious Museums: The On Field Experimental Action of Museo Diocesano, Milano

> Eleonora Lupo, Politecnico di Milano, Italy Sara Chiesa, Politecnico di Milano, Italy Rita Capurro, Politecnico di Milano, Italy Davide Spallazzo, Politecnico di Milano, Italy Raffaella Trocchianesi, Politecnico di Milano, Italy



\odot The Challenges and Opportunities Faced by Cultural Heritage Professionals in Designing Interactive Exhibits Fiona Mcdermott, University of Limerick, Ireland Loraine Clarke, University of Strathclyde, Scotland Dr. Eva Hornecker, University of Strathclyde, Scotland Dr. Gabriela Avram, University of Limerick, Ireland The Chill Concept: The Museum Evolution Gerardo Zavarce, The Chill Concept, United States Andreina Fuentes, The Chill Concept, United States \odot The Cross-Cultural Communication Features of a Distributed Museum Mobile Guide **Application Platform: a Concept Design** Shuchen Wang, Aalto University, Finland \odot The Cultural Memory Of Melbourne's Waterfront: Text, Movement And Mediated Space Chris McConville, Victoria University, Australia \odot The Design and Use of Social Media and Interactives for Learning in Art Museums Palmyre Pierroux, University of Oslo, Norway \odot The Online Museum and its Contribution to E-humanities Chiel van den Akker, University Amsterdam, Netherlands Lora Aroyo, University Amsterdam, Netherlands 201 Lourens van der Meij, University Amsterdam, Netherlands Susan Legêne, University Amsterdam, Netherlands Guus Schreiber, University Amsterdam, Netherlands

⊙ The Other Way Round: From Semantic Search to Collaborative Curation

Chantal Eschenfelder, Städel Museum Frankfurt, Germany Karsten Gresch, Software AG, Germany

\odot **The Responsive Museum**

Susan Hazan, The Cyprus Institute, Israel Sorin Hermon, The Cyprus Institute, Cyprus

PAPER PRESENTATIONS

Time For the 80's

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Greet Vanderhaegen, Het Huis van Alijn, Belgium

\odot Ting - Democracy and Technology on Discussion

Henrik Treimo, Norsk Teknisk Museum, Norway Timothy Ventimiglia, Ralph Applebaum Associates Inc, Germany Marc Tamschick, Tamschick Media+Space GmbH, Germany

Too Many Cooks Spoil the Broth? Exploring the Challenges of Collaboration between Museums \odot and ICT Design Companies

Anne Rorbaek, DREAM, Roskilde University, Denmark

 \odot When is Knowledge?

Lily Diaz, Aalto University School of Arts Design and Architecture, Finland

\odot Will Collaborating With the Audience Change Us? Making a Collaborative Science Center in Stockholm

Lisa Söderlund, National Museum of Science and Technology in Stockholm, Sweden Åsa Lindgren, National Museum of Science and Technology in Stockholm, Sweden

\odot Working in beta - implications for museums and their visitors

Lauren Davis, Koc University, Turkey Christie Ray, Allard Pierson Museum, Netherlands Merel van der Vaart, Allard Pierson Museum, Netherlands



POSTERS, DEMONSTRATIONS & EXHIBITORS

The exhibition space NODEM EXPO is organized at the Museum of Medieval Stockholm. This year's edition focuses on: "New Conception of Museums as Public Spaces and Communication Modes and Interfaces". The exhibition will showcase the latest, cutting-edge products, exhibitions and services for museums, galleries and heritage sites. Furthermore, within NODEM EXPO there are scheduled poster presentations and demonstrations.

