Panoramas as Memory of the World

33rd International Panorama Conference

Digital Package

Pavilion **A** Oct. 2–4 2024

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Association des Amis du Panorama de Morat

PAN○RAMA International Panorama Council

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Wednesday — Friday
9 am — 6 pm

Upon Registration

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More Information and Registration
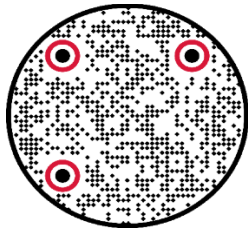
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33rd International Panorama Council (IPC) Conference

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

Content of the digital package

Webpage of the conference

Program

Book of Abstracts

Maps – Conference Locations

Maps – Post-conference Tour Locations

Day 1, Workshops and Opening Reception (WEDNESDAY Oct 2)

09.00 Registration

10.00-10.30 Panorama as Memory of the World: Presentation of IPC's survey

IPC Commission for UNESCO Recognition

Sarah Kenderdine, EPFL, Switzerland, Daniel Jaquet, EPFL, Switzerland and Dominique Hanson, IPC, Belgium

10.30-11.30 Workshop 1 – Inscription process and successful applications

Insights from the Swiss Commission for UNESCO

Christof Bareiss, Swiss Commission for UNESCO, Switzerland

Bibliotheca Bodmeriana

Nicolas Ducimetière, Fondation Bodmer, Switzerland

11.30 Lunch

13.00-14.30 Workshop 2 – Swiss case

Short history of the Swiss panorama initiatives and ideas regarding UNESCO

Patrick Deicher, Bourbaki Panorama, Switzerland

Roundtable for Swiss Panorama owners/custodians

Moderator: Daniel Jaquet, EPFL, Switzerland

Participants:

Patrick Deicher, President, Bourbaki Panorama Foundation, Switzerland

Christiane Feldmann, Foundation for the Panorama of the Battle of Murten, Switzerland

Helen Hirsch, Thun Panorama, Switzerland

14.30-15.45 Workshop 3 – Next steps

Roundtable with the presenters of the day and opening to the floor

Moderator: Daniel Jaquet, EPFL, Switzerland

15.45 Coffee/tea

16.30 Welcome speeches

Molly Briggs (President of the International Panorama Council), **Thiago Leitão de Souza** (IPC Secretary General), **Sarah Kenderdine** and **Daniel Jaquet** (local hosts)

16.50-17.50 Plenary Lecture

Computational Museology: Six Themes of Transformation

Sarah Kenderdine, eM+, EPFL, Switzerland

18.00 Transfer to the Laboratory for Experimental Museology

18.30-21.00 Guided visit to the Laboratory of Experimental Museology and standing buffet

21.00 Transfer to hotel

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Day 2, Conference (THURSDAY Oct 3)

08.00 Registration

08.30-10.40 Session 1: Recovering Panoramas

Moderator: Leen Engelen, LUCA School of Arts / KU Leuven, Belgium

Impossible to Frame: Shifting scales in forgotten Cosmorama pictures

Susana S. Martins, Universidade NOVA, Lisbon, Portugal

Broadening Horizons: The wayfaring scenes of fairground panoramas (1820–1910)

Bart G. Moens, Antwerp University, Belgium

Mirroring the World: Techniques and perceptions of panoramas in the early 19th century

Gabriele Koller, Jerusalem Panorama, Altötting, Germany

Thrown Back on the Sketches: Reconstruction of the destroyed panorama *The Battle of Wörth on 6 August 1870 (1882–1905)* by Otto von Faber du Faur

Christian Bunnenberg, Ruhr-University Bochum, Germany

Charles A. Chase and the Electric Cyclorama

Suzanne Wray, independent researcher, New York City, USA

10.40 Coffee/tea

11.10-12.30 Session 2: Panorama of the Battle of Murten

Moderator: Melissa Wolfe, Saint Louis Art Museum, USA

Unveiling Historical Depth: Semantic annotation of the *Panorama of the Battle of Murten*

Tsz Kin Chau, Daniel Jaquet and Sarah Kenderdine, EPFL, Switzerland

Unfurl the Banners! Flags as artistic elements and military markers in battle panoramas

Jean-Claude Brunner, independent researcher, Austria

The Terapixel Panorama: The augmented *Panorama of the Battle of Murten*

Daniel Jaquet and Sarah Kenderdine, EPFL, Switzerland

12.30 Lunch

14.00-15.45 Session 3: Panoramas and Living Memory

Moderator: Nicholas Lowe, The School of the Art Institute of Chicago, USA

The Nova Tuskhut: A walk-in archive of "Arctic" things

Sara Velas and Ruby Carlson, Velaslavasay Panorama, Los Angeles, USA and

Weiling Deng and Jonathan Banfill, Champlain College, Vermont, USA

Beyond the Canvas: The essential conservation of ecological and cultural heritage on Kauō

Jessica M. Smith, University of Iowa Museum of Natural History, USA

Rotunda and the City: An intricate relationship

Emile Mermillod, Association des Amis du Panorama de Morat, Switzerland

Outsourcing Memories: Remembering at urban panstereoramas (in the Age of AI)

Blagovesta Momchedjikova, New York University, USA

15.45 Coffee/tea

16.15-18.00 Session 4: Round Tables

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Discussion 1: Restoration (60 mins)

Moderator: Gabriele Koller, Jerusalem Panorama, Altötting, Germany

The renewal of the "optical apparatus" in the Bourbaki Panorama, Lucerne (Switzerland)

Christian Marty, Bourbaki Panorama, Lucerne, Switzerland

The Panorama of Racławice and its two counterparts: Reconstruction in the process of panorama revitalization

Ryszard Wójtowicz, Drabik i Wójtowicz Conservation and Restoration of

Monuments, Wrocław, Poland

Participants:

Patrick Deicher, Bourbaki Panorama Foundation, Switzerland
Adrienne Quarles van Ufford, Curator, Museum Panorama Mesdag, The Hague, Netherlands
Minke Schat, Museum Panorama Mesdag, The Hague, Netherlands
Jessica M. Smith, University of Iowa Museum of Natural History, Iowa, USA
Beata Stragierowicz, Curator, Panorama Racławicka, Poland
Sara Velas, Director, The Velaslavasay Panorama, California, USA
Melissa Wolfe, Curator, Saint Louis Art Museum, Missouri, USA

Discussion 2: Panorama Code of Ethics (30 mins)

Led by Heritage Committee: Gabriele Koller (Chair), Sara Velas, Minke Schat

18.30-20.30 Tour of EPFL Pavilions (Exhibition on show: Musica ex Machina: Machines Thinking Musically) and standing buffet

20.30 Transfer to hotel

Day 3, Conference (FRIDAY Oct 4)

Registration, Coffee/tea

08.30-10.40 Session 5: Pano-visions

Moderator: Chiara Masiero Sgrinzatto, independent artist, Venice, Italy

An Archeology of Time and Memory in Panoptic Media

Rod Bantjes, St. Francis Xavier University, Nova Scotia, Canada

Chicago as Exhibition: Centering the city in interactive print

Molly Briggs, University of Illinois at Urbana-Champaign, USA

Crossing the Switzerland of America: Chicago's global ambitions

Nicholas Lowe, The School of the Art Institute of Chicago, USA

Museum Panorama Mesdag: Ulrike Heydenreich, *Longing for the Distance*

Ulrike Heydenreich, artist, Düsseldorf, Germany and Adrienne Quarles van Ufford,

Museum Panorama Mesdag, Netherlands

The Memories of Objects: From lenses to panorama history

Luca Vascon, VR artist, photographer, and video maker, Venice, Italy

10.40 Coffee/tea

11.10-12.30 Session 6: Panorama du Congo

Moderator: Daniel Jaquet, EPFL, Switzerland

The Afterlife of the *Panorama du Congo* (1913): Decolonial curation of imperial panoramas

Victor Flores, Lusófona University, Lisbon, Portugal, and Leen Engelen, LUCA School

of Arts / KU Leuven, Belgium

Congo VR: A panoptical dissidence

Ana David Mendes, Lusófona University, Lisbon, Portugal

Illustrating a New Memory: Panorama key and virtual tour for the exhibition "Panorama of Congo"

Chiara Masiero Sgrinzatto, independent artist, Venice, Italy

12.30 Lunch

14.00-16.10 Session 7: Immersive Media and Panoramas

Moderator: Victor Flores, Lusófona University, Lisbon

The Panorama of Rio de Janeiro by Victor Meirelles and Henri Langerock: Part 7 - 360° historical experiences of city memories by *Game Engines*

Thiago Leitão de Souza, Universidade Federal do Rio de Janeiro, Brazil

Ernst A. Heiniger's SWISSORAMA: The world's first seamless 360° large format film system

Lukas Piccolin, independent researchers, Zürich, Switzerland

The Effects of Panorama 25 December's Digital Spaces on Visitors

Murat Dağ and Hüseyin Ateş, Gaziantep Metropolitan Municipality, Turkey

Sacred Spaces of New England: Cultural heritage and the panorama

Seth Thompson, American University of Sharjah, United Arab Emirates

Unveiling the Past with Photogrammetry: A study of static and dynamic projects – *Panorama Racławicka* and stave churches

Karolina Wójtowicz, visual and architectural designer, Wrocław, Poland

16.10 Coffee/tea

16.40-18.40 IPC General Assembly & Updates

19.10 Bus transfer

19.30 Farewell Group Dinner (Chalet Suisse)

22.00   Transfer to hotel

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Day 4, Post-Conference Excursion (Optional) (SATURDAY Oct 5)

08.15	Departure from Conference Venue (Pav B)
09.45	Toilet break Murten
10.15	**Murten battlefield, Murten**
11.30	Standing lunch with wine tasting
13.00	Transfer to Einsiedeln
15.45	**Einsiedeln Panorama**, guided tour
17.15	Transfer to Lucerne
18.30	Arrival at Hotel Ibis Kriens, Lucerne (Gr. 2 check-in)
18.50	Arrival at Hotel Ibis Styles, Lucerne (Gr. 1 check-in)
19.15	Bus transfer from Hotel Ibis Kriens to Restaurant (Gr. 2)
19.20	Short walk from Hotel to Restaurant (Gr.1)
19.30	Dinner at Hofgarten Restaurant, Luzern

Day 5, Post-Conference Excursion (Optional) (SUNDAY Oct 6)

08.10	Departure from Ibis Kriens (Gr. 2)
08.30	Loading of luggages at Hotel Ibis Styles (Gr.1)
08.35	Short walk from Hotel Ibis Styles to the Alpineum Museum
08.45	Visit of the **Alpineum Museum** with the large diorama Gornergrat and Matterhorn Mountain
09.30	**Bourbaki Panorama, Lucerne,** guided tour (in front and behind the scenes)
10.45	Toilet break
11.00	Transfer to Thun
12.15	Lunch at the Strandhotel, Iseltwald
13.15	Departure
14.15	**Thun-Panorama (Wocher Panorama)**
15.15	Transfer to Bern
16.00	Bern main station (train connection to airport of Zürich)
16.15	Transfer to Conference Venuel (St-Sulpice)
18.15	Arrival in St-Sulpice

Panoramas as Memory of the World

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EPFL ■ Laboratory for Experimental Museology (eM+)

PRESENTATION ABSTRACTS & AUTHOR BIOGRAPHIES

Opening | Panorama as Memory of the World

Panorama as Memory of the World: Presentation of IPC's survey
Daniel Jaquet and Sarah Kenderdine, EPFL, Switzerland and Dominique Hanson, IPC, Belgium

Abstract. The International Panorama Council nominated the commission for panorama recognition by the UNESCO program Memory of the World (General Assembly, 2023). The commission is tasked with the following objectives for the initial project (2023-2026): (1) Present IPC members with the details of the process for an application for recognition, (2) Define the criteria for participating in the application for recognition, (3) Carry out an interest survey among IPC members and collect the information needed for the preparation of the application, (4) Establish the necessary networks with each regional or national authority for the submission of applications (based on the MoW regional or national committees), (5) Support the members in drafting the documentation required for the application. The survey was conducted in 2024, sent to IPC members and non-IPC members panorama owners or custodians, worldwide. The result of the survey presented during the workshop will allow for a discussion regarding the suggested criteria (workshops 1-3). Following the conference, these criteria will be reviewed by a scientific committee before presentation to the IPC Executive Committee.

