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#StrongerTogether





24 - 28 January 2022

# **Book of Abstracts**

Explore the connections

Climate.Culture.Peace is a knowledge-building initiative, aimed at exploring the interconnections between culture, climate change, peace and disaster resilience. It includes a 5-day virtual conference and a knowledge portal with a focus on heritage places and institutions, which are threatened by climate-related disasters and/or conflicts driven by environmental stresses.

This project is conceived and designed by First Aid and Resilience for Cultural Heritage in Times of Crisis (FAR), a flagship programme of ICCROM, which is aimed at protecting cultural heritage from conflicts and disasters. This initiative is generously supported by the British Council's Cultural Protection Fund (CPF) in partnership with the Department for Digital, Culture, Media and Sport (DCMS).

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Book cover photo: *Burullus Lake, Kafr al-Sheikh*, 2017, Egypt. Source: Alia Nassar, Egyptian Heritage Rescue Foundation (EHRF)

#### Concept

ICCROM First Aid and Resilience for Cultural Heritage in Times of Crisis (FAR), ICCROM

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Image showing a breakdown of the conference programme and the sessions held

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# Introductior

Climate.Culture.Peace is a knowledge-building initiative, which aims to explore the interconnections between culture, climate change, peace and disaster resilience. It included a five-day international virtual conference held from 24th to 28th January 2022, which aimed to strengthen existing networks for safeguarding all types of heritage threatened by hydrometeorological events, rising sea levels, desertification and other forms of acute environmental stress, as well as conflicts driven by such stresses.

The virtual conference successfully brought together heritage custodians, professionals and cultural bearers from the Middle East and Africa, as well as other regions that are suffering from the consequences of climate change. It provided a platform for exchanging knowledge and sharing experiences, practices and research. Videos of the presentations made during the conference, and case studies submitted separately, will be made available on the associated web-based knowledge portal. It will continue to act as a hub for the Climate.Culture.Peace knowledge network that has developed during the conference.

This project is conceived and designed by ICCROM's flagship programme, First Aid and Resilience for Cultural Heritage in Times of Crisis (FAR), which aims to protect cultural heritage from conflicts and disasters. It is generously supported by the British Council's Cultural Protection Fund (CPF) in partnership with the Department for Digital, Culture, Media and Sport (DCMS) and seeks participation from all CPF target countries.

Together with 55 partners representing multi-disciplinary institutions and diverse communities from **33 countries**, the Climate.Culture.Peace conference provided a common platform to knowledge holders, policy advisors, practitioners, researchers, local communities and youth leaders.

Culture and heritage bring together the full range of human experience – from the past into the present. It resides in all of us, our lives and livelihood, our art, our places and traditions and our knowledges and practices. To enhance this idea and find connections between culture, climate action, peacebuilding and disaster risk reduction, the conference featured ideas, research, experiences and stories of cultural bearers and indigenous communities that are actively engaged in using their traditional knowledge for climate change mitigation and environmental regeneration.

To guide this initiative, four themes were outlined that broadly captured how culture and heritage are intertwined with climate change and human experiences of peace, conflict and disasters.

- Theme 1 | Culture the missing link
- Theme 2 | Climate change as a risk driver for culture and people
- Theme 3 | Culture-based mitigation, adaptation and renewal
- Theme 4 | State of knowledge and action

This book is a compilation of abstracts received after a widely disseminated call for contributions. After a careful review and selection of the proposals by the conference scientific committee, **158** speakers from **55** countries presented their work in the form of presentations, case studies and multi-media. This included **10** multi-media presentations from **8** countries and **36** place-based examples from **21** countries.

Over a span of **77** hours, **37** interactive sessions were held, which included a highlevel inaugural panel, **04** Climate Open mic sessions, **03** sessions of the Youth Forum, **06** capacity-building workshops, **14** panel discussions, **04** regional focus panels (Middle-East and Africa region, Lusophone Countries, Oceania and Latin America), **04** Ignite Talks and a final reflection session.

Proceedings of the conference and key recommendations are disseminated through the dedicated web-based knowledge portal, which will also serve as a platform for strengthening collaboration and creating new networks for heritage safeguard and climate resilience. The portal currently hosts all conference videos, over 40 cases studies and other relevant resources.

To know more about the Climate.Culture.Peace project, visit: www.climateculturepeace.org/ICCROMFAR

# **Conference Programme**

# Day 1 | 24.01.2022

Inaugural Panel | Culture for a Liveable Future 13:00 - 15:15 CET

Melting Snow and Rivers in Flood International National Trust Organization (INTO)

Ignite Talks | Theme 1 | What are the Links between Climate, Culture and Peace? 15:00 - 15:30 CET

Climate Change: A Damage Multiplier in Lebanon Ms. Christine Abboud Abou Jaoude

Indigenous Artists Respond to Climate Change Ms. Prerna Singh

The Coexistence between the Dwelling Environment and the Historic Architecture Mr. Yohei Kiyonaga

What I See, What I Do - A Bio-Cultural Paradox Ms. Kelly Hazejager

Trying to be a 'Good Ancestor' in Times of Climate Crisis: the Need for 'Pacific Heritage' Dr. David Harvey

Panel | Culture the Missing Link – Learning from the Past 15:30 - 17:00 CET

Sinai's Climate Challenge: How the Past Can Inform The Future Dr. Aleida Ten Harkel and Mr. Ahmed Shams

Ark for Iraq: What can the Vernacular Maritime and Craft Heritage of Iraq Teach us About the **Climate Crisis?** Ms. Hannah Lewis

Past Landscapes and Future Territory Management: From the Study of Historical Landscapes to New Tools for Current and Future Planning Ms. Mara Visonà

Vernacular Infrastructure Heritage as a Key to Building Climate-Resilient and Liveable Countryside Dr. Yapeng Ou

The Role of Collective Memory in Democratizing a Synergetic Urban Place making: the Case of Khartoum's Sit-in Held During the 2019 Sudanese Uprising Mr. Hussamaldeen Gomaa

Culture is Harmony Created by the Human Spiritual Dimension Ms. Alessia Strozzi

**Climate Open Mic** 17:00 - 17:30 CET

Between Intense Rain and Desertification - Multimedia On The Tomb Of Askia Mr. Mamadou Samaké

Learn from the Past (for a Brighter Present and Future) 17:30 - 19:00 CET

How Community Resilience Actions can be a Potential Key for the Construction of a Legal Framework in Cultural Heritage Risk Management Ms. Ana Paula Gomez

Modelling Human-Landscape Interactions with Local Partners in the Maya Biosphere Reserve Dr. Heather Hurst

The Olive Grove of the Faculty of Fine Arts at the Complutense University of Madrid: a Setting for Artistic Research, Culture, Peace and Nature Prof. Pilar Montero Vilar

Museum of Sarmiento Climate Changes and Historical Implication Ms. Virginia Gonzalez

#### Day 2 | 25.01.2022

Keynote Lecture of Prof. Laurajane Smith | Culture, Heritage and the Climate Crisis 09:30 - 10:00 CET

Panel | Culture the Missing Link – Strategies for Heritage 10:00 - 11:30 CET

'Best Practice' Heritage Management in a Changing Climate Ms. Anna Hyland

Green Heritage: Culture and Climate in the Sahel (Sudan) Dr. Helen Mallinson

Heritage Place Lab: Connecting Research and Practice for Effective World Heritage Management Dr. Maya Ishizawa

The Potential of Documentary Film in Disseminating other Epistemologies on Climate Change Ms. Janaína Welle

**Climate Action Needs Culture** Ms. Isobel Griffin

Youth Forum | Intergenerational Dialogue on Climate.Culture.Peace 10:00 - 11:30 CET

Assessing the Impact of Rising Sea Levels on Southern Irag's Cultural Heritage Dr. William Deadman

Sites Leptis Magna Ms. Enas Alhssiek

Weather In and Weathering Climate Change: Making Climate Change Tangible Through Archaeology Mr. NikPetek-Sargeant

Green Heritage: The Transformation of the Post War Cultural Heritage of Mosul Mr. Omar Mohammed

The Backward Forwardness: Taking Cities Back to Sustainability Ms. Nirzary Pujara

Ecology in Heritagization for Responsible and Sustainable Preservation of the Medina of Sousse Dr. Zeineb Youssef

Middle Eastern Traditional Cultural Practices as a Tool For Resilience Dr. Hellen Almoustafa

Mili Juli : An Effort to Unearth the Potential of Community in CBDRM Mr. Bhola Saha

Open Data, Open Maps and Heritage Protection Dr. Marta Pucciarelli

Modelling Flood Resilience and Flood Impacts in Historical Art Cities Dr. Chiara Arrighi

Panel | Culture for a Sustainable Future in the Arab Region (Arabic/English) 11:40 - 13:10 CET

Panel | Climate Change as a Risk Driver for Culture and People – When Water Rises 13:40 - 14:40 CET

A Citadel Against the Wind: The Possible Solutions to Rescue Qaitbay Citadel from the Impacts of Climate Change Dr. Rehab Ibrahim Ahmed ElSiedy

The MOVIDA Project Towards a Better Evaluation of Flood Risk Mitigation Strategies Prof. Daniela Molinari

CARBICA-CHEN, Empowering the Caribbean Cultural Heritage Ms. Rita Tjien Fooh & Mr. Max Scriwanek

Assessing Climate Change Threats to Coastal Archaeology in the Middle East and North Africa Dr. Kieran Westley

Workshop | It is Flooded! (English) 14:40 - 16:10 CET

Flood Impacts to Cultural Heritage in the Po River Catchment Dr. Chiara Arrighi

A New Type of Flood in Belgium? Quickly Evaluating Damages for Cultural Heritage Ms. Francoise Collanges

Workshop | It is Flooded! (Arabic) 14:40 - 16:10 CET

Climate Change and its Impact on the Historic City of Sana'a (a World Heritage Site) Mr. Fares Altowaity

**Climate Open Mic** 16:10 - 16:40 CET

City in Conflict Ms. Khushi Shah, CEPT University

#### Day 3 | 26.01.2022

Youth Forum Workshop: My Voice Counts 09:30 - 11:00 CET

Changing Climate and Abandoned Rural Heritage Ms. Zeynep Yılmaztürk

KAM-Cubuk Mr. Talha Ulaş

Climate Stories of Himalayan People Mr. Shahzad Ahmed Malik

The Tale of Mumbai – Where's the Culture? Mr. Rahul Salunke

The Blend of Melodies from Northeast India Mr. Mriganka Banikya

Ode to Natural Disasters Mr. Manash Kamal Bhuyan

#### Ignite Talks | What do Climate Risks Look Like Around the World 10:30 - 12:00 CET

Community Engagement with Climate and Culture in an Area of Multiple Deprivation Ms. Lorraine Finch

Olive Farming: Intersection of Culture and Climate Change in the State of Palestine Ms. Anisha Patel and Nour Abdelhamid

Rural Tourism Development and Heritage Preservation After a Heavy Rainstorm: Tashuimo Village in Zhengzhou Dr. Yichen Jiang

City of Dead Between Erosion and Loss Ms. Raghda Nasr El Nezory

Individual Attempts to Document the Visual Identity of the City of Alexandria in Light of the Unjust **Urban Development** Mr. Mohamed Farouk

Wading the Murky Waters of Climate Change in the Subcontinent: A Study into Climatic Systems; Cultural Mobilization; Tangible Heritage; and Adaptability in the Province of Sindh, Pakistan Mr. Arsum Anshari

#### Panel | Culture, Climate, and Drivers of Conflict

12:00 - 13:00 CET

Re-Thinking Living Heritage: Syria as Case Study Dr. Eva Ziedan

Climate-Related Disasters and the Outbreak of Civil Conflict Ms. Tianyue Hu

Risks for Peace Due to Promotion of Heritage Dr. Cornelius Holtorf

Culture, Conflict, Climate Vulnerability and Adaptation in Western Sahara Dr. Joanne Clarke

Climate and Igboho History Mr. Abiodun Abioye

#### Panel | Building a Map of Climate Impacts on Culture and Heritage 13:30 - 15:00 CET

Pertaining to the Southern Coastal Regions of Ghana Dr. Ing. Henry Nii-Adziri Wellington

Impact of Climate Change on Historical Landscape of Sistan in Afghanistan and Iran Dr. Bijan Rouhani

Climate Change as a Deteriorating Catalyst for Karamoja Sub-Region Culture Mr. Peter Wasswa

Research Plan on Early Warning Measures of Cultural Heritage Under Climate Change - Taking the Summer Palace as an Example Mr. Zhou Pingquian

A Contribution to Understanding the Impact of Climate Change on Europe's Tangible Cultural Heritage Ms. Panagiota Manti

Local Climate Change Zones of Rosette City, Egypt Ms. Eman Abdelrhaman

Stó:lō Cultural Heritage and Climate Change Dr. Karen Brady

Climate Open Mic & Positive Change Envisioning Exercise 15:00 - 16:00 CET

Climate Change as a Risk Driver for the World Heritage Site: Victorian Gothic and Art Deco Ensembles of Mumbai Ms. Sneha Kishnadwala

Workshop | Every Place has a Climate Story 15:30 - 17:00 CET

The Story of Aswan the Famous Winter Resort Facing Climate Change Ms. Amira Elsayed

#### Day 4 | 27.01.2022

Ignite Talks | Climate Change, Culture and Peace in the Pacific Region 06:00 - 07:30 CET

Erromango Cultural Association and the Netai en Namou Toc Initiative Ms. Anna Naupa

Aspirations for a Proactive Approach to Climate Change in Aotearoa Ms. Rebecca Ramsey and Ms. Emma Ash

Indigenous Story of Hope for a Climate Chance Dr. Anne Poelina

#### Panel | Adaptation in Action

10:00 - 11:00 CET

Synthetic technics and Interdisciplinary Approach for Cultural Heritage in the Time of Disasters Dr. Mohamed Soliman

Synchro-Trawling in the Skagerrak: a media ethnography Mr. Joseph Puglisi

Added Value: The role of the Red Cross in the Protection of Cultural Heritage Ms. Marcela Szalanska

Opportunities to Develop Response with Culture-Based Mitigation to the Future Water Security Problem Ms. Gamze Özmertyurt

**Our Collections Matter Toolkit** Mr. José Luiz Pedersoli

Qait'bay Citadel (1477-1479): Visualizing the Main Coastal Fortification of Medieval Alexandria, Egypt Dr. Mohamed Soliman

Climate and Culture - Aiming to restore 'the fine balance' Ms. Bhasha Shah and Ms. Anuja Mukherjee

Ignite Talks | How Culture Sparks Solutions? 11:30 - 12:00 CET

Experience Working in the Intersection Between Humanitarian Aid, Cultural Heritage and the Environment in the Gaza Strip Ms. Rafif Al Amassi

Cultural Heritage - an Underplayed Resource for Mitigation, Adaptation and Resilience Mr. Khwezi Mpumlwana

Kafr Agab Historic Centre as a Cultural and Environmental Hub Ms. Shatha Safi

Stingless Bees, Climate Change, Cultural Heritage and Indigenous knowledge Pastor Prof. Peter Kwapong

Greening Cultural and Creative Industries Ms. Mohona Chakraburtty

Panel | Connecting Culture and Nature Knowledge 12:00 - 13:10 CET

Water-Climate-Culture Nexus: Revivifying Indigenous Water Wisdom for Climate Resilience Mr. Vignesh Kesavan

Climate Change and California Archaeology Mr. Michael Newland

Nature-Culture Solutions - Working Together to Strengthen the Resilience of Heritage Places Ms. Nicole Franceschini

Bartjan - Sámi Summer gathering in Jämtland, Sweden. A climate risk assessment of the cultural landscape and Sámi community Ms. Therese Sonehag

Panel | Adaptation Through Built Heritage 13:30 - 15:00 CET

Environmental Adaptation and Socio-Cultural Mitigation Approached in Built-Form and Occupational Patterns: (Lessons Learned from the Vernacular Red Sea Architecture of Suakin, Sudan) Mr. Elobaid Mohammedali

Control and Maintenance for the Sustainable Conservation of Built Cultural Heritage Prof. Francesca Piqué

Learning from Heritage for Better Resilience Mr. Thierry Joffroy and Mr. David Gandreau

Beirut's Built Heritage After the Explosion of August 4th 2020 Ms. Alia Fares

Small Insular Territories : Landmarks of Climate Change Ms. Noro Ravoavahy

Workshop | The Futures We Write for Climate, Culture, and Peace: Dystopias or Utopias? 15:00 - 17:00 CET

Panel | Heritage as a Source for Innovation and Coping Capacities 15:10 - 16:10 CET

The Oasis of M'hamid El Ghizlane in the Face of Climate Change Ms. Aziza Chaouni

Disaster Archaeology – Adapting Archaeological Methods to Recover Human Cremated Remains from Catastrophic Wildfire Areas Mr. Alex DeGeorgey

The Saltmen of Iran - Cultural Heritage as Driver and Enabler of Sustainable Development and Growth Ms. Shahrzad Amin Shirazi

The Curious Case of a City Called Ahmedabad Mr. Tanmay Gound

#### Day 5 | 27.01.2022

#### Panel | Culture in Support of Carbon Budgets 09:00 - 10:00 CET

Documentation and the Digital Transition: What About its Future Sustainability? Dr. Andreia Nogueira

Material Scientists: Heritage Protection Makers from the Future? Dr. Deborah Briccola

The Mary Rose- Investigation and Incremental Changes for Climate Action Ms. Sarah Coggins

Comparison of Sector-Leading Initiatives for Sustainable Management of Collection's Environment Ms. Estelle De Bruyn, Ms. Helen Wilson and Mr. Peter Whitehead

Using AI to Detect New Archaeological Sites and Monitor for Potential Damages to Known Sites Dr. Iris Kramer

Ignite Talks | At the Forefront of Culture, Heritage and Climate 10:00 - 10:30 CET

Strengthening Cultural Heritage Resilience for Climate Change Ms. Anne Grady

Climate Change is Orange Dr. Veronica Bullock

Heritage Responds - Taking Positive Action on Climate Change Mr. Rob Woodside

Archaeological Heritage and Vulnerability Indicators: a Brazilian Case Study Dr. Aline Carvalho

How to Work with Multiple Actors in Times of Crisis? Samples from Wildfire in Turkey, 2021 & Archaeological Excavation Site of the Ancient City KELENDERIS Ms. Saadet Güner and Prof. Dr. Mahmut Aydin

Panel | Transdisciplinary Action to Recognize Loss and Enhance Sustainability 10:30 - 12:00 CET

Heritage, an Inherent Parameter to Sustainable Development and Economic Growth Dr. Nadine Panayot

Learning from Loss: Reflections on Eroding Heritage Mr. Tom Dawson

KulturGutRetter (KGR) – An Emergency Mechanism for Cultural Heritage in Crisis Situations Ms. Constance Domenech de Celles

Responsible and Restorative Heritage Tourism for Scotland Ms. Chiara Ronchini

Workshop | Vulnerability, Capacities or Justice? 10:30 - 12:00 CET

The Flood of Trogir's Heritage: a Future Threat or a Present Fact? Ms. Jasna Popović

**Discussion Forum | Growing Ways to Learn and Share** 12:00 - 13:00 CET

Obstacles and Tools for Climate Change Education – Experience of Office for Climate Education Ms. Gabriel Brunnich Dunand

Biodiversity and Culture on the School Grounds Ms. Shari L. Wilson

Heritage in our hand and climate in our mind Ms. Amira Elsayed

Wisdom at risk Mr. Samuel Franco Arce

Panel | The Lusophone Perspective on Climate.Culture.Peace 13:00 - 14:30 CET

Climate Change as a Risk Factor for Culture and People, an Approach for Mozambique Ms. Regina Charumar, Prof. Dra. Lucília Chuquela and Mr. Daniel Inoque

Heritage, Climate and Resilience. Challenges of Risk Management in Small Island Countries. Case of Cidade Velha, Cape Verde Mr. Hamilton Fernandes

Implications of Climate Change on Culture and Nature Conservation in Bijagós, Guinea-Bissau Dr. Meio Dia Sepa Maria Lé Có

Climate Change and Public Policies for Cultural Heritage: the National and State of Minas Gerais Context, Brazil

Ms. Daniele Ferreira and Prof. Dra. Aline Carvalho

The 2017 Forest Fires in Portugal: Lessons for Cultural Heritage Ms. Esmeralda Paupério and Professor Xavier Romão

**Workshop | Dialogue And the Root Causes of Climate Crisis** 14:00 – 15:30 CET

Final Reflection | Heritage in Climate Action – Stepping Forward in Policy, Research and Practice 15:30 – 17:30 CET

Cooling Kemeraltı: Havra Street Mr. Ozden Coskun Oner

Walking as Embodied Research in Emergent Anthropocene Landscapes *Mr. Nick Shephard* 

The Establishment of a Sustainable Tourism Management System for Biodiversity Conservation and Sustainable Development in the UNESCO World Heritage Site Vallée de Mai *Ms. Cheyenne Chang-Yunn* 

Integrating Community-Based Solid Waste Management in Preserving Lamu's Heritage *Ms. Maureen Mokeira Kombo, Ms. Purity Chepkemboi and Mr. Kenneth Otieno* 

# Abstracts

# Day 1 | 24.01.2022

# Inaugural Panel | Culture for a Liveable Future

Moderators: Ms. Aparna Tandon and Ms. Marcy Rockman

Connecting leadership, research, policy and action, the inaugural session of Climate.Culture.Peace launched the conference goal of promoting culture as the missing link in our understanding of, and responses to the climate crisis. Culture and heritage bring together the full range of human experience from the past into the present and can help create a liveable future. Distinguished leaders, policy advisors and scientists shared vital insights from their own work, recognizing that what we know about climate change, culture, sustainability and peace must include the processes as well as history of how we know it.



Inaugural panel poster

#### Melting Snow and Rivers in Flood Author: International National Trust Organization (INTO)

Melting Snow and Rivers in Flood is an ongoing project exploring a community-led response, where climate change risks the erasing of belief systems, cultural rites and scared sites alike. In September 2020, the International National Trusts Organisation began this project focussing on preserving heritage at risk from climate change, in partnership with the Cross-Cultural Foundation of Uganda and the National Trust of England Wales and Northern Ireland. Responding to rapid glacial melt and extreme floods in the Rwenzori and West Nile region of Uganda, this project focuses on adopting an integrated approach to mitigating the impact climate change is having on local heritage.

Now in its second phase of working, the project is trialling natural flood management techniques in the Rwenzori, and expanding its work documenting climate-threatened heritage sites to new areas across Uganda and East Africa.

#### Ignite Talks | Theme 1 - What are the Links between Climate, Culture and Peace? Moderator: Ms. Jui Ambani

There are many ways to link culture, climate, and peace. This session sparks ideas for different ways to see, share, and understand these links.

#### Climate Change: A Damage Multiplier in Lebanon Author: Ms. Christine Abboud Abou Jaoude, Université Paris Nanterre

Lebanon faces another challenge: what resulted from the COVID-19 epidemic, the port explosion on August 4, and the consequences of the chronic Syrian crisis. Climate change will lead to higher rates of infectious diseases, increased illness and death from rising temperatures and increased malnutrition from reduced agricultural production. This will result in more annual deaths than today, and pressure on available capacity in urban and rural health facilities. Climate change will multiply the impacts of the country's actual economic crisis and all the challenges that Lebanon is facing. It will impede any improvement in the social and economic situation, and that's why it must be placed at the heart of reforms. Lebanon's economy needs to recover and it must be held in parallel with the action on climate change: the recovery plan must be a green recovery plan, and sustainable at all levels. Lebanon should consider serious investments in renewable energies, as they contribute to creating new job opportunities, thereby strengthening the economy and preserving the health of the society. The government needs to focus on citizens' health and the environment as two major pillars in any plan seeking to contribute to the country's economic recovery.

#### Indigenous Artists Respond to Climate Change Author: Ms. Prerna Singh, Platform Anthropocene Inc. Co-Author: Mr. Amit Batra, Platform Anthropocene Inc

As the anthropogenic pressures increase, the scale and extent of environmental degradation is progressing at a much faster rate than it did during any other geological time periods. We, at Platform Anthropocene, curate, review and disseminate knowledge resources from scientific journals to mainstream media to broaden our understanding of human interactions with the Earth systems. While we spread awareness and foster dialogue on sustainable development, the central question arises: are our collective actions commensurate to the exigency of the situation? Alongside activists and the scientific community, who have raised alarms about the impending 'climate emergency', there is also a growing community of artists from the indigenous background who are using multi-disciplinary art mediums as a call to action. As much as the socio-economic impact of climate change is highlighted in global climate discourses, there is an urgent need to leverage the indigenous knowledge base to mitigate and adapt to the uncertainties posed by the changing climate.

Rooted in diverse cultural experiences and a multi-generational understanding of human-Earth interactions, traditional knowledge offers valuable insights into leading a sustainable future. This presentation, attempts to highlight the works of some of the indigenous artists who have stretched their skills and imagination to estimate the risks and impacts of climate change.

#### The Coexistence between the Dwelling Environment and Historic Architecture Author: Mr.Yohei Kiyonaga, Agency for Cultural Affairs, Government of Japan

The author wishes to explore the significance of the coexistence between the dwelling environment and historic architecture in the modern city, while focusing on the management of historical areas based on the Japanese system of preservation of districts for groups of traditional buildings (PDG). This exploration begins by tracing the development of the conservation history from historic architecture to historical areas since the end of 19th century, and proceeds by making sure the aspects of the PDG are in order to learn how to manage historical areas, before finally revealing recent problems faced in the conservation of historical areas. The conclusion illustrates the significance of the coexistence between the dwelling environment and historical architecture in the modern city from the perspective of decarbonized society.

#### What I See, What I Do – A Bio-Cultural Paradox Author: Ms. Kelly Hazejager, ICCROM

What I See, What I Do – the nature-culture paradox aims to encourage listeners to critically consider how they think about the relationship between nature and culture. It presents historical and cultural examples that illustrate that this relationship is not only complex, but also changing over time. Management of human waste and animals becoming cultural and political symbols are helpful in demonstrating that the boundary between culture and nature is a social construction, like everything, but that it also influences how we treat nature and relate to climate change. What mental model should we try to build of culture and nature to support climate action?

#### Trying to be a 'Good Ancestor' in Times of Climate Crisis: the Need for 'Pacific Heritage' Author: Dr. David Harvey, Aarhus University

If 'heritage', 'peace' and 'climate change' have one thing in common, it is that they are all too readily packaged up, essentialised and categorised for the sake of short-term management and interpretation requirements. Peacebuilding and heritage appear to have a dysfunctional relationship, while climate change debates often reduce heritage to a physical proxy for 'culture', stripped of all meaning beyond numerical and locational data.

Taking a processual viewpoint, this paper reflects on whether it is possible to 'do heritage differently'; refusing to accept climate fatalism and perpetual conflict by making space for a pacific heritage, which can maintain criticality and a purposeful determination towards social justice. Taking strength from some current theoretical trends in other disciplines, the paper considers some implications for how a rethinking of 'critical heritage studies' can help to transform the way that we approach the ambition of trying to be a 'good ancestor' for future generations.

#### Panel | Culture the Missing Link – Learning from the Past? Moderators: Ms. Marcy Rockman and Mr. Samuel Franco Arce

This session explores and considers multiple ways in which culture and heritage can be used for climate action.

#### Sinai's Climate Challenge: How the Past Can Inform The Future Author: Dr. Aleida Ten Harkel, University of Oxford Co-Author: Mr. Ahmed Shams, Research Consultant, University of Oxford

Living on the highest plateau of Egypt, the Gebaliya tribe and the monks of the Monastery of Saint Catherine at Mount Sinai (UNESCO-WHS 954) are adapting their 1,400-year-old agriculture/irrigation practices to a new climate reality. Since the 1990s, the precipitation pattern has changed rapidly, alternating between long cyclic droughts, snow precipitation and increasing flash-flood events. The latter triggered the single-focus construction of 140+ small-scale water dams and 20+ storage dams across the mountain range, showing high evaporation and sedimentation rates. Combining the remote-sensing methodology of the Endangered Archaeology in the Middle East and North Africa (EAMENA) project, School of Archaeology, University of Oxford, and the geospatial data from the 20-year field survey of Sinai Peninsula Research (SPR) project (14,000 interdisciplinary points of interest), this presentation outlines a low-cost approach, centred around watershed management, and the economic value of the landscape and the cost of devalued practices. After a brief presentation of the heritage sites, this talk addresses the failures of governance/inter-sectoral decision making. The talk highlights the importance of building on threatened traditional landscape knowledge, eroded by accelerating urbanization since the 1970s, through promoting the integrated re-use of the traditional and new water structures towards sustainable resilience.