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POSTERS & DEMONSTRATIONS

'shaping Urban Art pathways (sUAp)' – Almada: a Portuguese Case Study Helena Rua, Instituto Superior Tecnico, Portugal

Design Game for Exploration of Mobile Museum Mediation Rikke Baggesen, University of Copenhagen, Denmark

Evaluating the CULTURA System for Cultural Heritage Collections: What do Researchers of Tomorrow Think? Christina M. Steiner, Knowledge Technologies Institute, Graz University of Technology, Austria

Face Animation and Augmented Reality for the Museums Dario Cianciarulo, Darteq, Italy Liene Some, Darteq, Latvia



POSTERS & DEMONSTRATIONS

\odot	Integrating and Testing the Evaluation Service Equalia for Alexander Nussbaumer, Graz University of Technolo
	Knowledge Technologies Institute, Cognitive Scienc
\odot	Interactive Poetry Experiences
	Zsófia Ruttkay, Moholy-Nagy University of Art and E
\odot	Lean Museum Startup: A low budget – low risk approach t
	Karsten Gresch, Lean Museum Startup, Germany
	Martin Hegel, Museum Museum für Angewandte Ku
\odot	Meaning Making Experiences by Partnership and Creative
	Mie Marie Vinther Ellekilde, Meaning Making Experi
\odot	Museum in the Digital Age: Use of New Technologies befor
	Javier Celaya, Doscode.com, Spain
	Taking the Arts to the Streets of Hong Kong
	Connie Lam, Zoe Leung, Hong Kong Arts Center, Ho
\odot	Touch the visitor? Experiences from developing a mobileg
	Anette Rattfelt, Laterna Vox, Norway
\odot	Untitled Until Titled
	Danne Ojeda, School of Art, Design and Media,
	Nanyang Technological University, Singapore

or Digital Libraries and Beyond

logy, nce Section, Austria

Design, Hungary

to transforming cultural institutions

lunst, Germany

e Collaboration

rience, Denmark

ore, during and after visiting an exhibition

ong Kong

guide system in Norway

nodem

EXHIBITORS

 \mathbf{O} Advanced Imaging Laboratory, Kyoto University, Japan Ari Ide-Ektessabi

 \mathbf{O} Audioapps, Sweden Ludvig Persson Tim Gustafsson

> Dataton AB, Sweden Lars Sandlund

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Ο Engage Lab, Norway **Richard Nesnass**

> Expology, Norway Kari Gjetrang

 \mathbf{O} Fluxguide, Austria Generate, Interact, Connect: The Future of Digital Guiding André Seirafi Tomáš Mikeska

> Gagarin, Island Nils Wiberg

Guide ID, Holland Frits Polman

Ixagon AB, Sweden Axel Jacobson 0 Ljusdesign AB, Sweden Innovating LED-lights for museums Stefan Gemzell Stefan Wiktorsson Jan Gouideo

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NOUS, Austria Look – Listen – Play Michaela Zach Alexander Stickelberger

Wolfgang Schreiner

Nousguide AS, Denmark Visitor information and communication system for museums and exhibitions Christian Struckmann Irgens Thorbjörn Kolbo

OnSpotStory, Sweden Guides in your phone Staffan Gerlöw



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Stockholm City Museum, Sweden Sten-Åke Sändh

Talk Of The Town, Sweden Göran Derefeldt





 \bigcirc Virtway, Sweden 3D Live virtual museum solution Serdar Temiz

 \bigcirc Visuliseringscenter / TII, Sweden Inside Explorer Thomas Rydell

 \mathbf{O} Yooba AB, Sweden Using Tablet Apps to Engage and Educate on-site David Nordin

NODEM 2013 & CULTURE KICK: WORKSHOPS

Culture KICK invites to inspirational workshops organized by the leading and experienced facilitators

Culture KICK is connected to the existing NODEM network, and builds on accumulated competencies on organizing knowledge transfer between stakeholders in research, innovation and practice. Therefore Culture Kick together with the leading and experienced facilitators invites to the workshops on digital engagement and open cultural practices. The workshops provide an opportunity for museum professionals, creative industry and researchers to explore some of the practical ways of innovating and opening museums.

ABOUT CULTURE KICK

Culture KICK is a university-based network involving 8 partners from Norway, Sweden, Denmark, Finland and Island. The aims of Culture Kick are: (1) to establish a conceptual and methodological framework for multidisciplinary, technology based innovation for the cultural heritage sector; (2) to foster the state of the art digital development in the sector, and (3) to decrease the technology and knowledge gap between large and small organisations. The initiative is financed by the Nordic Council of Ministers as part of a focus on knowledge triangulation related to the emergence of digital media in the heritage field.