Keywords. UNESCO Memory of the World, Media Archaeology, Panorama

Biography. Professor Sarah Kenderdine researches at the forefront of interactive and immersive experiences for galleries, libraries, archives and museums. In widely exhibited installation works, she has amalgamated cultural heritage with new media art practice, especially in the realms of interactive cinema, augmented reality and embodied narrative. In addition to her exhibition work she conceives and designs large-scale immersive visualization systems for public audiences, industry and researchers. Since 1991, Sarah had authored numerous scholarly articles and six books. She has produced 80 exhibitions and installations for museums worldwide including a museum complex in India and has received a number of major international awards for this work. In 2017, Sarah was appointed Professor of Digital Museology at the

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

École polytechnique fédérale de Lausanne (EPFL), Switzerland where she has built a new Laboratory for Experimental Museology (eM+), exploring the convergence of aesthetic practice, visual analytics and cultural data. She is also Director and lead curator of EPFL's new art/science initiative, EPFL Pavillons. Email, sarah.kenderdine@epfl.ch

Biography. Daniel Jaquet is a medievalist, with a background in literature, history of science and material culture of the early modern period. He received his PhD in history at the University of Geneva in 2013. He taught at the universities of Geneva, Lausanne, Bern and Neuchâtel (2008-2023). He was a visiting scholar at the Max Planck Institute for History of Science (Berlin, 2015-2016), and an associate researcher at the Renaissance Centre of the University of Tours (2016-2017). His teaching and research specializations are martial culture, production, transmission and reception of martial knowledge in Europe (15-19 centuries). He is the project manager and co-lead researcher of the project *Digitizing and Augmenting the Panorama of the Batlle of Murten* at the Laboratory for Experimental Museology (EPFL, 2022-2026). He is also a certified museologist (ICOM Switzerland 2021) with experience in state museums and has curated 5 exhibitions.
Email, daniel.jaquet@epfl.ch

Workshop I | Inscription process and successful applications

Insights from the Swiss Commission for UNESCO
Christof Bareiss, Swiss Commission for UNESCO, Switzerland

Abstract. "Memory of the World" (MOW) is a UNESCO programme aimed at raising awareness of the importance of documentary heritage and encouraging its preservation and accessibility. The programme's flagship activity is the management of its International Register, which lists, on the proposal of UNESCO Member States, items of documentary heritage deemed to be of global significance. These range from centuries-old manuscripts to groundbreaking cinema, encompassing a broad spectrum of human knowledge and creativity. Every two years, two nominations per UNESCO Member State may be submitted for inclusion in the Register. The validation authority for Swiss nominations is the Swiss Commission for UNESCO, which has set up a group of experts to help with this task. Nominations submitted by more than one Member State are not subject to any numerical restrictions. Nominations must be prepared by individuals, institutions, or groups familiar with the materials. These applications must provide a comprehensive dossier detailing the documentary heritage's significance, historical context, and condition, as well as current measures for its preservation and access. The nominating bodies must also demonstrate the universal value of the documents, showing how they contribute uniquely to global history, culture, or science. Once submitted to UNESCO, nominations undergo an evaluation process in accordance with the defined selection criteria, until the final decision taken by the Executive Board.

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

Inclusion in the Register brings greater recognition to the inscribed items, but it also entails obligations in terms of access, protection and promotion of the importance of documentary heritage. Obtaining the UNESCO label should therefore never be considered an end in itself.

Keywords. UNESCO Memory of the World, Documentary Heritage

Bibliotheca Bodmeriana
Nicolas Ducimetière, Foundation Bodmer, Switzerland

Abstract: The Martin Bodmer Foundation, the fruit of sixty years of bibliophilic passion, was created by the great Zurich collector (who was also vice-president of the ICRC) in March 1971, shortly before his death. Its purpose was to continue his work, to protect and make available to researchers one of the largest private libraries in the world, containing the oldest Gospel of John (3rd century, on papyrus), 300 Western medieval manuscripts, 200 Oriental manuscripts, 350 incunabula, a copy of the Gutenberg Bible and thousands of autograph manuscripts and first editions. With the aim of providing a comprehensive overview of 'Weltliteratur' (the Goethean concept for the greatest written texts of humanity since Antiquity, in the fields of literature, religion, politics, science, etc.), the Bodmer collection has been made accessible to the public through an underground museum opened in 2003. Combining research, conservation and museum presentation, the Foundation was selected in 2013 as a candidate for the 'Memory of the World' programme. At the end of a two-year process, its universal profile and the uniqueness of this one-man collection, in addition to the preciousness and nature of the texts preserved, led to its inclusion on the Register in 2015.

Keywords. UNESCO Memory of the World, Documentary Heritage, Bodmer Foundation

Workshop II | Swiss case

Short history of the Swiss panorama initiatives and ideas regarding UNESCO
Patrick Deicher, Bourbaki Panorama, Switzerland

Abstract: Efforts to have the panorama phenomenon listed as a UNESCO World Heritage never really got beyond ideas and declarations of intent internationally. The most concrete results were in Belgium. At the 2008 session of the World Heritage Committee, it was decided to place the Waterloo Panorama on the tentative list for Belgium. This was done expressly as a particularly representative example of the "panorama phenomenon" with a view to the serial inscription of historic panoramas worldwide.

According to the criterion of the largely unchanged ensemble (building, circular image, faux-terrain, velum, skylights, etc.), only a few historical panoramas are eligible for a serial entry. The Innsbruck

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

Panorama lost this option following a project in 2009 in which the circular painting was removed from the original building and relocated to a new museum. In Switzerland, the Bourbaki Panorama's World Heritage bid was rejected back in 2004. The Bourbaki has considerable problems with regard to its integrity in the context of the World Heritage rules: both the panorama itself and the building surrounding it have been heavily altered several times. There are also doubts about the formal possibility of a World Heritage candidacy, as only immovable properties, but not "mobile" panoramas, can be inscribed. A World Heritage candidacy was abandoned by IPC in 2022. However, the UNESCO "Memories of the World" program has come into play again. The IPC General Assembly in Luxembourg in 2022 commissioned the Executive Board to carry out the relevant planning and clarifications. As a first step, a geographical boundary was chosen that ideally represents the panorama phenomenon but is also realistic and manageable: Switzerland with its 5 panoramic panoramas from the period 1814 to 1964

<u>Keywords.</u> UNESCO, Switzerland, Panorama, Bourbaki Panorama

<u>Biography.</u> Patrick Deicher studied history and political science at the Universities of Berne and Bonn (M.A. in History), non-profit management at the FHNW in Basel (MAS NPO Management), municipal finance at the Lucerne University of Applied Sciences and Arts and digital administration at the ZHAW (CAS Digital Administration). He worked in museums for 20 years, most recently as a museum director.

Today, Patrick is a consultant for public administrations and non-profit organizations. He has been with *BDO Ltd. (Switzerland)* since 2009. Patrick is Head of Non-Profit Organizations Central Switzerland and is responsible for the further development of BDO Switzerland's internal customer relationship management system. Throughout Switzerland, he is primarily responsible for projects on organization, municipal management and authority organization, NPO governance and municipal mergers as well as inter-municipal cooperation.

In addition to his professional activities, Patrick is also involved in voluntary work: he is a former member of the Lucerne City Parliament and the Lucerne Naturalization Commission. He also managed the Foundation *Luzern hilft*. He is currently involved as a member of the regional civil protection commission of the cities of Lucerne and Kriens and the municipality of Horw.

Patrick is a former curator of *Bourbaki Panorama* in Lucerne, Switzerland. Since 2019 he is a member of the Board of Trustees and since 2022 the President of the *Bourbaki Panorama Foundation*. From 2003 to 2013 he acted as the Secretary-General and from 2013 to 2017 as the Treasurer to the *International Panorama* Council (IPC). Patrick is an active member of IPC's Advisory Group and Co-section-editor of the *Panorama and Immersive Media Yearbook*.

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

He is the former director of the *Bruder Klaus Museum* in Sachseln and was a member of the city parliament of Lucerne. From 2011 to 2021, he was also a member of the Board of Trustees of the *Panorama Altoetting Foundation*, Germany.

Workshop III | Next steps

Roundtable for Swiss Panorama owners/custodians
Moderator: Daniel Jaquet
Participants: Patrick Deicher, Bourbaki Panorama Foundation, Lucerne, Switzerland; Christiane Feldmann, Chairwoman, Foundation for the Panorama of the Battle of Murten, Murten, Switzerland; Helen Hirsch, Thun Panorama, Thun, Switzerland; Christoph Bareiss, Swiss Commission for UNESCO, Switzerland; Nicolas Ducimetière, Foundation Bodmer, Switzerland

Session I | Recovering Panoramas

Impossible to Frame: Shifting scales in forgotten Cosmorama pictures
Susana S. Martins, Universidade NOVA, Lisbon, Portugal

Abstract. Image consumption in the nineteenth century — from panoramas to aerial photography, stereoscopy, and microscopic entertainments — operated at various perceptual scales, crossing different kinds of popular, erudite and instructive circles. This shaped a vibrant visual culture that often oscillated between the gigantic and the minuscule.

In such a playful environment, Cosmorama shows emerged in Europe as attractive venues for experiencing modern pictures, where landscape representations played a prominent role. Part of an immersive culture in which education and recreation converged, Cosmoramas (or views of the world) were installed in fashionable exhibition rooms in city centers, displaying well-lit painted landscapes to be admired through a series of optical lenses set into a wall. While cosmoramas share some features with panoramas, in some ways, they almost invert the panoramic device, namely in terms of scale and the relationship between the image and the viewer.

This paper explores the Cosmorama phenomenon, investigating how the landscape paintings they exhibited engaged with questions of 'scale' at material, perceptual and conceptual levels. To do so, we will examine Cosmorama showmen (Nicolino Calyo (1799-1884) and Hubert Sattler (1817-1904) among others) who were also accomplished landscape and travel painters. First, the paper will analyze the changing depth and scale illusions one perceives while admiring a cosmoramic picture through a lens, causing the impression of entering a more spacious and borderless, unlimited landscape. Second, it will examine how the process of condensing and presenting different views of the world in one single setting, actually rested upon intense travel endeavors, which these artists performed all around the world.

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

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Finally, we will also address how these cosmoramic images, much like the panoramas, circulated worldwide, at a magnified global scale, promoting a dynamic and fluid landscape of images.

Keywords. Cosmorama, Scale, Early Media Culture, Circulation, Immersive perception.

Biography.. Susana S. Martins is an Assistant Professor in Contemporary Art and Museology at the Art History Department at Universidade NOVA de Lisboa. Researcher at the IHA - Art History Institute/IN2PAST, she coordinates the research group MuSt-Museum Studies and is a member of the Direction Board. She also co-coordinates the line Museums, Monuments and their Collections within the associate laboratory IN2PAST. Trained as an art historian, she received a PhD in Photography and Cultural Studies from the Arts Faculty of the Katholieke Universiteit Leuven. Specialized in the history and theory of photography, Martins has been mainly working on the intersection of photography, exhibitions and print cultures. In the field of museum studies, she has engaged with issues of virtual heritage, exhibition histories, and digital museography. Author of several journal articles on these topics, she has worked with different museums and curatorial projects and has also been involved in multiple research projects involving art and visual culture. She is currently Co-PI of the FCT research project "Curiositas: Peeping Before Virtual Reality. A Media Archaeology of Immersion Through VR and the Iberian Cosmoramas" (2022-2025).
Email, susana.martins@fcsh.unl.pt

Broadening Horizons: The wayfaring scenes of fairground panoramas (1820-1910)
Bart G. Moens, Antwerp University, Belgium

Abstract. This presentation delves into the captivating world of fairground panoramas and related media formats, such as dioramas and cycloramas, shedding light on their exhibition practices at North-western fairgrounds. Based on extensive archival research in Belgian and German archives, this contribution showcases the cultural resonance and historical value of traveling fairs, an area that has received limited academic attention, particularly in relation to the circulation of knowledge.

Yet, through unprecedented socio-economic and technological developments during the nineteenth century, the realm of the funfair not only developed into a transitory site for commercial amusement. Traveling shows people popularized visual culture and disseminated knowledge about the world in various ways (Wynants 2020, 26). Next to an eclectic array of attractions, such as mechanical theaters and wax museums, panoramas were exhibited to represent remarkable historical and extraordinary geographical scenes.

Exploring fairground environments and tracing the geographical movements of fairground panoramas reveals a different kind of panorama. Firstly, on a formal level, these panoramas were designed to be more compact for touring and further spectacularized within the fairground ambiance through performance, in

combination with other visual media, and music. Secondly, in terms of reception, these ambulant panoramas reached broad populations in towns and villages, more diverse than traditional and mainly stationary panoramas. As such mass audiences of men, women and children, rich and poor, were informed about historical events and distant places. Transcending societal boundaries, traveling panorama attractions opened up epistemic horizons, offering communities a peek into the wider world.