#### Ark for Iraq: What can the Vernacular Maritime and Craft Heritage of Iraq Teach Us about the Climate Crisis? Author: Ms. Hannah Lewis, Safina Projects Co-Author: Mr. Rashad Salim, Safina Projects

Since 2016, the Ark for Iraq project has been documenting and reviving the inland boatbuilding traditions and other vernacular construction and craft heritage of southern and central Iraq. The project advocates for the recognition of this endangered body of heritage not only as a victim of climate crisis and conflict, but as an embodiment of knowledge and lifeways that are vital in addressing these entrenched issues.

# Past Landscapes and Future Territory Management: from the Study of Historical Landscape to New Tools for Current and Future Planning Author: Ms. Mara Visonà, University of Siena and University of Salento

The study of historical landscapes aims to analyse changes as evidence of the human-environment long-term interaction. In this perspective, landscape changes are interpreted as a consequence of changes in adapting strategies and resource exploitation systems. The result is often a balance between the geographical elements and human actions.

The Maremma Grossetana (Tuscany) is a paradigmatic example of this equilibrium: the long frequentation of the area has led humans to relate with inner water bodies. A crucial element in the study of the human-environment relationship in the Maremma is the presence of malaria and its trends over time. Despite being an element traditionally associated with the Maremma since remote times, a critical reading of historical sources seems to date the onset of the infection under Medici's rule, from the 14th century. Several recent studies highlighted the close relationship between climate and environmental changes, and the spread of epidemic infections. Therefore, the study of changes in inland water bodies, both due to climatic changes and human actions, is particularly significant in order to investigate the causes that led to the onset of the infection and to avoid a recurrence.

# Vernacular Infrastructure Heritage as a Key to Building Climate-Resilient and Liveable Countryside

#### Author: Dr. Yapeng Ou, ICOMOS Italy

This proposed presentation case studies laochi, a traditional flood pond that used to be common in villages all over the Guanzhong region, China, especially in the semi-arid areas of the Loess Plateau, which is prone to drought and flood. As a vernacular infrastructure heritage, laochi helps manage the run-off water in the village by flexibly adapting to varied weather scenarios, conserving rain water for production and daily uses in normal times, and discharging floods in storm periods. Moreover, following the traditional rural planning norm, it is a genius loci in the village, with cultural spaces surrounding it and traditional beliefs, values, cultural expressions and so on associated with it. All in all, it is crucial for building a liveable countryside that is green and safe. The presentation is closely related to Themes 1 and 3, as (1) the case of laochi is a good practice in generating sociocultural and ecological benefits by integrating vernacular infrastructure heritage and its intrinsic traditional construction and water management knowledge into climate action; (2) it sheds light on the great contribution that rural knowledge and heritage can make towards climate action; (3) it evidences that it is high time we learned from our ancients and past societies; (4) it demonstrates how a tight culture-nature link is critical to fostering human-nature harmony; and (5) it can act as a heritage public space for building a cohesive community conducive to collective climate action.

#### The Role of Collective Memory in Democratizing a Synergetic Urban Place making: the Case of Khartoum's Sit-in Held During the 2019 Sudanese Uprising Author: Mr. Hussamaldeen Gomaa, Omdurman Islamic University

Khartoum's sit-in, which ignited its sparks during the spring of 2019, symbolizes the contemporary version of the Sudanese uprising, and reflects a unique state of awareness and rebelling against deeply-rooted oppressions imposed viciously during the last 30 years on both political mind-sets and the socio-economic fabric within the local Sudanese community. Although this uprising could not fully achieve the political democracy that all Sudanese were looking for, what happened there at Khartoum's sit-in represents a one-of-a-kind state of democracy in terms of formulating a synergetic placemaking within local built environment whereby all people involved there were contributing enthusiastically and voluntarily towards empowering their place-identity and their sense of social belonging within that area throughout a series of activities (such as mobilization, guarding, cooking, cleaning, cheering, singing, and painting).

Such synergetic series of placemaking activities held at the sit-in, by which a definite built environment has been recognized, depicted, and organized, can be attributed mainly to the collective memory; the one that is responsible for associating certain meanings (whether visually or mentally) to the shared communal spirit spread among social groups while reflecting their sense of place identity and social belonging towards certain events or places. This contribution discusses the role of collective memory created with its consequent manifestations there.

#### Culture is Harmony Created by the Human Spiritual Dimension Author: Ms. Alessia Strozzi, Italian Ministry of Culture

This contribution wants to explain why culture is a peace driver. Moving from Economic studies such as Maslow pyramid, Easterin Paradox, Human dimensions, we understand human behaviour, needs, and human well-being. The Human dimension, composed by the material dimension, the socio-relation dimension, and the spiritual dimension, allow us to deepen & understand the human well-being. These aspects must be all present, coexisting & in harmony. While the material d. satisfies the basic needs, the socio-relation d. is linked to affections, trust, mutual esteem, therefore it brings with it a dimension of mutual help, brotherhood, benevolence. Spiritual d. is linked to equity, harmony, soul and beauty. These aspects are fundamental, because they represent a typically human tension towards sacredness, universal love, and is therefore a relationship of transcendence. Every human expression made for others is culture and those others recognize and strive to preserve (e.g. the manuscripts of Timbuktu, Mali) or condemned when damaged (Buddhas of Bamiyan in Afghanistan). The spiritual d. concerns the transcendent relationship: it transcends the self & the other, to re-join a universal vision & self-realization of oneself, a relationship that aims to generate harmony between oneself & the world (see EnAction Manifesto). Therefore, cultural expressions are the witnesses of these transcendence. Future scenarios?



#### Between Intense Rain and Desertification – Multimedia Film on The Tomb Of Askia Author: Mr. Mamadou Samaké, Cultural Mission of Gao

The Tomb of Askia in Mali is a significant socio-cultural and religious remnant, an exceptional architectural monument and a historical witness of the eloquence, grandeur and wealth of the Songhoy Empire. This presentation shows how the site suffers from the adverse effects of climate change today. It highlights how in-depth studies on the site and on the climate change process will help people to better understand the negative effects and impact of climate change, and to take adequate measures to minimize these effects with a view to sustainable conservation of the site.



The Tomb of Askia, Mali. Source: Mr. Mamadou Samaké, Cultural Mission of Gao

#### Learn from the Past (for a Brighter Present and Future) Moderator: Ms. Valerie Magar Language: Spanish (simultaneous interpretation in English)

Through four case studies from Argentina, Colombia, Guatemala and Spain, this session explores how knowledge from the past and use of heritage can be fundamental for inclusive participation of communities and young generations, to promote actions for peace and for the care of our environment.

#### How Community Resilience Actions can be a Potential Key for the Construction of a Legal Framework in Cultural Heritage Risk Management Author: Ms. Ana Paula Gomez, Strengthening Museums Program of Colombia's National Museum, Ministry of Culture

An important topic that is connected to the author's role in the Strengthening of Museums Program is the absence of a legal framework that focuses directly on the risk management of cultural heritage in Colombia. There is a robust law on risk management in the National Unit for Disaster Risk Management (UNGRD), but that leaves aside the cultural sector. On the other hand there are community museums, which are immensely creative and resilient in the face of situations derived from the invasion of the territory by large hydroelectric companies and, later, the armed conflict that left thousands of victims and forced the displacement of its inhabitants. With the process called "reparation to the victims", the ancient settlers have returned to these territories and have built places of memory or museums. Traditional trades such as agriculture have been reborn. The UNGRD's challenge is to reduce the vulnerability of victims who suffer double effects from armed conflict and disasters, but the cultural component is always lacking.

#### Modelling Human-Landscape Interactions with Local Partners in the Maya Biosphere Reserve

Author: Dr. Heather Hurst, Skidmore College Co-Authors: Mr. Boris Beltrán, Skidmore College and Ms. Kelsey Herndon, University of Alabama in Huntsville

The archaeological record provides long-term data on the impact of agricultural intensification and past human responses to climate change and land degradation over thousands of years. In the Maya Biosphere Reserve, the extent of ancient Maya landscape modification comes into new focus through remote sensing at the sites of San Bartolo and Xultun, Guatemala. These ancient cities share an ecological zone and population/political history, yet each adopted different strategies of intensification contributing to two very different site trajectories. San Bartolo's ancient murals, depicting Maya creation mythology and the earliest known writing (~300-100 BCE), characterize beliefs of human-forest interactions and the centrality of corn cultivation that would shape the next 1,500 years of urban growth. A new project engages local forest communities and contemporary Maya to contribute to geographical study and analysis in order to better model human-forest interactions and landscape ecology of the past, and integrates local values into the future management of the San Bartolo-Xultun cultural heritage sites.

# The Olive Grove of the Faculty of Fine Arts at the Complutense University of Madrid: a Setting for Artistic Research, Culture, Peace and Nature

Authors: Ms. Pilar Montero Vilar, Complutense University and Mr. Jan Matthews, Complutense University

In 2005, the extraction of raw materials by a cement company from Morata de Tajuña, south of Madrid (Spain), endangered an olive grove. In response, the Complutense University of Madrid's School of Fine Arts took the initiative to recover and transplant a portion of those trees to its campus. 40 centenary olive trees were selected and now constitute a natural environment in which, from now on, generations of students can enjoy outdoor activities and artistic practices. Inspired by the now-protected olive grove, students of the Investigación, Arte y Creación Master are able to develop artistic proposals and explore relations between culture and nature, memory and work, immigration and climate change, nature and peace, nature as a creative source, etc. This sequence of events constitutes a casebook example of how an institution of higher learning can save a relevant part of our natural environment (the olive tree is a symbol of peace) while simultaneously providing its students with material for study and inspiration for generations to come. The case study aims to address issues such as the culture/nature relationship to contribute to the culture of peace, and awareness of global warming in the next generation of artists.

#### Museum of Sarmiento: Climate Changes and Historical Implication

# Author: Ms. Virginia Fernanda Gonzalez, Historical Museum of Sarmiento, ASINPPAC (International Association for the Protection of Cultural Heritage)

The distinctiveness of the Historical Museum of Sarmiento, in relation to climatic change and other risks, is related to how communities associate with it. It is important not only because it is a museum whose social function is essential, and which has suffered a fire and several floods that partially affected its collections, but also the character that it historicizes. President Domingo Faustino Sarmiento, in the second half of the 19th century, occupied himself by caring about environmental problems, to an extent that even in the last years of his life he built a house called Isothermal, a kind of prefabricated smart house designed to regulate the temperature, which he had acquired in the United States. This is what motivates the museum today to activate lines of work such as bio-installations by contemporary artists that show the impact of man on the environment, and to address issues that help raise awareness in society regarding people's actions and their consequences.



Poster for the panel in Spanish: 'Aprender del pasado para un futuro mas rico' / 'Learn from the past (for a brighter present and future)'

# Day 2 | 25.01.2022

#### Keynote Lecture of Prof. Laurajane Smith | Culture, Heritage and the Climate Crisis

#### Moderators: Ms. Sarah Stannage and Ms. Aparna Tandon

The presentation by Prof. Laurajane Smith reiterates the importance of emphasising a people-centred approach to heritage. The emphasis on the materiality of heritage in international policies and practice, framed and legitimised by the 'authorised heritage discourse', works to privilege experts and expert knowledge. Consequently, the diversity of non-expert values, historical experiences, and uses of heritage are obscured. Heritage cannot be reduced to places, buildings, and artefacts. Instead, heritage is a set of practices or performances where the past is brought to the present to address contemporary problems and negotiate future aspirations. Challenging the authorised discourse, and the hegemonic and often exclusionary heritage practices it frames, has become increasingly urgent in the context of the uncertainties presented by the climate emergency, increasing political extremism, and the COVID pandemic. Opening up room to recognize and equitably engage with the diversity of ways heritage works to help communities and nations re-think, legitimise or challenge aspirations for the future requires a commitment to a people-centric understanding of heritage.



Poster for the keynote presentation by Prof. Laurajane Smith, Director of the Centre of Heritage and Museum Studies, Research School of Humanities and the Arts, Australian National University

#### Panel | Culture the Missing Link – Strategies for Heritage Moderator: Ms. Eugénie Crete

Discussing strategies for working with heritage to build sustainable places for a changing climate, this session identifies ways to exchange knowledge and learn from human experiences worldwide.

#### 'Best practice' heritage management in a changing climate Author: Ms. Anna Hyland, Lovell Chen

For over 40 years, the Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance, has provided a standard set of practices for the conservation and management of places of cultural significance. The success of the document is in part attributable to its capacity to evolve to respond to a changing heritage landscape.

As awareness of the impacts of climate change on cultural heritage grows, there is a need for cultural heritage practitioners to engage in climate change discussions with communities. This raises the question of the extent to which the Burra Charter offers a relevant framework for considering and responding to these challenges. This presentation considers this question, discussing several Australian cultural heritage places that face considerable environmental challenges, which highlight the need for a considered approach.

#### Green Heritage: Culture and Climate in the Sahel (Sudan) Author: Ms. Helen Mallinson, Mallinson Architects & Engineers Co-Author: Mr. Michael Mallinson, Mallinson Architects & Engineers

The authors have been working on the Western Sudan Community Museum project for four years with two lead partners, ICCROM-Sharjah and the BIEA (British Institute Eastern Africa), for Sudan's NCAM (National Corporation Antiquities and Museums), with several other national and international partners, and funded by three consecutive grants from the British Council CPF and one from the Aliph Foundation. The overarching project has been to restore and revitalize three museums representing Western Sudan by embedding them in their communities. Each of them has endured the effects of conflict and they are linked through their shared history, traditions and geography. The current 'Green Heritage' project explores the possibility of adding a new agenda to the museums, instigated by a new exhibition, as they also represent the extreme vulnerability of their shared culture to climate change. The museums are well placed to act as knowledge centres for the communities and as meeting places for community action. As museums they represent a held-in-common culture that promotes finding peaceful solutions.

#### Heritage Place Lab: Connecting Research and Practice for Effective World Heritage Management

Author: Dr. Maya Ishizawa, World Heritage Leadership programme, ICCROM Co-Author: Ms. Eugene Jo, World Heritage Leadership programme, ICCROM

The Heritage Place Lab functions as an incubator for the curation of collaborative research-practice agendas aimed at co-creating relevant long-term research agendas to support the effective management and safeguarding of World Heritage properties and heritage places. The Lab focuses on four priority topics including: 1) incorporating different knowledge systems to influence World Heritage policy; 2) analysing and enhancing governance and management systems; 3) exploring local languages and knowledge systems; 4) understanding the potential of heritage management to contribute to climate change adaptation using traditional and local systems.

The project looks at baseline data sets needed and it aims to understand how researchers and World Heritage site managers could define indicators to monitor the impacts of climate change, while also considering and involving indigenous and traditional knowledge systems at World Heritage places.

In 2021, the World Heritage Leadership programme launched the pilot phase of the Heritage Place Lab. The Lab brings together eight research practice teams from Argentina, Botswana, Ghana, Guatemala, India, Norway, Peru and Zimbabwe.

#### The Potential of Documentary Film in Disseminating Other Epistemologies on Climate Change

Author: Ms. Janaína Welle, Unicamp

Co-Authors: Ms. Aline Carvalho, Centre for Environmental Studies (NEPAM) and Mr. Emilio Moran, Michigan State University

This talk calls attention to the potential of documentary cinema as a tool in the construction and dissemination of narratives about climate change anchored in epistemologies and ontologies of traditional communities, such as indigenous peoples, who are repeatedly excluded from the debates. For this purpose, two Brazilian documentaries directed by filmmaker Mari Corrêa are presented, Para Onde Forum as Andorinhas? (2016) and Quentura (2018). With a similar narrative structure, based on listening, the documentaries present the ways indigenous people from two regions of the Brazilian Amazon have been perceiving and experiencing climate change and its consequences in their daily lives. The climate changes are presented through accounts of the changes in their daily activities, such as the cultivation of their fields, alterations in natural cycles, and in time markers. Both bring the perspective of the effects of climate change away from the techno-scientific logic, embodying and territorializing risks, from their focus on indigenous accounts and experiences. In this way, these documentaries open the way for other voices to discuss the Anthropocene. This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brazil (CAPES).

#### **Climate Action Needs Culture** Author: Ms. Isobel Griffin, National Galleries of Scotland

In the months leading up to COP26, a group of organisations in Scotland came together to discuss how to increase awareness of the role culture can play in encouraging climate action. The group was led by Creative Carbon Scotland and the other members were Creative Scotland, Historic Environment Scotland, Museums Galleries Scotland, National Galleries Scotland, the National Library of Scotland, and the Scottish Library and Information Council. The group made a short film, entitled Climate Action Needs Culture (https://vimeo.com/643933667). This was produced by Picture Zero, a film company specialising in climate solutions and human climate change stories and narrated by Scottish-Nigerian supermodel, actress and activist Eunice Olumide MBE, who called for culture to be front and centre of climate action. The film aimed to encourage players from both the climate and the culture sides to start collaborating; to make policy makers want to learn more; and to prompt members of the public to ask their favourite arts and cultural organisations how they are responding to the climate emergency. It was used as the starting point for an event within the Scottish Government's COP26 programme, entitled 'Is culture the untapped ally of climate policy?' and it was also screened at the Scottish Government's Culture Reception. The contribution proposed is a screening of the film (which lasts just under 5 minutes) with a short talk explaining why the film was made and how it is being used.

Youth Forum Intergenerational Dialogue on Climate.Culture.Peace Moderators: Mr. Repaul Kanji and Mr. Abhiyant Tiwari

Assessing the Impact of Rising Sea Levels on Southern Iraq's Cultural Heritage Author: Mr. William Deadman, Durham University Co-Authors: Ms. Kristen Hopper, Durham University and Mr. Daniel Lawrence, Durham University

Sea level rise due to climate change has the potential to cause catastrophic damage to our cultural heritage but has received limited attention. The potential impact in Southern Irag is particularly serious as large areas of the flat alluvial plain remain very close to modern sea level. As the location of the world's oldest cities, the heartlands of Bronze and Iron Age empires, and the centre of the caliphate during the 'golden age' of Islam, Southern Iraq also contains archaeology of international significance. As part of the Endangered Archaeology in the Middle East and North Africa (EAMENA) project, geospatial and archaeological data for thousands of Iragi sites have been collated. We combine this with sea level projection models over several timescales to assess the impact that this particular consequence of climate change is likely to have on the archaeology of Southern Irag.

#### Sites Leptis Magna

Author: Ms. Enas Alhssiek, Department of Antiquities Libyan

This talk explores the threat of climate change at the archaeological site Leptis Magna, which includes damage to some mosaic floors and some walls of buildings and cracks due to the presence of plants and weeds on the site. Weeds are concentrated in the direction of the valley (Wadi Knibes) and the port area. Last summer, temperatures reached 47 degrees Celsius for more than 20 days – a phenomenon that has not occurred since 1987. The rising temperatures and drying of plants and weeds inside Leptis increases the threat of fires.

#### Weather In and Weathering Climate Change: Making Climate Change Tangible Through Archaeology

Author: Mr. Nik Petek-Sargeant, University of Cambridge

A challenge faced by researchers working on climate change is that, for the public, climate change is something that is temporally and geographically distant. To address this challenge, social sciences and humanities have been studying the social dimensions of climate, and weather has been a particularly fruitful gateway to understanding how people relate to and interpret climate change in everyday situations. However, successful communication on climate issues also needs to involve ideas about community and local history, and archaeology is critical to this despite being largely absent in the conversation. Nevertheless, with its insights into material outcomes of human experiences and relations, it can become integral to the discussion of 'weathering' climate change and making climate tangible. Using the example of Kenya's llchamus community, this talk highlights the community's experiences of weather since the Little Ice Age, and explores the potential of archaeology as a communications tool.

#### Green Heritage: The Transformation of the Post War Cultural Heritage of Mosul Author: Mr. Omar Mohammed, Sciences Po University

The Green Mosul Initiative Urban Greening Project seeks to be a bridge between Mosul's diverse communities as trees will be planted at sites of importance to Yezidis, Christians and Muslims and be maintained by their respective communities. Green Mosul will additionally plant trees in locations of public use including at Mosul University, the Northern Technical University, Mosul Municipality, and the Government Environment and Desertification Directorate, as well as in areas surrounding Mosul City including Telesqaf, Sinjar Academy, Ali Rush Village, Zain al-Abeden and other areas. Trees will also be planted at the heritage sites of Our Lady of the Hour Catholic Church (Église Notre-Dame de l'Heure) and Al-Nuri Mosque in historic Old Mosul, which are under reconstruction by UNESCO as part of its flagship initiative, Revive the Spirit of Mosul. Trees will also be planted at the recently reconstructed Mosul Museum and Rabiya'a Mosque, currently under reconstruction.

The selected trees are distinguished by the density of their leaves and their tolerance to extreme environmental conditions, as well as their ability to provide sizeable ground cover. Among the trees to be planted are diverse varieties of cypress and pines, as well as lemon and orange trees. A Tree of Fraternity will be planted for Pope Francis in Hosh al-Bieaa (Church square) to honour the message of his historic pilgrimage to Old Mosul.

#### The Backward Forwardness: Taking Cities Back (to Sustainability) in Order to Develop Ahead – A Case Study of Historic City of Bundi, Rajasthan Author: Ms. Nirzary Pujara, self-employed

Sustainability, as defined today, is a relatively recent concept that was already the very 'essence' of historic human-nature interactions and the design of settlements. But rather than adapting these features and building upon them for managing developments, in a way the wheel of sustainability has been re-invented. As a result, the potential role of cultural heritage in achieving the Sustainable Development Goals (SDGs) and managing the climate crisis has been unnoticed and is almost absent from the mainstream narrative of sustainability, along with the realization that the identified parameters and indicators were actually inherent characteristics of historic settlements. The paper highlights that many concepts and methods detailed in the SDGs are already among the many aspects of managing cultural heritage that can be directly applied to fulfil SDGs. This paper aims to showcase two points: 1) historic cultural landscapes and settlements were sustainable in character, 2) reinforcing and borrowing from these inherent values, along with management of cultural resources, is an effective tool for managing changing urban-scapes. This is showcased via a case study of Bundi.

# Ecology in Heritagization for Responsible and Sustainable Preservation of the Medina of Sousse

Author: Dr. Zeineb Youssef, ISAM Mahdia

The Medina of Sousse is a historic centre of a coastal Tunisian city that is recognized as a world heritage site since 1988, and increasingly the intramural built heritage assets require permanent preservation actions in the struggle against the threats of climate changes. Increased impacts are altering traditional earthen constructions, as walls, roofs and plaster are crumbling and advancing the technical degradation. The need to speed up all the concomitant phases of heritagization becomes an unavoidable imperative because this complicated and multiform process brings back the ancestral ecological solutions suitable required to mend the damage caused by climate change and thus revitalize urban identity and safeguard built heritage.

What are the ecological solutions worth being explored during heritagization? Who are the involved institutions? And what type of matrix should be implemented in order to assess undertaken ecological strategies?

The author's research deals with the on-going heritagization process of the Medina of Sousse, which witnessed a remarkable project of urban renovation in 2014, even though the conserved heritage items are still threatened. This crucial situation pushed institutions to launch a new strategy, including an ecological approach to guarantee sustainable and responsible preservation. This talk explores the phases of heritagization and attempts to assess actions by implementing an evaluation matrix of ecology.

#### Middle Eastern Traditional Cultural Practices as a Tool for Resilience Author: Dr. Hellen Almoustafa, Sanliurfa Tourism Development INC

Climate change impacts developing and developed countries, leading to wars and climate displacement. These displaced communities suffer not only from economic and environmental vulnerabilities but also endangerment of their cultural values, since climate change threatens individuals' and communities' close relationships with land, people, the environment, and tradition. Cities and villages are not only a home and a source of our livelihoods but they also represent the history of those who lived there over the centuries and shaped what it is now called heritage. This heritage includes cultural practices derived from the relationship between the built environment and its physical surroundings.

The presentation focuses on the role of intangible cultural heritage as a tool of resilience against climate change, and to promote social cohesion and integrity. The talk explores how the Syrian community's knowhow, traditional cultural practices and bio-cultural knowledge support their economic livelihood, and how the recognition of intangible cultural heritage contributes towards successful adaptation and healing, and offers benefits to host communities and migrants.

## Mili Juli : An Effort to Unearth the Potential of Community in CBDRM Author: Mr. Bhola Saha, The Assam Royal Global University, CRRP India

Co-Author: Dr. Saran Prakash, CRRP India

This work is a collection of case studies that aim to use examples from communities across the state of Assam to foster the idea that members of a community can manage disaster risks on their own, and that they have their own curious ways of dealing with risks. In fact, these cases serve as perfect examples of encouragement to the more 'modernized' world to start engaging in disaster risk management as a part of a developmental agenda, and how the tools lie not in fancy applications and software but in an inherent collective cultural consciousness.

#### Open Data, Open Maps and Heritage Protection Author: Dr. Marta Pucciarelli, University of Applied Sciences and Arts of Southern Switzerland Co-Author: Ms. Iolanda Pensa, University of Applied Sciences and Arts of Southern Switzerland

Climate change-induced disasters represent a major threat to cultural heritage. The 2019-2022 European Work Plan for Culture sets out as first priority the sustainability of culture and stresses the importance of digitalization to potentiate access, expression, preservation, dissemination and consumption of cultural heritage, and the relevance of cultural statistics to support evidence-based policy making at European and national level. The concrete actions for the sustainability of culture include for the first time the topic of adaptation to climate change, the use of mapping methods, a specific focus on the safety of heritage under extreme climate circumstances, and the production of recommendations leading to awareness-raising and capacity-building of national heritage experts on sustainability of cultural heritage.

This contribution focuses on existing data and maps about heritage, hazards and risks, and it envisions scenarios to enhance the interoperability and use of these data and maps. It critically presents the themes and discussions that emerged during the Open Data and Open Maps for heritage protection conference, organized in 2020 in the city of Bellinzona (Switzerland) by SUPSI, in the frame of the project CHEERS (Cultural Heritage, Risk and Securing activities).

#### Modelling Flood Resilience and Flood Impacts in Historical Art Cities Author: Dr. Chiara Arrighi, University of Firenze Co-Author: Mr. Fabio Castelli, University of Firenze

Art cities attract many visitors worldwide who want to enjoy cultural heritage and contribute significantly to the local economy. If a destination is affected by a natural hazard, such as a flood, cultural heritage can be physically impacted along with the whole socio-economic context related to tourism. This contribution describes a way to model the intrinsic link between flood resilience, impacts and economic losses in art cities where there are many cultural attractions. The method is applied to the city of Florence (Italy), which usually hosts millions of visitors each year and is prone to rare flood events.

# Panel | Culture for a Sustainable Future in the Arab Region

Moderator: Mr. Zaki Aslan Language: Arabic (simultaneous interpretation in English)

This session discusses the conference themes in the context of the Arab region, including risk drivers, environmental, political and communal factors. Using scenarios, it outlines the likely impacts of climate change in the region, and identifies grassroot-level actions that could be crucial for enhancing ecosystems and community resilience. Panel presentations illustrate how cultural heritage and traditional sustainable practices can help promote nature-based solutions for a better future for the planet and humanity. The session features case studies from: Algeria, Egypt, Iraq, Sudan and Yemen.

#### Climate Change as a Risk Driver for Culture and People – When Water Rises Moderator: Ms. Cathy Daly

It's no longer a question of if water will rise, but what needs to be done when it does. This session explores current tools and what is needed to continue building and implementing them.

