

## Book of Abstracts

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## Symposium Outline

Living heritage provides people with their sense of identity and is continuously regenerating in response to their environment. But we live in a time of rapid environmental change accelerated by the current climate crisis. Our responses to this crisis have the potential to strengthen our living heritage or destroy it. With this in mind we invite you to explore the following questions:

- How is the climate emergency changing living heritage in your region?
- How may living heritage, the connection of people with places, culture and nature, contribute to address the challenges of climate change, sustainability and community development?
- Can regional and local responses to risks posed by that climate change to livelihoods and cultural heritage, become assets for climate actions and resilience?
- In our heritage practice can we develop responses to climate change impacts that strengthen the connections of people with heritage places; contributing to well-being and building resilience.
- What shifts in local, national, and international heritage policies and practice are in progress or are needed to activate heritage as a tool in developing effective responses to the climate emergency.

In this United Nations Decade of Action for Sustainable Development, ICOMOS embraces a two-pronged approach to climate change that both responds to the risks that climate change poses to culture and cultural heritage and also champions heritage in all its forms, as a source of resilience and an asset to climate action.

Living Heritage includes human practices, representations, expressions, knowledge, skills, that continue with changes over time. The values of such living cultural expressions are related to identity, memory and remembrance, belief and symbolism, nature and the environment. Such intangible heritage is enacted, renewed, and transmitted within communities, in response to their environment, their interaction with nature, and their history.

ICOMOS Resolution 20GA/19 on People-Centered Approaches promotes people-centered approaches, the connections of people with heritage and places; intercultural dialogue and understanding, sustainability and well-being when addressing local, national, and international heritage policies and practice.

ICOMOS is committed to honour heritage communities and individuals' rights, taking into consideration past and future generations, acknowledge their role in developing and implementing resilience strategies in a rapidly changing and unstable world, and assist authorities to empower citizens to maintain and develop their values and livelihoods in a dignified, responsible, and sustainable manner.

ICOMOS works to sustainably synergise cultural heritage conservation and management with the diverse cultural, environmental, and socio-economic concerns of people and communities, through building partnerships with relevant sectors, such as social and health services; peace-building and conflict resolution; cultural and creative industries; nature and biodiversity conservation; tourism; urban and territorial planning and development; and infrastructure and energy provision.

This is the first of the series of annual scientific symposia that are part of the *Triennial Scientific Plan (TSP) 2021-24 Climate Change Reboot* focusing proposed ICOMOS meetings and Scientific Symposia on how climate change impacts on specific heritage places and issues.

In the 2021 Scientific Symposium you are asked to look at how these inter-related considerations play out in the context of living heritage amidst climate change, including how they affect the heritage communities as well as understanding, assessing and managing of places directly or tangibly associated with living traditions, ideas, beliefs, and/or artistic and literary works.



The Symposium will occur during the 2021 United Nations Climate Conference, (COP26) underscoring linkages between Living Heritage and the need for urgent actions to respond to the global climate emergency. It will also reinforce the ICOMOS 20th General Assembly resolution 20GA/15 on Climate and Ecological Emergency, which calls on all relevant actors to seek to safeguard all types of heritage from adverse climate impacts, implement risk-informed disaster responses, deliver climate resilient sustainable development; and recognise equity and justice as fundamental dimensions of climate action.

The goal is to broaden the discussion beyond impacts of climate hazards, to include changes in how people valorise and celebrate Living Heritage for climate resilience, adaptation and greenhouse gas mitigation. Local perspectives and experiences are sought to showcase a diversity of approaches, expressions and approaches that drive climate action.

The 2021 ICOMOS Scientific Symposium on the theme of **Living Heritage** will address the following ICOMOS Documents:

- Triennial Scientific Plan (TSP) 2021-24 Climate Change Reboot GA20/13
- ICOMOS People Centred Approaches Resolution GA20/19
- ICOMOS Buenos Aires Declaration on Human Rights 2018
- ICOMOS Climate and Ecological Emergency Resolution GA20/15
- ICOMOS Future of Our Pasts
- The research commissioned for the Indigenous Heritage WG
- Heritage and the Sustainable Development Goals: Policy Guidance for Heritage and Development Actors
- UN Special Report on Report on climate change, culture and cultural rights
- Mālama Honua – to care for our island Earth. A Statement of Commitments from the Nature-Culture Journey Participants at the IUCN World Conservation 2016.
- [Yatra aur Tammanah: Our purposeful Journey](#)

The symposium will investigate, explore and reflect on the ways in which these guiding documents can be implemented in the regional and/or global work of acknowledging, mitigating and adapting to the climate emergency.

## Symposium Themes

1. INTERCONNECTIONS. Exploration of the interconnected relationship between people, place, heritage and sustainability. This could include conservation practices and innovative strategies that respects and preserves this dynamic relationship in view of the current climate emergency;
2. EXAMPLES. Case studies that benchmark and share strategies for the integration of inter-connected values in evaluation, management, and revitalisation of living heritage;
3. COMMUNITIES. Studies that consider the roles and actions of communities, groups and individuals, and their experience of sustaining their living heritage both as a means of mitigating climate change but also in response to climate change, through their livelihoods, conservation and development policies, good governance and application of useful tools;
4. METHODOLOGIES. Successful methods and tools for the identification, documentation and interpretation of living heritage in its fullest sense, that develop and support appropriate policies at all administrative levels, and to raise awareness among all actors on its value;
5. PARTNERSHIPS. Collaborative work of ICOMOS, ICCROM and IUCN, and other national and international organisations which identify ways of bringing forward broader actions on behalf of the global wealth of living heritage – with a focus on People-Centred Approaches;
6. SUSTAINABILITY. Transformative practices that tackle sustainable development issues of living heritage and supports inclusive social development and environmental resilience for urban and rural communities.