Keywords. Panorama, fairground, media archaeology, history of knowledge, circulation of knowledge.

Biography.. Bart G. Moens is an art and media historian with a particular interest in the interconnections between the arts and popular media forms during the late-nineteenth and early-twentieth century. He is currently a postdoctoral researcher at the University of Antwerp within the framework of the ERC-funded project 'Science at the Fair: Performing Knowledge and Technology in Western Europe, 1850-1914,' working on the subproject: 'Panorama, Diorama and Cosmorama. Performing History and Geography.' In 2023, at the Université libre de Bruxelles, Bart completed his PhD 'Emotions on Demand: Melodramatic Structures of Feeling in Optical Lantern Culture (1890s-1920s),' as part of the EOS-funded research project 'B-magic: The Magic Lantern and its Cultural Impact as a Visual Mass Medium in Belgium,' which he is currently reworking into a monograph that is planned to be published within the book series Media Performance Histories (Brepols Publishers).
Email, bart.moens@uantwerpen.be

Mirroring the World: Techniques and perceptions of panoramas in the early 19th century
Gabriele Koller, Jerusalem Panorama, Altötting, Germany

Abstract. As an innovative media art form, the panorama had its start in 1787 with Robert Barker's unique patent of invention. With it, Barker set the standard for an entirely new exhibition concept that was to have far-reaching effects on the presentation of visual art. Panoramas based on Barker's invention have been created throughout the nineteenth and early twentieth centuries. The paper will focus on painted panoramas that were created in the early nineteenth century and will examine their specific media practices. It will examine how these panoramas were presented, and how they were perceived by the viewer. By looking more closely at the use of optical devices such as mirrors, lenses, and c*amera obscuras* in or in relation to early exhibitions of panoramas, the paper will show how these practices, embedded in the cultural context of the time, were applied and how they shaped visitors' perceptions. In addition, the paper will show that in terms of presentation and perception, early nineteenth-century panoramas differed much from late nineteenth-century panoramas.

Keywords. 360-degree panorama, Exhibition, Optics, Mirror, Camera Obscura.

Panoramas as Memory of the World

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Lausanne, Switzerland | October 02–06, 2024

Biography.. Gabriele Koller is an exhibition curator, author, and researcher with interests in media art history and cultural history. Her thesis was devoted to Gebhard Fugel, the artist responsible for the Panorama of Jerusalem and the Crucifixion of Christ, Altötting, Germany. Since then, she has published on various aspects of panorama history. Her current research focus is on the early history of the panorama. For the International Panorama Council of which she is a member since its foundation she edited The World of Panoramas: Ten Years of International Panorama Conferences (2003), The Panorama in the Old World and the New (2010), and More Than Meets the Eye: The Magic of the Panorama (2019). She is a member of the Executive Board of the Jerusalem Panorama Foundation Altötting, Germany, and is the Panorama's Curator. She currently serves as Vice President of the International Panorama Council. Email, gabriele_koller@gmx.de

Thrown Back on the Sketches: Reconstruction of the destroyed panorama The Battle of Wörth on 6 August 1870 (1882-1905) by Otto von Faber du Faur
Christian Bunnenberg, Ruhr-University Bochum, Germany

Abstract. Four oversized sketches (each approx. 140 x 290 cm) are stored at the Bavarian Army Museum in Ingolstadt. The oil sketches are preliminary studies by the painter Otto von Faber du Faur (1828-1901) from 1880 onwards for the large-format panorama painting "The Battle of Wörth in Alsace on 6 August 1870" (approx. 14 x 160 m), which was staged by the Hamburg Panorama Actien Gesellschaft from 1882 in Hamburg, from 1886 in Cologne and from 1888 to 1890 in Munich. After the panorama painting had been stored for nine years, it was exhibited in Dresden from 1899 to 1901, then moved to Munich, temporarily stored and severely damaged during transport to Dortmund in 1905 and finally destroyed after an expert appraisal. Letters from the painter during his working period, newspaper articles and a detailed description of the panorama offer clues to the pictorial programme of the panorama. Taken together, the content of the panorama can thus be reconstructed. The four large-format sketches can be consulted to gain an impression of the composition of the picture. By comparing them with the image descriptions of the panorama, numerous similarities can be identified, turning the sketches into a second-order panorama. However, this approach to the sketches falls too short and does not do justice to these sources: the sketches have their own provenance and are independent objects with their own history. Thus, indications of an exhibition practice can also be found for the sketches. The lecture is dedicated to the destroyed panorama of the Battle of Wörth and attempts to reconstruct it in its temporal context - Wörth in Alsace was a place of pilgrimage for tourists in the German Empire - as part of the historical culture of the war of 1870/71 in the German Empire. The question is how to tell the story of a panorama that has not survived and of which there are no visual sources. Furthermore, the panorama sketches will be discussed as independent objects and scrutinized with regard to their source value for the reconstruction of the panorama.

Keywords. Battle Panorama, Oil Sketches, Reconstruction, Historical Culture, Sources.

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

Biography.. Christian Bunnenberg, Dr phil. (*1979), studied History and German Studies at the Westfälische Wilhelms-Universität, 2005 First State Examination and Magister Artium, 2008 Second State Examination, then secondary school teacher. 2009 to 2011 lecturer in history didactics at the University of Cologne, 2011 to 2014 research assistant at the Department of History Didactics at the University of Duisburg-Essen, 2014 to 2016 academic counselor at the Heidelberg University of Education. Since October 2016 Junior Professor of History Education at the Ruhr University Bochum, since 2021 Professor of History Education and Public History at the same university. His research focuses on the history of the 19th and 20th centuries, in particular the history of tourism, media history and the cultural history of war; history in social media and immersive media (virtual reality); history teaching and digital transformation. Email, christian.bunnenberg@ruhr-uni-bochum.de

Charles A. Chase and the Electric Cyclorama
Suzanne Wray, independent researcher, New York City, USA

Abstract. In the late nineteenth century, the popularity of the painted panorama was on the wane, despite attempts to add sound and lighting effects to the canvas. As the exhibitions became unprofitable, panorama rotundas were often converted for other uses. In late 1893, an advertisement in the *Chicago Tribune* newspaper announced the removal of the Chicago Fire Panorama, to be "replaced by one of the most novel, weird, and magnificent exhibitions ever conceived." The following year, the "Electric Cyclorama" of Charles A. Chase was demonstrated in the rotunda. Continuous "cycloramic" view from photographs were projected, using a battery of stereopticons (magic lanterns) arranged on a circular platform suspended from the ceiling. The lower cost of producing an "electric cyclorama," and the ease with views could be changed led to hopes that Chase's invention might "bring panoramas into fashion again," but the invention never gained the success predicted for it.

Keywords. ADD TEXT. ASK.

Biography.. ADD TEXT. ASK.
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Session II | Panorama of the Battle of Murten

Unveiling Historical Depth: Semantic annotation of the Panorama of the Battle of Murten
Tsz Kin Chau, Daniel Jaquet and Sarah Kenderdine, EPFL, Switzerland

33rd International Panorama Council (IPC) Conference

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Abstract. Realized by Louis Braun (1836-1916) in 1893, the Panorama of the Battle of Murten stands as a cherished Swiss national treasure, commemorating the pivotal Swiss victory of 1476. Beyond its national significance, the panorama holds a prominent place in global visual heritage, particularly within the realms of art history and panoramic history. Remarkably, the Murten Panorama is a rare surviving example of a painted panorama depicting a medieval battle scene. While most military panoramas of the time focused on contemporary victories, this work provides a unique glimpse into the past. Additionally, it is the sole surviving panorama by Louis Braun, making it essential for the preservation of the artist's legacy.

To achieve its immersive quality, Louis Braun and his associates conducted exhaustive historical research, delving into museum collections, illustrated chronicles, historical accounts, and field visits to craft a vivid portrayal of the medieval battle, transporting visitors back in time. The panorama's content is exceptionally rich, encompassing various elements such as geolocations, heraldic representations, historical characters, events, armaments, and costumes. This richness invites scholars from diverse disciplines, including art history, military history, and medieval studies, to explore its iconographic significance.

To enhance the interpretation of the panorama's intricate visual content, we propose a deep semantic annotation approach for data curation, operating at the Point of Interest (POI) level. Leveraging Linked Open Data (LOD) technologies, we will develop an annotation ontology to facilitate the description and interpretation of the panorama using interoperable structured data. This annotation will be supported by a web-based platform we designed, featuring deep zoom capabilities, with the potential to evolve into a versatile tool for the curation of panoramic content.

Keywords. Annotation, Data Curation, Art History, Linked Open Data.

Biography. Tsz Kin (Raphael) Chau is a PhD candidate in Digital Humanities at the École polytechnique fédérale de Lausanne (EPFL), Switzerland, with a background in history, art history, digital humanities, and artificial intelligence. Drawing from expertise in digitization and archiving, he has developed both the physical archive and the digital infrastructure of the Jeffrey Shaw Archive and Jeffrey Shaw Compendium (2015-), which have been exhibited in Austria, France, Hong Kong, Switzerland, and online. He is interested in the curation, retrieval, dissemination, and experience of big cultural data on the web. Currently, he is working on the Digital Murten Panorama project (DIAGRAM), a collaboration between EPFL and the Foundation for the Panorama of the Battle of Murten.
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Biography. Daniel Jaquet is a medievalist, with a background in literature, history of science and material culture of the early modern period. He received his PhD in history at the University of Geneva in 2013. He taught at the universities of Geneva, Lausanne, Bern and Neuchâtel (2008-2023). He was a visiting scholar at the Max Planck Institute for History of Science (Berlin, 2015-2016), and an associate researcher at the Renaissance Centre of the University of Tours (2016-2017). His teaching and research specializations

are martial culture, production, transmission and reception of martial knowledge in Europe (15-19 centuries). He is the project manager and co-lead researcher of the project *Digitizing and Augmenting the Panorama of the Batlle of Murten* at the Laboratory for Experimental Museology (EPFL, 2022-2026). He is also a certified museologist (ICOM Switzerland 2021) with experience in state museums and has curated 5 exhibitions.
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Biography. Professor Sarah Kenderdine researches at the forefront of interactive and immersive experiences for galleries, libraries, archives and museums. In widely exhibited installation works, she has amalgamated cultural heritage with new media art practice, especially in the realms of interactive cinema, augmented reality and embodied narrative. In addition to her exhibition work she conceives and designs large-scale immersive visualization systems for public audiences, industry and researchers. Since 1991, Sarah had authored numerous scholarly articles and six books. She has produced 80 exhibitions and installations for museums worldwide including a museum complex in India and has received a number of major international awards for this work. In 2017, Sarah was appointed Professor of Digital Museology at the École polytechnique fédérale de Lausanne (EPFL), Switzerland where she has built a new Laboratory for Experimental Museology (eM+), exploring the convergence of aesthetic practice, visual analytics and cultural data. She is also Director and lead curator of EPFL's new art/science initiative, EPFL Pavillons.
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Unfurl the Banners! Flags as artistic elements and military markers in battle panoramas
Jean-Claude Brunner, independent researcher, Austria

Abstract. Any visitor to Switzerland will be greeted by the ubiquitous displays of local, cantonal and national banners in the streets. It is fitting that the panorama of the battle of Murten features a plethora of Swiss, allied and Burgundian banners. For modern audiences unfamiliar with vexillology it can be hard to decode the mimesis encoded in the panorama paintings.

Comparing the use of flags in the Murten panorama painting and the Murten miniatures diorama of Curt F. Kollbrunner in the Swiss National Museum in Zürich, the illustrations in Swiss chronicles as well as the surviving specimens of the banners in various Swiss museums will reveal the different choices the artists took in aligning art, truth and storytelling. On the image from the Murten panorama included below on the left, the three lions of the English King are proudly displayed to mark the English archers participating in the battle who in reality would not have been permitted to fly royal banners.

The presentation will educate the audience in better understanding the flags presented in the Murten panorama.

Keywords. Flags, Murten panorama, Murten diorama, battle panoramas, vexillology.