# A Citadel Against the Wind: The Possible Solutions to Rescue Qaitbay Citadel from the Impacts of Climate Change

Author: Dr. Rehab Ibrahim Ahmed ElSiedy, Faculty of Archaeology-Cairo University

Qaitbay citadel is a significant fortification structure located in Alexandria, Egypt. It was built by the Mamluk Sultan Al Ashraf Qaitbay in 1477 AD. The structure has many historical, archaeological, and social values that have developed since it was established in the 15th century until now, as the most massive complete example of fortification that has existed on the northern coast of Africa. It has witnessed the ups and downs of political power shifts during the last seven centuries and has shaped the story of daily life of the population of Alexandria, becoming the core of their culture. Built on the same spot as the Alexandria lighthouse, one of the ancient seven wonders that collapsed due to a very strong earthquake, now it stands against all the threats of climate change. Some recent studies describe how the increase in climate change could threaten historical sites on Alexandria's northern coast, such as Qaitbay citadel. This talk proposes that it is time to begin an international cooperation project to rescue the most threatened historical sites on the northern coast of Africa, starting with Qaitbay citadel, based on three main points: documentation, digitization and new methods.

#### The MOVIDA Project Towards a Better Evaluation of Flood Risk Mitigation Strategies Author: Prof. Daniela Molinari, DICA – Politecnico di Milano

Co-Authors: Mr. Francesco Ballio, Department of Civil and Environmental Engineering - Politecnico di Milano and Mr. Tommaso Simonelli, Po River District Authority

Effective mitigation of climate change-related risks requires the estimation of consequent expected impact, before and after the implementation of mitigation strategies. The MOVIDA tool, developed in the Po River District (Italy), allows for a comprehensive evaluation of flood damage to all potentially affected tangible and intangible assets, reaching a twofold objective: 1) supporting the cost-benefit analysis (CBA) or the multi-criteria analysis (MCA) of mitigation measures included in flood risk management plans, and 2) widening the alternatives of intervention, moving from hazard control to risk reduction ones.

#### CARBICA-CHEN, Empowering the Caribbean Cultural Heritage Author: Ms. Rita Tjien Fooh, CARBICA-CHEN Co-Authors: Mr. Max Scriwanek, CARBICA-CHEN

The Caribbean region is prone to disasters caused by extreme hazard events. With the increase in the number and frequency of extreme weather events, Caribbean cultural heritage institutions have become increasingly vulnerable to disasters. In 2020-2021 the island of Saint Vincent & the Grenadines (SVG) was struck by volcano eruption and on the island of Haiti people lost their livelihood and homes because of an earthquake.

All these disaster events have increased awareness that heritage professionals in the region need to collaborate with each other in order to salvage and preserve the Caribbean cultural heritage collection. Because the island states are all scattered over the region and have limited resources, the Caribbean Heritage Emergency Network (CHEN) (an entity of the Caribbean branch of the International Council on Archives) was officially launched in 2019 to facilitate regional and international responses to emergencies threatening cultural property and to encourage safeguarding and respect for cultural property, especially by promoting risk preparedness, recovery, response and mitigation measures. Since 2019, CARBICA/ CHEN has been collaborating with regional experts and international organizations such as the UNESCO Cluster Office in Kingston to raise awareness and conduct trainings and workshops with regards to empowerment, emergency preparedness and disaster resilience. In this presentation, CARBICA/CHEN representatives share their endeavours to make the Caribbean heritage professionals more resilient against the effects of climate-induced disasters.

# Assessing Climate Change Threats to Coastal Archaeology in the Middle East and North Africa

Author: Dr. Kieran Westley, Ulster University

Climate change is acknowledged as one of the key threats facing coastal archaeology today, with particularly strong impacts from flooding and erosion. However, many places lack secure baseline data, such as on the location and condition of archaeological sites, key threats, and likely impacts on these sites. This contribution outlines current research by the Maritime Endangered Archaeology (MarEA) project, which aims to document and assess threats to maritime archaeological sites across the Middle East and North Africa. Work presented here demonstrates current attempts at regional-scale threat assessment, while also highlighting the complexity and variability of coastal change (and hence impacts) at a site level, through case studies from eastern Libya and Oman. The intention is that this will illustrate methods that can provide a means to redress the frequent absence of baseline data on climate change impacts and coastal cultural heritage in the MENA region.

#### It is Flooded! (English) Moderators: Ms. Aparna Tandon and Ms. Mohona Chakraburtty

One of the most visible impacts of a warming world are floods, which affect both inland and coastal communities. Erratic and intense rainfall in combination with factors such as poor land management and degradation makes certain populations more vulnerable to flooding. Sea level rise, storm surges and the melting of glaciers are some of the other contributing factors. Held simultaneously in Arabic and English, this workshop offers tools for managing the flood risk for cultural heritage and its associated communities.

#### Flood Impacts to Cultural Heritage in the Po River Catchment Author: Dr. Chiara Arrighi, University of Firenze Co-Authors: Prof. Daniela Molinari, DICA – Politecnico di Milano

EU countries are required to identify and reduce the potential adverse consequences of flooding on human health, the environment, cultural heritage, and economic activity (Directive 2007/60/EC). This contribution describes: 1) the experience of the project MOVIDA, funded by the Po River District Authority, in the identification of tangible cultural heritage exposed and vulnerable to floods in the largest Italian river catchment, and 2) the challenges and opportunities in adopting a different perspective in heritage protection. Thanks to the project, the number of cultural heritage structures considered in the plan increased from 60 to 125,000; each object was classified in terms of flood hazard, exposure and vulnerability, and a spatial index of impact to cultural heritage has been developed.

#### A New Type of Flood in Belgium? Quickly Evaluating Damages for Cultural Heritage Author: Ms. Francoise Collanges, KIK-IRPA

In July 2021, exceptional floods hit the east of Belgium, with mud floods, high pollution levels and areas which remained inaccessible for several weeks, with damages still heavy more than seven months after the disaster. While museums and archaeological storage facilities managed to ask for help within days, religious heritage appeared to be undermanaged, ruled within a complex administrative maze, and relying heavily on populations that were not able to respond. The creation of a crisis committee for heritage enabled quick evaluation of the impacted areas and sites, first by creating a central point for gathering information, then by promoting the use of a quick evaluation tool, adapted with local professionals under ICCROM supervision. However, the use of the tool remained limited and ways it could have been better used to trigger emergency operations deserve to be researched.

#### It is flooded! (Arabic) Moderators: Mr. AbdelHamid Salah Al-Sharief and Ms. Amira Sadik Aly

#### Climate Change and its Impact on the Historic City of Sana'a (a World Heritage Site) Author: Mr. Fares Altowaity, YKRB Foundation - Yemen

How does climate change affect the historic city of Sana'a? Climate change, which is responsible for the torrential rains that occurred in the city in the past seven years, caused damage to about 2,500 houses out of the total number of 6,500, according to the field survey carried out by the Historic Cities Preservation Authority in 2020, and the damage varied between total, medium and light damage. This damage is exacerbated by the weaknesses of the materials used in construction such as bricks, mud, and earthen roofs, as well as the deterioration of the service sector as a result of obsolescence, the current conflict, and the economic crisis, which caused the inability of homeowners to maintain and repair the damage in its early stages. The collapse of homes due to climate change causes a conflict between the authority responsible for protecting the city and the owners of those homes who sell them to merchants and those who rebuild them to be stores and shops in a different style. The collapse of public and private buildings directly related to climate change increases the conflict and the economic crisis among the city's residents, and it is threatening the peace and the coexistence in society.



Poster for the workshop on managing flood risk for cultural heritage and its associated communities (in Arabic and English)



#### City in Conflict Author: Ms. Khushi Shah, CEPT University

The presentation focuses on the city of Ahmedabad. The first city of India to be recognized as a World Heritage city, but even with its rich collection of cultural heritage, it has seen a fair share of violence and conflicts. A video shown as part of this presentation addresses the conflict that has been a part of the city since its establishment, and how has it impacted the heritage of the city. Ahmedabad is most often seen as the amalgamation of various cultures and religions, and has managed to form a balance among the multitude of religions that persist here. But every other decade, the city spectates the riots and madness influenced mostly by the religious or political powers and the heritage of the city is often the collateral damage of these riots. The video highlights the concept of conflict, the role our so-called ideals play in igniting them, and how some of the significant violent riots and conflicts resulted in some mass destruction across the city. It focuses on the after-effects of these disastrous events and the toll that it takes on the city's culture: tangible and intangible. It focuses on how cultural heritage can be an important asset when dealing with these kinds of conflicts and moving past the bittersweet memories of the past. It provides a pathway for more harmonious and inclusive future.

The presentation includes snippets from a visit to the Museum of Conflict in the city of Ahmedabad. It focuses on the complex history upon which the city has been built, the transition of powers, and the collateral damage that it has witnessed. It essentially emphasizes how cultural heritage plays a pivotal role in moving forward in a congruent manner and how to eliminate the prejudices and biases that have been created amongst people over the period of time.



An extract from the multimedia presentation - City in Conflict, Ms. Khushi Shah, CEPT University

#### Youth Forum Workshop: My Voice Counts Moderators: Mr. Repaul Kanji and Mr. Saran Prakash

The session begins with two images – one depicting a dystopic future and the other a sustainable one. This townhall session opens with the questions: how do we build a culture which would ensure that we are able to reach a sustainable future? How do the different panellists envisage the future, keeping climate, culture and peace in mind?

#### Changing Climate and Abandoned Rural Heritage Author: Ms. Zeynep Yılmaztürk, Aarhus University / Antalya Kültürel Miras Derneği - ANKA

It is challenging to realize the effects of climate change in big city-based daily lives. However, living in rural areas is a game-changer in terms of carrying out daily lives, considering the stage of the Anthropocene. According to the Antalya Cultural Heritage Society (ANKA), "rural cultural heritage", with its tangible and intangible elements, has less involvement than it deserves in these discussions. This fact carries vital problems with it such as cultural aridity and weakening of the bonds of human beings with the past. This contribution aims to draw attention to changing daily practices and therefore the fading away of rural heritage due to climate change. Elmali Teke Highland district of Antalya, in the Southwest of Turkey, stands out as a significant example that demonstrates the relationship between climate change and cultural heritage. Within ANKA's current project, KIRKAMBAR, it is understood that climate change has been affecting the traditional beekeeping and agricultural practices in Elmali. Being one of the ethnoarchaeological examples in Elmali, not only the traditional practice as an intangible aspect but the vernacular architecture of traditional beehives and granaries, both of which are considered as the continuation of Lycian culture having resemblances to the Lycian pillars and rock tombs, are also being abandoned. By exchanging knowledge, alternative ways are sought to mitigate the effects of climate change on cultural heritage.

#### KAM-Çubuk

#### Author: Ms. Talha Ulaş, Ankara Yıldırım Beyazıt University

The main aim of creating KAM-Çubuk, a research centre that mainly focuses on studying the rural cultural heritage of central Anatolia, is protecting the identity of rural heritage, and bringing back its values through documentation, research, and development. The targeted rural heritage is of architectural, artistic, agricultural, and industrial types and values. The project began by conducting research on the architectural heritage records from the works of international travellers and documenting.

# Day 3 | 26.01.2022

#### **Climate Stories of Himalayan People**

Author: Mr. Shahzad Ahmed Malik, Member of ICOMOS INDIA, ISOCARP & Indian Institute of Architects

The life of the native people of Uttarakhand is in a struggle against the odds of climate change, urbanization, and lack of contextual support from the government. Native people, known as Pahadis, live in close vicinity to Himalaya – known to be one of the water towers of the world. Life is a constant struggle for them, forcing them to shift from the cultural roots of agriculture, traditional water harvesting practices, and livestock rearing. This has brought the community to the verge of migration towards the alluvial plains of the Ganges.

This presentation highlights the changes in the lives of the native people of Uttarakhand, which is one of the states that lie in the Hindu Kush region (HKR) within India. The multimedia showcases the changes in the landscape, impact on lifestyles of locals, and long-term effect of existing policies in support of tourism, from the perspective of the native speaker as first-hand evidence.

# The Tale of Mumbai – Where's the Culture?

#### Author: Mr. Rahul Salunke

The contribution is a photographic narrative of Mumbai's eclectic culture; a mix of old and new, a blend of aged and young. On one hand, the unique culture promotes bonding beyond limitations of caste and religion, and on the other hand the same culture is victimized by guns and bombs. And yet, the city goes on. The photograph string self-narrates the vibrance and resilience of a city – resilience to hazards and much more.

#### The Blend of Melodies from Northeast India Author: Mr. Mriganka Banikya, Archmary Studio

This composition is prepared by mixing various traditional and indigenous songs, art forms, modern songs, and artifacts from North East India that represent Climate, Culture, and Peace. This is an attempt to showcase the efforts of artists from Northeast India in upholding the value of traditional and indigenous knowledge through their art, songs, and other contributions.

#### Ode to Natural Disasters (Concluding Musical)

#### Author: Mr. Manash Kamal Bhuyan, CRRP

To build a culture of understanding that disasters are not natural, the YYPs of CRRP has come up with a song that hits the right chord with the contemporary generation. Disasters are social constructs – as much as this is known in the circles of researchers and intellects, it is less known amongst the masses. To build a culture of understanding that disasters are not natural, the YYPs of CRRP has come up with a song that hits the right chord with the contemporary generation.

#### Ignite Talks | What do Climate Risks Look Like Around the World? Moderator: Ms. Bakonirina Rakotomamonjy

Climate change is bringing diverse risks to culture and heritage around the world. This session characterizes different risks and foster a better understanding of the forces that create these risks.

#### Community Engagement with Climate and Culture in an Area of Multiple Deprivation Author: Ms. Lorraine Finch, Lorraine Finch Conservation and Preservation

Great Yarmouth in Norfolk is an area of multiple deprivation, scoring as one of the most deprived areas in the UK on the Index of Multiple Deprivation, measured across the domains of income, employment, education, skills and training, health and disability, crime, barriers to housing services, and living environment. It is an area at high risk and at immediate risk from climate change including flooding, tidal surges and rising sea levels. Research has revealed that it could be lost to the sea by 2050. Much would be lost in terms of culture and the environment. The denes in Great Yarmouth are a Site of Special Scientific Interest (SSSI), home to rare and unique plants, insects and birds. The culture under threat includes the most complete town wall in England, the largest parish church in England, a unique row system and many historic buildings, with links to authors such as Charles Dickens and global history including the Russian Revolution.

The deprivation is in conflict with the culture. Most people are focused on their day-to-day survival rather than the survival of the culture. Great Yarmouth is home to people from around the world, which, unfortunately, has created people-to-people conflict. Both of these have led to conflict between the community and in addressing climate change and environmental degradation. How do we get to peace? How do we get to a place of peace for people-to-people, people and the environment, and arrive at solutions that are viable, durable and allow all to thrive?

# Olive Farming: Intersection of Culture and Climate Change in the Occupied Palestinian Territories

#### Author: Ms. Anisha Patel, Europa-Universität Viadrina, Frankfurt (Oder) Co-Author: Ms. Nour Abdelhamid, American University of Sharjah

Globally, there is on-going research on the effects of climate change on rainfall patterns, water levels, soil conditions, and agriculture. In countries experiencing conflict, this situation is exacerbated by constrained use of and access to natural resources. Indigenous to the Levant region is the farming of olives, which forms a critical component of the Palestinian economy in the occupied Palestinian territories (oPt). Other than the role it plays in the socio-economic context, the farming of olives has, over time, come to be an integral part of the Palestinian culture and identity. However, the farming of olives in the oPt today is a precarious activity, which experiences direct effects of the occupation and conflict, such as limited access to farmland during the harvest season, settler violence, limited resource allocation, and destruction of the olive trees. It also reels under the effects of broader changes in the socio-cultural aspirations of the society and limited approaches by the governing Palestinian Authority. This presentation aims to highlight the challenges faced in farming olives by Palestinians, through a cross-disciplinary framework based on climate change, conflict, and culture.

#### Rural Tourism Development and Heritage Preservation after a Heavy Rainstorm: Tashuimo Village in Zhengzhou, China Author: Dr. Yichen Jiang, Shenzhen University

This contribution takes Tashuimo village as an example, which is situated in Henan, a province located in central China. It is near the Shaolin Temple. Plenty of historical elements exist there, even without any recognition through the authority of the government: honeysuckle farms with a long-cultivated history, the old dwellings in the form of caves, as well as the traditional background of advocating Buddhism. These elements should not be ignored during tourism development.

Unfortunately, In July 2021, Tashuimo village continuously suffered from a heavy rainstorm. The entire region experienced rare and continuous heavy precipitation. The cumulative average precipitation at that time even reached 449mm. A number of buildings and fences collapsed in the study area, and most of the farmland was destroyed.

Before the rainstorm, the government development model for this village was to encourage tourism development (within the next five years). In the current development plan, there is no in-depth exploration of the heritage elements. However, it is known from interviews that some villagers have deep feelings for their dwellings and honeysuckle fields, even though their houses and farmland have been destroyed. Hence, this research aims to explore the heritage preservation-oriented tourism development and expected community livelihood models after the rare rain.

#### City of Dead Between Erosion and Loss

#### Author: Ms. Raghda Nasr El.Nezory, Department of Historic Cairo

Recently, the world has experienced major climatic changes, and Egypt is considered one of the countries that have been greatly affected. In 2021, the Egyptian Meteorological Authority published a report stating an unprecedented rise in summer temperatures over the past five years, up by 3-4 degrees with a very high level of rain.

The City of the Dead, which is the main part of the living heritage in historical Cairo, includes Mamluk buildings that embody the most outstanding medieval architectures with a distinctive style world-renowned in Islamic architecture. It had a unique military, political, social style, which reflects the culture of its era (700-800 years).

Due to extreme temperatures and dry weather conditions, cohesive building materials such as mortar are shrinking and developing cracks. Together with infrastructural deficit, these unprecedented conditions are leading to the erosion, destruction and collapse of the historic buildings. These architectural arts are destined for great demise due to weather changes over the years, with the rapid change around the world leading to the disappearing of important heritage.

# Individual Attempts to Document the Visual Identity of the City of Alexandria in Light of the Unjust Urban Development

Author: Mr. Mohamed Farouk, Ministry of Tourism and Antiquities in Egypt

The project aims to document the heritage buildings in the city of Alexandria and the impact of the ongoing demolitions on these structures. Through pictures of these buildings before and after demolition, the author wishes to capture the loss and destruction of the historic structures. Working with the Ministry of Tourism and Antiquities in Egypt, he leads rescue excavations in the city to reveal the layers of transformation that took place over the Greek, Byzantine, Roman and Islamic era.

#### Wading the Murky Waters of Climate Change in the Subcontinent: A Study into Climatic Systems; Cultural Mobilization; Tangible Heritage; and Adaptability in the Province of Sindh. Pakistan

#### Author: Mr. Arsum Anshari, Endowment Fund Trust for the Preservation of the Heritage of Sindh

The Indian Subcontinent, with its glacial rivers; annual monsoon dependence; and massive inland waterbodies, has always been topographically and meteorologically anomalous compared to the rest of the world. A meticulous climatic temperament has poised over the region for millennia; nurturing distinct civilizations and diverse ecosystems. Climate change threatens to disrupt the already frail meteorological system. This disturbance threatens to nudge the system into 'murkier waters' with an increase in reactively adverse climatic events. The call for elaborate meteorological studies and cultural mobilization is ripe. This paper explores the potential paradigm shift of cultural awareness, stances and adaptability to climate change in the sample province of Sindh, Pakistan. Moreover, it addresses the cumulative effects of climate change on tangible heritage including built heritage and cultural landscapes in Sindh. Lastly, it investigates the preparedness and mitigation strategies relevant to the Subcontinent in general.

#### Panel | Culture, Climate, and Drivers of Conflict

#### Moderators: Ms. Elly Harowell and Ms. Aparna Tandon

There are many threads between culture, heritage, and conflict in relation to climate: culture and heritage can be a source of tension, they can be damaged by conflict, and they can provide avenues for resilience and recovery. This session explores these threads and how they may be woven together.

#### Re-thinking Living Heritage. Syria as Case Study Author: Dr. Eva Ziedan, Independent researcher

This presentation investigates how local communities have been able to reinvent and recover the idea of heritage through collective efforts. It focuses on heritage as a living and dynamic concept; it forms part of the urban space and is a fundamental asset for our sense of community. It represents a "living social energy" entwined in the traditional houses of Aleppo and Damascus or in the ancient folk rain chants of the steppe in the years of drought. Likewise, drawing on wisdom and wit accumulated in communal heritage is a way of maintaining water and electricity networks, conducting agriculture and economic exchange, as much as the ability to keep communicating and to overcome hindrances such as military checkpoints by devising creative solutions. Emblematic case studies for this presentation are taken from the author's own engagement with activists and actors in Northern Hama, Aleppo, Ragga and Tell Hasan Basha in Syria.

#### Climate-Related Disasters and the Outbreak of Civil Conflict Author: Ms. Tianyue Hu, Tsinghua University

Climate change is one of the most serious and urgent challenges facing human society today. Climate change will not only lead to an increase in the frequency and intensity of disasters, but may also increase the likelihood of conflicts and the destruction of important cultural heritage. Using panel data for all countries from 1960 to 2017, this paper examines the relationship between disasters and the outbreak of civil conflict, mainly from the path of state capacity. The results suggest that disasters have a significantly positive impact on the outbreak of civil conflict, and that the increase in state capacity can reduce the impact of disasters on the outbreak of civil conflict, but the causal mechanism of disaster-national capability-outbreak of civil conflict is not proven. One of the implications of this research is that strengthening state capacity can help reduce the risk of civil conflict arising from disasters and protect precious cultural heritage.

#### Risks for Peace Due to Promotion of Heritage Author: Dr. Cornelius Holtorf, Linnaeus University

As the significance of culture and cultural heritage is gradually entering high-level discussions concerning sustainable development, the general view that culture and heritage necessarily benefit mitigation and adaptation related to climate change should be adopted with caution. Promoting seemingly timeless heritage derived from the past can make necessary transformations of inherited ways of life and livelihoods more difficult. At the same time, perceptions of exclusive cultural heritage may support ethnic pride and social exclusion. Both recent and historical examples show how perceptions and uses of cultural heritage can inflame violent conflicts between different cultural groups over power and territory. Promoting heritage can thus threaten peace and human rights, reduce socio-cultural cohesion and resilience, and effectively become a hindrance for global human adaptation.

# Culture, Conflict, Climate Vulnerability and Adaptation in Western Sahara Author: Dr. Joanne Clarke, University of East Anglia

Co-Author: Dr. Nick Brooks, University of East Anglia

Conflict in Western Sahara has created over 173,000 refugees and prevented the Sahrawi people from practising their traditional nomadic livelihoods, eroding their knowledge of pastoralism and the environment through forced sedentarization. This knowledge represents an important source of adaptive capacity for monitoring and responding to climatic and environmental change. At the same time, geographic and institutional factors amplify the displaced Sahrawis' exposure and vulnerability to floods, water shortages and heat extremes, causing further hardship and dislocation. This presentation identifies drivers of vulnerability rooted in the conflict, and how the continuation of the conflict and global climate governance mechanisms further amplify this vulnerability. It explores how addressing the conflict and its impacts can support adaptation, and highlights the critical role of intangible heritage and the culture in which it is embedded in responding to climate change both in the refugee camps and in the non-self-governing territory of Western Sahara at large.

#### Climate and Igboho History

#### Author: Mr. Abiodun Abioye, University of Ibadan

The presentation brings to light how vital the knowledge of climate is in the curricula of agriculturalists in rural areas. It explains climate as a major determinant not only of agricultural production processes but also shaped socio-cultural relations among peoples of lgboho (i.e. indigenes and migrant farmers). It also exposes how climate is central to non-peaceful intergroup relations in Nigeria, with a special reference to the herders-farmers clash crisis in Igboho and how the rural people combat these germane issues. Using historical approaches to analyse and interpret qualitative data, this research work discusses the themes of climate and peace within Nigerian rural history, using Igboho as a case in point.

#### Panel | Building a Map of Climate Impacts on Culture and Heritage

Moderators: Mr. Bijan Rouhani and Mr. Repaul Kanji

#### Pertaining to the Southern Coastal Regions of Ghana

Author: Dr. Ing. Henry Nii-Adziri Wellington, Architect/Cultural Heritage Scholar Co-Authors: Prof. K. Appeaning-Addo and Dr. I. Appeaning-Addo

This presentation shares personal experiences of, and informed observations on, the effects of climate change on the present natural flora/fauna systems, and the built-environment scenarios observed on the eastern coastal areas between Accra and Keta, Ghana.

In this context, observed occurrences of flash floods, continuous rising of seawater-levels along the beaches, the prevalence of short dry-harmattan seasons and continuously high-humidity levels, are attributable to observed negative conditions. These conditions include erosion and inundation of shorelines, pushing traditional flora and fauna into near extinction and causing cultural heritage sites and fabrics of built-heritage structures to experience decay and disintegrate uncontrollably, thereby consequently destroying both tangible and intangible cultural heritages.

The presentation concludes with recommendations to effect a positive change in Ghana's so-called lack of cultural maintenance. These recommendations should energize the cultural milieu in these threatened communities to proactively live with the effects of climate change.

# Impact of Climate Change on the Historical Landscape of Sistan in Afghanistan and Iran

#### Author: Dr. Bijan Rouhani, University of Oxford

In recent decades, climate and environment changes have severely affected Afghanistan and Iran. The vast and historical region of Sistan, in eastern Iran and southwestern Afghanistan, is one of the regions that have faced severe environmental changes and prolonged drought. Livelihoods in this extremely arid area depend on its wetlands and rivers that originate in remote regions. Climate change, water mismanagement, tensions over shared water resources, changes in traditional irrigation systems, conflict, and instability have all caused a social and environmental crisis in this fragile landscape. Managing these environmental changes depends on coordinated cross-border cooperation.

Although the alarm of the recent environmental crisis in Sistan has been sounding for some time, its impact on cultural heritage has not yet been assessed. The EAMENA project, set up to document and monitor changes to archaeological sites in the Middle East and North Africa, examines the impact of these changes on traditional settlements and ancient sites in this historic landscape. By examining environmental information and overlaying it with data on the historic built environment, we try to understand what types of cultural heritage are primarily at risk and how.

## Climate Change as a Deteriorating Catalyst for Karamoja Sub-Region Culture Author: Mr. Peter Wasswa, IWR, Rhodes University

Culture is the total fabric of ideas, beliefs, customs, traditions, directions, languages, symbols, and other social patterns that distinguish a particular group of people from other groups. It is closely linked to a variety of key factors through climate change that have proven critical to affecting culture (Adger et al., 2009). The Karamoja sub-region is increasingly suffering from climate change in terms of drought and famine that have affected the pastoral nature of the inhabitants, which is their traditional culture, thereby threatening their own social structures. Despite the Karamajo's pasture-based cattle farming, the climatically stressed arid areas, in which they are living, which are characterized by high temperatures and persistent droughts, negatively impact their livestock and cattle herds due to lack of grass, which is directly seen in their habits and diet.

#### Research Plan on Early Warning Measures of Cultural Heritage under Climate Change – Taking the Summer Palace as an Example Author: Ms. Zhou Pingqian, School of Architecture, Tianjin University

At present, various countries have discussed extreme climate disasters, which is a meteorological disaster faced by the world. The United Nations action plan on water and disasters proposes that although the threat of global water disasters is increasing under the influence of climate change and human activities, the destructiveness of water disasters can still be reduced through prevention, preparation and planning. At the start of disasters caused by climate factors, including drought and flood, people often attribute the causes to bad weather events, such as long droughts without rain, or rare heavy rain, and so on. Another important factor causing disasters is the disaster resistance of the city itself. China's thousands of years of water conservancy at historical sites and water control cultural heritage are typical cases. Throughout the evolution of urban development, there has always been a close relationship between the Beijing water system and the city. The number of water disasters decreased in Yuan and Ming Dynasties, partly due to the rain and flood control in the northwest suburbs. In the northwest suburb, Kunming Lake in the Summer Palace is the water source guarantee. The declaration of the Summer Palace as a World Heritage Site clearly states that its climate and water quality are of practical value to Beijing's environmental protection. It also proposed to strengthen scientific research on the Summer Palace in order to better understand its value.