DIGITAL ENGAGEMENTS WORKSHOPS Facilitator: Jasper Visser

Basics of digital engagement

How can you use a weblog to get more visitors to your museum? How can you turn Facebook fans into paying members? In this workshop you will learn the basics about how to turn your digital media platforms (Facebook, website, etc.) into engagement activities.

We focus on a simple framework for engagement and apply this to case studies participants bring to the workshop.

Please note: this is a beginners workshop. Participants who are comfortable with digital engagement can better join the other workshops.

Structured digital engagement

What role does digital media play in the media mix of a museum? How can digital media help your institution achieve its mission? This workshop introduces the Digital Engagement Framework, a much used tool to structure digital engagement in institutions. Using input from the participants, we will discover how your institution can structure and enhance its digital and traditional media activities.

Digital media and social institutions

A social institution uses digital media and other strategies and processes smartly to achieve its mission and create value for and with its audiences. In this workshop we will focus on what a social institution is and how participants can help their organisations develop towards such institutions. We will outline the processes, technologies and strategies needed to be successful and create value.

Please note: this is an expert workshop aimed at participants who want to take their organisation to the next step in the digital revolution.

Jasper Visser

Jasper is an independent consultant and innovator. He works with non-profits, NGOs and cultural organisations from around the world on strategies for the future, especially in the area of digital media, innovation and value creation. Jasper is cofounder of several startups that turn his ideas into reality, author of the Digital Engagement Framework, blogger at The Museum of the Future and can regularly be found in good museum cafés around the world.

<inspiredbycoffee.com> <digitalengagementframework.com>

<themuseumofthefuture.com>



NODEM 2013 & CULTURE KICK: WORKSHOPS

INTERACTIVE EXHIBITIONS WITH 3D CONTENT: VIRTUAL MUSEUMS

Facilitators: Patrick Reuter, Inria Bordeaux & Holger Graf, Fraunhofer IGD Darmstadt V-must European Network of Excellence <http://v-must.net/>

Interactive exhibitions make visitors actively participate in museums. 3D technologies are today mature and robust and provide endless opportunities: the numerous new variants for input (gesture, multi-touch, tangibility, 3D acquisitions) and output (projectors, see-through displays, 3D printers) make it possible to merge real and virtual worlds seamlessly. The involved activation of multiple senses builds high visitor engagement through all ages. In this talk, we show and discuss the enormous potential of integrating interactive 3D content into exhibitions and online visits, and we share recent experiences of the V-must.net European Network of Excellence.

PROGRAM

- Augmenting collections: Interactive spatial augmented reality. Patrick Reuter, Wim Hupperetz (Inria and Allard Pierson Museum).
- Creating immersive narrative experiences with natural interaction. Sofia Pescarin, Augusto Palombini, Eva Pietroni (CNR and Roman National Museum).
- Visualising heritage assets using Internet 3D technologies: 3D Virtual Museums for all. Holger Graf, Patrick Reuter (Fraunhofer and Inria).
- Managing and studying sites and collections online with Archeogrid. Patrick Reuter and Robert Vergnieux (Inria and CNRS).
- 3D Acquisition, analysis, and reassembly of archeological artifacts. Patrick Reuter (Inria).

Audience: Museum directors and curators



Patrick Reuter

Patrick Reuter is associate professor in computer science at University Bordeaux and researcher at Inria Bordeaux. His major research interests are efficient 3D user interaction and geometric modeling. He is member of several program committees in computer graphics related events, and authored or co-authored more than 30 international, peer-reviewed publications in major conferences and journals.

He is involved in various digital heritage related projects. He was the general coordinator of the SeARCH project for virtual reassembly of broken archeological objects surrounding Alexandria's Lighthouse. Some of the results were exposed in exhibitions in the "Musée de la Marine" in Paris and in the "Musée du Mariemont" near Bruxelles. He also designed an interactive museum setup using spatial augmented reality in the "Allard Pierson Museum" in Amsterdam.