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Biography. Jean-Claude Brunner is a Swiss business analyst living and working in Vienna, Austria. His research interests are social and technological change in the 15th and 19th century in Central Europe. He is treasurer of the Weltmuseum Wien Friends association.
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The Terapixel Panorama: The augmented Panorama of the Battle of Murten
Daniel Jaquet and Sarah Kenderdine, EPFL, Switzerland

Abstract. The project entitled Digitizing and Augmenting the *Panorama of the Battle of Murten* (2022-2026) exploits the unprecedented digital resolution of the digital twin of the panorama (1.600 Gigapixel) to pioneer new strategies and methods of interpretation for this magnificent yet contested historical artifact for exhibitions and networked access. Enriched with 4D volumetric video, 3D objects and spatial soundscape building on research in military and cultural history, the digital twin will enable diverse publics to engage with pioneering research across the three scientific domains of digital heritage, humanities and public history. To do so, the project will leverage world-leading hardware infrastructure developed by the Laboratory for Experimental Museology. Emulating historic ways of seeing 'in-the-round', these technologies include a pioneering 3D-360-degree display system. This platform provides up to 30 people with the extraordinary capacity to explore the digital twin in a format that not only emulates but also augments the original panoramic viewing experience.

The project will publicly communicate the digital twin through a series of four exhibitions at the Museum für Gestaltung, the Castle of Grandson, the Murten Museum, and the Bernisches Historisches Museum and related programs in 2025 and 2026. It will additionally produce specific content and avenues of engagement for audiences who would not otherwise have access to the underlying scientific knowledge of the *Panorama of the Battle of Murten* and the research unraveled in its digital twin. A special website and interactive tool for accessing all the augmented features of the project will open the entire digital twin to national and international audiences. As the permanent display of the digital twin or original painted panorama is not envisaged, this website will be the only mode of permanent access to the work.

Keywords. Panorama of the Battle of Murten, Museum, Digital Twin, Augmentation.

Biography. Professor Sarah Kenderdine researches at the forefront of interactive and immersive experiences for galleries, libraries, archives and museums. In widely exhibited installation works, she has amalgamated cultural heritage with new media art practice, especially in the realms of interactive cinema, augmented reality and embodied narrative. In addition to her exhibition work she conceives and designs large-scale immersive visualization systems for public audiences, industry and researchers. Since 1991, Sarah had authored numerous scholarly articles and six books. She has produced 80 exhibitions and installations

for museums worldwide including a museum complex in India and has received a number of major international awards for this work. In 2017, Sarah was appointed Professor of Digital Museology at the École polytechnique fédérale de Lausanne (EPFL), Switzerland where she has built a new Laboratory for Experimental Museology (eM+), exploring the convergence of aesthetic practice, visual analytics and cultural data. She is also Director and lead curator of EPFL's new art/science initiative, EPFL Pavillons. Email, sarah.kenderdine@epfl.ch

Biography. Daniel Jaquet is a medievalist, with a background in literature, history of science and material culture of the early modern period. He received his PhD in history at the University of Geneva in 2013. He taught at the universities of Geneva, Lausanne, Bern and Neuchâtel (2008-2023). He was a visiting scholar at the Max Planck Institute for History of Science (Berlin, 2015-2016), and an associate researcher at the Renaissance Centre of the University of Tours (2016-2017). His teaching and research specializations are martial culture, production, transmission and reception of martial knowledge in Europe (15-19 centuries). He is the project manager and co-lead researcher of the project *Digitizing and Augmenting the Panorama of the Batlle of Murten* at the Laboratory for Experimental Museology (EPFL, 2022-2026). He is also a certified museologist (ICOM Switzerland 2021) with experience in state museums and has curated 5 exhibitions.
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Session III | Panoramas and Living Memory

The Nova Tuskhut: A walk-in archive of "Arctic" things
Sara Velas and Ruby Carlson, Velaslavasay Panorama, Los Angeles, USA, and
Weiling Deng and Jonathan Banfill, Champlain College, Vermont, USA

Abstract. This presentation provides an in-depth tour to the design ideas and philosophical underpinnings of the *Nova Tuskhut* (2014-2024) in the Velaslavasay Panorama in Los Angeles, a built-in diorama of the "Only Arctic Trading Post in the Lower 48 States" of the US. Its installation was paired with two of the VP's previous installations: the 360-degree panorama *Effulgence of the North* (2007-2017) and the lobby exhibit *Nancy Columbia and the Arctic Beyond* (2014-2018). The famed Inuit film star was born into the spectacle of "Eskimo Village," an Arctic obsession at the 1893 Chicago Columbian Exhibition that imposed its colonial name on her. By birth, Nancy Columbia's life was an installation of stolen and simulated memory to shifting audiences who both admired and remembered her and penned the world in which she lived in the role of acting and a memory holder.
    Instead of a "seamless" 360-degree installation, the *Nova Tuskhut* relies on the fleeting and fragmented vignettes of ephemera and specters of polar lifeways, and also on the embodied experiences with them shared by the curators and the visiting public as the wooden hut survives over a decade and a change of

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

panorama-on-view at the VP. It features a well-stocked pantry, library, wood burning stove, bear pelt, picturesque window view, fireside cot. Throughout the first half of 2015, it was accompanied with a six-part screening series in collaboration with LA Filmforum entitled *Mush To The Movies: A Polar Film Club.* But as the hut's de-installation and digitization near, its next habitat in the digital ether renews the rumination of the gains and losses of these polar legacies that always haunts preservation works upon reentry into the process of conception-execution-reproduction. From the *Nova Tuskhut*, we interrogate the possibilities and constraints of panorama and its digital representation as a tool and institution of memorialization.

Keywords. Ephemera, Archival Object, Arctic, Diorama, Nancy Columbia.

Biography. Sara Velas is the Founder, Co-Curator and Artistic Director of the Velaslavasay Panorama, a nonprofit museum and garden she established in the year 2000 to present experimental immersive experiences and variations of media popular before the invention of cinema. An artist, graphic designer, curator, gardener, and native Los Angeleno, she is active on the Heritage Committee and Advisory Board of the International Panorama Council. Ms. Velas is a member of the Los Angeles Breakfast Club and is significantly involved in architectural preservation efforts throughout Los Angeles. Born in Panorama City, California she received her BFA from Washington University in 1999.
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Biography. Ruby Carlson is a Curator, Writer and Director of Programs at the Velaslavasay Panorama. From 2015-2018 she served as the elected Secretary of the International Panorama Council. She studied literature and linguistics at George Washington University and is an award-winning cinematographer for media and fine art projects. Since 2010 she has participated in PLACE, a critical return to the discovery of Freud and its construction in the topology introduced by J. Lacan.
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Biography. Weiling Deng is Assistant Professor of Interdisciplinary Studies and Digital Humanities at Champlain College in Burlington, Vermont. She received her Ph.D. in Social Sciences and Comparative Education from UCLA. Her research and teaching interests include Global Asias, archipelagic thinking, traveling theory, gender and race in technology, engaged pedagogy, and applied humanities. She has published on *South Asian Review, Verge: Studies in Global Asias, Los Angeles Review of Books, and academic anthologies including Postcolonial and Postsocialist Dialogues: Intersections, Opacities, Challenges in Feminist Theorizing and Practice.*
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Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

Biography. Jonathan Banfill is Assistant Professor of Interdisciplinary Studies and Digital Humanities at Champlain College in Burlington, Vermont. He holds a PhD in Social Sciences and Comparative Education from UCLA, where he worked as a teacher and researcher for a multi-year interdisciplinary educational program, the Urban Humanities Initiative, funded by the Mellon Foundation and is a founding member of the Urban Humanities Network (urbhum.net). His research sits at the intersection of pedagogy, urban space, and public humanities fields.
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Beyond the Canvas: The essential conservation of ecological and cultural heritage on Kauō
Liz Crooks and Jessica M. Smith, University of Iowa Museum of Natural History, USA

Abstract. The University of Iowa Museum of Natural History's Laysan Island (Kauō) Cyclorama encapsulates a moment frozen in time, preserving the memory of an ecosystem on the brink of irreversible change. Through meticulous detail in foreground and mural, the cyclorama serves as a tangible sensory snapshot, preserving the essence and memory of this part of the world for generations to come. Transporting visitors to 1902, proceeding the forthcoming devastation by poachers, industrialization, and the introduction of non-native species, the cyclorama provides an immersive experience, vividly capturing the sights and sounds of the island's pristine environment.

Despite some successful recovery efforts, including the eradication of invasive animal species and heightened conservation measures, today the island and its inhabitants face new threats from human impact—primarily plastics. The story the cyclorama tells supports current research and provides a platform for cultural exchange and preservation.

This presentation explores the museum's new partnership with the supporters of the United States Fish and Wildlife Service's work in the Papahānaumokuākea refuge, highlighting the intersection of environmental conservation, cultural heritage, and museum practices. By engaging with stakeholders knowledgeable about native naming conventions and cultural significance, the museum seeks to update exhibit labels and narratives, ensuring a more authentic and inclusive portrayal of the island's history and ecology.

Through this case study, we demonstrate the pivotal role of panoramas/cycloramas as repositories of memory and cultural heritage. By integrating historical knowledge with contemporary conservation efforts, museums can foster meaningful dialogue, raise awareness, and contribute to the preservation of our shared natural and cultural heritage.

Keywords. Cyclorama, Laysan Island, Conservation, Cultural Heritage, Museum Practices.

Biography. Liz Crooks has served as the director of the University of Iowa Pentacrest Museums since 2018, serving the greater institution for over three decades. Crooks holds an MA in Museum Studies and a

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

Graduate Certificate in Book Arts. Her passion for museums was kindled through formative visits to the very museums she now leads with dedication. With her leadership guided by the foundational belief that museums hold in store something for everyone, Liz ensures that every individual, from her staff to visitors and even campus janitors, will find enjoyment and enrichment within the museum's walls.

Liz's impact extends far beyond the walls of her institution. A firm believer that great universities have great museums, Crooks serves as a state representative and on the conference planning committee with the Association of Academic Museums and Galleries. Liz has spearheaded efforts to conserve the museum's crown jewel exhibit, the Laysan Island Cyclorama. This work has led to a deeper involvement with the International Panoramic Council where she has served as conference presenter, host, journal editor, and member of the heritage committee.

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Biography. Jessica M. Smith has led the communications and engagement department at the University of Iowa Pentacrest Museums since 2018. Her diverse and creative backgrounds in sociology, art, marketing, environmentalism, and non-profit organizing inform and contribute to her work as a museum professional. Jessica has played an integral role in the conservation efforts of the cyclorama with documentation, a major fundraising campaign, grant acquisitions, and strategic partnerships. Her work in identifying curricular connections between the cyclorama and classes encourages high-impact, hands-on learning opportunities for students of all ages. Jessica teaches her own students to create access to science and history using creative media, writing, and joy.
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Rotunda and the City: An intricate relationship
Emile Mermillod, Association des Amis du Panorama de Morat, Switzerland

Abstract. The sheer scale of a panorama painting and its fixed form make the building that hosts it an imposing urban presence.

In the early 19th century, rotundas were mostly built as a profitable short term investment, and were thus built with minimal financial and decorative efforts. By contrast, modern rotundas from the end of the 20th and the beginning of the 21st century seem to be built to last and these differences are often visible in the quality of the cladding and the type of the structure. Likewise, the location of rotundas also highlights various strategies. While the 19th century panoramas tend to nestle in the heart of cities, newer rotundas are pushed outward on the edges due to rising land costs and zoning laws. Another common strategy found both in modern and classical time panoramas includes the integration of rotundas into green spaces, disconnected from the urban fabric.

In this study, we collect and sort data about the exterior appearance and the different urban strategies of European rotundas built outside of the context of fairs. This analysis shows tendencies in the urban and

architectural characteristics of rotundas with regard to their economical and historical background. We question the evolution of these characteristics not only in the context of improving techniques and supply chains, but also in the changing function of these buildings in our society. Finally we discuss the fate of panoramas, first as capitalistic enterprises then as historical artifacts worth cherishing.

Highlighting these architectural and urban strategies and their evolution paves the road to cautious previsions about the future development of panoramas.

Keywords. Architecture, Urbanism, Rotunda, Urbanistic Strategies, Cladding..