#### A Contribution to Understanding the Impact of Climate Change on Europe's Tangible Cultural Heritage

#### Author: Ms. Panagiota Manti, Ionian University, Dept. of Environment Co-Author: Mr. Marios Anagnostou, IERSD, National Observatory of Athens

The conservation and museum sectors are called upon to respond quickly to the impact of climate change on tangible cultural heritage. Scientific understanding of the risks involved, and evidence-based collection management and planning take priority over more traditional approaches to conservation. The risks involved with climate change are at least twofold: the increasing frequency of extreme hydrometeorological events, and the gradual yet fast-approaching change in climatic conditions. The sector has already adopted the 2030 UN Agenda, but a brief review of published work shows that research requires time. As time is of the essence, focused research and policy-making would be valuable. The paper presents an analysis of IPCC data on humidity, precipitation and temperature in Europe. The results of this worst-case scenario indicate a distinction between Northern and Southern Europe and may prove useful to policy makers who wish to develop regionally relevant solutions.

#### Local Climate Change Zones of Rosette City, Egypt

#### Author: Ms. Eman Abdelrhaman, The Egyptian Heritage Rescue Foundation

Rosette City is located in the west of Nile Delta in Beheira Governorate, Egypt. Overlooking one of the two Nile river estuaries to Mediterranean Sea, the livelihood of the population is based on fishing and fishing crafts, as well as industries intertwined with cultural tradition and knowledge. Rosette/Rashid is registered on the World Heritage tentative list, as it is has an influential cultural heritage throughout Egyptian history, especially Islamic architecture. The author presents a study to create a local climate change zone map scope with open source data linked to remote sensing data and GIS applications to represent a realistic representative of urban climate change. The cumulative impact of global climate change is obvious for both tangible and intangible heritage in Rashid, in relation to the ecosystem shifts affecting fishing areas, the sea-level rising affecting heritage sites. The zone map will assist in providing a precise assessment of the magnitude of this hazard colliding with other factors.

#### Stó:lō Cultural Heritage and Climate Change Author: Ms. Karen Brady, Stó:lō Research and Resource Management Centre Co-Author: Mr. Dave Schaepe, Stó:lō Research and Resource Management Centre

S'ólh Téméxw (Our Land, Our World) comprises the Stó:lo traditional lands of the lower Fraser River watershed in southwest British Columbia, Canada. Each year, S'ólh Téméxw experiences climate-related events that have the potential to negatively impact the safety and security of Stó:lo homes and communities, access to resources and services, and overall human and ecosystem health and wellbeing. Understanding climate change, its potential impacts, and the risk it poses is a fundamental step in climate change adaptation planning and increasing community resilience. In 2019, the Province of British Columbia developed a climate change risk assessment framework and carried out a preliminary assessment to understand risks to its residents, industries, infrastructure, natural resources, and ecosystems. It was acknowledged that this preliminary risk assessment could not adequately consider indigenous perspectives or cultural values without further engagement, which would follow in a second stage. The Stó:lo Research and Resource Management Centre has taken steps towards addressing this critical gap by highlighting the need to understand the impacts of climate change on indigenous cultural heritage, and exploring how best to include it in related risk assessments. This presentation provides an overview of the work to date and discusses the on-going needs and challenges involved in ensuring indigenous cultural heritage is central to climate change research and resiliency planning.

#### **Climate Open Mic & Positive Change Envisioning Exercise** Moderators: Ms. Aparna Tandon, Ms. Kelly Hazejager and Ms. Mohona Chakraburtty

This session aims to collect a landscape of hopes for the future, given the need for hope in order to inspire us to action, to have something to hold onto even in the face of conflicts as well as the global and complex issue of climate change. Emphasising the people-centred approach to heritage, participants were asked two questions to guide their imagination for the future: "What would you want your heritage to feel, taste and look like in 30 years? What do you want your legacy to be?"

# Climate Change as a Risk Driver for the World Heritage Site: Victorian Gothic and Art Deco Ensembles of Mumbai

Author: Ms. Sneha Kishnadwala, ICOMOS India

Research was conducted as a part of a scholarship program by Indian National Trust of Arts and Cultural Heritage (INTACH) Heritage Academy in 2020-2021, to prepare a climate risk assessment for the World Heritage Site, Victorian Gothic and Art Deco Ensembles of Mumbai. An evaluation of climate change risks to this site was done for three different time periods, i.e. 2030, 2050 and 2070. It assessed values of economic, social, and cultural (ESC) dependency for this World Heritage Site of Mumbai.

With this background research, adaptation and mitigation strategies need to be planned. Few of these strategies include 'building with nature' instead of combating climate change and its impacts. Also, with the World Heritage Site being a part of the commercial capital of the country, it has become important to safeguard the economic values along with the possible vulnerability to the outstanding universal values of the ensembles of Mumbai.

This presentation explores the possible adaptation methods for climate change as risk drivers for the World Heritage Site: Victorian Gothic and Art Deco Ensembles of Mumbai.



#### Hopescape: Vision for the Future of Heritage

Image showing a collage of hopes for the future by conference attendees

#### Workshop | Every Place has a Climate Story Moderators: Ms. Marcy Rockman and Ms. Jui Ambani

How can people talk about climate change in ways that capture its human elements? In ways that have meaning in all the places people live, even if those places don't have commonly visible climate impacts, such as rising sea levels or melting glaciers? In ways that connect what people see and feel with what needs to be done? Learning to find and tell climate stories is one answer to all of these questions. This workshop presents climate stories as a way of bringing together climate change, heritage, and place in clear and meaningful narratives.

#### The Story of Aswan the Famous Winter Resort Facing Climate Change Author: Ms. Amira Elsayed, Egyptian Heritage Rescue Foundation

Aswan is one of the most ancient communities and cities in Egypt, which dates back to the 4000 BC. It is an unique place where the community depends on tourism for income. The warm winter weather has always been an attraction for many, since the Roman times. The place is known for its beautiful natural and cultural landscape, unique Nubian architectural heritage and rich traditional knowledge located at the Nubian villages. However, it if now facing extreme weather conditions that has never been witnessed in Aswan before. With the help of examples, such as the ancient systems of rainwater management, such as the shafts present in the ancient Egyptian tombs, this presentation reflects how the climate is changing in the area through ages and the various ways the community is adapting to the change.

# Day 4 | 27.01.2022

#### Ignite Talks | Climate Change, Culture and Peace in the Pacific Region Moderators: Ms. Anita Smith and Ms. Catherine Forbes

The Pacific region is characterized by small landmasses and large intervening seascapes. Oceanic places of cultural significance are vulnerable to rising sea levels and ocean temperatures, changing currents and more frequent and intense storm activity. Land-based heritage places are vulnerable to coastal erosion. Intensification of coastal development exacerbates the natural threats while salination is affecting food and water security, forcing migration to new lands.

The larger landmasses of Australia and New Zealand are particularly vulnerable to rising temperatures, long-term reduction in rainfall, more regular and intense extreme weather events, as well as microclimatic changes that affect plant and animal habitats. Natural and cultural heritage is affected directly by wildfires, drought, diminishing wet tropics, rising snow lines, and insect spread (e.g. termites). Indirect impacts may result from the implementation of mitigation and adaptation measures to address water, food and power insecurity.

This session considers how people, institutions and governments are preparing for and responding to loss or damage to culture and heritage. It also considers a range of indigenous and non-indigenous heritage places and responses based on traditional knowledge and practice, western scientific knowledge, or innovative convergences of both approaches.

#### Erromango Cultural Association and the Netai en Namou Toc Initiative Author: Ms. Anna Naupa, Erromango Cultural Association in Vanuatu Co-Authors: Mr. Jeffry Yaviong

The compounded challenges of depopulation legacies following European contact and increasing contemporary environmental stresses due to climate change make efforts to record, revive and restore cultural heritage in Vanuatu considerably complex. Recognising this challenge, in 2021 the Erromango Cultural Association (ECA) embarked on a Netai en Namou Toc initiative – Stories of our Mother Ocean - to capture traditional stories relating to the sea, and consolidate traditional coastal knowledge. With the generous support of the One Ocean Hub's DEEP Fund, the ECA – a grassroots cultural heritage association dedicated to the island of Erromango in southern Vanuatu - has navigated a number of fast currents to realise the objective of capturing traditional ocean knowledge before it is rapidly lost, whether as our elders pass on or as sea-level rise erodes or swamps coastal sacred places. This presentation shares examples of traditional storytelling and artistic strategies we have used to safeguard heritage in the face of climate change.

#### Aspirations for a Proactive Approach to Climate Change in Aotearoa Author: Ms. Rebecca Ramsay, Archaeology - Cultural Heritage Implementation, Heritage Unit,

Auckland Council

Co-Authors: Ms. Emma Ash, Archaeology, Auckland War Memorial Museum

As an island nation, the archaeological record of Aotearoa/New Zealand is particularly vulnerable to the exacerbating effects of climate change, particularly sea level rise. While there has been concern for some time about the impacts of climate change on cultural heritage sites and places, there is no coordinated national approach to proactively protect cultural heritage, nor a clear stream of available funding.

This presentation introduces the NZAA's strategic plan to advocate for greater cooperation across the heritage sector and recognition in national and regional policy, while providing a consistent national approach to identify and address the impacts of climate change on cultural heritage. Secondly, it highlights The Noises Project, which hopes to demonstrate how archaeological investigation of an eroding coastal midden, coupled with matauranga Maori, can be used to support anecdotal and contemporary environmental data in the development of climate change responses, resource management plans and conservation.

Benjamin Jones – University of Auckland doctoral candidate in partnership with the National Science Challenge Coastal Research Programme – also contributed to this presentation.

#### Indigenous Story of Hope for a Climate Chance Author: Dr. Anne Poelina, Chair of Indigenous Studies and Senior Research Fellow Notre Dame University

As Indigenous Australians, First Nations from the oldest living culture in the world, we have not walked away from 'nature'. Our diverse cultures and knowledge have a law of obligation through Customary First Law custodianship of lands and waters throughout not only 'deep time' but for all time. Significant to Kimberley Indigenous families and communities is the iconic Martuwarra, also known as the Fitzroy River. All living creatures are interrelated with the Martuwarra which, in turn, gives life not only to humans and other species, but also to the water's cultural and nurturing flow. Such qualities have been, and are, endangered by industry. The author shares as an insider the Martuwarra's integrated human, cultural, spiritual and environmental qualities – especially by foregrounding its enduring and intertwined relationship with Indigenous Traditional Owners – and how past and present industrial threats to the Martuwarra are being assessed and resisted by the influence and continuity of First Nations Laws and Knowledges, being in and on Country, and the intrinsic value of indigenous storytelling, to create hope, climate justice and a climate chance.

Anyone interested in Green Crime in Australia and the destruction of Indigenous sacred sites and culture as world heritage is encouraged to watch A Place Called Juukan Gorge, broadcast on the SBS Viceland channel. See this link: https://www.sbs.com.au/ondemand/watch/1964513859994

#### Panel | Adaptation in Action

#### Moderators: Mr. Thierry Joffroy and Mr. Abhiyant Tiwari

Adaptation is not something that happens once. It is something that must be integrated into on-going practice. This session questions where energy for adaptation comes from, and which organizations and values keep it going.

#### Synthetic Technics and Interdisciplinary Approach for Cultural Heritage in the Time of Natural and Man-Made Disaster

Author: Dr. Mohamed Soliman, National Research Institute of Astronomy and Geophysics

This contribution adopts an interdisciplinary approach to dealing with cultural heritage at times of disaster, using advanced technology, based on relevant case studies. Geospatial databases and analyses are required to figure out the LULC change in urban cultural heritage. One of the historical maps associated with the most recent satellite images was constructed for Alexandria and publicized for scholars and stakeholders. Geophysics applications in cultural heritage are guite a known procedure. Alexandria is exposed to land subsidence and building collapses, frequently, which threatens lives and properties. Three areas have been investigated using LOZA-V GPR technique. Interpretation diagnoses the land subsidence for archaeological assets under the urban area.

Geodesign utilizes the previous techniques to innovate a change model to the Downtown Alexandria Geodesign Project and achieve sustainable development goals of national sustainable development goals, Egypt 2030, based on nine land use categories, focusing on cultural heritage, environment, and urban mobility. Qaitbay Citadel VR project modules cultural heritage at risk, using Ricoh Theta technic at a low price, and a system that became easier to use in the form of applications. In the same context, 3D modelling is a sophisticated technique that digitizes museum collections, especially in countries under an armed conflict that exposes collections to destruction, looting, and smuggling. Generating meta shape of Kyoto Archaeological Museum objects opens gates to maximize the benefits.

#### Synchro-Trawling in the Skagerrak: a Media Ethnography Author: Mr. Joseph Puglisi, University Münster

For 700 years the North Sea coast of Denmark was a common resource, free to any fisherman with the grit and knowledge to work its dangerous waters. With new mechanisms of commoditization, fishing rights have become shares to be bought and sold on the market. As a result, the seas have been enclosed and relegated to capitalistic exploitation. But what does enclosure look like in the open sea? And how can we develop a cartographic practice of autonomous rebellion?

Based on thick ethnographic research, this presentation offers insights into the last community-based fishing collective in Denmark: The Thorupstrand Fishing Guild. It details the guild's commitment to lowimpact fishing methods, its positionality as an activist group, and its re-appropriation of local AIS media to develop a catalogue of the ecological disaster taking place off its local beach by multinational corporations. By analysing these and other aspects of the guild's political project, the presentation makes the claim that tactical victories have been won, even as strategic losses have simultaneously been incurred. Can counter mapping the ocean make sense? Or is it a tactic worth throwing overboard?

#### Added Value: The Role of the Red Cross in the Protection of Cultural Heritage Author: Ms. Marcela Szalanska, Newcastle University

Whether people choose to acknowledge it or decide to ignore it, cultural heritage forms a part of everyone's life. It is an integral part of human history that shapes our culture, identity, and sense of belonging.

Subsequently, its damage and destruction can impact the well-being of individuals, groups, or even entire societies. In recent years, the protection of civilians and the protection of cultural property have become increasingly linked and is now strongly emphasised as a humanitarian imperative. This presentation examines the role of the International Red Cross and Red Crescent Movement in the protection of cultural property. The movement is the biggest humanitarian organization in the world, not only helping people in need during conflicts and disasters, but also supporting governments with legal matters during times of peace.

The work presented herein includes case studies from the International Committee of the Red Cross, the International Federation of the Red Cross and Red Crescent. The aim is to identify common goals within the movement and the different challenges that are faced by the constituent parts of the movement in relation to the protection of cultural heritage.

#### Opportunities to Develop Response with Culture-Based Mitigation to the Future Water Security Problem

#### Author: Ms. Gamze Özmertyurt, Yıldız Technical University

This presentation discusses the role of traditional underground water systems in providing water security, which is one of the consequences of the expected climate crisis, through examples. Examining the history of traditional groundwater systems is the first step. The main point of the study is the methods and techniques used in the climate crises, experienced by the local people in the past, the adaptation to the regional conditions, and the potential to turn the success of the resistance into an opportunity in future crises.

#### Qait'bay Citadel (1477-1479): Visualizing the Main Coastal Fortification of Medieval Alexandria, Egypt

Author: Dr. Mohamed Soliman, National Research Institute of Astronomy and Geophysics

In the time of natural/man-made disasters, VR technology became a requirement for digital humanities. Tourism is one of the hardest hits by the COVID-19 outbreak, in the same context the typical humanities research, basically, archaeology affected as well. Exceptional restrictions and a state of emergency that is imposed everywhere prevent aviation and local mobility, so the importance of VR application has emerged, as the Qait'bay Citadel will be available to scholars and the public interested in cultural heritage. The fire at Notre Dame Cathedral in Paris in April 2019 made the world aware of the necessity of 3D laser measurement data and panoramic images of Notre Dame Cathedral left behind by the art historian Andrew Talon (died 2018). Accordingly, visualizing the Citadel of Qait'bay is targeted as a module for documenting the cultural heritage at risk, where the citadel is exposed to seismic and tsunami threaten. In addition, a tool that was once expensive is now available at a low price, and systems that require specialized knowledge are becoming easier to use in the form of applications. On the other hand, this project comes within a framework of strengthening cooperation between Ritsumeikan University and E-JUST, in terms of developing the advanced technology applications in cultural heritage to achieve the SDGs of NSDS Egypt vision 2030.

#### Climate and Culture - Aiming to restore 'the fine balance'

Authors: Ms. Bhasha Shah and Ms. Anuja Mukherjee, The City Palace Museum of Udaipur

Udaipur is like an 'oasis' at the southern end of the semi-arid state of Rajasthan in India and the City Palace complex is strategically located on a hill top surrounded by the Aravalli ranges at the banks of Lake Pichola. The City Palace Museum is housed in this iconic 450 year old structure. The macro setting of the Palace along with the micro elements in its architecture such as lime based thick walls, open courtyard spaces in the complex, etc. ensure naturally cooler interiors and proper ventilation. This has helped in maintaining ambient conditions within the Museum and preserving the collection. Lately, it has been observed that the heritage structure and the collection are getting adversely affected due to change in precipitation pattern causing water seepage, staining and bio deterioration and overall high humidity inside the galleries and storage spaces. Steps have been taken by the Museum to tackle these problems like waterproofing of terraces and innovative storage solutions focussing on reducing financial and environmental costs. However, unless this subject is seen as a product of climate change and combined efforts are not made, this problem will only escalate harming not only the cultural heritage but also the local communities connected with it.

#### Ignite Talks | How Culture Sparks Solutions Moderator: Mr. Carl Ampah

The concept of "nature-based" solutions is becoming widely known in climate adaptation, but culture-based solutions are not yet well recognized or developed. This session sparks ideas for growing culture-based solutions.

#### Experience Working in the Intersection between Humanitarian Aid, Cultural Heritage and the Environment in the Gaza Strip Author: Mr. Anthony Dutemple, Premiere Urgence Internationale Co-Author: Mr. Rafif Al-Amassi, Premiere Urgence Internationale

Opting for the space provided by the "Ignite Talks", Premiere Urgence Internationale (PUI) reflects on its experience working in the intersection between humanitarian aid, cultural heritage and the environment in the Gaza Strip (GS), with its innovative project "INTIQAL". PUI is an INGO, supporting vulnerable individuals and communities affected by humanitarian crises across the globe. INTIQAL launched in 2017 and utilizes elements of cultural heritage preservation, environmental awareness and socio-economic development to promote local resilience and well-being. This is achieved through:

1. The rehabilitation of two archaeological sites in the GS; 2. The incorporation of sustainable energy options within these sites for the local communities to tackle the well-documented power shortages;

3. The provision of awareness raising and training on cultural heritage. Using INTIQAL as an entry point, PUI asks and attempts to answer the following question: "Why should a population facing extreme conflict-related adversity care about or act against climate change or other environmental concerns?"

For PUI, the answer emerges by looking at the tether between land and the Palestinian cultural identity.

#### Cultural Heritage - an Underplayed Resource for Mitigation, Adaptation and Resilience Author: Mr. Khwezi Mpumlwana, National Heritage Council and Zenalia Consulting

The author reflects on 25 years of work and interactions with community-based heritage as a resource for mitigation, adaptation and resilience, in contexts of peace, sustainable development and climate change. The presentation reflects on the ways in which the potential of culture has often been overlooked, and options for correcting this overlooked situation. Ideas are shared that take account of geographic, cultural, linguistic, and technological diversity that are relevant to correct the underplayed role of culture in securing mitigation, adaptation, renewal and resilience on matters of peace, sustainable development, or even pandemics.

#### Kafr Agab Historic Centre as a Cultural and Environmental Hub Author: Ms. Shatha Safi, RIWAQ- Centre for Architectural Conservation Co-Author: Mr. Saja Mansour, RIWAQ- Centre for Architectural Conservation

The proposal for the restoration of the historic centre of Kafr 'Aqab, a Palestinian neighbourhood in East Jerusalem, creates an environmental, social and cultural hub for the local community. The project is the outcome of a collaborative effort made with local institutions, administrations and, most importantly, the local community. It moves through different scales to include infrastructural and landscape interventions as well as targeted measures at the building scale for the restoration of historical fabrics. The program includes a play area for children and eco-kitchens for the women's association, as well as spaces for cultural activities and local institutions.

To strengthen the connection with the location's rural history and promote an environmentally friendly approach, the project emphasizes local materials (limestone, crushed pottery and sand) for reconstruction. In addition, the project adopts green practices including rainwater collection, greywater irrigation, reviving a water spring, and the integration of vegetation as a key design component. Green areas are conceived as social activators to promote interaction between community members and shared agricultural practices, offering new quality spaces away from pollution and urban densification.

#### Stingless Bees, Climate Change, Cultural Heritage and Indigenous knowledge Author: Prof. Peter Kwapong

Stingless bees are highly eusocial bees that form colonies typically comprising one queen and thousands of workers. They are among the most abundant pollinators in tropical ecosystems across the globe, where they are known to visit flowers of over 200 plant families. Their ecosystem service of pollination results in fruit and seed formation for the sustenance of livelihoods and populations of many human and animal communities. The seeds from trees help grow the forest back, helping to combat climate change and maintain cultural heritage. They also produce and store valuable medicinal products like honey, pollen and propolis and hence maintain peace to society. There is therefore the need to conserve these bees. In 2006, the author set up a sanctuary of stingless bees in Ghana, the International Stingless Bee Centre adjourning the Kakum National Park for research, training, environmental education and ecotourism.

#### Greening Cultural and Creative Industries Author: Ms. Mohona Chakraburtty, ICCROM

UNESCO's representative list of the Intangible Cultural Heritage of Humanity aims to recognize the diversity of cultural practices and raise awareness. In 2021, the 'Durga Pujo of Bengal' - an annual festival celebrated in the cultural capital of India, Kolkata - was added to this list. Celebrated to pay homage to the Hindu goddess Durga, the inclusive character of the festival is amplified by the active participation of the Muslim community in Bengal. Artists, potters, ritual drummers and many others are dependent on this festival for their livelihood. Yet, in a world where climate change is causing cyclic disasters and shaping the future of conflicts, what is the impact of such cultural practices on the environment? Over 50 festivals are celebrated in India every year, where magnificent idols are crafted, worshipped and immersed in the holy rivers. Traditionally moulded out of clay, straw and bamboo, these idols are now being made out of non-biodegradable materials, which adds excessive amounts of harmful chemicals to the water. While these festivals and cultural traditions bring communities together and generate livelihoods, they are also posing a threat to the environment and amplifying the risk of water wars between India and its neighbouring countries.

#### Panel | Connecting Culture and Nature Knowledge

#### Moderators: Ms. Eugene Jo and Mr. Abhiyant Tiwari

Indigenous and traditional knowledge combines human practices with deep understanding of local environments. This session identifies various benefits of using this knowledge and these experiences for sustaining different ecosystems.

#### Water-Climate-Culture Nexus: Revivifying Indigenous Water Wisdom for Climate Resilience

Author: Mr. Vignesh Kesavan, Indian Institute of Science (IISc), Bangalore

India is referred to as the land of culture for its different and unique traditions, which diversify every 1,000 kilometres. The philosophy of considering every natural element as sacred shaped the traditional practices, which present the local community as environmental guardians rather than exploiters. Water is inextricably linked with Indian culture, as righteously managing water is considered one of the primary duties of ancient communities. Worshipping rivers and safeguarding local water bodies are ritualistic in view of protecting Mother Nature. The community's sense of responsibility for proper water management is explicit through their water-sensitive indigenous practices, which are needed to handle the climate crisis. Thus intrinsic water ethics and wisdom linked with regional culture show the ideal pathway to leverage water heritage for climate resilience. The Indian subcontinent is rich in traditional water wisdom. Ancient communities in different parts of India practised diverse water management practices and possessed regional hydrologic wisdom. This presentation attempts to analyse how indigenous water practices of South India, known as 'ERIs', are in salvage to combat climate-induced water scarcity. On-site research at more than 50 villages gives an overview of the current status of indigenous knowledge, the impact of ancient water institutions, Indian cultural waterscapes, and reasons why rural areas are still preserving the local water wisdom.

#### Climate Change and California Archaeology Author: Mr. Michael Newland, Environmental Science Associates

#### California is on the front lines of the impacts of climate change. Catastrophic fires, drought, and coastal erosion threaten the state's cultural heritage. Archaeology and archaeologists are being used in new ways to help recover from these impacts and to build resiliency going forward. Recent cultural resource legislation has given the tribal community greater say over what happens to their cultural heritage, and as large infrastructure projects loom to build resilience for climate change and to accommodate continuing development in the state, tribes, agencies, and archaeologists are engaged in finding a common language for discussing the best way forward, in terms of physical, cultural, and spiritual impacts on resources. The state's archaeological society continues to move forward with inventorying the state's coastal heritage before it is gone. This presentation looks at the new role that archaeologists are playing in mapping out the impacts to sites, and working with tribes to find consensus about how best to protect the natural and cultural resources of our shared home.

#### Nature-Culture Solutions - Working Together to Strengthen the Resilience of Heritage Places

Author: Ms. Nicole Franceschini, World Heritage Leadership programme, ICCROM Co-Authors: Ms. Maya Ishizawa and Ms. Eugene Jo, World Heritage Leadership programme, ICCROM

The proposed contribution focuses on introducing participants to the PANORAMA Nature-Culture Thematic Community. It focuses on sharing nature-culture solutions where the interlinkages between nature conservation and the safeguarding of cultural heritage are crucial for the effective management and sustainable development of heritage places. It presents place-based and people-centred approaches that highlight the relationship between nature, culture and people, providing a source of knowledge exchange and peer learning between World Heritage Properties, heritage places and practitioners from diverse fields. The thematic community looks both at challenges that heritage places face as part of management, as well as global challenges such as climate change, adaptation and resilience and vulnerable socio-cultural environments.

The Nature-Culture Thematic Community aims to build a community of practice focused on learning from and being inspired by successful approaches implemented elsewhere, as well as to collect evidence for meaningful bottom-up policy-making. Collected and shared data/experiences are used to better inform policies, heritage institutions and structure internationally, nationally and locally.

#### Bartjan – Sámi Summer Gathering in Jämtland, Sweden. A Climate Risk Assessment of the Cultural Landscape and Sámi Community Author: Ms. Therese Sonehag, Swedish National Heritage Board

Bartjan highlights the situation in general for Sámi communities and Sámi cultural heritage sites in Sápmi, covering the northern parts of Norway, Sweden, Finland and Russia. Climate change affects structures and environments directly, and has an indirect effect by changing the usage of the area. Climate mitigation measures, such as wind turbine farms and mines for minerals used in windmills and car batteries, also indirectly affect the traditional way of reindeer herding. This is a very important business for Sámi communities as well as an intangible heritage and a traditional lifestyle in close relationship with nature and climate seasons. The reindeer herders act as an early warning system for climate change effects since they experience the changes on a daily basis. The reindeer react to changes by changing their moving pattern, away from insects and away from heat, searching for pastures. The freeze-thawing winters make it harder for the reindeer to find food, which has forced the herders to support feeding. In addition to the impact of climate change, an increased interest in land use makes it even harder to maintain the traditional way of herding. A large part of the Sámi cultural heritage originates from reindeer herding. The Swedish National Heritage Board initiated the case study as associative partners of Adapt Northern Heritage, a project in Northern Periphery and Arctic Programme 2014-2023. The case developed in partnership with Tassasen Sami community, who manage the site, and Foundation Gaaltije.

#### Panel | Adaptation Through Built Heritage Moderator: Mr. Rohit Jigyasu

Buildings must be adapted to climate change through learning of the processes to build, maintain and restore them. This way, they can help the human communities live better with climate and related stresses. This session explores understandings and approaches that have been developed and areas where more work is needed.