Web: <http://www.labri.fr/perso/preuter/>

Holger Graf



Holger Graf received his diploma degree in 'Technomathematik' (Industrial Mathematics) from the University of Karlsruhe in 1997 and graduated in 1998 from the department of computer science at the University of Bristol (England) with a M.Sc. in 'Global Computing and Multimedia'. In 1999 he worked as a research assistant at the Institute of Telematics in Trier, Germany. Since January 2000, he follows a research position as staff member of the Fraunhofer-Institute for Computer Graphics (IGD) in Darmstadt, Germany, where he is working on the integration of CAE esp. finite element methods into VR within the department of industrial applications. His research interests comprise collaborative engineering, augmented reality, simulated reality, new interaction methods and efficient methodologies for real time finite element calculations in interactive 3D environments. He is author and co-author of about 30 publications in internationally reviewed journals and renowned conferences, including three publications in books. In April 2006 he changed position and was responsible for the department 'Visual Computing' as head of department within the Center for Computer Graphics, ZGDV until its fusion with the Fraunhofer IGD in March 2009.

NODEM 2013 & CULTURE KICK: WORKSHOPS

INTERACTIVE TOWARDS OPEN CULTURAL COMMONS - OPEN GLAM WORKSHOP

Facilitators: Sanna Marttila & Mariana Salgado, Aalto University, Finland http://openglam.org

This interactive session discusses the opportunities and challenges that art and memory institutions face when opening their work practices, processes and collections for wider public. Furthermore, through case examples and experiences we address various strategies and drivers for openness, and demonstrate how art and memory institutions can be more open and accessible for wider public.

Objectives: The session has three main objectives: (1) to discuss and share knowledge related to open culture and the Open GLAM (galleries, libraries, archives and museum) network; (2) to assist the GLAM institutions to open up their content and data, and (3) to support and facilitate synergy and collaboration between various actors in the Nordic cultural domain.

The Open GLAM workshop has two main parts: introduction presentation, and facilitated group working session where the participants are working together in smaller groups to discuss themes such as digital accessibility, public engagement and strategies for openness.

Participants: The workshop is open for all, but specially targeted to representatives from the art and memory institutions

OPEN GLAM CLINIC

The purpose of the clinic is to provide the GLAM institutions a possibility to present projects and productions related to openness and participation in the museum context, and obtain feedback and suggestions from participants and facilitators of the workshop. Please consult the website for further information how to apply to the clinic.

Sanna Marttila

Sanna Marttila is a project leader and design researcher at the School of Arts, Design and Architecture of the Aalto University. She has a background in humanities and new media and digital design. Her research centers on designing meaningful public access to the vast digital archives that exists in public memory institutions. As a designer Sanna's interest includes open and collaborative design and creative re-use utilizing archival materials online. Sanna is vice chair of the Open Knowledge Finland board and works actively with the Finnish GLAM sector. She is also engaged in Creative Commons Finland where she is promoting an open and collaborative cultural sector.

Mariana Salgado

Mariana Salgado is a design-researcher. She is working as a postdoctoral researcher in Media Lab, Department of Media, Aalto University. Her doctoral dissertation dealt with participatory practices in museums and other cultural organisations. Her research interests are in participatory design approaches and inclusive solutions that weave new media into cultural sites. Her research interests are in participatory design approaches and inclusive solutions that weave new media into cultural sites. She is currently involved in Avoin Glam initiative. She is a Fellow Researcher in LINKS, Argentinean Association for the Promotion of Information Society.



NODEM Digital Repository

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This year NODEM is celebrating its 10th anniversary and to show our achievements we have designed a new digital repository. In our digital repository you can browse materials from past and forthcoming NODEM conferences, seminars and research projects. The repository will be updated and improved on a regular basis. Our intent is to upload the material from all our previous NODEM Conferences.

At this moment we have managed to gather contributions of the following conferences: NODEM 2010 Denmark (abstracts, papers) NODEM 2012 Hong Kong (videos, abstracts) NODEM 2013 Sweden (abstracts of this year's presentations)

Our mission is to mediate the knowledge transfer between researchers, heritage professionals and creative industries. We believe that our conference materials may facilitate this process and support the development of the digital heritage field.

http://repo.nodem.org





Designed by STUDIO ZAMOJSKI

We are pleased to announce that the next NODEM conference will be held in Warsaw, Poland.

Please visit our website regularly to keep informed of new and upcoming NODEM conferences and initiatives.





NORDIC DIGITAL