Biography. Emile Mermillod discovered panoramas as a child when he visited the Morat Panorama at the Swiss National Exhibition of 2002 (Expo 02). He graduated from the EPFL as an architect in 2019 with a project for a rotunda to house the *Panorama of the battle of Morat*. He collaborates with the Association of Friends of the Morat Panorama who are aiming to find a suitable permanent site for the painting and pursue research related to this object. This led in 2019 to a traveling exhibition and in 2022 to an analysis of the various past projects around the Panorama of Morat. In 2023, together with the architectural office awerk, he submitted a study for a building permit application to the city of Morat to investigate the legal feasibility of a rotunda in the protected areas of the medieval town. This project is currently ongoing. Emile Mermillod also has an interest in ambiguous Swiss heirloom pieces, exploring the myths and objects that shape the mental landscape of Switzerland. Besides his interest in the Morat Panorama his research also includes the question of the heritage and significance of ageing Swiss nuclear power plants.
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Outsourcing Memories: Remembering at urban panstereoramas (in the Age of AI)
Blagovesta Momchedjikova, New York University, USA

Abstract. Panstereoramas, commonly referred to as scale models, miniatures, or maquettes, belong to the family of panoramic representations that both supplement and contest the medium of painted panoramas. Unlike painted panoramas, which are two-dimensional, bigger than the viewers, and surrounding them; panstereoramas are three-dimensional, smaller than the viewers, and surrounded by them. These differences provide radically different experiences at painted panoramas versus pansteroramas, yet there are overlapping experiences as well: those of immersion, memory, and comprehensiveness. But to what end?

I would like to argue that panstereoramas have persisted in time periods and across disciplines, more so than painted panoramas have, perhaps due to their size, portability, and their ever-growing circulation in popular culture (i.e., the toy industry). Do panstereorams then have a different relationship to memory, both collective and individual, than painted panoramas? Has that contributed to the popularity of panstereoramas, even in the present day? At previous conferences, I have examined the ancient technique

of the memory palace, as it enlivens pansteoramas and invites immersion in the world of the miniatures. This time, I want to explore the fading necessity to remember due to various electronic devices and recently, AI, and thus the habit to outsource the process of remembering and as a result, outsource memories. I will engage with concepts from "media archeology," as well as examples of panstereoramas, in the context of fashioning city memories from city representations.

Keywords.. Panstereoramas, Media Archeology, Memory Palace, City Representations, Outsourcing Memories.

Biography. Blagovesta Momchedjikova, PhD, is an urban culture essayist and poet, who publishes on panstereoramas, memory, and the lived city experience. She is the editor of *Captured by the City: Perspectives in Urban Culture Studies and Streetnotes: Urban Feel;* and the co-editor of *Sounds and Silence in the Pandemic City, The Panorama Handbook: Thoughts and Visions On and Around the Queens Museum's Panorama of the City of New York, From Above: The Practice of Verticality, Public Space: Between Spectacle and Resistance.* Dr. Momchedjikova chaired the Urban Culture Area for the Mid-Atlantic Popular and American Culture Association (MAPACA) for 15 years and the inaugural Conference Scientific Committee for IPC for 5 years. She is a founding member of the *International Panorama Council Journal* (IPCJ), and sits of the editorial boards of both IPCJ and *Streetnotes*. She teaches art, writing, and the city at New York University.
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Session IV | Round Tables

Discussion: Restoration
The renewal of the "optical apparatus" in the Bourbaki Panorama, Lucerne (Switzerland)
Christian Marty, Bourbaki Panorama, Lucerne, Switzerland

Abstract. The painting of the Bourbaki Panorama Lucerne was extensively restored in the years 1997-2000. The optical apparatus, the viewing platform and the lighting system with artificial light were also redesigned and furnished. After almost 25 years and over a million visitors, the Baldaquin, velum and solar sails in particular showed visible signs of wear and aging and formed a sometimes-drastic contrast to the high quality of the painting. The aim of the recently completed project was to upgrade the worn-out, damaged and technically overhauled equipment to a future-oriented and energy-efficient equipment. The presentation describes the planning and execution of this work.

The central part of the project concerned the replacement of the Baldaquin, which has about 1600 square meters of fabric with a total weight of about 200 kilograms. To this end, a custom-made design with cutting patterns and a hanging device for the Bourbaki Panorama had to be created. In terms of fire resistance, lightness and light protection, the textiles had to meet the highest requirements in terms of

heritage preservation and safety. Most of the restoration work was carried out by industrial rope access technicians to protect the painting.

Another sub-project concerned the refurbishment/restoration of various listed equipment elements due to the worn-out condition and the exceeded service life. In particular, it was about the metal balustrade of the visitors' platform and four leather-covered benches, which are still from the original furnishings of 1889.

The third sub-project concerned the replacement of 64 metal halogen lamps for artificial painting illumination. Once again, 64 high-quality LED spotlights were installed as a custom-made product for mounting on the existing metal brackets. They allow illumination without damaging spectral content in UV and IR range, guarantee gentle illumination and an authentic impression of Picture and foreground. A new lighting control with dimming function allows an acceptable adjustment and controls the illumination intensity according to the time of year and day.

Keywords. Bourbaki Panorama, Optical apparatus, Baldaquin, Velum, solar sails.

Biography. Christian Marty, Conservator-restorer SKR/SCR FIIC. He completed his training as a painting and sculpture conservator-restorer in Zurich. Further training took place at various museums and institutes in Switzerland, Austria and the Netherlands. In 1980 he joined the Swiss Institute of Art Science (SIK/ISEA), where he was appointed head of the Art Technology Department in 1985. During this time, he was involved in the "Swiss Association for Conservation and Restoration" (SKR/SCR) for 8 years, 6 of them as president. He was also co-founder and member of the presidium of the "European Confederation of Conservators - Restorers' Organisation" (E.C.C.O). From 1997 onwards, he led the Institute's major conservation projects, including the conservation and restoration of the Bourbaki Panorama (Lucerne, CH) where he is still mandated as chief restorer. In 2003 he founded ARS ARTIS AG, together with his life partner Petra Helm. He was able to contribute his experience in dealing with large panoramas as a consultant in the restoration of the Sattler Panorama (Salzburg, A) and in the translocation of the painting Battle of Atlanta (Atlanta, USA). He was the overall project manager for the translocation of the Battle of Bergisel (Innsbruck, A). From 2017-21 he restored together with his partner Petra Helm the small panorama "Clear World of the Blissful" by E. Kupffer on Monte Verita, Ascona (CH). He publishes and gives lectures on conservation and restoration. Fellow of the International Institute of Conservation IIC. Email, christian.marty@bourakipanorama.ch

The Panorama of Racławice and its two counterparts: Reconstruction in the process of panorama revitalization
Ryszard Wójtowicz, Drabik i Wójtowicz Conservation and Restoration of Monuments, Wroclaw, Poland

Abstract. Due to the need to resolve a unique conservation problem, it was necessary to adopt and invent a new approach to the issue that could solve the subject in an innovative way and answer any questions. In

order to prove such a thesis, it was necessary to define the methodology of conservation proceedings and to develop a new research strategy regarding the monuments. These studies were initiated and carried out during the restoration of the *Panorama of Racławice* in Wrocław, and as a sequence in Hungary and the United States. Each of these ventures was led by the author of the book.

The basic assumption for technical and aesthetic solutions in these processes was the restoration and preservation of the main idea of the panorama, which is the illusion of the "new" reality. The experiments and research described in the book come from the results of conservation work on the following works of art:

Panorama of the Battle of Racławice, Wrocław, Poland
Creation date: 1893-94, Lwów, Poland
Dimensions: 114.50m x 14.20m
The conservation: 1981-85;
Feszty Panorama Arrival of the Hungarians, Ópusztaszer, Hungary
Creation date: 1892-94, Budapest, Hungary
Dimensions: 113.50m x 14.10m
The conservation: 1991-95;
Cyclorama Battle of Gettysburg, Gettysburg, PA; USA
Creation date: 1884, Boston MA, USA
Dimensions: 114.80m x 12.90m
The conservation: 2006-08.

Referring to the title of the book the issues of all aspects of conservation problems and terminology, contained in a complex sequence of activities aimed at recovering all artistic values of preserved works of art inscribed on the national heritage lists in each of the described panoramas homelands, were developed and applied.

Keywords. Conservation, Three Panoramas, Illusion of Reality.

Biography. Dr Ryszard Wójtowicz, Conservator of Monuments: master's studies in Conservation and Restoration of Works of Art, Nicolaus Copernicus University in Toruń 1975-1980. Since 1992 a member of the IPC, former vice – president, as well as Association of Art Conservators and Association of Art Historians in Poland. Head conservator of 3 panoramas: Racławice Panorama, Poland, Feszty Panorama, Hungary, The Gettysburg Cyclorama, USA. Participation in many research projects, among others of the Getty Institute, California; many conservation projects for historic monuments from the early middle ages up to the twentieth century, including two located on the UNESCO World Heritage List: Centennial Hall in Wrocław, Pl. and the seventeenth century Peace Church in Świdnica, Pl. Numerous works in the field of his profession, expert opinions and consultations in Poland and abroad. Preparation of several exhibitions and many presentations. Author of a number of articles. Awarded by the Prime Minister and

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

Minister of Culture for conservation work on the Panorama of Racławice, honored with the Cross of Appreciation by the President of Hungary for work on the Panorama of Feszty in Hungary, a special award from the Gettysburg Foundation for work on the panorama of the Battle of Gettysburg in the USA (PA). Email, zabytki@drabikwojtowicz.pl

Session V | Pano-visions

An Archeology of Time and Memory in Panoptic Media
Rod Bantjes, St. Francis Xavier University, Nova Scotia, Canada

Abstract. "Deceptive" anamorphosis and their corrective apparatuses are artifacts that embody a covert pre-history of the panorama. I take an experimental media archaeology approach to unlocking the conceptual innovations embedded in these objects. Kepler's rotating *camera obscura* of 1604 was similar to the panoramic *camera obscuras* popular in the early 19th century except that Kepler's image-plate rotated and across its surface a roll of paper scrolled as he recorded the panorama slice by slice. His paper roll was a cybernetic memory employed to capture and reconstruct the all-round immersive character of the world-as-experienced. Seventeenth-century Dutch painters inserted shiny convex surfaces into their still-lifes that reflected anamorphic projections of full-surround views of the spaces they occupied. The "curvilinear" perspective that these details exemplified was a still-un-rectified anamorphosis of the immersive experience they pointed to.

Artistic innovators used anamorphosis to question all planar projections of immersive spatial experience. I reconstruct Hoogstraten's peepshow parody of perspective convention and recreate the lost viewing apparatus for Van der Heyden's anamorphic *Amsterdam Stadhuis*. I also reconstructed the missing viewing-box for Fabritius's panoramic *A View in Delft*. I make the device adjustable to test hypotheses about the nature of the anamorphosis and the logic of its rectification. All these assemblages, like the Barker panorama, produce seductive invocations of space that seem freed from an image substrate. They achieve their effect through the mediation of obtrusive machinery of representation that implies a machinery of perception – the bodily motion, temporal recording and reconstruction through memory that Kepler's panoramic camera obscura stood as concrete metaphor for. This new constructivist paradigm of perception, first articulated by Berkeley, was fiercely resisted for its challenge to veridical sight. That resistance helps make sense of the paradox that, despite unprecedented realism, exhibition machinery was often "disappeared," and media that used it was stigmatized as "deceptive."

Keywords. Experimental media archaeology, Anamorphosis, Curvilinear perspective, Spatial perception.

Biography. Rod Bantjes is a Senior Research Professor at St. Francis Xavier University, Nova Scotia, Canada. He is author of two books and numerous journal articles on environmental social movements and

state formation. He is currently applying his research on media archaeology to understanding changing conceptions of space, perception and epistemology. His recent work has been published in The History of Ideas, Art History, History of Photography, Technology and Culture, Early Popular Visual Culture, and the International Journal of Film and Media Arts.
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Chicago as Exhibition: Centering the city in interactive print
Molly Briggs, University of Illinois at Urbana-Champaign, USA

Abstract. Two print artifacts, dated 1870 and 1886, offer a concise overview of Chicago's construction and reception as a panoramic city. An 1870 advertising broadside pictures the Chicago Rock Island & Pacific Railroad (C.R.I. & P.R.R.) as a central component in a contiguous network of steam and rail lines that circumnavigate the globe. The broadside is dominated by a world map drawn in north polar (azimuthal) projection upon which transport lines are charted in a continuous loop. This does more than put Chicago on the map; it situates the burgeoning pre-fire city at the center of the world.