#### Environmental Adaptation and Socio-cultural Mitigation Approached in Built-Form and Occupational Patterns: (Lessons learned from the Vernacular Red Sea Architecture of Suakin, Sudan)

#### Author: Mr. Elobaid Mohammedali, Omdurman Islamic University, Faculty of Architecture and Planning

This contribution is presented as an article, and it falls within the theme of culture-based mitigation and adaptation. Hence, this study explores the sort of environmental and socio-cultural manifestations that contributed towards shaping the specialness of built-form expressions along with built-form perceptions regarding the Vernacular Red Sea Architecture of Suakin, Sudan. For limitations of this study, only residential buildings will be taken into consideration by conducting a critical discussion and visual analysis for three case-studies to examine the extent to which built-form expressions, built-form perceptions and functional duality of occupational usage patterns are approached there, in a way that offers a wide range of flexible, built-up configurations with seasonal variability features that suited both the socio-cultural requisites associated with the local environmental distinctiveness within the region. It is expected that this study will not only contribute towards the retrieval of such specialness of built-forms figuratively, but rather will pave the way towards preserving the wisdom of occupational patterns used there as the result of the simultaneous plurality in dealing with dynamic environmental and socio-cultural manifestations within that particular built-environment.

#### Control and Maintenance for the Sustainable Conservation of Built Cultural Heritage Author: Prof. Francesca Piqué, SUPSI, University of Applied Sciences and Arts of Southern Switzerland

Built cultural heritage is continuously affected by climate and its change, which hinders the preservation of monuments worldwide and requires regular attention and care. In collaboration with the Office of Cultural Heritage, SUPSI is developing guidelines for control and maintenance programs to mitigate the effects of climate, reducing the risk of losing built heritage significance. The objective is to provide support to owners and to conservation professionals to develop a control and maintenance plan to address the need of the heritage and the priorities identified. The regular control of the state of conservation of the heritage and the implementation of maintenance operation can help to keep built heritage stable over time and avoid costly interventions. The objective is to promote a culture of conservation not determined by emergencies but based on a preventive and programmed vision. Several cases have demonstrated the effectiveness of this approach, both in the respect of the cultural significance of the object and from the economical point of view. Over time (10-20 years), it is less demanding on the original fabric and cheaper to conduct regular control and maintenance operations rather than to wait to have a large problem and carry out a large-scale intervention. The guidelines proposed provide both methodological and operational guidance to encourage early identification of problems, which allows for early action.

## Learning from Heritage for Better Resilience Author: Mr. Thierry Joffroy and Mr. David Gandreau, Craterre/AE&CC/ENSAG/Univ.Grenoble Alpes

For the last 40 years, CRAterre has been inspired by traditional earth building techniques to propose solutions for improving people's living conditions. Actually, building with what is just under your feet presents some very interesting potential, though needs to be done with special care, and according to the specificities of the local climate. Rather technical at its origins, CRAterre's approach has gradually evolved into a more cultural one, better taking into account the cultural aspects and the various knowledge and know-how associated with it, often resulting from a longstanding local experience. From settlement localization to building maintenance, but also aspects of co-living with the non-human, there is often much that can be learnt from local practices, which are still very useful today for reflection on improving people's living conditions, with potential to identify ways by which societies have already adapted in the past to their changing environment, which can today help people reflect on the required preparation for climate change.

#### Beirut's Built Heritage after the Explosion of August 4th 2020 Author: Ms. Alia Fares, University of Cologne

An account of the immediate effects of the August 4th 2020 explosion in Beirut on the built heritage and urban weave of the city. A review of the recovery work that has been undertaken to date, and an analysis of what is still required in order to return city life to a new normalcy. An exploration of the societal changes this has led to, as the city witnessed new civic society engagement with its architectural legacy, the effects of disaster and climate change on it, and public efforts to valorize and preserve the city's heritage.

## Small Insular Territories : Landmarks of Climate Change Author: Ms. Noro Ravoavahy, LABEX AE & CC - CRATerre

The author aims to remind everyone the existence of multiple risks. The topic is not new but really stressful and seemed to be played down until the sanitary crisis covid 19. First, with the tragedy of the archipelago of Kiribati that will soon disappear. After the extensive tsunami in the Indian Ocean (Sumatra, 2004), for which it is said that ever occured a long time ago and could be the origin of malayo-polynesian migration from Hawai to Madagascar... After Haïti since 2010 until today, where natural and sanitary disasters go at fiercely and unrelentingly... After the eruption of the Eyjafjallajökull volcano (Island, 2010) that stopped the World... After Fukushima natural disaster (Japan, 2011) that lead to nuclear disaster then to sanitary disaster... I think that today after the first, second, third ....sanitary crisis covid 19, it is time to broaden multirisk culture facing unexpected and cumulative tragic events for efficient mitigation and resilience : make the unexpected a main parameter and an acceptable event, due to the fact that we have no choice, for risk schooling and to manage climate change better.

#### Workshop | The Futures We Write for Climate, Culture, and Peace: Dystopias or Utopias?

Moderators: Ms. Zeynep Gül Ünal, Ms. Zeynep Ece Atabay and Ms. Zeynep Egeli

This multi-disciplinary workshop contributes to the Climate. Culture. Peace initiative by inviting all willing actors to think together about the interconnection between climate, culture and peace and how they impact each other. The participants work in teams to imagine the best and worst possible futures - a utopia or a dystopia - in the year 2050, taking into consideration critical factors with regards to climate change, culture and peace. The participants imagine how these factors may evolve and the role that cultural heritage may play during the process. The teams prepare and present their scenarios as the outcome of the workshop. Participants from diverse backgrounds are invited to contribute to the team's effort by drawing from their personal knowledge and experience unique to their field and affiliation.

#### Panel | Heritage as a Source for Innovation and Coping Capacities Moderators: Ms. Sarah Stannage, Mr. Mahmoud Soliman and Ms. Marcy Rockman

Heritage does not belong to a distant past; it is living and evolving. Moreover, methods and means of working with it can be a source of profound creativity and new applications for climate change-driven stresses, conflicts and disasters. This session presents several unique situations that developed sparks of innovation from culture and heritage.

#### The Oasis of M'hamid El Ghizlane in the Face of Climate Change Author: Ms. Aziza Chaouni, University of Toronto

This contribution shares the process and outcomes of a unique oasis revival project that resulted from decade-long efforts to use the preservation of cultural heritage to better combat desertification in the oasis of M'hamid El Ghizlane, Morocco.

Located at the very end of the famous Drâa Valley, a UNESCO Biosphere, the oasis of M'hamid el Ghizlane has suffered tremendously in the past decade from climate change effects such as lack of precipitation, depleting underground water resources, increased temperatures and advancing sand dunes. This led the inhabitants to abandon cultivating their oasis and either leave to large cities or turn to tourism for livelihood. Unfortunately, the forms of tourism that emerged aggravated the existing water crisis: large concrete hotels with pools over-pumped the meagre underground water resources that remained.

Against all odds, the Joudour Sahara Music School, which has been offering free classes to children and youth, has turned the faith in the oasis around. The preservation of the rich and diverse musical heritage of M'hamid El Ghizlane, which encompasses several ethnics groups in one geographic location, coupled with training and recording opportunities, ecotourism activities, permaculture and new anti-desertification systems, all present at the school, have created a powerful precedent to retain populations locally and encourage them to safeguard their traditions against climate change pressures.

#### Disaster Archaeology – Adapting Archaeological Methods to Recover Human Cremated Remains from Catastrophic Wildfire Areas Author: Mr. Alex DeGeorgey, Alta Heritage Foundation Co-Author: Mr. Michael Newlad, Alta Heritage Foundation

Drought-like conditions in the western United States have contributed to a series of massive catastrophic wildfires. Indeed, the most destructive wildfires in California's history have occurred in the past few years, devastating whole communities, causing billions of dollars in damages and resulting in the loss of life. Oftentimes families keep the cremated remains of previously deceased family members within the home in urns or other vessels, which become lost when the wildfire destroys their home. Human cremains are endowed with significant sentimental meaning and the loss of these heirloom objects contributes to the emotional trauma suffered by wildfire victims. Alta Heritage Foundation is a non-profit organization of volunteer archaeologists and specially trained dogs who are working within wildfire disaster areas to help fire victims recover the remains of family members. Archaeological skills originally intended for studying the past are adapted to address contemporary issues and to solve problems thrust upon us by current events. Archaeology can play an important role in the recovery process following a wildfire disaster event. As archaeologists become engaged as recovery workers, their work can be instrumental in providing "closure" for wildfire victims.

#### The Saltmen of Iran - Cultural Heritage as Driver and Enabler of Sustainable Development and Growth

Author: Ms. Shahrzad Amin Shirazi, Research Centre for Conservation of Cultural Relics (RCCCR) Co-Author: Ms. Maruchi Yoshida, iCONYK GmbH and Natascha Bagherpour Kashani, Archäologisches Museum Frankfurt, Deutsches Bergbau Museum Bochum

This contribution presents the strategy and activities to preserve cultural heritage in Iran, a country suffering from political tensions, economic crisis caused by international sanctions and a global pandemic. Besides involving international and interdisciplinary scientists to find a way to safeguard the so-called salt-mummies, social awareness and community activation is considered as part of a preservation strategy. The presentation gives insight into the various activities and events that have taken place to reach a diverse community, from local populations to international scientists, to safeguard the heritage of the saltmen.

#### Curious Case of a City Called Ahmedabad

Author: Mr. Tanmay Gound, Gujarat Institute of Disaster Management Co-Author: Dr. Repaul Kanji and Dr. Abhiyant Tiwari, Gujarat Institute of Disaster Management

The COVID-19 pandemic has drastically impacted all walks of life. Although the impact of COVID-19 in terms of the number of cases and deaths is somewhat accounted for, the effect and impact, in terms of losses in different sectors, await confident comprehension. This research investigates the process of the risk, which contributed to faster transmission of SARS-CoV-2 and relatively higher deaths due to COVID-19, in the World Heritage (old) city of Ahmedabad. The motive behind this study is to understand how the city managed to cope with the effect and impact of COVID-19 and it was concluded that social cohesion, brewing out of the vivid culture of the city and the closely-knit inter- and intra-community relations, was one of the most powerful enablers. Finally, this study establishes the nexus between cultural heritage, disaster resilience and sustainable development and puts forth the agenda of mainstreaming these dimensions to foster the agenda of risk-informed sustainable development, in order to promote people-centred disaster risk reduction strategies.

#### Panel | Culture in Support of Carbon Budgets Moderators: Ms. Estelle De Bruyn and Mr. Terry Little

The heritage sector holds and uses carbon. Emitting less carbon is essential to slowing the progress of climate change and all the variability it brings with it. This session shares a range of approaches for understanding heritage carbon footprints and reducing them.

#### Documentation and the Digital Transition: What About its Future Sustainability? Author: Dr. Andreia Nogueira, TECHN&ART – Technology, Restoration and Arts Enhancement Centre, Polytechnic Institute of Tomar

A digital transition is being implemented and enforced to help mitigate climate change and achieve the green transition. This, however, should be analysed from two different angles: the carbon footprint of current digital archiving is not that environmentally friendly, with a high consumption of energy; and most of the digital content produced nowadays is in real danger of loss, because digital preservation strategies are not being accounted for, at least collectively, in the first place. Therefore, to think seriously about: 1) the preservation of performance-based artworks, often dependant on the production of complex and vast amounts of documentation (increasingly in digital format); and 2) the sustainability of the conservators' own work, is to get into the development of more efficient, sustainable and carbon-neutral digital preservation practices. Nevertheless, considering the difficulty in defining and creating such practices, this leads to the frightening reality that cultural and artistic heritage, and related memories, are in real danger of moving at an increasingly accelerated pace towards their disappearance. Important information that used to be available (mostly online) is not retrievable anymore, as is demonstrated here. Human, financial and natural resources were, in a way, wasted. With this comes the question: how can we deal with the digital transition in such a way as to implement sustainable and environmentally friendly preservation practices?

# Day 5 | 28.01.2022
# Material Scientists: Heritage Protection Makers from the Future? Author: Dr. Deborah Briccola, University of Applied Sciences and Arts of Southern Switzerland

What could be the interconnections between innovative materials, climate change, heritage protection and conflict resilience when looked at from a civil engineer's point of view?

During the civil war in Lebanon, the protection of large objects by concrete cases at the National Museum of Beirut saved invaluable treasures from barbaric acts. These walls also acted as sacrificial elements in case of blasts, which are likely to occur during conflicts. Therefore, this strategy is among the more promising when dealing with the problem of artistic heritage protection in conflict areas. However, concrete production is a well-recognized trigger of climate change as the amount of CO2 introduced in the environment is meaningful, causes environmental stress and could foster climate-related disasters. What is the role of innovative materials and innovative building strategies in this framework? Materials with enhanced dynamic properties such as metaconcrete, made out of demolition waste or plastic, tyres and rubber scraps, are viable alternatives to reduce concrete case thickness while preserving blast-resistance performance. Sacrificial walls made out of dismantled concrete elements could be another sustainable alternative to reduce the impact on the environment while taking care of heritage protection issues. Could these two examples be a common field of investigation for material scientists, policy advisors and practitioners to share experiences and contribute to a safer environment?

# The Mary Rose Investigation and Incremental Changes for Climate Action Author: Ms. Sarah Coggins, Mary Rose Museum

The Mary Rose Museum is committed to reducing its environmental impact, and acute stressors due to the coronavirus pandemic have made a move towards financial sustainability even more important. Advice and proposals for climate action for cultural institutions are often generalised, vague and not always viable. For example, institutions often have leases or arrangements with larger entities in which change is hard to enact. Museums also often have specific environmental parameters for objects in their collections, and detailed analysis and research are required to produce the confidence to alter them. The contribution of the Mary Rose Museum to the conference Climate.Culture.Peace is to highlight how an independent museum is currently investigating its energy use across its estate, and honing in on the use for different activities such as visitor services or conservation. The presentation describes how adaptations have gradually been put in place to attempt to reduce the museum's energy use through a slow process of investigation and evaluating risks to the hull of the Mary Rose and its collection.

This talk presents a real-world example of the slow progress of investigation and incremental changes that are vital for realistic climate action and increased financial sustainability for an independent cultural heritage site threatened by coronavirus restrictions.

# Comparison of Sector-Leading Initiatives for Sustainable Management of Collection's Environment

Author: Ms. Estelle De Bruyn, Royal Institute for Cultural Heritage (KIK-IRPA) Co-Authors: Dr. Helen Wilson, The National Archives of the United Kingdom; Mr. Peter Whitehead, National Library of New Zealand

Cultural institutions' mandate to optimally preserve their collections often encourages them to invest in heating, ventilation and air-conditioning (HVAC) systems to strictly control the indoor climate in their collection storage. These HVAC systems induce high operating costs and energy use. Today's context calls for a combined strategy, one that reduces an institution's environmental impact and at the same time sustains or even improves preservation conditions. Initiatives are taken worldwide to help cultural institutions become more environmentally friendly. The authors propose a roundtable where The National Archives (UK), the National Library of New Zealand and the Climate2Preserv consortium of partners (BE) share and compare their approaches. By discussing respective approaches, participants are given an overview of some sector-leading initiatives past and present from around the world. The objectives of the initiatives are similar: defining an optimal indoor climate and considering the requirements of the collections, the capacity of the building envelope and climate control systems and human needs. While objectives and methodologies can be shared, approaches and solutions will depend on the specific context and culture of each institution. The proposition aims at shedding light on this complexity, inherent in decisions around sustainable collections' care and seeing how sharing approaches can lead to creative propositions.

# Using AI to Detect New Archaeological Sites and Monitor for Potential Damages to Known Sites Author: Dr. Iris Kramer, ArchAl

In order to protect our heritage, people need to know where sites are located. ArchAl's Al technology has been used to map archaeological sites across England ranging from roundhouses to hillforts and field systems. ArchAl is currently developing technology to monitor threats to known sites ranging from coastal erosion to animal burrowing and vegetation. ArchAl is seeking collaborations to apply its technology and detect sites at risk across the world. This talk demonstrates current progress and discuss how AI can be a game-changer in the protection of

heritage under threat from conflict, climate change and modern development, allowing rapid assessments and response to loss and damage, moving from local to global scale solutions.

# Ignite Talks | At the Forefront of Culture, Heritage and Climate Moderator: Ms. Jui Ambani

As the world races to respond to the climate crisis, methods for connecting culture and heritage with climate change are evolving fast as well. This session shares some of the innovation that is underway and sparks ideas for more.

# Strengthening Cultural Heritage Resilience for Climate Change Author: Ms. Anne Grady, EU Commission

In accordance with the Work-plan for Culture 2019-2022, a new working group composed of member states' experts (Open Method of Coordination working group - OMC) commenced meeting in January of 2020. The title of the group is Strengthening Cultural Heritage Resilience for Climate Change. The group of experts is actively working on identifying and exchanging good practices and innovative measures for safeguarding cultural heritage in relation to climate change. The group is also examining the contribution cultural heritage can make to mitigating and combating climate change in line with the European Green Deal's goals. The final report and its recommendations are planned to be published later this year (2022).

# Climate Change is Orange

### Author: Dr. Veronica Bullock, Significance International P/L

'Our Common Future' identifies seven interlocking crises of sustainability. 'Climate change' is one, 'biodiversity loss' another. But these are the most scientific crises; five crises concern human peace and conflict more directly.

This 'Ignite' talk uses the seven colours of the rainbow, familiar to every culture, as aides-mémoire to the key differentiable elements of sustainable development proposed in 1986. Its aim is to reawaken the vital understanding of co-dependence: we focus on individual crises at our peril.

As a corollary to this serious, if colourful, message, the careful thinking evident in the Brundtland Report confirms it as a significant and still relevant part of our collective heritage.

# Heritage Responds - Taking Positive Action on Climate Change Author: Mr. Rob Woodside, English Heritage

Our heritage now faces unprecedented challenges from climate change. However, heritage can also be part of the solution. 'Heritage Responds' – a new publication and online resource – recognizes that the climate crisis can also be a catalyst for greater collaboration around the issues that matter most and sets out how the heritage sector is already taking positive action in addressing climate change through research, innovation, technology, advocacy, community engagement, building adaptation, decarbonization, nature-based solutions and skills training. This presentation sets out how heritage organizations can best collaborate and demonstrate the value cultural heritage can bring, not only in protecting what we value but also contributing to wider societal and environmental issues arising from climate change. The presentation draws from a diverse array of case studies brought together from government agencies, NGOs, advisory bodies, academic institutions and commercial practice.

# Archaeological Heritage and Vulnerability Indicators: a Brazilian Case Study Author: Dr. Aline Vieira de Carvalho, State University of Campinas (Unicamp) Co-Author: Ms. Luana Campos, Goias Federal University - Brazil

This presentation discusses research in the coastal land of São Paulo, Brazil, where public policies on archaeological heritage face a new scenario marked by extreme events that stress social and environmental issues. The authors discuss the archaeological heritage of the coastal strip, centred on the urban landscape of the north coast of São Paulo and in particular Ubatuba and Ilha Bela's City. The case study is presented as a laboratory for understanding the status of archaeological heritage in areas of socio-environmental vulnerability, and strategies for the integral management of this heritage. The research has three central objectives: 1) the creation of indicators of vulnerability for decision-making in the management of archaeological heritage; 2) the production of social cartography of the archaeological heritage of the north coast of São Paulo and a digital and public platform with data about the region; and 3) strategies for the formulation of public policies based on vulnerable archaeological heritage. For Climate.Culture.Peace the focus is on the methodology proposed by goal 1.

### How to Work with Multiple Actors in Times of Crisis? Samples from Wildfire in Turkey, 2021 & Archaeological Excavation Site of the Ancient City KELENDERIS Author: Ms. Saadet Güner and Prof. Dr. Mahmut Aydin, Kültürel Mirasın Dostları Derneği – KUMID (Friends of Cultural Heritage-FOCUH)

Due to climate change, raging forest fires in southern Turkey have caused huge devastation, with many people losing their homes and possessions and some their lives. Those fires also adversely affected the archaeological excavation sites in the region in July and August 2021. One of them was the ancient city "KELENDERIS" in Aydıncık, Mersin/Türkiye. Therefore, disaster preparedness measures were taken in KELEDERIS and evacuations were made to two different excavation areas. Once the danger had passed, the team, archives and equipment, such as portable XRF spectrometers, returned safely to KELENDERIS. The entire processes were documented in writing, video and photographs. Public awareness of the case was raised on national and international level, as well as on social media. Primary and secondary actors of the case predict that the disasters that threaten Kelenderis after the great forest fire will be floods and landslides that may occur due to the burning of the forests around it. For this reason, studies continue on those scenarios.

# Panel | Transdisciplinary Action to Recognize Loss and Enhance Sustainability Moderators: Mr. David Gandreau and Ms. Kelly Hazejager

How we approach sustainability is connected to how we think about loss and all the stages of action in between. This session shares experiences of interagency cooperation for sustainable development, dealing with crises, transforming heritage and learning how to let go.

# Heritage, an Inherent Parameter to Sustainable Development and Economic Growth Author: Dr. Nadine Panayot, American University of Beirut

The presentation starts with the geographical location of the site of Anfeh and its physical, natural and geological settings, as well as its flora and fauna, which have been systematically documented and inventoried. The socioeconomic settings are then explored, followed by a brief historical background with a highlight of the archaeological works conducted on land and underwater. The dual objective of natural/cultural ecotourism promotion and sustainable local economic development requires an integrated planning approach that builds on the existing natural, cultural and human capital of local areas, without adversely affecting this capital.

It then demonstrates how the outreach and awareness campaigns implemented by the archaeological team led to the declaration of Hima, which means "protected area" in Arabic, which is a communitybased approach used for the conservation of sites, species, habitats and people in order to achieve the sustainable use of natural resources. The Hima concept incorporates good governance means, doubled with a bottom-up approach, empowering the members of the civil society and giving them the right to be involved, to communicate and to decide what should be protected and what should not be, within the limits of their own direct environment (city, town, village), ensuring a smooth transition towards sustainable practices and the development of economic growth.

# Learning from Loss: Reflections on Eroding Heritage Author: Mr. Tom Dawson, University of St Andrews / SCAPE Co-Author: Ms. Joanna Hambly, University of St Andrews / SCAPE

Introduction and short film recorded in the Orkney Islands. Participants from the USA and Scotland visited threatened heritage sites around the Scottish coast as part of the 'Learning from Loss' project, organized by the SCAPE Trust and the University of St Andrews. The project culminated in a trip Sanday, a low-lying island to the north of the Scottish Mainland. The group met with local residents, some of whom had previously worked with SCAPE on a community project to rescue prehistoric structures exposed on a beach. The group visited threatened structured discussion sessions during the trip, interviews were recorded and a film recorded participants' views on heritage value.

# KulturGutRetter (KGR) – An Emergency Mechanism for Cultural Heritage in Crisis Situations

Author: Ms. Constance Domenech de Celles, German Archaeological Institute Co-Authors: Mr. Tobias Busen, German Archaeological Institute and Mr. Christoph Rogalla von Bieberstein, German Archaeological Institute

Although cultural heritage is particularly vulnerable to all types of climatic hazards, it remains under-integrated in the national and international disaster risk management processes. This lack of integration slows down the implementation of immediate safeguarding measures that are key in reducing further losses and destructions of damaged cultural heritage during the recovery and reconstruction phases. To protect and preserve cultural heritage in all phases of a crisis, it is thus necessary to develop dedicated rapid intervention mechanisms that can be deployed in the immediate aftermath of a climatic disaster to provide first aid.

To answer this challenge, the project KulturGutRetter (KGR) has been launched by three German institutions representing both the disaster management and the cultural sectors. This one-of-a-kind cooperation leverages the German expertise in heritage preservation and rapid response intervention by bringing together the German Archaeological Institute (DAI), the Federal Agency for Technical Relief (THW) and the Romano-Germanic Central Museum-Leibniz Research Institute for Archaeology (RGZM). The KulturGutRetter mechanism – currently in its development phase – will combine an operational team and efficient procedures that can be quickly deployed worldwide after a climatic, natural or man-made disaster, to assist in securing, preserving and salvaging cultural heritage objects and buildings.

# Responsible and Restorative Heritage Tourism for Scotland Author: Ms. Chiara Ronchini, Historic Environment Scotland Co-Author: Ms. Vanessa Glindmeier, Historic Environment Scotland

We often read about sustainable tourism or heritage tourism, but rarely about 'sustainable heritage tourism'. Sustainable heritage tourism needs to be both responsible and restorative to reduce greenhouse gas emissions to achieve net zero, whilst maximizing benefits for its local communities. What does this mean for cultural heritage tourism? How can cultural heritage tourism be part of the solution in climate action and protecting human connections? This presentation aims to demonstrate that heritage tourism is instrumental in tackling the climate emergency and supporting community wealth building. It shows how Historic Environment Scotland (HES) – the lead public body responsible for understanding, protecting and celebrating Scotland's historic environment and the largest operator of paid visitor attractions in Scotland – embarked on a journey towards a more responsible, restorative heritage tourism. This presentation examines how HES put Responsible Tourism on top of the agenda and how this translates into real practice. Two case studies illustrate the steps that the organization has taken towards responsible tourism, working with communities in the Heart of Neolithic Orkney World Heritage Site and Doune Castle. As this is only the beginning of a long journey for HES, this is an invaluable opportunity to share lessons learnt with other organizations facing similar challenges.

# Workshop | Vulnerability, Capacities or Justice?

Moderator: Ms. Ksenia Chmutina

Cultural heritage is not only seen as a sector that needs protecting from the impacts of climate change but also as a source of strengths for the communities and individuals. There is however very little understanding of the actual contributions of cultural heritage towards capacity development; little is also known about cultural heritage as a potential source of vulnerability. This session explores to what extent actions towards mitigating and adapting to climate change actually enhance capacities (and whose capacities), and whether a broader appreciation of root causes of vulnerabilities (in particular, those related to systemic oppression and justice) are at all considered in the current approaches to reducing the risks of climate change.

# The Flood of Trogir's Heritage: a Future Threat or a Present Fact? Author: Ms. Jasna Popović, Ministry of Culture and Media of the Republic of Croatia

When the city of Trogir was founded by ancient Greeks in 3rd century BC, the islet it was built on, placed in a sea strait between the terraferma and the island of Čiovo (Central Dalmatia, Croatia), presented a strategically well-chosen point for a newly established commune. Protected by two landmasses and by the sea, and well fed by fertile fields in its surroundings, the commune flourished for almost two millennia. It is in fact due to this urban continuity that the Historic City of Trogir was recognized as a World Heritage site in 1997. But what a dramatic turn we are witnessing: the low-lying point that has been its most advantageous characteristic for ages is now becoming a weakness.

Due to the same topographic effects, and with the addition of the southeast wind Jugo, mainly in the colder part of the year, sea level rises by several metres causing flooding, damage and destruction of coastal infrastructure, making the historic core of Trogir one of the most endangered points in the Dalmatian region. The sewage system is flooded, it leaks and the drain covers break. Everyday life is hampered and about 450 residential and business buildings (mostly ground floors and basements) are endangered and often damaged. This affects the lives of about 2,000 permanent residents and workers on the islet, posing a significant threat not only to built cultural heritage but cultural practices as well.



Image showing the result of 'Moving Forward' - a group activity conducted during the 'Vulnerabilities, Capacities or Justice?' workshop

# Discussion Forum | Growing Ways to Learn and Share

### Moderators: Ms. Aparna Tandon and Ms. Jui Ambani

As understanding of climate change grows, so too grow our needs and methods for learning and sharing it. This forum presents three developing approaches to knowledge and information sharing about climate change. It identifies ways in which to promote such exchanges globally.

# Obstacles and Tools for Climate Change Education – Experience of Office for Climate Education

# Author: Ms. Gabriel Brunnich Dunand, Strategy and Partnerships Officer, Office for Climate Education

The essential role of education in addressing the causes and consequences of anthropogenic climate change is increasingly being recognized. The complexity of climate change education (CCE) poses significant challenges for education systems around the world. Teachers are having to learn multidisciplinary and evolving climate science, while managing the expectations of young people in the face of this information.

This presentation outlines some of the obstacles facing CCE and proposes a framework for implementing effective CCE in schools, which includes robust climate knowledge, social constructivist pedagogies, the development of critical thinking skills and the enactment of learners' feelings, values and actions. It presents some of the IPCC report-based tools developed by the Office for Climate Education (OCE), addressing the scientific and societal dimensions of climate change, while developing students' critical thinking skills and guiding them to take action in their schools and communities. It also touches upon the OCE's CCE pilot project in Latin America.

# Biodiversity and Culture on the School Grounds

### Author: Ms. Shari L. Wilson, University of Wisconsin-Stevens Point

Biodiversity is declining. Many schools are surrounded by asphalt, with little connection to the community they serve. Community members have cultural traditions and practices to help schools manage their grounds in ways that are healthier for people and the planet. Imagine the difference between biodiversity and climate change, cultural relationships and understanding if school grounds were full of plants supporting pollinators and birds, community art and spaces for thinking, talking and engaging in healthy activities. Through an empowering international curriculum supported by a website, www.schoobio.earth , students can take the lead. Currently in development, this curriculum will connect students around the world to engage in projects leading to more ecological school grounds that reflect their cultures through symbolism, food, art and activities. This Ignite Talk explores how school grounds can become ecological havens for diverse species while reflecting the cultures of their students and community.

# Heritage in our Hand and Climate in our Mind Author: Ms. Amira Elsayed, Egyptian Heritage Rescue Foundation

Children and youth are a force that needs to be aware, to have a clear focused view for what heritage is. Why does it have significance and a direct relation on their lives? How does it bring joy and science, and open their minds to discover spaces and times that they need to reveal? They also need to identify types of hazards and detect vulnerabilities in order to avoid direct impacts on their lives, environments and heritage. How can a series of dedicated workshops help in training the importance of the community to deal with the context of climate change, and become seeds for protecting heritage and inspiring peace?

# Wisdom at Risk

# Author: Mr. Samuel Franco Arce, Casa K'ojom Cultural Rescue Centre

Wisdom at Risk is a presentation about how a Cultural Rescue Centre located in Antigua Guatemala, a UNESCO World Heritage Site and a city historically affected by earthquakes and volcano activity, began in 1987 as a Documentation Centre of Intangible Cultural Heritage of the living Maya communities of Mesoamerica. It started with the mission of documenting in the field through audio-visual media and displaying a permanent multimedia exhibit to raise awareness about the uniqueness of the cultural expressions and knowledge of these communities, but also to raise awareness about the fragility of its preservation and the risks that threaten ancestral traditions and practices. Concerned about the vulnerability of the region, the centre has evolved into an educational option that also raises awareness about developing a culture of prevention and preparedness for emergencies to safeguard against threats to cultural heritage caused by nature or humans. Through capacity-building activities and infrastructure, the centre provides a learning experience to the visitor of the exhibit. Beyond its walls and geographical borders, through the "Ambulance of Culture" project, supported by the Prince Claus Fund-CER, Cultural Emergency Response program and ICCROM's methodology, the centre has become a hub of the region of Central America and the Caribbean, to assist cultural institutions and sites, through in-person and hybrid capacity building, in-situ risk and damage assessment, and first aid to cultural and documentary heritage.

# Panel | The Lusophone Perspective on Climate.Culture.Peace

Moderators: Mr. João Pedro Otoni, Mr. Xavier Romão and Ms. Esmeralda Paupério Language: Portugues (simultaneous interpretation in English)

The impacts of climate change on communities and their cultures do not spread evenly across the globe. This panel proposes, through a perspective of Portuguese-speaking countries, to debate the risks to which we are exposed, as well as articulating a collaborative network for the exchange of knowledge and practices.

# Climate Change as a Risk Factor for Culture and People, an Approach for Mozambique Author: Dr. Regina Charumar, Movimento Ambiental Geração Consciente Co-Authors: Professor Dra. Lucília Chuquela, ICOM-Moçambique; Daniel Inoque, ICOM-Moçambique

Climate change, transformations that occur in the climate over time, cause natural disasters that jeopardise social well-being and the safety of people and communities, creating a situation of uncertainty. Culture and people are the main victims of the impacts of climate change. It is essential and urgent to invest in environmental education and awareness, and at the same time strengthen the responsiveness and resilience of vulnerable communities.

# Heritage, Climate and Resilience. Challenges of Risk Management in Small Island Countries. Case of Cidade Velha, Cape Verde

Author: Mr. Hamilton Fernandes, Instituto do Património Cultural de Cabo Verde

Issues relating to the safeguarding of cultural and natural heritage assets, particularly those inscribed on the World Heritage List on the African continent, require an overflight of the social, political and economic contexts of each country where these assets are located. As a continent marked by instabilities, ravaged above all by successive wars and terrorist attacks, coups d'état and cyclical crises, causing a shortage of primary goods, where the priorities have been the survival and subsistence of communities, measures for the preservation of cultural and natural heritage are no longer imperative. In addition, the purpose of our reflection requires this introductory analysis, before we focus on our study space - Historic Site of Cidade Velha (Cape Verde), which despite being geographically located on the African continent, presents a stable social and political framework. This fact has reflected on the country's attitude towards the concepts of management and enhancement of cultural and natural heritage, especially the risks to which they are exposed and the challenges for their mitigation.

# Implications of Climate Change on Culture and Nature Conservation in Bijagós, Guinea-Bissau

# Author: Mr. Meio Dia Sepa Maria Lé Có, Organização para a Defesa das Zonas Húmidas na Guiné-Bissau

The effects of climate change on the environment in the Bijagós leads to the cultural dimension being affected by the climate crisis. The environment is what shapes the way of life of the Bijago people by providing means of subsistence, and integrates their collective memory, the imagination and the arts. Changes, consequently, modify the entire system built over centuries: ways of relating to the environment and managing available spaces and resources. The extreme temperature, rainfall irregularity and rise in the mean sea level can damage the longevity of traditions dependent on the conservation status of the Bijagós Archipelago.

# Climate Change and Public Policies for Cultural Heritage: the National and State of Minas Gerais Context, Brazil

Author: Ms. Daniele Ferreira, IEPHA – Instituto Estadual do Patrimônio Histórico e Artístico de Minas Gerais

Co-Author: Professora Dra. Aline Carvalho, ICOMOS - Brasil / Unicamp

Studies on climate change are carried out at various levels (national, state and municipal) and indicators are often proposed considering large territorial areas. This proposal presents the Brazilian general framework and, in particular, the actions of the Committee on Climate Change and Heritage linked to ICOMOS Brazil, and then work specifically in the State of Minas Gerais, where diverse data on climate and geographic aspects, and a climate change vulnerability index are available. However, this information is sparsely used in cultural heritage preservation policies and there are still no indicators capable of translating the exposure of cultural assets to risk or damage considering the specificities of the territory in which they are inserted. Currently, a working group has started with the aim of presenting a proposal for action by the state cultural heritage agency after the occurrence of an extreme rain event earlier this year, which demonstrates a convergence with studies aimed at risk management and planning of contingency action associated with damage and climate risk, and it is intended to present this experience and a little of the state context on this theme.

# The 2017 Forest Fires in Portugal: Lessons for Cultural Heritage Author: Ms. Esmeralda Paupério, ICOMOS-Portugal, Universidade do Porto Co-Author: Professor Xavier Romão, Universidade do Porto

The 2017 fires in Portugal destroyed forests, but also countless lives and properties. However, the amount of cultural heritage (CH) affected, in particular archaeological heritage, remains unknown. The existing gaps regarding baseline data (e.g. reliable georeferenced data on the CH) and the fact that there was no systematic survey of these impacts on the ground with teams specialised in CH, did not allow for an organized and systematized view of the impacts of these fires. In this context, the presentation addresses some changes that may improve the response to an upcoming event.

# Workshop | Dialogue and the Root Causes of Climate Crisis Moderators: Mr. Braden Paynter and Ms. Linda Norris

Building on presentations, discussions, performances and other interactions held during the five days of the Conference, the closing session of Climate.Culture.Peace identifies actors, stake and right holders, emergent needs, as well as strategies that can help promote heritage safeguarding and contribute to a fair and inclusive climate action. The session features Ignite Talks, followed by a lively discussion with an expert panel, key aspects of which are captured live in the form of drawings, helping to visualize culture-based pathways for lasting peace, disaster risk reduction and climate action for people and heritage.

# Heritage in Climate Action – Stepping Forward in Policy, Research and Practice Moderators: Ms. Aparna Tandon and Ms. Marcy Rockman

Building on presentations, discussions, performances and other interactions held during the five days of the Conference, the closing session of Climate.Culture.Peace will identify actors, steak and right holders, emergent needs, as well as strategies that can help promote heritage safeguard, and contribute to a fair and inclusive climate action. The session will feature Ignite Talks, followed by a lively discussion with an expert panel, key aspects of which will be captured live in form of drawings, helping to visualise culture-based pathways for lasting peace, disaster risk reduction and climate action for people and heritage.

# Cooling Kemeralti: Havra Street

### Author: Mr. Ozden Coskun Oner, İzmir Metropolitan Municipality Co-Author: Mr. Hamidreza Yazdani, İzmir Metropolitan Municipality and Ms. Gulben Ozsoy

The Cooling Kemeralti Project proposes creating an alternative green route (cool streets) to the existing main commercial route. Urban cooling will be achieved by planting traditional ivy on the route. Recycling systems such as rainwater and grey water are planned to be used in the irrigation system. After the implementation, the micro-climatic data will be collected to monitor the effects of the ivy. Also, these data will be shared with the visitors and the users of the area to get their feedback and raise their awareness about climate-sensitive design solutions. The pilot implementation started in Havra Street. All communication, energy, storm water, drinking water, sewerage and lighting lines were renewed in an energy efficient manner. Then a canopy made of flameproof mesh fabric was installed through the street. Ivy was planted at 11 points to be wrapped around the canopy. The adaptation of the lighting system provided the mitigation of the carbon emissions and energy efficiency. The separation of sewer and storm water lines prevents sewage floods on heavy rainy days. The canopy increases the pedestrian thermal comfort.

# Walking as embodied research in emergent Anthropocene landscapes Author: Mr. Nick Shephard, Aarhus University, University of Pretoria

"Walking is the speed for noticing – and for thinking. The Table Mountain Walking Seminars suggest just how much we need walking to imagine alternatives to the intertwined human and non-human catastrophes of the Anthropocene." Anna Tsing (in Shepherd et al 2018:1). In 2014, the author began convening walking seminars on Table Mountain, South Africa, together with the researcher Christian Ernsten and the documentary photographer Dirk-Jan Visser. Each seminar involves a mix of scholars, artists, curators and activists, and results in a variety of work: journal articles, musical scores, photographic essays and creative non-fiction. This short talk sets out the thinking behind the walking seminars, drawing on a variety of sources: recent interventions in the environmental humanities, decolonial thinking and practice, arts-based research methods and ideas around embodied research and the senses. Not least, it draws on the long history of writing about walking as a way through which to engage the world, and intervene in social scenarios. As we enter the ambiguous new epoch of the Anthropocene, and as familiar landscapes change and degrade, people need – more than ever – to pay attention, to notice, to take care. For scholars, this arguably involves leaving the "white cube" of the seminar room, for more materially involved and implicated forms of engagement with research subjects. The humble, everyday act of walking offers one route towards such modes of engagement.

# The Establishment of a Sustainable Tourism Management System for Biodiversity Conservation and Sustainable Development in the UNESCO World Heritage Site Vallée de Mai

Author: Ms. Cheyenne Chang-Yunn, Seychelles Islands Foundation

The UNESCO founded project aims to establish a sustainable tourism management system for the UNESCO World Heritage Property Vallée de Mai in Seychelles. Despite Seychelles protecting 50 percent of its terrestrial territory and 30 percent of its marine territory, key threats to wildlife and natural heritage persist. Climate change impacts, invasive alien species, poaching, forest fires and overuse of biodiversity are serious threats that need to be communicated and addressed. The project outputs will include a visitor science app to enrich the visitor experience by providing additional information during the visitation, while also encouraging the visitor's participation in the science and monitoring programme. This new tool will also engage the local community and youth groups and underline the importance of biodiversity and species only found in the World Heritage Property. One of the outcomes of the project is an enhanced information flow between the different stakeholders involved with the World Heritage Property and a better understanding of the different needs of all. To ensure appreciation of the biodiversity values of the site, visitor experiences should be enhanced for biodiversity conservation and sustainable development.

# Integrating Community-Based Solid Waste Management in Preserving Lamu's Heritage

Author: Ms. Maureen Mokeira Kombo, Kenya Marine and Fisheries Research Institute Co-Author: Ms. Purity Chepkemboi and Mr. Kenneth Otieno, Kenya Marine and Fisheries Research Institute

Lamu Town, the oldest and best-preserved Swahili settlement in East Africa, has experienced inordinate population growth, resulting in waste management challenges, particularly plastics leaking into marine ecosystems causing adverse impacts on the environment. This study aimed to reduce the quantities of litter from land-based sources and their impacts on the UNESCO World Heritage Site. This was achieved through interviews with opinion leaders and youths from beach management units and environmental groups, and training on solid waste management that was represented by Lamu Arts and Theatre Alliance, Volunteer Radio Lamu, Jicho la Tatu, youth entrepreneurs and fishers. From the discussions, the youths unanimously (95 percent) hold that solid waste is a problem in Lamu, with most of the waste being disposed of in open dumps, beachside and along the streets. 70 percent of youth are aware of the existence of environmental groups in Lamu town. 82 percent of youth residents have no access to waste bins. 88 percent, 65 percent and 59 percent of youth consider plastic, fishing gear and glass as significant marine pollutants, respectively. A total of 97 bags were collected from the beach clean-ups, weighing approximately 2,102 kg. With the island's inability to handle the generated waste, there is a need for more awareness creation on waste management to the general population, and future collaboration should be considered amongst relevant stakeholders to address waste management in Lamu Old Town World Heritage Site.

### **The Closing Session**





Visual representation of the final reflections of the conference. Source: Christopher Malapitan

# **Speaker Profiles**

Ms. Christine Abboud Abou Jaoude, Université Paris Nanterre Christine Abboud Abou Jaoude is an architect and urban planner/designer with a Master's degree in Innovation Management and Sustainability. She is also writing a thesis on sustainability in a post-conflict situation.

Ms. Prerna Singh, Editor Platform Anthropocene Inc. Prerna Singh is Editor at Platform anthropocene Inc. and has extensive experience in communications and journalistic roles involving research, interviewing, writing, editing and publishing in national as well as international platforms. She has also freelanced as academic editor for various publications and NGOs.

Mr. Yohei Kiyonaga, Agency for Cultural Affairs, Government of Japan Yohei Kiyonaga has an MA in Engineering in Environmental Design focused on Historical Environmental Design in Japan. He started his career in the field of conservation on built heritage as a researcher at National Research Institute of Cultural Properties in Nara in 2004. Since 2007 he has been working for the Agency for Cultural Affairs in Japan as a Senior Specialist for Cultural Property focusing on Conservation of Architectural Cultural Property.

### Ms. Kelly Hazejager, Consultant, ICCROM

Kelly Hazejager is a Dutch-Singaporean historian with a Bachelor's degree in History and a Master's in Heritage and Memory Studies. She has been working with ICCROM since the beginning of 2021 on researching and developing the Sustaining Digital Heritage initiative. Kelly recently joined the FAR team as a content writer and copyeditor. During the Climate.Culture.Peace conference she developed the website and social media content, and post-conference, she will lead the development of the web portal as a knowledge and networking hub.

Dr. David Harvey, Associate Professor of Heritage Studies, Aarhus University David Harvey is an Associate Professor of Heritage Studies in the Department of Archaeology and Heritage Studies at Aarhus University, Denmark, and has developed a strong international reputation as a historical-cultural geographer specialising in the field of heritage studies. He is also the Research Programme Leader for 'Materials, Culture and Heritage' within the School of Culture and Society at Aarhus.

Dr. Aleida Ten Harkel, Researcher, University of Oxford Letty ten Harkel is part of the EAMENA team at the University of Oxford, and is working on projects in Lebanon, Sinai (Egypt) and the Marshes of southern Iraq. She specialises in the archaeology and heritage of (relatively) recent time periods, from about 1,500 years ago to the present day, with a particular interest in settlement archaeology and material culture.

# Day 1

### Dr. Ahmed Shams, Research Consultant, University of Oxford (Endangered Archaeology in the Middle East and North Africa — EAMENA project)

Ahmed Shams teaches the MA International Cultural Heritage Management (ICHM) at Durham University and is a research consultant at the School of Archaeology, University of Oxford (Endangered Archaeology in the Middle East and North Africa – EAMENA project), as well as a fellow of the Royal Geographical Society (RGS). Dr Shams is the founder of Sinai Peninsula Research (SPR). His current cross-disciplinary research focuses on knowledge-making, mapping and mapmaking; cartographic archaeology; landscape, archaeology and politics; cultural ecosystem services; watershed management; and land-use and ownership in Sinai Peninsula and the Middle East and the Alps.

# Ms. Hannah Lewis, Programme Manager, Safina Projects

Hannah Lewis is the Programme Manager of Safina Projects, a creative practice she co-founded in 2017 with Rashad Salim, which works to protect and revive the endangered traditional boats and vernacular heritage of Irag through art and participatory research projects that engage the public in Irag and internationally.

# Ms. Mara Visonà, University of Siena and University of Salento

Mara Visonà is a PhD student in Sciences for Cultural Heritage at the University of Salento, and Research Fellow for the Archi.Maremma Project at the University of Siena. They are specialised in Landscape Archaeology, GIS analysis and Geoarchaeology, with a particular interest in 'marginal' landscapes and their role in economic, political and social history.

# Dr. Yapeng Ou, Researcher, ICOMOS Italy

Ou Yapeng holds a PhD in Urban Regeneration and Economic Development and is a researcher in rural-urban regeneration, sustainable development and civilization dialogue. He is also the co-editor of a book on global irrigated rural landscapes as well as a member of the Interim Steering Committee of the UNESCO Global Youth Community.

# Ms. Alessia Strozzi, Conservation Officer, Italian Ministry of Culture

Alessia Strozzi works as a Conservation Officer and is responsible for the Education & Research Area for the Italian Ministry of Culture. She is currently on leave at the Louvre Abu Dhabi Museum and holds a M.Sc. in paper & book conservation from ICPAL, Rome 2016. She is specialised in Disaster Risk Reduction for cultural heritage and was the project manager of the workshop Preparing Cultural Heritage to Emergencies with the support of ICCROM, as well as being a mentor coordinator for ICCROM's FAR-CollAsia project and online learning coordinator for PREVENT workshop.

# Mamadou Samaké, Head, Cultural Mission of Gao

Ms. Ana Paula Gomez, Strengthening Museums Program, National Museum - Ministry of Culture Ana Paula Gomez currently works as a contractor advisor for the Strengthening Museums Program of Colombia's National Museum - Ministry of Culture. She is in charge of the conservation and management of the country's museum collections. She graduated as a conservator and restorer of movable cultural heritage from the Externado University of Colombia, and holds a master's degree in Art History from the La Sapienza University of Roma.

Dr. Heather Hurst, Director of the Proyecto Regional Arqueológico San Bartolo-Xultun, Skidmore College Heather Hurst holds a Ph.D. in archaeology and uses visual documentation paired with both qualitative and quantitative methodologies to study the past, supported by decades of fieldwork in Mesoamerica. She is currently the director of the Proyecto Regional Argueológico San Bartolo-Xultun, Guatemala, an international, multi-institutional collaboration.

Prof. Pilar Montero Vilar, Professor, Universidad Complutense de Madrid Pilar Montero Vilar is a Professor of Painting at Faculty of Fine Art, Complutense University, Madrid. Her research fields include conceptual art, new media, conservation on new media, methodology research, risk management in cultural heritage, project management and quality management applied to contemporary heritage. Currently, she is the Director of GREPAC, a Research Group on risk management and emergencies in cultural heritage, and is the principal investigator of the Observatory of emergencies in cultural heritage at the Complutense University of Madrid.

Ms. Virginia Gonzalez, Director, Historical Museum of Sarmiento Virginia Gonzalez is the Director of the Sarmiento Historical Museum and President of ASINPPAC (International Association for the Protection of Cultural Heritage). She holds a Bachelor's in Museology and a Master's in Management and Management of Museums. She is currently writing her master's thesis in art history. She is a professor at the Universidad of Social Argentinian Museum and professor at the National School of Museology. She is also the advisor for various national institutions on the diagnosis of collections, as well as the conservation, restoration and salvation of documentary collections.

# Day 2

### Prof. Laurajane Smith, Australian National University

Laurajane Smith is professor and director of the Centre of Heritage and Museum Studies, Research School of Humanities and the Arts, the Australian National University. She is a fellow of the Society for the Academy of the Social Sciences in Australia and founded the Association of Critical Heritage Studies. Professor Smith has been the editor of the International Journal of Heritage Studies since 2009. She is the co-general editor with Dr Gönül Bozoğlu of Routledge's Key Issues in Cultural Heritage, and author of Uses of Heritage (2006) and Emotional Heritage (2021) and editor with Natsuko Akagawa of Intangible Heritage (2009) and Safeguarding Intangible Heritage (2018).

### Ms. Anna Hyland, Heritage Consultant, Lovell Chen

Anna Hyland is a heritage consultant working at Lovell Chen, an Australian multi-disciplinary heritage practice. Her work focuses on strategic heritage management, in particular, through the development of conservation and heritage management plans and tailored policy documents.

### Dr. Helen Mallinson, Project Manager, Western Sudan Community Museum

Helen Mallinson is an architectural designer and writer, as well project manager for the Western Sudan Community Museum project funded by British Council CPF and Aliph Fund (2018-2022). Previously she held senior academic positions at the London Metropolitan University. She also holds a PhD in Humanities and Cultural Studies.

# Dr. Maya Ishizawa, World Heritage Leadership programme

Maya Ishizawa is a heritage specialist focused on the management of cultural landscapes and the study of nature-culture interactions in heritage places. Trained as an architect in Lima, Peru, she received a Master of Media and Governance from Keio University, Japan, and a Ph.D. in Heritage Studies at BTU Cottbus-Senftenberg, Germany. As a full-time researcher at the University of Tsukuba, Japan, she coordinated the capacity building programme of the UNESCO Chair on Nature-Culture Linkages in Heritage Conservation. Currently, she works for the ICCROM-IUCN World Heritage Leadership Programme, and serves as scientific coordinator of the ICOMOS/IFLA ISCCL.

# Ms. Janaína Welle, Doctoral Student, State University of Campinas (Unicamp)

Janaína Welle is currently a doctoral student in Environment and Society at the State University of Campinas (Unicamp) where she is developing her research on the representations and narratives of extractivism in the Brazilian Amazon from national documentary film. Since 2015 she acts as tutor and project advisor at the International Documentary Film Festival Acampadoc (Panama).

Dr. Aline Vieira de Carvalho, Researcher at NEPAM, State University of Campinas (Unicamp) Aline Vieira de Carvalho is researcher at the Center for Environmental Studies and Research (NEPAM), at the University of Campinas (Unicamp), in Campinas, São Paulo, Brazil and the coordinator of "ProfHistória/Unicamp" and of the Laboratory of Public Archaeology Paulo Duarte (LAP) also at Unicamp, which investigates themes of Material and Immaterial Heritage, Public Archaeology and Environmental History. At the moment, she is working on the impact of climate changes in the Brazilian archaeological heritage and is also a professor in the post-graduation program at Unicamp.

Ms. Isobel Griffin. Head of Conservation. National Galleries Scotland Isobel Griffin has a first degree in the History of Art from the University of Cambridge. She trained as a wall painting conservator at the Courtauld of Institute of Art, and she also has a PhD in heritage science. She has spent most of her career as a preventive conservator and conservation manager, working for National Museums Scotland, the National Trust for Scotland and the National Library of Scotland, before taking up her current post as Head of Conservation at National Galleries Scotland in 2019. She is an accredited conservator, and her professional activities include chairing the IIC Technical Committee, which selects and reviews the papers for the biennial congress, vice-chair of the Institute of Conservation's Scotland group, and membership of B560, the UK mirror committee for CEN/TC 346 -Conservation of cultural property. In her role as Head of Conservation, Isobel chaired the organisation's COP26 working group. This involved delivering a programme of public engagement and undertaking several collaborative projects with other organisations in Scotland.

Dr. William Deadman, Postdoctoral Research Associate, Durham University William Deadman completed a BSc, MA and PhD in archaeology at Durham University, and is now a Postdoctoral Research Associate with the Endangered Archaeology in the Middle East and North Africa project at the same institution. His PhD examined the distribution of Bronze Age tombs in Southeastern Arabia, with his areas of interest including the use of GIS and remote sensing, and the landscape archaeology of Arabia and the wider Middle East.

Ms. Enas Alhssiek, Libyan Department of Antiquities Enas Alhssiek has an educational background in Antiquities and Tourism and professional experience in the map archive and with maps database data. Her work includes training employees of the Antiquities Department in using the GPS programme.

Dr. Nik Petek-Sargeant, Marie Skłodowska Curie Actions Fellow, University of Cambridge Nik Petek-Sargeant is an archaeologist and historical ecologist currently holding a Marie Skłodowska Curie Actions fellowship at the University of Cambridge. He has undertaken archaeological and anthropological fieldwork in Kenya, Tanzania, Comoros and Madagascar and worked on commercial projects in the UK, Slovenia and Germany.

### Mr. Omar Mohammed, Sciences Po University

Omar Mohammed is a historian from Mosul, known until recently only as the anonymous blogger 'Mosul Eye'. Through Mosul Eye, Omar set out to inform the world about life under the Islamic State in his city. He is the host of the podcast series Mosul and the Islamic State, which tells untold stories from inside the Islamic State's reign of terror, the pursuit of justice in its aftermath, and the enduring struggle of the people of Mosul for a better future. Omar is currently teaching Middle East History and Cultural Heritage Diplomacy at Sciences Po University. His focus has now shifted to the advocacy of social initiatives for the people of Mosul, including the international effort to re-supply Central Library of the University of Mosul. At the intersection of media, academia, and civil society. Omar is motivated to develop new networks of collaboration and innovations in humanitarian action. As a historian and lecturer at the University of Mosul, he focuses his scholarly work on conceptual history and research.

### Ms. Nirzary Pujara, Conservation Architect, Self employed

Nirzary Pujara is a Conservation Architect from India, currently residing in the United Arab Emirates. Belonging to India's first World Heritage city, she has worked on various scales and typologies of cultural heritage projects, including UNESCO and the World Monuments Fund. She holds expert skills in the area of Built Heritage and Urban Conservation, Cultural Landscapes, Conservation Management plans, Impact assessments and Analytical research. She is an active member of ICOMOS and one of the finalists of UNESCO's Young Professionals Programme 2021.

### Dr. Zeineb Youssef, Assistant Professor, ISAM Mahdia

Zeineb Youssef is an Architect and Assistant Professor at ISAM Mahdia (University of Monastir). He holds a Ph.D. in architecture and is a member of the research laboratory LarPa at National School of Architecture and Urban Planning of Tunis (University of Carthage), Tunisia.

# Dr. Hellen Almoustafa, Sanliurfa Tourism Development INC

Hellen Almoustafa is a cultural heritage expert and Archaeologist of Syrian nationality, based in Turkey, with a PhD in ancient near eastern archaeology under the topic "Urbanization in Upper Mesopotamia During Bronze Age". She is also Co-founder of Gönül Köprüsü Association, whose main concern is preserving cultural heritage and the rehabilitation of damaged archaeological sites especially in conflict zones; raising awareness about the value of the nation's heritage and the importance of this heritage in the economic chain.

### Mr. Bhola Saha, Assistant Professor, The Assam Royal Global University & CRRP India

Bhola Saha is an Architect at heart and a Disaster Risk Reduction Professional by passion. He is keenly interested in Nature-Based Solutions (NBS) in Disaster Risk Reduction, Climate Change Adaptation (CCA), Eco-DRR, Water Governance and Community Engagement. He holds several positions including being a founding member of CRRP India and an Assistant Professor at the Royal School of Architecture, Assam, India.