Adolph Wittemann's 1886 accordion-fold *Panorama of Chicago* pictures in 270 degrees the view from the roof of the Pullman building on Michigan Avenue. Labels highlight infrastructural additions since the 1871 Chicago fire. This single-sheet viewbook renders Chicago as a panoramic city in five senses of the word. The title echoes the word's usage in illustrated print compendiums of urban data—books that purport to contain whole cities—while its proportions comport with those of the wide-format images known then (as now) as panoramas. Its format is a direct adaptation of the circular panorama and horizontal orientation plans thereto, and it is rendered from a vantage point whose proportions correspond to those of a panorama viewing platform. Finally, it omits an important building from the foreground in order to open a sightline to the rotunda housing the *Panorama of the Chicago Fire*, then on display on Michigan Avenue.

This presentation contextualizes a close reading of both prints with period accounts of efforts to construct a pair of new rotundas, one in Garfield Park and one in Jackson Park, with the aim of curating Chicago's cultural landscape history in expressly panoramic form.

Keywords. Immersive Rhetorics, Panoramic Perception, Transportation Infrastructure, Chicago Fire, Chicago Panoramas.

Biography. Dr. Molly Catherine Briggs is a design theorist, landscape historian, and studio practitioner who interrogates graphic and spatial epistemologies by elucidating interactive and immersive rhetorics in historic and contemporary media. She holds a PhD in Landscape Architecture History & Theory from the University of Illinois at Urbana-Champaign and an MFA in Art Theory & Practice from Northwestern University. She is currently an Assistant Professor of Graphic Design and Design for Responsible Innovation in the School of Art & Design at the University of Illinois at Urbana-Champaign, where she

teaches visual communication and design research methodology. Dr. Briggs has presented her research in peer-reviewed conferences, symposia, and journals throughout the United States and Europe. She is the recipient of numerous scholarly, creative, and pedagogical grants, awards, and recognitions and is a 2023 Fellow of the Maclean Map Library. She is a member of the College Art Association, the Design Research Society, the Design History Society, the International Panorama Council, the SECAC, and the Society of Architectural Historians. Her creative work has been represented by Zg Gallery in Chicago since 2004. Email, mbriggs@illinois.edu

Crossing the Switzerland of America: Chicago's global ambitions
Nicholas Lowe, The School of the Art Institute of Chicago, USA

Abstract. The Grand Panoramic View of the Heart of Chicago (1892) by George Melville presents an image of the city in anticipation of the World's Columbian Exposition of 1893. Following the Great Fire of 1871 Chicago had rebuilt itself sufficiently enough that all traces of the conflagration had been eradicated. The city's ambitions had been made clear for some time, and the occasion of the World's Fair consolidated the opportunity to claim itself as the world's center. The post conflagration fervor to rebuild produced what has been called the first truly American city and this idea appears to have been established in no small part through the embrace of panoramic forms. Knowingly or not, Chicago had remade itself as a platform from which to view the world, and conversely through an architecture that contained the world.

A close reading of The Grand Panoramic View of the Heart of Chicago when taken together with an earlier accordion-fold publication the 'Panoramic Map of the Great Overland Route from Occident to Orient' (Rand McNally) is revealing of the panoramic ambitions and conceits of Chicago. The City's urban fabric and architectural inventions can be seen to have been greatly informed by panoramas and panoramic visions. The Chicago, Rock Island and Pacific RailRoad from its beginnings in 1851 is celebrated in this 1876 publication for its contributions to improvements in transcontinental travel. The journey from Chicago to San Francisco at the time of this publication is described self-consciously for its physical connections to the rest of the world. Closing with the assertion that in having forged its ascendency in rail connections from the east to the 'Golden Gate' and San Francisco, Chicago confirms itself as a city of global importance to rival London and its Great Exhibition of 1851. As a foldout pocket map this artifact draws strongly upon the precedents found in overland trail guidebooks, and moving panorama narrations of the 1840's. Key to this publication is its connections to the exponential post-fire growth of commerce in Chicago which is set in counterpoint to European and particularly British imperial ambitions.

Keywords. Chicago World's Fair 1893, Chicago Fire, Moving Panorama, Transcontinental Map.

Biography. Nicholas Lowe is an interdisciplinary visual artist, writer, educator and curator whose work is known for its contextual and documentary approaches. His visual and performance works forefront

material research, interpretation and public engagement. He holds an HDFA from the Slade School of Art, University College London and a BA in Crafts Combined Study (Wood Metal Textile Ceramic) from Manchester Met. University. Lowe is a Professor at The School of the Art Institute of Chicago and is the John H. Bryan Chair of Historic Preservation.
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Museum Panorama Mesdag: Ulrike Heydenreich, Longing for the Distance
Ulrike Heydenreich, artist, Düsseldorf, Germany, and
Adrienne Quarles van Ufford, Museum Panorama Mesdag, Netherlands

Abstract. Museum Panorama Mesdag is an icon in The Hague, with the Panorama of Scheveningen (1881) as its absolute highlight. The museum owes its name to the painter of the Panorama, Hendrik Willem Mesdag (1831-1915), and also houses an impressive collection of art by him and his wife Sientje Mesdag-van Houten. With many temporary exhibitions that connect the past to the present, there is always something new to see.

In 2023 Museum Panorama Mesdag presented a unique overview of German visual artist Ulrike Heydenreich (1975). In this IPC talk Ulrike Heydenreich and Adrienne Quarles van Ufford, curator of the show and Head of Collection and Exhibitions at Museum Panorama Mesdag, will give insights into her work.

Ulrike Heydenreich is fascinated by maps and panoramic mountain landscapes. Her magical – and sometimes monumental – artworks express her desire for distant places. She records these vistas in drawing and objects, with collages and through folding techniques – or even a huge reflective kaleidoscope.

Like Hendrik Willem Mesdag, Heydenreich toys with perspective and illusion, the difference being that she fabricates rather than replicates the view and shows you what you don't see. Time and again, Heydenreich designs, draws, folds or stitches a new and wondrous world of imaginary landscapes.

Heydenreich sometimes refers quite literally to the phenomenon of nineteenth-century panoramas, as is the case with the historic topographical maps and folded panoramas she uses in her work. Heydenreich draws copies of various mountain ranges taken from historical photos or creates collages from old topographical maps, merging different mountains together to create a new landscape.

Using photographs from the early 20th century as a starting point for her collages brings the aspect of time into play in her work. Most of the glaciers have probably melted away, intensifying the sense of transience.

Keywords. Illusions and Fabricated Views, Historic Panoramas as a Window on Present Times, Reinventing Dimensions, Climate change.

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

Biography. Adrienne Quarles van Ufford is a Dutch art historian. She studied Art History at Amsterdam University and achieved a Postdoc degree at the School of Journalism, Utrecht. She is Head of Collection and Exhibitions at Museum Panorama Mesdag, Den Haag since 2021 and curator of the exhibition Ulrike Heydenreich. Longing for the distance.
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Biography. Ulrike Heydenreich lives and works in Düsseldorf, Germany. She studied at the famous Bauhaus-Universität in Weimar and also at the School of Visual Arts in New York, among others. Her work has been exhibited in Germany, The Netherlands, Belgium, Austria, Spain, America and Japan. Longing for the distance at Museum Panorama Mesdag in Den Haag was her first survey exhibition at an art museum.
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The Memories of Objects: From lenses to panorama history
Luca Vascon, VR artist, photographer, and video maker, Venice, Italy

Abstract. How a camera collector looking for some rare and forgotten lens stumbles over some Panorama history missing pieces.

Collectors are strange beings, moved by passion and curiosity, they are avid learners of any information that concerns their fixation and they want to know more than simply the nude facts, they want all the microhistories connected.

My line of collection, or, with the proper terms. "My own obsession" is non-rectilinear lenses and optical systems. Meaning primarily fisheye lenses, but including all the ones that defy the now common rules of renaissance perspective, all exposed in https://www.thefisheyelist.com.

I'm actually looking into some prototypes and elusive lenses histories, but in the last two years of researches I've seen few solved mysteries, I'd say two, and the lines of two fascinating lenses ended in a precise place in Panorama history, both connecting to the name of Ernst Heiniger, the inventor of Swissorama.

I'll try to explain, with real life examples I recreated myself, how the two systems were supposed to work and make a comparison with previous and actual technologies.

Keywords. Cinema, Photography, Technology, Cineorama, Circarama.

Biography. I'm a 360VR artist, photographer and video maker, but I'm also a camera and photographic collector. I started at the end of '90 with the very beginning of the digital VR pioneering era. I felt it was a natural move to researchPanorama history in order to look for answers about the media's nature, languages and possibilities. My attitude is to make or adapt my own tools in order to achieve the result that I want,

being them cameras,special heads, new techniques, approaches, languages. At first working as multimedia lab teacher in IUAV university of Venice, then as co-founder and CEO of the visual services company "Officine Panottiche", then as a self-employed, I took part in major cultural and educational projects in Italy and abroad. A pioneer of digital panoramic photography, I have a thorough knowledge of the technology (hardware and software) related to interactive imaging, high-resolution photo and video, navigable videos and time-lapses, and have developed an extensive network in that particular community through years of active involvement. Fields of expertise: Analogical and digital photography: HDR techniques, high-resolution gigapixel images, documentary, scientific, scale models, studio photography, geological and architectural surveys. Interaction design: VR photography and video, immersive reality, interaction design for cultural heritage, photogrammetry. Education, research and development. Email, luca.vascon@gmail.com

Session VI | Panorama du Congo

The Afterlife of the Panorama du Congo (1913): Decolonial curation of imperial panoramas
Victor Flores, Lusófona University, Lisbon, Portugal, and,
Leen Engelen, LUCA School of Arts / KU Leuven, Belgium

Abstract. The fabrication and manipulation of history and memory were the primary objectives of most imperialist panoramas. Due to their unsettling messages, many of these sophisticated propaganda machines have since disappeared into oblivion, either consigned to storage or lost altogether. The retrieval and digital remediation of these panoramas can serve as a timely political gesture, raising awareness among contemporary audiences and sparking discussions on similar contemporary discourses.

This presentation will argue that despite the loss or unavailability of imperial panoramas, their substantial persuasive power can still be harnessed to dismantle their original narratives and encourage critical inquiry. To this end, the diverse array of surviving archival materials and their rich material history—including advertisements, handbills, illustrated keys, pamphlets, and guidebooks—will play a pivotal role.

The digitization and virtual recreation of the Panorama of Congo (Congo VR, 2023), a Belgian colonial Panorama from 1913 by Alfred Bastien and Paul Mathieu, contribute to the critical examination of such propaganda mechanisms. This presentation will draw upon both virtual and physical artistic restagings of the Panorama of Congo, created for its first critical exhibition at the National Museum of Natural History and Science (February - June 2024). The absence of the original Panorama, now relegated to storage due to its poor condition, was not a disadvantage. Rather, it allowed us to digitally entangle and weave the painting with its historical contexts of violence and oppression. Firstly, akin to how historical illustrated keys and guidebooks instructed viewers to scrutinize details and interpret the all-embracing image, our project employed sound narratives and specific scenographic techniques to redirect the gaze and reorganize the knowledge about what is seen in Virtual Reality. Secondly, the curation of a scaled installation (15

meters) of the Panorama, accompanied by a decolonial soundscape and contemporary voices, served to evoke the violence (conspicuously absent in the original painting) and stimulate the viewer's imagination and critical engagement, thereby thwarting the Panorama's original objective of rendering violence in Congo unimaginable.

Keywords. Panorama of Congo, Virtual Reality, decolonial curation, imperial Panoramas.

Biography. Victor Flores is a media researcher, professor and curator whose work foregrounds understudied immersive media heritage through archive research and recent technologies such as Virtual Reality. He is an Associate Professor at Lusofona in Lisbon and is the head of the PhD Program in Media Arts and Communication. As a principal researcher at CICANT, he coordinates the Early Visual Media Lab (https://earlymedialab.ulusofona.pt/) and is the co-PI of the research projects *Curiositas: Peeping Before Virtual Reality* (FCT) and *Decolonising the Panorama of Congo: A Virtual Heritage Artistic Research* (FilmEU RIT-H2020). He is the founder and editor-in-chief of the International Conference and Journal on Stereo & Immersive Media (https://revistas.ulusofona.pt/index.php/stereo/issue/archive). His publications include books and articles on immersive media. He is the curator of the *Catalogue Raisonné of Carlos Relvas's Stereoscopic Photography*. (https://carlosrelvascatalogue.pt).
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Biography. Leen Engelen is a professor of film-and media history at LUCA School of Arts/KU Leuven in Belgium. She published widely on film, media and visual culture in the nineteenth and twentieth century, including immersive media such as panoramas and the Kaiserpanorama. An overview of her publications can be found here: https://www.kuleuven.be/wieiswie/en/person/LeenEngelen. She is currently Principal Investigator (with Victor Flores) of the research project *CongoVR. Decolonising the Panorama of Congo: A Virtual Heritage Artistic Research* (FilmEU RIT-H2020). Leen is an honorary academic at the School of History (University of Kent) and is currently the president of the International Association for Media and History (www.iamhist.net).
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Congo VR: A panoptical dissidence
Ana David Mendes, Lusófona University, Lisbon, Portugal

Abstract. The Panorama du Congo, an early immersive media, has been retrieved from archives and museums where its memory was fading and absent (Congo VR 2022). It is crucial to safeguard this historical media artifact in the current digital transition times.