Dr. Marta Pucciarelli, Researcher, University of Applied Sciences and Arts of Southern Switzerland Marta Pucciarelli is researcher at the Institute of Design at the University of Applied Sciences and Arts of Southern Switzerland SUPSI. Her research focuses on the accessibility of cultural heritage to promote cultural and social inclusion of peripheral communities. She holds a PhD in Communication science on the digital representation of an African city and a master's degree in technology-enhanced Communication for Cultural Heritage at USI, Lugano. Since 2014 she has been working at SUPSI on international research projects aiming at improving digital access to cultural heritage and institutions through open collaborative projects, open data, and dissemination activities.

# Dr. Chiara Arrighi, Assistant Professor, University of Firenze, Italy

Chiara Arrighi is currently an assistant professor of hydrology and hydraulic works at the department of Civil and Environmental Engineering, University of Firenze (Italy). Since 2018 she has been a scientific consultant for the CIMA Foundation (Savona, Italy) for the project "Building disaster resilience to natural hazards in Sub-Saharan African regions, countries and communities".

### Mr. Salem Ahmed Saeed Hamdiah, Chairman, Socotra Society for the Conservation of Endangered Flora

Salem Ahmed Saeed Hamdiah is the Scientific project local coordinator at the Franklinia Foundation and Mendel University and the Chairman of Socotra Society for the Conservation of Endangered Flora. He is also a Member of World Network of Island and Coastal Biosphere Reserves (WNICBRs), Menorca Spain and South Korea. He is currently undertaking a PhD at the University of Ljubljana, Biotechnical Faculty.

Dr. Salwa Abedelhameed, UNESCO National Commission for MAB program and World Heritage Salwa Mansour AbdelHamid Ibrahim has a master's degree in Natural Pasture Environment, and did her PhD in Wildlife Ecology in Colorado, USA. Throughout her professional career, she was involved in numerous environmental and ecological missions, conferences, workshops and trainings in Sudan and abroad. Since 2001, Ms. Ibrahim is the chairman of the National Committee for Man and the Biosphere (MAB).

Mr. Saleh Amokrane, Culture, Parks and Biodiversity & Sustainable Development, Algeria Salah Amokrane has a PhD in Ecology and Environment. He worked as the director of the national museum of Zabana d'Oran, as well as the national Maritime Museum in Alger, where he has conducted various conservation and preservation work. Since 2014, Mr. Amokrane is working as the national director of the (project). Whereas in 2016, he joined the cultural committee of the national commission of UNESCO in Alegeria as a specialized archaeologist.

Dr. Mohammad Sameh Antar, Wadi Al Hitan, Egypt Mohammed Sameh represents the Egyptian Government as a focal point for Natural World Heritage (UNESCO) as well as a member of the World Commission of Protected Areas (WCPA). He is also a visiting professor in Kafr El Shekh University, lecturing on vertebrate paleontology and paleoenvironment since 2015. His current responsibilities include developing central protected areas in Egypt and developing Geology, planetology, and management the geological sites in Egypt and supervising Nature World Heritage sites in Egypt (Wadi El Hitan) and mapping and documenting skeletal remains at paleontological sites (Wadi El-Hitan, Gabel Qtrani, Siwa Qattara Depression).

Ms. Haifaa Abdelhaleem, World Heritage 4 All, Jordan Haifaa Abdalhaleem is a Master of Art student in Management and Development of Heritage and Touristic sites. She is now a co-convener for the IT theme for the new global Initiative "Our World Heritage" and also the Vice-Chair and trustee for Friends of Sogotra Association. Haifaa has worked for IUCN for more than 12 years and been the driving force behind the successful IUCN-Tabe'a Programme, developing knowledge of World Heritage and the Arab States' regional context, drivers, political and communal factors.

Mr. Khalid Shambol, Sudan- Khartoum State Project Manager, Sudan Khalid Shambol has a Master's degree in Environmental Science from the Institute of Environmental studies, University of Khartoum, Sudan. He has extensive knowledge and work experience in climate change, environment and conservation, having conducted 22 environmental impact assessment studies in different fields. He is also the editor and co-author of "Khartoum State Environmental Strategic Assessment and Evaluation."

### Mr. Mudhafar Salem, The Arab Regional Center for World Heritage (ARC-WH)

Mudhafar Salim has worked on national, regional (Middle East) and global activities that aimed at protecting the threatened species and their habitats in these regions. He also delivered many technical lectures in many countries about the environment and biodiversity. In addition, he has worked on the regional level (Irag) with different stakeholders (governmental, NGOs, and communities) for many years through various projects and initiatives.

### Dr. Rehab Ibrahim Ahmed ElSiedy, Associate Professor of Heritage Studies, Islamic Archaeology at Faculty of Archaeology-Cairo University

Rehab Ibrahim Ahmed ElSiedy is an associate professor of Islamic Archaeology at Faculty of Archaeology-Cairo University with a Ph.D in Islamic Archaeology. He teaches across museology, excavation, and management of cultural heritage subjects. He also participated in the excavation of the Fatimid and Ayyubid walls of Cairo which held by the French institute of oriental archaeological in Cairo (IFAO).

### Prof. Daniela Molinari, Professor, DICA - Politecnico di Milano

Flood risk analyst, Daniela Molinari (Politecnico di Milano) is an expert in flood risk assessment and management, with particular expertise in flood damage evaluation. She led, or has been involved in, several European and national research projects dealing with flood risk and damage assessment, such as 'Ensure (seventh framework programme): Enhancing resilience of communities and territories facing natural and na-tech hazards'.

# Ms. Rita Tjien Fooh, CARBICA CHEN

Rita Tjien Fooh is representing CARBICA-CHEN, the Caribbean Heritage Emergency Network, as part of the Caribbean Regional Branch of the International Council on Archives. She is also the National Archivist and Director of the National Archives of Suriname.

### Mr. Max Scriwanek, CARBICA CHEN

Max Scriwanek is representing CARBICA-CHEN, the Caribbean Heritage Emergency Network, as part of the Caribbean Regional Branch of the International Council on Archives. He is also the Director of the National Archives Curacao.

### Dr. Kieran Westley, Research Fellow, Ulster University

Kieran Westley is a Research Fellow at the School of Geography & Environmental Science, Ulster University (UK). He is currently employed on the Maritime Endangered Archaeology (MarEA) project where he is researching climate change impacts and threats to maritime archaeology in the Middle East and North Africa. He has wider research interests in submerged prehistoric landscapes and the application of marine and satellite remote sensing to archaeological research.

### Ms. Françoise Collanges, IRPA

Françoise Collanges specialises in preventive conservation and risk management for cultural heritage and is a member of the ICCROM FAR network as well as active within Blue Shield committees. As a scientific advisor for IRPA (Royal Institute for artistic heritage, Belgium), she managed a crisis committee for cultural heritage rescue after the floods in the summer of 2021 and supported the management of several projects linked to the recovery of heritage impacted during these floods within IRPA for 2022.

Mr. AbelHamid Salah al-Sharief, Chairman, Egyptian Heritage Rescue Foundation AbelHamid Salah al-Sharief is the Chairman of the Egyptian Heritage Rescue Foundation and manager of the Risk Assessment Unit in the Disaster Risk Management Department at the Ministry of Tourism and Antiquities (the Minister Office). He is also the Consultant and Resource person on CRISIS Risk Management in the National Training Academy, Consultant and Resource person on Disaster Risk Management with the African World Heritage Fund for formulating Disaster Risk Management plan for 9 World Heritage Sites in 7 countries in Africa. He is also a Holder of a Master's degree in Heritage Conservation and Site Management from Helwan University and Brandenburg University, and a PHD Candidate in the Heritage and Museum Studies Program, Bachelor of Arts, Faculty of Archaeology, Conservation Department. Cairo University.

### Ms. Khushi Shah, CEPT University

Khushi Shah completed her Bachelor's in Construction Technology from CEPT University, India in May 2021. She is the founder of Indian Heritage, a social media website and account that aims to promote the rich and diverse heritage of India. She has organised various heritage walks across the city to spread awareness and sensitise people towards the importance of heritage. Currently, she is working on the preparation of a comprehensive Conservation Management Plan for the Sardar Vallabhbhai Patel Stadium, a world heritage site under WORLD MONUMENT FUND as a conservation engineer. She is also the Teaching Associate for the studio Geotechnical Engineering at CEPT University.

# Day 3

### Ms. Zeynep Yılmaztürk, Aarhus University / Antalya Kültürel Miras Derneği - ANKA

Zeynep Yılmaztürk is a freelance architect and an architectural photographer, currently writing her thesis for her Master's in Sustainable Heritage Management at Aarhus University. She is also working as a heritage recorder in ANKA's current project KIRKAMBAR: Documentation, Digitalization and Promotion of the Traditional Beehives and Granaries in Teke Highland, Elmalı (Antalya/Turkey).

### Mr. Talha Ulaş, Ankara Yıldırım Beyazıt University

### Ms. Tanisha Tewari, Eco Architect

Tanisha Tewari Works as an Eco Architect in Uttarakhand, exploring its tangible and intangible heritage. This gives her the opportunity to work on different ecological restoration projects in the Himalayas along with residential and commercial projects, while connecting them with permaculture designing, regenerative living and vernacular architecture in best possible way.

# Mr. Shahzad Ahmed Malik, Member of ICOMOS INDIA, ISOCARP & Indian Institute of Architect Shahzad Ahmed Malik is from the Himalayan state of Uttarakhand, a researcher, an architect and an academician. He is also a member of International Society of City and Regional Planners (ISOCARP) and an associate member of Indian Institute of Architects (IIA) - Uttarakhand chapter. Shahzad is a trained urban regeneration professional with a master's degree in Urban Regeneration from Department of Architecture and Ekistics, Jamia Millia Islamia, New Delhi. His interests align with the post 2015 Sendai Framework of DRR, Heritage-led regeneration and urban planning.

### Mr. Rahul Salunke

Rahul Salunke initially worked in chemical manufacturing, before realising their polluting nature, therefore switching his career into Health, Safety and Environment. His key responsibilities are to identify hazards (Health and safety, social, environmental) for organisations and to keep workers, society and nature safe from those hazards. Photography is his passion and he uses photographs to demonstrate the current scenario and spread awareness within the workforce to mould their actions for preventing/reducing pollution and cultivate their thoughts for a better environment for coming generations.

# Mr. Mriganka Banikya, Architect, Archmary Studio

Mriganka Banikya has a Bachelor's degree in Architecture from the Royal School of Architecture, Gauhati University. He is an experienced Graphic Designer with a demonstrated history of working in the Graphic design industry. Mriganka is skilled in various 2D and 3D graphic design software.

### Mr. Manash Bhuyan, CRRP

Manash Kamal Bhuyan, stage named "Mokshy", is a student of Architecture and a freelance Music Producer. He started his journey of music production in 2017 and is still exploring the vast world of music through some of his experimental records/songs viz. Jonaki, Xopun Nixa, Tumar Bhabona, Boroxa. He also co-founded a record label called "Jajabor Records" based on YouTube. Trying to make some fresh tunes with some fresh ideas, aspiring to bring "Moksh" or peace to the state of mind of the listener in these troublesome times.

**Ms. Lorraine Finch**, Director and Founder, Lorraine Finch Conservation and Preservation (LFCP) Lorraine Finch is Director and Founder of LFCP. She is an accredited conservator working with archives and specialising in the conservation and preservation of film, sound and photography. She assists institutions to work with environmental sustainability embedded into their practices; enable digital transformation and to ensure a skilled and knowledgeable workforce through bespoke training and workshops.

Ms. Anisha Patel, Europa-Universität Viadrina, Frankfurt (Oder) Anisha Patel is an architect by training and has completed her MA in World Heritage Studies from the Brandenburg University of Technology. She has since worked as a heritage professional with public sector organizations in the areas of capacity building, world heritage processes, management planning, stakeholder participation, and policy development. Anisha is currently pursuing an LL.M. in International Human Rights and Humanitarian Law from the European University Viadrina, with a focus on the application of international law in the occupied Palestinian territory.

Ms. Nour Abdelhamid, American University of Sharjah Nour Abdelhamid is an architect and urban designer by profession, with a Bachelor's of Architecture from the American University of Sharjah and a Master's of Architecture in Housing and Urbanism from the Architectural Association. She is currently working as an adjunct professor at the American University of Sharjah and pursuing her PhD in engineering systems management with a focus on sustainable cities and communities. She has previously worked as an urban designer and project manager in private and government organizations, contributing to cultural, residential, commercial and heritage projects.

Dr. Yichen Jiang, Post-Doctoral Fellow, Shenzhen University Yichen Jiang is currently a post-doctoral fellow in the School of Architecture and Urban Planning at Shenzhen University. Her research contains multiple dimensions of agricultural heritage, including the spatial transformation of agricultural land, urban history, comparative study of agricultural policies among different countries, agri-tourism, as well as the local community-based heritage conservation.

Ms. Raghda Nasr El.Nezory, Inspector, Department of Historic Cairo Raghda Nasr El.Nezory works as an inspector at the Ministry of Tourism and Antiquities (MOTA) at the general department of Historic Cairo. She has a Master's degree in Islamic Archeology from Ain Shams University specific in Syrian Islamic Architecture study, and is a pre-Doctoral student.

**Mr. Mohamed Farouk**, Head of Inspector, Ministry of Tourism and Antiguities in Egypt Mohamed Farouk is the Head of inspector at central Alexandria neighborhood in the Ministry of Tourism and Antiquities, Egypt. He is responsible for managing and supervising the Archaeological services and urban salvage excavations in the area covering the Royal Quarter of Ancient city of Alexandria. He is also a freelance photographer.

### Dr. Eva Ziedan, Independent Researcher

Eva Ziedan is a cultural heritage and community development practitioner, with more than ten years of field experience in the Middle East and Europe. She is experienced in facilitation, coaching, design, implementation, sustainability and evaluation of development and cultural projects. She works on advocacy efforts to support peace building, projects innovation, strategic vision, networking ability and capacity development skills.

### Ms. Tianyue Hu, Junior Student, Tsinghua University

Tianyue Hu is a junior student from the Department of International Relations, Tsinghua University. Her research interests focus on climate change, conflict and gender.

### Dr. Cornelius Holtorf, UNESCO Chair on Heritage Futures, Linnaeus University, Sweden

Cornelius Holtorf was educated in Germany and the UK where he gained his Doctorate in 1998. He is currently a Professor of Archaeology and holder of a UNESCO Chair on Heritage Futures at Linnaeus University in Sweden (renewed in 2021). He is also Director of the Graduate School in Contract Archaeology (GRASCA) at the same University. Recent publications include a co-written book on Heritage Futures (Harrison et al 2020) and a co-edited volume entitled Cultural Heritage and the Future (Holtorf and Högberg 2021).

### Dr. Joanne Clarke, Professor, University of East Anglia

Joanne Clarke is an archaeologist of arid zone environments with a strong background in peopleclimate relationships both in the past and present. She has directed archaeological field projects in Gaza, Cyprus and Western Sahara with a commitment to collaboration, equity and equality. In the last ten years she has developed a strong research profile in human-climate interactions through various research projects and outputs on resilience, vulnerability and adaptation to climate change.

### Dr. Nick Brooks, Visiting Research Fellow, University of East Anglia

Nick Brooks is a consultant and researcher whose work focuses on resilience and adaptation to climate change. Nick directed the Western Sahara Archaeology Project with Joanne Clarke from 2002 to 2018, addressing heritage issues and evidence of past human occupation in the context of environmental change, in the non-self-governing territory of Western Sahara. In 2021, in close cooperation with Sahrawi and international colleagues, he coordinated the first indicative Nationally Determined Contribution for Western Sahara, launched to coincide with COP26.

### Mr. Abiodun Abioye, University of Ibadan

Abioye Abiodun Emmanuel is a graduate student of University of Ibadan, majoring in African History. He is a climate change activist and rural development enthusiast, a budding scholar in African history and a history teacher at Muslim Grammar School, Igboho, Oyo state, Nigeria.

### Dr. Ing. Henry Nii-Adziri Wellington

Prof. Emeritus Henry Nii-Adziri Wellington is presently engaged with the University Of Ghana, Legon in the field of Archaeology and Field Studies. He is a member of the Local Organising Committee under the auspices of the Ghana National Commission for UNESCO. He also spearheaded links between the department of architecture, K.N.U.S.T and Ecole Africaine des Metiers de L'achitecture et de L'urbanisme (EAMAU), Lome, Togo to promote regional integration as well as links between KNUST and the University of Michigan, Ann Arbor, U.S.A.

### Dr. Bijan Rouhani, University of Oxford

Bijan Rouhani is senior researcher and project manager at Endangered Archaeology in the Middle East and North Africa (EAMENA) project in the School of Archaeology, the University of Oxford. He is Vice-President of the Scientific Committee on Risk Preparedness of ICOMOS (ICOMOS-ICORP), and representative of ICOMOS on the International Board of the Blue Shield. He was also the founding director of AMAL in Heritage at Global Heritage Fund (GHF) – Cultural heritage emergency management tools and training for the MENA region.

### Mr. Peter Wasswa, IWR, Rhodes University

Peter Wasswa's career interest is gaining skills and expertise in climatic science that can enhance his contribution in working with governmental and non-governmental agencies and research institutions. He is dynamic, open-minded with interpersonal skills, and can work with other people, in multicultural environments.

**Ms. Zhou Pingqian**, School of Architecture, Tianjin University Zhou Pingqian is a Doctoral Student in Landscape Architecture at the School of Architecture, Tianjin University.

**Ms. Panagiota Manti**, Assistant Professor, Ionian University, Dept. of Environment Panagiota Manti currently works as a Senior Lecturer at the programme of Conservation of Antiquities & Works of Art at the Ionian University.

**Ms. Eman Abdelrhaman**, The Egyptian Heritage Rescue Foundation Eman Abdelrhaman works in the Urban Climate Change Sector and has experience in the field of local climate zones, urban climate, urban micro-climate, climate model, environmental studies; climate change mitigation and adaptation. She is currently part of EHRF as well as an Environmental Studies Researcher and expert in GIS.

**Ms. Sneha Kishnadwala**, Architect, INTACH Heritage Academy Sneha Kishnadwala is an Architect currently working with INTACH Heritage Academy in New Delhi and coordinating the PG Diploma in Heritage Studies, visiting faculty at Kamla Raheja Vidhyanidhi Institute of Architectural and Environmental Studies (KRVIA), and has worked on Izzat Khan's mosque at her native town, Bharuch. She received the INTACH Research Scholarship (2020 – 21) to conduct a research on Climate Risk Assessment for the WHS: Victorian Gothic and Art DecoEnsembles of Mumbai

# Day 4

### Ms. Anna Naupa, Adviser and Secretary, Erromango Cultural Association, Vanuatu

Anna Naupa is an Adviser and Secretary to the Erromango Cultural Association, which is a community cultural heritage initiative dedicated to the documentation, preservation, and promotion of Erromango island's linguistic and cultural diversity. Based in Vanuatu, Anna is trained anthropologist and also holds MAs in Geography and Public Administration from the University of Hawai'i, Manoa and Harvard University's Kennedy School respectively.

Ms. Rebecca Ramsay, Specialist: Archaeology - Cultural Heritage Implementation, Auckland Council Rebecca Ramsay is an archaeologist within the Auckland Council Heritage Unit and the current submissions officer for the New Zealand Archaeological Association (NZAA). With the NZAA she has developed a climate change and cultural heritage portfolio and associated working group to increase awareness of climate change impacts on cultural heritage site and places and achieve greater collaboration at central and local government levels to develop proactive adaptation responses.

### Ms. Emma Ash, Associate Curator, Auckland Museum Tāmaki Paenga Hira

Emma Ash is Associate Curator of Archaeology at Auckland Museum Tāmaki Paenga Hira, assisting with the kaitiaki of taonga and development of legacy archaeological assemblages and current council member of the New Zealand Archaeological Association. Her research interests include environmental reconstruction, human-environment interaction and the application of archaeology to issues such as climate change and ecological restoration. She is currently involved in this work through a multidisciplinary project on Ōtata Island.

Prof. Anne Poelina, Chair Indigenous Studies University of Notre Dame, Nulungu Institute Research Professor Anne Poelina is a Nyikina Warrwa woman from the Kimberley region of Western Australia. She is also the Chair of Indigenous Studies and Senior Research Fellow Notre Dame University, an active community leader, human and earth rights advocate, film maker and a respected academic researcher, with a second Doctor of Philosophy (First Law), Master's degrees in Education, Public Health and Tropical Medicine and Indigenous Social Policy. In 2017, she was awarded a Laureate from the Women's World Summit Foundation (Geneva), elected Chair of the Martuwarra Fitzroy River Council (2018). Professor Poelina is a Visiting Fellow with the Crawford School of Public Policy at the Australian National University.

### Dr. Mohamed Soliman, National Research Institute of Astronomy and Geophysics

Mohamed Soliman is Advisor of the President of (NRIAG), and visiting researcher at Ritsumeikan University, Japan. Soliman accomplished his Ph.D. from Helwan University on the topic of water systems in medieval Alexandria, while his M.D. from Alexandria University in the thesis of adaptive reuse of the palace of Princess Fatima Al-Zahra Haider in Alexandria. Soliman's research field focuses on the sustainability of cultural heritage using advanced technology.

Mr. Joseph Puglisi, Master's Student, University Münster Joseph Puglisi is a writer, photographer and filmmaker; and currently the co-creator of an ethnographically inspire project entitled "Preserving the North Sea". Over the course of 2022, Joseph and his team will visit the entire coastline of the North Sea: Scandinavia, the low countries, and the UK, to engage with traditional fishing communities and producers of fish products by drawing together the broad intersectionalities of heritage contained within the whole region through participatory observations, extensive semi-formal interviews, photographs, and recipe sharing.

Ms. Marcela Szalanska, Newcastle University Marcela Szalanska is an experienced Heritage Specialist with experience consulting for senior stakeholders on heritage resources and values. Her current research focuses on the role of the humanitarian sector in cultural property protection and collaboration between cultural and humanitarian organisations. She holds an MA in Archaeological Heritage Management from Leiden University and an MLitt in Cultural Property Protection from Newcastle University.

Ms. Gamze Özmertyurt, Research Assistant, Yıldız Technical University Gamze Özmertyurt is working as a research assistant in the architecture department of Yıldız Technical University, and is in her Ph.D. thesis period, the subject of which is related to the relationship between water heritage and water security. She has been working to develop a doctrine, especially in establishing the connection between cultural heritage and climate.

Mr. José Luiz Pedersoli Jr., Unit Manager, Strategic Planning, ICCROM José Luiz Pedersoli Jr. has a Chemistry Degree (Federal University of Minas Gerais, Brazil; 1991) and a Master's Degree in Polymer Chemistry with emphasis on cellulosic materials and applications in the area of heritage conservation (University of Helsinki, Finland; 1994). His professional experience is in the risk management for cultural heritage and materials science applied to the conservation of cultural property, more specifically of paper-based collections and related materials, with several scientific articles published in specialized journals. His experience also includes the development, coordination, and training at various national, regional, and international capacity-building activities in the heritage sector. José Luiz is back at ICCROM since August 2018, where besides his role in strategic planning he also manages a portfolio of training partnerships and prospective activities concerning heritage collections, including risk management, communication and teaching skills, and sustainability.

Ms. Bhasha Shah, Art Conservator, The City Palace Museum, Udaipur Mhasha has graduated in history from Delhi University and completed Masters in Art Conservation from National Museum Institute, New Delhi. She work as an Art Conservator at The City Palace Museum, Udaipur, handling remedial treatments of artworks and preventive conservation of Museum collections. Besides, she have been actively involved in organizing training programmes for Museum staff and awareness programmes for school students, teaching college students and educating general public in care and handling of family heirlooms through social media.

### Ms. Anuja Mukherjee, The City Palace Museum, Udaipur

Anuja graduated in history from Indraprastha College for Women, Delhi University and completed Masters in Art conservation from National Museum Institute of History of Art, Conservation and Museology, New Delhi. She is an Art conservator with around 5 years of experience in both Government and Private museums. She has been working at The City Palace Museum, Udaipur, Rajasthan, India since 2017; and is involved in both preventive and curative conservation of Museum collection and also in organizing workshops, seminar and training programmes for museum staff and students.

Ms. Rafif Al Amassi, Community Engagement and Advocacy Officer, Premiere Urgence Internationale Rafif Al Amassi, is working with Premiere Urgence Internationale (PUI) as a community engagement and advocacy officer in the Gaza Strip. She holds a Bachelor's degree in architecture and a MSc in 'Sustainable Building Technologies'. She engages with youth, communities and local civil society stakeholders and advocates for the protection of Palestinian cultural heritage in Gaza Strip. Rafif works directly with communities to raise awareness about their cultural heritage. She develops the Socio-economic development program for the protection of Palestinian cultural Heritage.

### Mr. Khwezi Mpumlwana, National Heritage Council of RSA

Khwezi Mpumlwana is a specialist on the intersection of World Heritage and liberation struggles, with knowledge of urban and rural heritage uses for sustainable development and community resilience. His past positions include Chief Executive officer of a national museum; and education head of a national museum.

### Ms. Shatha Safi, Director, RIWAQ- Centre for Architectural Conservation

Shatha Safi is Director of RIWAQ, a leading non-governmental organization in the field of cultural heritage protection and development: its projects and activities are multidisciplinary focusing on bringing life back to historic buildings and centres in Palestine. Since its establishment in 1991, RIWAQ has restored more than 130 historic buildings into communal spaces in more than 80 different villages and towns in the West Bank and Gaza.

### Prof. Peter Kwapong, Pastor Professor, University of Cape Coast

Peter Kwapong is a Professor of Entomology and a Researcher at the Department of Conservation Biology and Entomology, University of Cape Coast. His passion for Pollination Ecology, Bee Biology and Ecology, led him to set up a unique center which serves as a sanctuary for culturing Stingless Bees in 2005. Prof. Kwapong has won many laurels including the British Council Award for the Most Effective Ambassador of UK Education in 2012, for being an Innovative Individual and Inspirational leader. He also won the University of Cape Coast @ 50 Award for Innovation and Creativity. He is an integral member of the top United Nations (UN) Expert Scientists who produced a policy-document on Global Assessment of Pollinators and Pollination.

Ms. Mohona Chakraburtty, Conservation Architect, ICCROM Mohona Chakraburtty is an architect from India, with a Master's degree in architectural conservation from La Sapienza University of Rome, Italy. She has worked on several prestigious conservation planning projects in India, with organizations like UNESCO, New Delhi, and DRONAH (Development and Research Organization for Nature, Arts, and Heritage). Mohona has been working with ICCROMs ground-breaking program - "First Aid and Resilience for Cultural Heritage in Times of Crisis" (FAR) since 2020. She coordinated and provided mentorship in two international training initiatives of ICCROM on disaster risk management for heritage collections and first aid to cultural heritage in conflict contexts. Additionally, she has contributed to the development of several resources on community-based disaster risk reduction, peacebuilding tools, simulation exercises and safeguarding of cultural heritage during COVID-19.

Mr. Vignesh Kesavan, Indian Institute of Science (IISc), Bangalore Vignesh Kesavan is carrying out research in Water and Culture, Water heritage, Indigenous water management systems, Water-Climate nexus, and Socio-hydrology concepts.

Mr. Michael Newland, Northern California Cultural Resources Director, Environmental Science Associates

Michael Newland is the Northern California Cultural Resources Director for Environmental Science Associates. He serves as the Climate Change and California Archaeology Committee Chairman for the Society for California Archaeology and sits on the Committee on Climate Change Strategies and Archaeological Resources for the Society for American Archaeology.

Ms. Nicole Franceschini, Online Activity Coordinator, World Heritage Leadership Programme Nicole Franceschini has a BA in Cultural Heritage with a major in archaeology and a MA in World Heritage Studies. Between 2016 and 2021 she worked as a lecturer in World Heritage and heritage management at BTU Cottbus-Senftenberg in Germany. Nicole worked as a consultant to institutions and companies working on feasibility studies for World Heritage nominations and management plans. She cooperated with international organizations involved in World Heritage projects in various capacities. Nicole works for the World Heritage Leadership Programme as an online activities coordinator and focuses on communications of the programme activities and results.

Ms. Therese Sonehag, Senior Adviser, Swedish National Heritage Board Therese Sonehag has been Senior adviser since 2011 at the Swedish National Heritage Board. She is an Architect specialised in issues concerning climate change, cultural heritage and the Sustainable Development Goals, Agenda 2030.

Mr. Elobaid Mohammedali, Head of Interior Architecture, Omdurman Islamic University Faculty of Architecture and Planning

Elobaid Mohammedali is lecturer, and Head of Interior Architecture Department at Faculty of Architecture and Planning, Omdurman Islamic University. He is an experienced Architect with a demonstrated history of working critically, gualified with a First Class B.Sc in Architecture and Planning, Omdurman Islamic University and M.Sc in Architectural Design from University of Khartoum.

# Prof. Francesca Piqué, Professor, SUPSI - University of Applied Sciences and Arts of Southern Switzerland

Francesca Piqué is a wall paintings conservator trained at the Courtauld Institute of Art, University of London with a degree in chemistry (University of Florence) and a Master's degree in science for conservation (University of London). She has worked from 1991 to 2004 at the Getty Conservation Institute on several multidisciplinary project focusing on the conservation of immovable heritage: wall paintings, bas-relief, mosaics, archaeological sites. Since 2009 Piqué has been employed as teacher and researcher at the University of Applied Sciences and Arts of Southern Switzerland (SUPSI) and was nominated professor of science applied to conservation of cultural heritage and recently responsible for the conservation restoration unit. She is the author of three books and over 50 articles in the field of conservation of wall paintings.

# Mr. Thierry Joffroy, Scientific Director, Craterre/ AE&CC/ ENSAG/ Univ.Grenoble Alpes

Thierry Joffroy is an Architect and currently a researcher at and Director of CRAterre team, AE&CC research Unit at ENSAG, University of Grenoble, France. Since the end of the 1980s, he has been working with ICCROM and World Heritage Centre in the framework of various initiatives for better conserving Earthen Architectural Heritage. He has played a paramount role in developing and further implementing the Africa 2009 programme and later the CentralAsianEarth and WHEAP programmes.

### Dr. David Gandreau, Archeologist, CRAterre - AE&CC - ENSAG - Univ. Grenoble Alpes

David Gandreau is an archaeologist, PhD in architecture, and researcher at the National School of Architecture of Grenoble (ENSAG, Univ. Grenoble Alpes). He is specialized in earthen cultural heritage studies, conservation and valorization. He has carried out numerous missions of expertise and training, in particular on World Heritage sites in the Middle East and in Africa. Since 2018, he is co-responsible for the UNESCO Chair "Earthen Architecture, Constructive Cultures and Sustainable Development".

# Ms. Alia Fares, Heritage Adviser, Landward Research

Alia Fares is Heritage Adviser at Landward Research, developing and delivering heritage management projects in Lebanon. She is also currently conducting her doctoral thesis at the Archaeological Institute of the University of Cologne on Roman Architecture: The Roman Sanctuaries of Qasr Naous - History, Function and Mythology. Other roles include site director and heritage consultant for the Lebanese Directorate General of Antiquities; university lecturer for history of architecture at the American University of Beirut, the Lebanese American University and the Rafik Hariri University; archaeological consultant ofKfW – German Development Bank in Lebanon; and certified national tour guide.

# Ms. Grace Rihan Hanna, Architect, ICOMOS Lebanon

Grace Rihan Hanna is a multi-facetted architect-restorer and designer. Grace graduated in 1986 with high distinction from the Lebanese University. She immigrated to France in 1990, where she started an architecture firm. After returning to Lebanon in 1995, she decided to continue her higher studies, graduating with a specialization in restoration of historical sites and monuments in 2003. Since then, she has been working on architectural restoration projects and started teaching architectural restoration at the Lebanese University in 2007. She is also one of 40 Lebanese architect-restorers, who launched an emergency mission one day after the August 4th explosion, named Beirut Built Heritage Rescue 2020.

Ms. Noro Ravoavahy, LABEX AE & CC - CRATerre Ms. Noro Ravoavahy has a Diploma in architecture at the Ecole Nationale Supérieure d'Architecture de Paris-Belleville (France). She worked on flooding and cyclonal areas during monsoon and she conducted a survey on vernacular earth building for low-cost housing and urban and reasoned agriculture in Antananarivo (Madagascar). Ms. Ravoavahy worked with Frédéric Lebard, architect in Paris, competition stage for UNIMA Group, a pioneer in the Malagasy shrimp industry, with the financial backing of the WORLD BANK. Design urban planning (50 ha) of 500 earth housing in Besalampy (Madagascar). She is also specialized in earthbuilding by CRATerre, Ecole Nationale Supérieure d'Architecture de Grenoble (France). In 2010 she created her own company TANIMANGA ARCHITECTURE, based in Paris.

Ms. Aziza Chaouni, Associate Professor, University of Toronto Aziza Chaouni is an Associate Professor of Architecture at the University of Toronto, John H. Daniels Faculty of Architecture, Landscape, and Design; and the Founding Principal of the design practice Aziza Chaouni Projects (ACP) with offices in Fez, Morocco and Toronto, Canada. She is also the Director of the Designing Ecological Tourism Research platform at the Daniels faculty. Chaouni's practice, research and teaching focus on sustainable design and construction in the developing world.

**Mr. Alex DeGeorgey**, President, Alta Heritage Foundation Alex DeGeorgey is the President of Alta Heritage Foundation a non-profit organization dedicated to using archaeological field science to support wildfire disaster victims. Alex's key responsibilities include serving as Principal Investigator for complex, high profile archaeological investigating, mentoring staff, and serving as a technical resource for senior project managers.

Ms. Shahrzad Amin Shirazi, Head of Conservation Department, Research Center for Conservation of Cultural Relics (RCCCR)

Shahrzad Amin Shirazi works with the Research Center for Conservation of Cultural Relics (RCCCR) as the head of the conservation department and one of the scientific board members. Her main speciality is textile conservation, she is also interested in legitimate protection of cultural heritage, project management and professional training for conservation.

Mr. Tanmay Gound, Research Associate, Gujarat Institute of Disaster Management Tanmay Gound is the Co-Founder & National Lead at Confederation of Risk Reduction Professionals (CRRP) India. He is a Research Associate cum Program Coordinator at the Gujarat Institute of Disaster Management in India. Tanmay is an experienced consultant with a demonstrated history of working in the philanthropy industry. He is a strong consulting professional with a master's degree in Disaster Management, focused in Crisis/Emergency/Disaster Management from Tata Institute of Social Sciences.

Dr. Nancy Odegaard, Head of Preservation, Arizona State Museum of the University of Arizona Dr. Nancy Odegaard is the retired Head of Preservation at the Arizona State Museum of the University of Arizona in Tucson where she is also a faculty professor emerita in the departments of Anthropology, Materials Science & Engineering, and American Indian Studies. Her own advanced studies in conservation were completed at the Smithsonian Institution and her doctorate degree is from the University of Canberra, Australia. She is a Fellow of the AIC and IIC. She is well known for her many articles and books, as well as her lectures and workshops in over 20 countries. Among her many awards, Nancy was an ICCROM Fellow in 2015 and was awarded an honorary doctorate from Faculty of Science at the University of Gothenberg, Sweden in 2016. She is currently chair of the conservation committee of the Patronato San Xavier, a non-profit committed to the preservation of Mission San Xavier del Bac.

Dr. Andreia Nogueira, TECHN&ART - Technology, Restoration and Arts Enhancement Center, Polytechnic Institute of Tomar.

Andreia Noqueira holds a PhD and is an Assistant Researcher at TECHN&ART - Technology, Restoration and Arts Enhancement Center in Portugal. She is currently engaged in critical and reflexive innovative work on the meaning and significance of our contemporary cultural heritage (in between music and the visual arts) and on the articulation between sustainable development and creative conservation.

Dr. Deborah Briccola, University of Applied Sciences and Arts of Southern Switzerland Deborah Briccola is a civil engineer with a doctorate in Structural, Seismic, and Geotechnical Engineering (Politecnico di Milano). In 2020 she was awarded a Swiss Government Excellence Scholarship to study metaconcrete for innovative strategic mitigation purposes. She is an adjunct professor in Structures and Earthquake Resistance Criteria at Politecnico di Milano. At the University of Applied Sciences and Arts of Southern Switzerland, she is an adjunct professor in Structural Mechanics and Masonry Construction in the Bachelor of Science in Civil Engineering, as well as a teaching tutor in Bridge Design, Construction, and Repair in the Master of Science in Engineering (Civil Engineering profile). She is a researcher at the Institute of Earth Sciences involved in an Interreg project on underground governance and she works in strong collaboration with the DynaMat SUPSI Laboratory, a center specialized in impact on materials and structures both at the numerical simulation and experimental level.

Ms. Sarah Coggins, Conservation Engineer, Mary Rose Museum Sarah Coggins works at the Mary Rose Trust as a Conservation Engineer, closely monitoring the environment and movement of the Tudor ship's hull. She has more recently worked for the Science Museum Group and since taking up a position at the National Gallery as a Preventive Conservation Engineer has focused on environmental and physical monitoring and advocacy for preventive conservation in large organisations.

Ms. Estelle De Bruyn, Head of the Sustainability Unit Royal Institute for Cultural Heritage (KIK-IRPA) As Head of the Sustainability Unit of KIK-IRPA, Estelle de Bruyn focusses with her team on the translation of sustainability in heritage work. She oversees research projects based on an interdisciplinary approach, aiming at helping Belgian cultural institutions become more environmental-friendly. She coordinates the Emergency Plans Federal strategy, which objectives are to help the 10 Federal Scientific Institutions develop a shared strategy in disasters reduction and response.



### Ms. Annelies Cosaert, Sustainability Unit, KIK IRPA

Annelies Cosaert graduated in 2014 with a MA in stained glass conservation after which she started a post-graduate internship at the Royal Institute of Cultural Heritage (KIK-IRPA). The first few years she did broad conservation tasks (working in a historic house and for a contemporary artist) including risk analysis, archival work, and general collection management before getting more specialized in collection environments. In 2018 she left for Los Angeles to join the 'Managing Collection Environments' Initiative' as a professional Fellow. Now, three years later, she closed the circle and is working back at KIK-IRPA, as part of the brand-new Sustainability Unit, helping museums to find balance a reduction of energy consumption while ensuring responsible collection care. In her spare time Annelies has started making stained glass windows again and loves the combination of research and creation (with some music in the background).

### Dr. Helen Wilson, Conservator, Research and Development, The National Archives of UK

Helen Wilson is an accredited conservation scientist working in the Collection Care department of the National Archives of UK. Most recently, evidence from Helen's work has informed preservation activities including environmental data reporting and assessment of the preservation risk of chemically unstable materials. Helen completed her AHRC-EPSRC Collaborative Doctoral Award (Science and Heritage Programme) with the University of Manchester and British Museum in 2012. Helen is the Communications Officer for Icon's Heritage Science Group and a peer reviewer for conservation publications.

### Mr. Peter Whitehead, Collection Care Leader, National Library of New Zealand

Peter Whitehead is the Collection Care leader at the Alexander Turnbull Library. He has thirty-year experience specialising in the conservation of books and manuscripts including parchment. From 2012-2017 he was a member of the conservation team that planned and prepared The Treaty of Waitangi for the He Tohu exhibition.

### Dr. Iris Kramer, Founder, ArchAl

Iris Kramer is pioneering the application of AI in archaeology, founding ArchAI, a start-up that is derisking land development by automatically detecting geo-risks including archaeology. ArchAl has received support from Geovation, the Royal Academy of Engineering (Enterprise Fellowship), SPRINT, the UK Space Agency, NESTA, and the ESA Business Incubation Centre. Iris did her PhD in Computer Science on the use of deep learning to detect archaeological sites on Earth Observation data.

### Ms. Anne Grady, Head Cultural Heritage Advisor, EU Commission

Anne Grady was a Senior Manager with the National Museum of Ireland and since May 2016, works as a seconded national expert with the Cultural Policy Unit of DG EAC. Anne played a key role with the management of the European Year of Cultural Heritage 2018 with a reach of over 12 million. She led a member states' working group (OMC) on the subject of sustainable cultural tourism. Anne is now leading a second OMC working group on "Strengthening Cultural Heritage Resilience for Climate Change". The report will be finalised in 2022.

Dr. Veronica Bullock, Director, Significance International P/L Veronica Bullock holds degrees in Prehistory/Archaeology and Materials Conservation and has worked in curatorial and conservation roles in major Australian collecting organisations. She established the heritage consultancy Significance International to undertake projects in a range of areas, including significance and risk assessment. Her 2020 doctorate investigates the history, meaning and effectiveness of heritage and sustainability policymaking by the Australian Government.

Mr. Rob Woodside, Director of Conservation, English Heritage Rob Woodside is the Director of Conservation at English Heritage and is responsible for the management and maintenance of over 400 ancient monuments and historic buildings. He is also the Chair of the UK Historic Environment COP26 Climate & Heritage Task Group and author of 'Heritage Responds -Taking Positive Actions on Climate Change'; Guest Lecturer on heritage, environmental sustainability and climate change at the UCL Institute of Sustainable Heritage; and Specialist Assessor to British Council Cultural Protection Fund grant applications for heritage led projects in Iraq, Turkey, Lebanon and the Occupied Palestinian Territories, as well as risk preparedness and climate change action in Kenya, Uganda and Tanzania.

Ms. Saadet Güner, President of the Executive Committee, Kültürel Mirasın Dostları Derneği - KUMID (Friends of Cultural Heritage – FOCUH), İstanbul/Türkiye Saadet Güner deals with the relationship between the sustainable development of countries and the protection of cultural heritage as well as the protection of cultural heritage in times of armed conflicts. As the President of the Executive Committee of KUMID she participated in the European Union (EU) Projects coordinated by KUMID and presented numerous papers at national and international conferences. The last European Union Project in which she acted as Project Coordinator was 'Project for Disaster Risk Reduction in Museums', 2020 applied within the scope of the "Civil Society Organizations (CSOs) -Academy Cooperation Support Program" implemented under the support of "the European Union and the Civil Society Development Center (STGM)".

# Heritage-FOCUH)

Professor Mahmut Aydin holds a PhD in Archaeometry from Middle East Technical University (MTU / Turkey-Ankara) and works for Batman University as an Associated Prof.Dr. since 2013. He is also head of Kelenderis Archaeological Excavation site since 2021. (Mersin-Aydıncık / Turkey). Under the roof of KUMID, he took charge in many European Union Projects as coordinator and also editor and translator in their proceedings (For example European Union Cultural Heritage Legislation and Turkey Project, Scientific Techniques and Risk Management in Museums).

Dr. Nadine Panayot, American University of Beirut Nadine Panayot is the Archaeological Museum Curator at the American University of Beirut (AUB), and an Associate Professor of Practice at the Department of History and Archeology. Since 2010, she is directing a terrestrial and maritime archaeological and ethnographical survey and excavation project in the coastal town of Anfeh - Lebanon, aiming at the conservation of tangible and intangible Cultural Heritage as a necessary tool for ecotourism and sustainable development.

Prof. Dr. Mahmut Aydin, Member, Kültürel Mirasın Dostları Derneği -KUMID (Friends of Cultural

### Mr. Tom Dawson, University of St Andrews / SCAPE

Tom Dawson is a Principal Research Fellow at the University of St Andrews and the Director of SCAPE (Scottish Coastal Archaeology and the Problem of Erosion). The research focus of the SCAPE team is the archaeological and historical heritage of the coast, especially sites threatened by natural processes and climate change. SCAPE combines academic research with practical projects, and has recently completed a study looking into methods of prioritising coastal sites for action. SCAPE also collaborates with communities around Scotland, adopting a citizen science approach to heritage management. SCAPE works closely with national heritage organisations, and Tom has served as a Commissioner with the Royal Commission on the Ancient and Historical Monuments of Scotland and Vice President of the Society of Antiquaries of Scotland.

### Ms. Constance Domenech de Celles, German Archaeological Institute

### Ms. Chiara Ronchini, Policy Manager, Historic Environment Scotland

Chiara Ronchini works for Historic Environment Scotland as Policy Manager, leading on the development of Futures Thinking and participatory approaches in heritage policy and strategy. She has over 13 years of experience as programme manager, working with Edinburgh World Heritage and as a consultant for UNESCO in Uzbekistan, Egypt, Croatia and Italy, and is a British Architect and member of the ICOMOS International Scientific Committee on Energy and Sustainability. She currently sits on the Responsible Tourism Institute Scientific Council, and is a Trustee of BuildAid, a charity providing emergency aid and supporting long-term community projects internationally.

Ms. Vanessa Glindmeier, Responsible Tourism Coordinator, Historic Environment Scotland Vanessa Glindmeier works for Historic Environment Scotland as Responsible Tourism Coordinator, leading on the transition to a responsible tourism organisation, in line with a green recovery from the COVID-19 pandemic's impacts on the tourism industry. She supports the objectives set out in the organisation's Climate Action Plan 2020-2025. Vanessa holds a MSc degree in Heritage and Cultural Tourism Management from Edinburgh Napier University. Her dissertation focused on the authenticity and interpretation at film-induced heritage visitor attractions. She also holds a BA in Modern Languages, Literature and Business Studies. Vanessa is a member of the Global Sustainable Tourism Council.

### Ms. Jasna Popović, Ministry of Culture and Media of the Republic of Croatia

Jasna Popović is the Head of the Conservation Department in Trogir Ministry of Culture and Media. She is currently working on producing comprehensive management plans for historic monuments and sites in the area of her jurisdiction. As a conservationist she has been responsible for managing nationally registered historic sites and areas, as well as for the supervision, restoration and conservation projects in the region.

Ms. Gabriel Brunnich Dunand, Strategy and Partnerships Officer, Office for Climate Education Prior to serving as Strategy and Partnerships Officer at the Office for Climate Education (OCE), Gabriel Brunnich Dunand worked at UNESCO for 14 years, where she ensured the implementation of 20+ projects around the world as head of the International Fund for the Promotion of Culture and coordinated the Fund's strategic transformation. She also spearheaded an international training programme for artists and contributed to multiple international events linking culture and sustainable development. Gabriel is responsible for the OCE's strategic partnership development and the implementation of climate change education projects around the world.

Ms. Shari L. Wilson, Teaching Ecologist, University of Wisconsin-Stevens Point Shari L. Wilson is a teaching ecologist/environmental educator. She is the Founder and President of Project Central, which designs and implements environmental curriculum and projects in schools and communities. She is currently a doctoral candidate in the Ed.D. in the Educational Sustainability program at the University of Wisconsin-Stevens Point. Her doctoral project is development of the innovative international curriculum focused on student empowerment to increase ecological school grounds, Schoobio (www.schoobio.earth).

Ms. Amira Elsayed, Executive Director, Egyptian Heritage Rescue Foundation Amira Sadik Aly is an Executive Director of EHRF and trainer and member of the Egyptian Heritage Rescue Team, EHRF. She is also Project Manager of CULTNAT at Bibliotheca Alexandrina. In 2014 she attended First Aid to Cultural Heritage in the Event of Disaster or Conflict, provided by ICCROM and UNESCO. Honored to participate with them, she joined as trainer and co-trainer in national, international and regional training courses of First Aid and Risk Preparedness for Cultural Heritage Properties.

Mr. Samuel Franco Arce, Executive Director, Casa K'ojom Cultural Rescue Center Samuel Franco Arce is the Director of Casa K'ojom, Cultural Rescue Center and Museum since 1987, which is located in Antiqua Guatemala and dedicated to the documentation, preservation and dissemination of the intangible cultural heritage of the Maya communities around the globe. He is Trainer-Consultant of the Cultural Rescue Center in Disaster Preparedness and Risk Management for Cultural Heritage in Central America and the Caribbean. Mr Samuel is also a Board member of the Guatemala National Committee of the UNESCO program "Memory of the World".

Dr. Regina Charumar, Movimento Ambiental Geração Consciente Regina Charumar is an environmentalist, presenter, founder of the Environmental Movement Conscious Generation and university professor. She is a Ph.D. student in Social Sustainability and Development at the Open University of Portugal. A Changemaker from the British High Commissioner, she gave voice to the fight for climate change in Mozambique and in the world towards COP26. Regina is a lawyer by training and profession, as well as University Lecturer and Director of the Faculty of Law of Instituto Superior Monitor between 2016 and 2017.

### Dr. Lucília Chuquela, ICOM - Moçambique

Lucília Chuquela holds a Master's degree in Museology, from Academia Reinwdart, Holland; and Degree in Biology, from Universidade Eduardo Mondlane (UEM). She has been Director of the Museum of Natural History since 2007, where she was Head of the Department of Museology (1998–2007). She is President of the International Committee of Museums (ICOM), triennium 2016-2019. She was a member of the Executive Committee for SAMP (Swedish African Museum Program) from 2007 to 2009. She has also been a member of the UEM University Council since 2007.

### Mr. Daniel Inoque, ICOM - Moçambique

Daniel Inoque is a Lecturer in Museology, Cultural Heritage and African History at Higher Institute of Arts and Culture (ISArC) in Mozambigue since 2013, and collaborates as "Researcher Associate" of the Unit of Research in Cultural Heritage-ISArC base in Maputo. He has degree in History at Eduardo Mondlane University in Mozambique and Master's in Heritage Studies at Open University in Portugal.

### Dr. Leonardo B. Castriota, UFMG / ICOMOS-International

Leonardo Barci Castriota is an architect-urbanist with a Ph.D. in Philosophy from the Federal University of Minas Gerais and a postdoctoral degree at the Getty Conservation Institute (GCI) in Los Angeles and the Universidad Politécnica de Madrid. He is a Professor at the Federal University of Minas Gerais, Vice-Coordinator of the Graduate Program in Built Environment and Sustainable Heritage, as well as Vice-President of ICOMOS International.

### Mr. Hamilton Fernandes, Presidente, Instituto do Património Cultural de Cabo Verde

Hamilton Jair Fernandes is President of "Instituto do Património Cultural" of Cape Verde. He is a Ph.D. Candidate in History, at the University of Evora, with a Master's in Archeology and Heritage, from the Autonomous University of Madrid, Degree in History variant Archeology, by the University of Coimbra. He is a Lecturer/researcher at the Jean Piaget University of Cape Verde and the University of Cape Verde. He is also the Coordinator of the Project of Classification of Historic Centers of Cape Verde the National Heritage.

Mr. Meio Dia Sepa Maria Lé Có, Organização para a Defesa das Zonas Húmidas na Guiné-Bissau Mejo Dia Sepa Maria Lé Có holds a Bachelor's in Biology and Ecology and Master's in Marine and Coastal Studies. He took over the coordination of the Bolama Bijagós Archipelago Biosphere Reserve between 2011 and 2018. He returned to active associativism in August 2016 at the 3rd General Assembly of the Organization for the Defense of Wetlands in Guinea-Bissau and is currently the Chairman of the Board of Directors of this organization.

Ms. Daniele Ferreira, Instituto Estadual do Patrimônio Histórico e Artístico de Minas Gerais Daniele Ferreira is an Architect and Urban Planner, with a PhD in Built Environment and Sustainable Heritage from the Federal University of Minas Gerais, Brazil. She is a public servant at the State Institute of Historic and Artistic Heritage of Minas Gerais (IEPHA) since 2009, working in activities for the preservation, conservation, and monitoring of Cultural Heritage, mainly in Listed Properties. She has been developing academic research in the area of Climate and Cities for over 15 years.

Ms. Esmeralda Paupério, ICOMOS-Portugal / Universidade do Porto Esmeralda Paupério graduated with and Master's in Civil Engineering, and has been working for over 20 years in the conservation and rehabilitation of Immovable Cultural Heritage, in particular for the protection of Portuguese Cultural Heritage. In this context, she participated in more than 300 technical reports for Cultural Heritage Buildings, having accompanied many of the conservation and rehabilitation works in Built Heritage.

Dr. Xavier Romão, Universidade do Porto, Portugal Xavier Romão is an Assistant Professor at the Faculty of Engineering of the University of Porto (FEUP). He has a degree in Civil Engineering from the Faculty of Science and Technology of the University of Coimbra; Master's Degree in Civil Engineering Structures from FEUP; and PhD in Civil Engineering from the University of Porto. He is also Vice President of ICOMOS-ICORP, the International Scientific Committee on Risk Preparedness of the International Council on Monuments and Sites; member of the Board of the Portuguese Society of Earthquake Engineering; representative of FEUP in the Sub-Commission of the National Commission for Civil Protection; UNESCO roster member for culture in emergencies; member of the Structural Extreme Events Reconnaissance (StEER) Network.

Mr. Nick Shephard, Aarhus University, University of Pretoria Nick Shepherd is based at the University of Cape Town, South Africa, and considers himself a global scholar. He has been a Mandela Fellow at Harvard University, a visiting professor at Brown University, Colgate University, and the University of Basel, and an artist-in-residence at Amsterdam University of the Arts. In 2017, he moved to Aarhus University, Denmark. An abiding feature of his work is an interest in guestions of social justice, whether in the context of the historical injustices of colonialism and apartheid, and the struggle for restitution, or in the context of the climate emergency, and the emergent social and political landscapes of the Anthropocene. Since 2014 he has been running regular walking seminars, involving scholars, artists, activists, curators and policy-makers. In 2021 he was commissioned as the Lead Author on a White Paper on Culture, Heritage and Climate Change: Solutions for a joint meeting of the IPCC, UNESCO and ICOMOS.

Ms. Maureen Mokeira Kombo, Kenya Marine and Fisheries Research Institute Maureen Mokeira Kombo is a competent and versatile Environmental and Coastal Management scientist professional, with passion towards environmental sustainability. She desires to see the environment meeting the nutritional and livelihood demands of the current and future generations. Being a woman, issues of nutrition's and child welfare is in her heart. She is a graduate from the University of Bologna with an MSc in Water and Coastal Management. Currently, she is working at the KMFRI, Mombasa station as a research scientist under the internship program in the Hydrography and oceanography department. Her other roles include coordinating the projects such as the Integrating Community-Based Solid Waste Management in Preserving Lamu's Heritage funded by KNATCOM, UNESCO and Impacts of climate change on high-value species mariculture project funded by WIOMSA.



# **158 speakers from 55 countries**

Countries arranged based on their risk profile

Yemen, Chad, Mozambique, Syria, Mali, Iraq, Nigeria, Sudan, Libya, Kenya, Colombia, Guatemala, India, Lebanon, Turkey, Brazil, Egypt, Iran, Indonesia, Guinea Bissau, Palestine, South Africa, Jordan, Vanuatu, Ghana, China, Algeria, Tuvalu, United States of America, Suriname, Tunisia, Argentina, Greece, Trinidad and Tobago, Italy, Canada, Croatia, Australia, Cape Green, Japan, France, Spain, Germany, United Kingdom of Great Britain and Northern Ireland, Seychelles, Belgium, United Arab Emirates, Portugal, New Zealand, Ireland, Switzerland, Sweden, Netherlands, Slovenia, Denmark.

Image showing the diversity of Climate.Culture.Peace conference contibutors

Climate.Culture.Peace is conceived and designed by First Aid and Resilience for Cultural Heritage in Times of Crisis (FAR), a flagship programme of ICCROM, which is aimed at protecting cultural heritage from conflicts and disasters. This initiative is generously supported by the British Council's Cultural Protection Fund (CPF) in partnership with the Department for Digital, Culture, Media and Sport (DCMS) and seeks the participation from all CPF target countries.

The First Aid and Resilience for Cultural Heritage in Times of Crisis (FAR) programme trains, builds knowledge, creates networks, increases awareness and informs policy with an overall aim to reduce disaster risk for tangible and intangible heritage and associated communities. The Programme motto – culture cannot wait – is grounded in the belief that by integrating heritage into the wider programmes for Disaster Risk Reduction (DRR), Humanitarian Aid, Peacebuilding and Climate Action, we can build peaceful and disaster-resilient communities. Today, the FAR network of cultural first aiders spans 83 countries. The Programme serves ICCROM's Member States by offering advisory services for protecting cultural heritage before, during and after a disaster or a conflict.

#Strongertogether #Culturecannotwait

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