This presentation will showcase a VR experience designed to question this imperialist dispositive through contemporary artistic practices. The creation of a virtual environment named 'Panoptical

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

Dissidence' decentered the vantage point and brought voices that were absent in this visual narrative. This approach was built on Experimental Media Archaeology and Artistic Research methodologies undertaken by CONGO VR to contribute to the decolonization of this mass propaganda medium. This was accomplished with a process of co-creation and co-curation with five artists from the Congolese diaspora, bringing their analogue artistic works to a VR environment. This required the curation and placement of performances, oral narratives, sculptures, installations and videos on the faux-terrain according to the different scenes of the painting and to the planned VR interaction. The development team used full body motion-capture, 3D-character animation, VR game technology, spatial sound, photogrammetry(3D-scan), hand gestures to integrate 2 performative choreographies, a video-essay, an interactive sculpture, audio poems and an interactive art mini-game.

Secondly, this presentation will draw upon the virtual recreation of this forgotten faux-terrain through information fragments collected in archive materials and materialized with virtual set design. This was a heuristic process to study the lighting, the structure of the rotunda, the height of the central platform and the shape of the canopy. Most importantly, it allowed viewers to be transformed into decolonial actors by stepping into this scenography and participating in new counter-narratives. A VR headset with this critical installation will be available during the conference to collect feedback from IPC experts.

Keywords. Decolonisation, VR- experience, Art, Deconstructing Propaganda, Congo.

Biography. Wim Forceville. Wim Forceville is a researcher & lecturer at Luca, School Of Arts, Ghent Belgium. In his research project Cohackreality, he develops proof of concepts where he uses XR as a design & educational tool. One output is the award-winning collaborative AR- game Babelar. He teaches immersive film & arts. Besides this he runs an artistic practice wuwao.be as an 'interdependent' producer/maker of immersive art & films. He likes to use creative technology that takes the viewer beyond the delusion of the day. He is the producer & DOP of multi-award winning 'Kinshasa Now' an interactive cinematic VR fiction film in Congo, Kinshasa Now by Marc-Henri Wajnberg. Creative technologist of Glad that I came, not sorry to depart, an award-winning VR piece with poems by Omar Khayyam by Belgo-Iranian artist Azam Mazoumsadeh. He is a producer and conceptual designer of 'WILDING', a poetic interactive listening performance that invites you to get lost and wander in the Bergmolenbos in Roeselare. He is the producer of Table Dialogues, a collection of five intimate, immersive participatory performances. Table Dialogues is a project that unites extended reality, interactive theater, and visual art. He is a producer and Director of Photography of Cinematic VR experience "Antigone in Molenbeek". Artistic research & design development Coordinator of Kongo VR and Panoptical Dissidence.
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Biography. Ana David Mendes is a Ph.D. candidate in Contemporary Art at University of Coimbra. She is specialized in Museology. Recently she received a PhD Research Scholarship through CICANT (Centre

for Research in Applied Communication, Culture, and New Technologies) for the project Curiositas: Peeping Before Virtual Reality. A Media Archaeology of Immersion Through VR and Iberian Cosmoramas." She has been coordinator and artistic curator of BAG- Municipal Gallery of Contemporary Art, since 2018. Co-founder of m|i|mo (Museum of the Moving Image) in 1996, she was its scientific and artistic coordinator until 2017. Since 1999 she has developed several innovative exhibitions such as the interactive project Oficina do Olhar [The Eye Workshop], created in 2010, and that exemplifies her passion in mediating museum collection contents through new technologies while at the same time enabling research and stimulating artistic and creative re-imaginings of artifacts. Since 2013 she has participated in three research projects of CICANT, related to stereoscopic photography coordinated by Victor Flores. She is currently co-investigator in the research project The Amazing Optical Machine: Workshop/Rational Recreation/Exhibition; coordinated by Rod Bantjes, from St.Francis Xavier University, Canada. Email, anadavidmendes@gmail.com

Illustrating a New Memory: Panorama key and virtual tour for the exhibition "Panorama of Congo"
Chiara Masiero Sgrinzatto, independent artist, Venice, Italy

Abstract. Interpreting and reimagining artworks is a way to explore their essence, reconsider them through a different lens, and also to preserve their memory.

This talk presents two immersive illustrated works based on the Panorama of Congo, painted by Alfred Bastien and Paul Mathieu for the Belgian Colonial Exposition in 1913. The Panorama Key and Virtual Tour presented here were developed for the research project Congo VR and its first critical exhibition, 'Panorama of Congo.' The National Museum of Natural History and Science in Lisbon will host an exhibition titled 'Unrolling the Past with Virtual Reality' from February to June 2024.

The Panorama Key and Virtual Tour combine artistry and technology to take audiences on a captivating journey through history and imagination.

The Panorama Key translates the panorama painting into a detailed and easily accessible graphic illustration, available as a large wall print or digital menu for the VR experience. Particular attention was given to the rendering of the scenes depicted in the foreground and the environments depicted in the background.

The Virtual Tour accompanies visitors through the environments and showcased content, serving as a bridge between the past, present, and future. Its main goal is to transport the public to the exhibition before its physical construction and to preserve the memory of the exhibition after its closing, allowing more people to enjoy it.

The process of creating the virtual tour will be explained in detail. This will include analyzing the available material to determine how each element could be incorporated into spherical illustrations. The challenge of illustrating a space that I had never physically visited and about which I had little information was faced using a simple but tricky drawing method. Digital handmade drawing and collage techniques

were used to highlight the showcased content while subtly conveying the environment, ensuring a seamless user experience.

The Virtual Tour of the exhibition is not available to the public at the moment, but it is possible to experience it on computer, smart devices, HDMs at the following link: https://superkiro.s3.eu-west-3.amazonaws.com/test/2311_panocongo/index.html. The key is visible on the first panorama.

Keywords. Spherical drawing, panorama key, virtual tour, VR experience.

Biography. Chiara is a visual designer based in Venice, Italy. Architect specializing in Visual Arts, her work is focused on the representation of environments through immersive hand-made drawing. She has been working in the VR industry for over a decade, creating photo, video, and illustrated 360° content for clients and institutions worldwide, including the European Union, La Biennale di Venezia, the Italian Ministry of Culture, the Venice World Expo Committee, the Guggenheim Collection, Ricoh Japan and USA, and The World War II Foundation. She also collaborates with panoramic photography manufacturers on equipment beta-testing, and with specialized software houses on the design of immersive interfaces. She is doing a joint Ph.D. in Digital Media Arts between the Algarve and Aberta Universities in Portugal.
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Session VII | Immersive Media and Panoramas

The Panorama of Rio de Janeiro by Victor Meirelles and Henri Langerock: Part 7 - 360° historical experiences of city memories by Game Engines
Thiago Leitão de Souza, Universidade Federal do Rio de Janeiro, Brazil

Abstract. This essay is related to the ongoing research project "The immersive experience in 360°: investigation, representation and digital immersion in the city of Rio de Janeiro in the 19th and 20th centuries", developed at PROURB-FAU-UFRJ, Rio de Janeiro, Brazil. The present work is a continuous investigation of the Unity Game Engine presented respectively from 27th to 32nd IPC Conferences.

The Panorama of Rio de Janeiro realized by the Brazilian painter Victor Meirelles and by the Belgian photographer and painter Henri Langerock was exhibited three times: Brussels in 1888, Paris in 1889, and in Rio de Janeiro in 1891. According to the official's painters reports and visitors notes the three presentations created significant marks and memories in the inhabitants of the three cities. Belgians, French, and Brazilians celebrated the exhibitions and enjoyed the 360° experience with the great splendor and beauty of Rio de Janeiro in 1885.

But how were the historical experiences in these three different moments? Do they have any in common or any singularity? Brussels, Paris and Rio had the same architecture to host a 360° immersive experience of the same panorama? How was the impact in these exhibition sites caused by the Panorama

of Rio de Janeiro? And also, what kind of memories were developed and created in their citizens due its exhibitions? What kinds of histories were created due to its memories?

This paper proposal will investigate 360° immersive experiences through the different three cities and its exhibitions developed in The Panorama of Rio de Janeiro by Victor Meirelles and Henri Langerock Unity Game Engine. The experiences established in previous essays will be improved. In order to achieve this, several digital and analogical systems of representations will be applied: computer graphics techniques, 3D models, 3D renderings, sketches, Virtual Reality, and programming codes will be also investigated.

Keywords. Panorama of Rio de Janeiro, Victor Meirelles, Henri Langerock, Game Engines, Virtual Reality.

Biography. Thiago Leitão de Souza is PhD Professor at Faculdade de Arquitetura e Urbanismo in Universidade Federal do Rio de Janeiro, Brazil. Holds an undergraduate degree in Architecture and Urbanism (FAU-UFRJ, 2006), Master of Science in Arts (PROURB-FAU-UFRJ in Rio de Janeiro, co-realized at Sint-Lucas Architectuur, Hogeschool voor Wetenschap & Kunst, Brussels, 2009), and PhD (PROURB-FAU-UFRJ in Rio de Janeiro, 2014), a Post-PhD in Game Design in New York University in development (2024). Since graduation, Thiago Leitão's research areas include: panoramas and virtual reality; 3D models; panoramas and its history; panoramas of Rio de Janeiro; 360° experiences and its conversion to digital media. He is the secretary-general of the International Panorama Council. Currently, he is the coordinator of the master course at PROURB-FAU-UFRJ.
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Ernst A. Heininger's SWISSORAMA: The world's first seamless 360° large format film system (70mm)
Lukas Pèiccolin and Thomas Schärer, independent researchers, Zürich, Switzerland

Abstract. On July 2nd 1984 the Swissorama, a new 360° projection system opened at the Swiss Museum of Transport and Communication in Lucerne. After over a decade of research and experimentation Ernst A. Heininger finally presented the world's first large format seamless 360° film (70mm) within a special theater to the public. An audience of 400 people could experience the film "Impressions of Switzerland" free of distortion as a moving panorama on the circular screen, 5m high and 60m in length. The theater had no seats and was about 20 m in diameter. Shows were held every hour and no extra admission was charged. Up to 1991 Swissorama was very popular among museum visitors, then attendance figures started to decrease constantly. After the last "farewell" shows, held on the 9th and 10th of March 2002, the Swissorama was removed and replaced by another exhibit.

Nevertheless in 16 years over 1.8 million people in about 20,000 shows saw *Impressions of Switzerland*. Although the Swissorama was a pioneering format and 3 more films were produced with the system until 1996, it was soon forgotten.

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

This changed when the Fotostiftung Schweiz planned a retrospective of Heinigers photo as well as film works in June 2021.

Thomas Schärer & Lukas Piccolin wanted to present a digital version of *Impression of Switzerland* at the exhibition – in collaboration with partners a solution for the task was developed and tested. Unfortunately the project could not be realized due to lack of financial funding.

In our presentation we would like to give a brief history of the Swissorama system and its main characteristics, followed by the main steps of how to produce a VR-version of a 70mm film. Last but not least we present the current project to contextualize its genesis with oral history.

Keywords. Swissorama, Patented 360° Film System in 70mm, Technical History, Oral History.

Biography. Lukas Piccolin is a freelance production manager for Swiss film productions and in the independent theater scene. He worked on film projects such as „Schellen Ursli" (2015) and „Zwingli" (2018) or on theater projects by Phil Hayes, Tim Zulauf, Michel Schröder and many others. For many years, he has cultivated his passion for circular paintings and circular projections and as member of the board of the association Pro Elisarion initiated the restoration project of the circular painting "Clearworld of the Blissful" on Monte Verita, Ticino. (Link: www.elisarion.ch). He knows the Swissorama cinema in the Museum of Transport in Lucerne from his childhood and began his research on the subject after a visit in 2003 when the Swissorama had already been closed.
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Biography. Thomas Schᶠrer has a PhD in history, film and cultural studies. Initiator and contributor to various (film) historical research and exhibition projects and author. Lecturer at the Zurich University of the Arts (film and media history, film and image analysis, academic writing), at the Universities of Basel (Department of Cultural Studies), Fribourg (Department of Contemporary History) and at the University of Bern (Economic, Social and Environmental History). His mother Lilian Schärer worked as a hostess on the SBB 360-degree film ""All about wheels and rails" directed by Ernst A. Heiniger and shot with Disney's Circarama system (9x 35mm) and still raves about the visual and social experience to this day.

Thomas Schärer contributed to the rediscovery of this film and its digital re-screening.
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The Effects of Panorama 25 December's Digital Spaces on Visitors
Murat Dağ and Hüseyin Ateş, Gaziantep Metropolitan Municipality, Turkey

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

Abstract. The concept of "Panorama", created by the painter Robert Barker in 1792 by combining two Greek words meaning "all visible", has become an important museological technique used in the construction of national culture through museums around the world. The circular exhibition space in the form of a two-storey rotunda established by the painter Robert Barker and his family in London's Leicester Square between 1793-1863 is considered to be the first attempt at a panorama museum in this sense, and this exhibition technique, which the Barkers pioneered by patenting it, also contributed to the establishment of nearly 30 panorama museums around the world. In this context, Turkey is very rich in terms of panorama museums. The panorama museums in Turkey make important contributions to the formation of national consciousness while telling various stages of Turkish history.

Among the panorama museums in Turkey, the largest panorama museum made with oil painting technique on canvas is the Panorama 25 December Gaziantep Defence Heroism Panorama and Museum built by Gaziantep Metropolitan Municipality. The museum covers the years of the National Struggle in terms of subject matter and tells the Antep Defence that took place between 1918-1921 in all its aspects. Built on an area of approximately 16 thousand m2, the museum includes 14 oil paintings by Russian artist Alexander Samsonov and his team, 3 dioramas and a unique panoramic area with a length of 122 meters and a height of 13 meters.

While the museum draws attention with these traditional features, it also makes extensive use of modern museological elements. The digital areas in the museum are inspired by real events in the light of documents. The most important of these is the declaration issued by the French commander to the people of Ayntab. In the declaration, the people of Ayntab were asked to tie white bands on their arms and thus the Turks were labeled. This incident is told in the museum in the digital area consisting of arms. The visitor interacts between the arms holding hands, holding the arms reserved only for him/her, and completes the unity with the heartbeat. In addition, there are digital areas in the museum that will provide different experiences for visitors. Animated areas, digital museum guide are a few examples of these.

Keywords. Gaziantep, Panorama, Digital, Experience.

Biography. Murat Dağ was born in 1989 in Gaziantep. He graduated from the History Department. He received a master's degree in the same field. He continues his doctorate education in the field of History of the Republic of Turkey. Panorama 25 December Gaziantep Defence Heroism Panorama and took part in the installation and display arrangement of the Museum. He has published 4 books on Gaziantep defense. He has edited various books and has many articles. Dağ is working as the Branch Manager of Libraries and Museums in Gaziantep Metropolitan Municipality.
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Biography. Hüseyin Ateş was born in 1987 in Gaziantep, he graduated from the Department of Office Management and Management Sciences with a degree. Then he completed the Faculty of Business

Administration in 2011. In 2015, he completed his Master's Degree in Management and Organisation in the Department of Business Administration. He worked as Deputy Director of Culture, Directorate of Social Affairs, Libraries and Museums Branch Directorate for 12 years within the Department of Culture and Social Affairs of Gaziantep Metropolitan Municipality. He took part administratively in the establishment and display of Panorama 25 December Gaziantep Defence Heroism Panorama and Museum. In addition, he took part in the processes of 10 museums, 1 city archive and 5 Children's Libraries from installation to operation. He has articles and thesis studies on Libraries and Museums. His academic studies continue at Istanbul University, Department of Museum Management. He is currently working at the Directorate of Culture and Tourism.
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Sacred Spaces of New England: Cultural heritage and the panorama
Seth Thompson, American University of Sharjah, United Arab Emirates

Abstract. The Sacred Spaces of New England project (seththompson.info/sacredspacesne/) is my ongoing effort to document religious and spiritual gathering spaces—both historical and contemporary—within the New England region through 360° panoramic imaging. This is the science, art, and practice of creating interactive and navigable immersive 360° screen-based images, which usually depict a place or event. The use of 360° panoramic photography is integral to this project, as it captures a gathering space in its totality.

While I was initially drawn to New England's sacred spaces for their spiritual significance and beauty, my quest also endeavors to better understand the complex history of religion in New England by learning about the churches, temples, synagogues, mosques, and other spaces that have made people's lives richer through communal gatherings and shared beliefs and experiences. While some of these places are strongly embedded within their communities, others are at risk of closing or have already closed.

Drawing from my recently published book, *Sacred Spaces of New England: Cultural Heritage and the Panorama*, my presentation will introduce and contextualize the Sacred Spaces of New England project by defining 360° panoramic imaging and situating it within a historical and technical context; introduce the Sacred Spaces of New England project and discuss its value and significance; and root my 360° panoramic photography's two-dimensional geometric image projections—known as stereographic images—of sacred spaces into an artistic tradition.

Keywords. Digital Heritage, 360° Panoramic Imaging, Panorama, Stereographic Projections, New England.

Biography. Seth Thompson is an associate professor in the Department of Art and Design at the American University of Sharjah, specializing in 360° panoramic imaging and its history. His research interests and practice primarily focus on the interpretation and representation of visual culture and heritage using panoramic imaging and hypermedia systems. Media art history with special emphasis on the panorama and

stereoscope plays an integral role in this theoretical and practice-based investigation. Thompson is an Advisory Board member and former President (2017–2020) of the International Panorama Council and a member of the International Art Critics Association. He has lived and worked in the United Arab Emirates since 2006.

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Unveiling the Past with Photogrammetry: A study of static and dynamic projects – Panorama Racławicka and stave churches

Karolina Wójtowicz, visual and architectural designer, Wrocław, Poland
Wojciech Drzewiński, Wrocław University of Technology, Wrocław, Poland

Abstract. Photogrammetry is a fundamental technique in modern geospatial analysis and 3D modeling, offering a sophisticated approach to capturing and reconstructing real-world environments with unparalleled accuracy and detail. In this presentation, we delve into the intricacies of photogrammetry, focusing on its application to the renowned Panorama Racławicka in Wrocław, Poland. The process involves several key steps, including image preprocessing, camera calibration, feature matching, bundle adjustment, and surface reconstruction, all of which are essential for refining the accuracy and fidelity of the final output.

However, photogrammetry extends beyond mere modeling; it serves as a gateway to understanding the object's form, techniques, and historical context. Leveraging innovative tools like the Unreal Game Engine, photogrammetric models can be transformed into educational applications that elucidate painting styles, conservation efforts, historical events such as the depicted battle and preserve memories. This presentation explores two implementation pathways: static virtual tours and interactive applications, drawing inspiration from successful projects like the Panorama Racławicka Photogrammetry and Application and Virtual Tours of the Stave Churches in Norway.

Moreover, these methodologies offer the flexibility to incorporate diverse forms of documentation from digital archives or collections, enriching the narrative with historical insights and contemporary perspectives. By bridging the past and present, photogrammetry enables the capture of both historical events and current realities within historic environments, utilizing modern technology to engage audiences of all ages and backgrounds worldwide.

In essence, photogrammetry transcends traditional boundaries, serving as a powerful tool for spatial documentation, historical preservation, and educational outreach. Through this presentation, we aim to illuminate the transformative potential of photogrammetric techniques in bridging the gap between past and present, while fostering global understanding and appreciation for cultural heritage and historical significance.

Keywords. Photogrammetry, Virtual Reality, 3D models, Cultural Heritage, Virtual Tours.

Panoramas as Memory of the World

Hosted by Swiss Federal Institute of Technology (EPFL)

Lausanne, Switzerland | October 02–06, 2024

Biography. M.Sc. Engineer in Architecture Karolina Wójtowicz is Visual and Architectural Designer holding a degree in Architecture and Urban Planning from the University of Technology in Wrocław, Poland. Her professional journey commenced with designing a new building for the panorama painting of the Battle of Murten as part of my diploma project. Through immersion in architectural studios and international firms, I cultivated expertise in design, 3D modeling, and 2D graphics. Transitioning from interior design to receiving a 2017 grant, she had embarked on creating a Virtual Project for the Church of Peace in Świdnica, Poland. This encompassed conducting a comprehensive computer survey, developing a detailed 3D model, and crafting a Virtual Tour compatible with the Oculus Quest platform. Subsequently, she had dedicated nearly two years at the University of Technology to creating 3D printed Tactile Maps for visually impaired students, while also spearheading the development of tactile map standards across universities. Funded research endeavors led her to Norway to study stave churches and explore their digital preservation methods. Presently, as a freelance designer, she specializes in corporate branding and 3D projects, including the meticulous modeling of the altar in Kamieniec Ząbkowicki, Poland, and the development of engaging Virtual Reality Projects.
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Biography. MSc. Eng. Wojciech Drzewiński has experience in the IT industry, (AI, AR ,VR, Cybersecurity, Photogrammetry, 3D digitization) Chief Technology Officer at Feyenally (Telemedics and AI specialist), Director of Department of Control in UKE (Office of Electronic Communication) employee of the Wrocław University of Technology, head of Knowledge Sharing at the Wrocław University of Technology in the Active Information Platform project e-scienceplus.pl (acronym AZON) and in the AZON 2.0 project (main digitizer and specialist in 3D digitization - laser scanning, scanning with structural LED light), manager responsible for the preparation of materials (typhlomaps and teaching aids) and navigation elements for people with disabilities at the Wrocław University of Technology in the "Politechnika Nowych Szans" project, manager and coordinator of the Laboratory Team at the Wrocław Network and Supercomputing Center, including the "3D Academy Laboratory", head of the "Cybersecurity for the Economy of the Future" project at the Faculty of Electronics of the Wrocław University of Technology, lecturer in the field of Multimedia Services and tariffication and cybersecurity. In addition, he was the president of the Piqual company dealing with digitization using the photogrammetry method and advanced solutions for people with disabilities. Co-creator of the project of the Virtual Church of Peace in Świdnica and co-creator of the photogrammetry model of Panorama Racławicka.
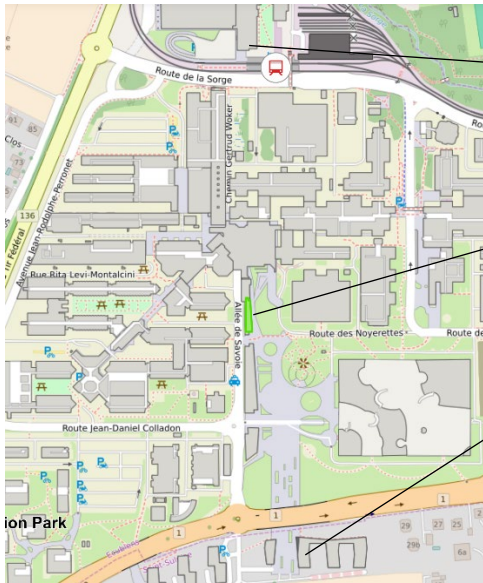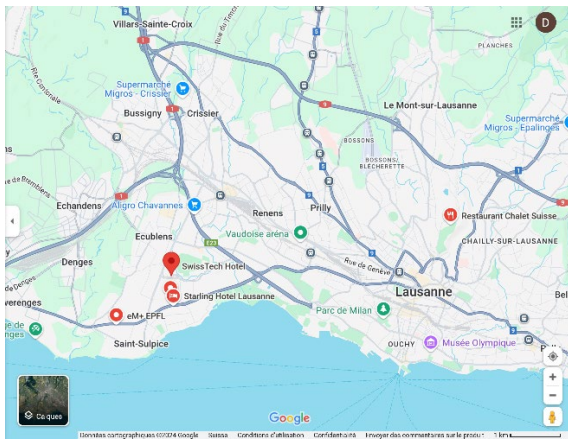Email, Wojciech.drzewinski@gmail.com.

Maps

Conference Hotel (SwissTech)
Route Louis Favre 10b, 1024 Ecublens

Conference Venue (EPFL Pavilions A)
Pl. Cosandey, 1015 Lausanne

Conference Hotel (Starling Hotel)
Rte Cantonale 31, 1025 St-Sulpice

Maps – Conference Locations

Maps – Post-conference Tour Locations