## Plan du symposium scientifique

Le patrimoine vivant confère aux personnes leur sens de l'identité et se régénère continuellement en fonction de leur environnement. Mais nous vivons à une époque de changements environnementaux rapides, accélérés par la crise climatique actuelle. Nos réponses à cette crise ont le potentiel de renforcer notre patrimoine vivant ou de le détruire. C'est dans cet esprit que nous vous invitons à explorer les questions suivantes :

- Comment l'urgence climatique modifie-t-elle le patrimoine vivant dans votre région ?
- Comment peut le patrimoine vivant, ainsi que le lien entre les personnes et les lieux, la culture et la nature, contribuer à relever les défis du changement climatique, de la durabilité et du développement communautaire ?
- Les réponses régionales et locales aux risques que ce changement climatique fait peser sur les moyens de subsistance et le patrimoine culturel peuvent-elles devenir des atouts pour les actions climatiques et la résilience ?
- Pouvons-nous développer des réponses aux impacts du changement climatique dans nos pratiques patrimoniales qui renforcent les liens entre les personnes et les lieux patrimoniaux, contribuant ainsi au bien-être et à la résilience ?

Quels changements dans les politiques et pratiques locales, nationales et internationales en ce qui concerne le patrimoine sont en cours ou sont nécessaires pour activer le patrimoine en tant qu'outil dans le développement de réponses efficaces à l'urgence climatique.

Dans le cadre de la Décennie d'action des Nations Unies pour le développement durable, l'ICOMOS adopte une double approche du changement climatique qui répond aux risques que le changement climatique porte sur la culture et le patrimoine culturel et qui défend également le patrimoine sous toutes ses formes, en tant que source de résilience et atout pour l'action climatique.

Le patrimoine vivant comprend les pratiques, les représentations, les expressions, les connaissances et les compétences humaines, qui se développent avec le temps. Les valeurs de ces expressions culturelles vivantes sont liées à l'identité, la mémoire et le souvenir, les croyances et le symbolisme, la nature et l'environnement. Ce patrimoine immatériel est mis en œuvre, renouvelé et transmis au sein des communautés, en réponse à leur environnement, à leur interaction avec la nature et à leur histoire.

La résolution 20GA/19 de l'ICOMOS sur les approches centrées sur les personnes favorise les approches centrées sur les personnes, les liens entre les personnes et le patrimoine et les lieux, le dialogue et la compréhension interculturels, la durabilité et le bien-être lorsqu'il s'agit de politiques et de pratiques locales, nationales et internationales en matière de patrimoine.

L'ICOMOS s'engage à honorer les droits des communautés patrimoniales et des individus, en tenant compte des générations passées et futures, à reconnaître leur rôle dans le développement et la mise en œuvre de stratégies de résilience dans un monde instable et en mutation rapide, et à aider les autorités à donner aux citoyens les moyens de maintenir et de développer leurs valeurs et leurs moyens de subsistance d'une manière digne, responsable et durable.

L'ICOMOS cherche à créer une synergie durable entre la conservation et la gestion du patrimoine culturel et les diverses préoccupations culturelles, environnementales et socio-économiques des personnes et des communautés, en établissant des partenariats avec les secteurs concernés, tels que les services sociaux et de santé, la consolidation de la paix et la résolution des conflits, les industries culturelles et créatives, la conservation de la nature et de la biodiversité, le tourisme, la planification et le développement urbain et territorial, ainsi que la fourniture d'infrastructures et d'énergie.



Il s'agit du premier de la série de symposiums scientifiques annuels qui font partie du Plan scientifique triennal (PST) 2021-24 Réamorçage du changement climatique axant les réunions et les symposiums scientifiques proposés par l'ICOMOS sur l'impact du changement climatique sur des lieux et des questions patrimoniales spécifiques.

Dans le cadre du symposium scientifique 2021, il vous est demandé d'examiner comment ces considérations interdépendantes s'inscrivent dans le contexte du patrimoine vivant face au changement climatique, et notamment comment elles affectent les communautés du patrimoine ainsi que la compréhension, l'évaluation et la gestion des lieux directement ou concrètement associés à des traditions, des idées, des croyances et/ou des œuvres artistiques et littéraires vivantes.

Le symposium aura lieu pendant la Conférence des Nations Unies sur le climat de 2021 (COP26), soulignant les liens entre le patrimoine vivant et le besoin d'actions urgentes pour répondre à l'urgence climatique mondiale. Il renforcera également la résolution 20GA/15 de la 20e Assemblée générale de l'ICOMOS sur l'urgence climatique et écologique, qui appelle tous les acteurs concernés à chercher à sauvegarder tous les types de patrimoine des impacts climatiques négatifs, à mettre en œuvre des réponses aux catastrophes basées sur les risques, à fournir un développement durable résistant au climat et à reconnaître l'équité et la justice comme des dimensions fondamentales de l'action climatique.

L'objectif est d'élargir la discussion au-delà des impacts des risques climatiques, pour inclure les changements dans la façon dont les gens valorisent et célèbrent le patrimoine vivant pour la résilience climatique, l'adaptation et l'atténuation des gaz à effet de serre. Les perspectives et les expériences locales sont recherchées afin de présenter une diversité d'approches, d'expressions et de démarches qui favorisent l'action climatique.

Le symposium scientifique 2021 de l'ICOMOS sur le thème du patrimoine vivant abordera les documents suivants de l'ICOMOS :

- [Triennial Scientific Plan \(TSP\) 2021-24 Climate Change Reboot GA20/13](#)
- [ICOMOS People Centred Approaches Resolution GA20/19](#)
- [ICOMOS Buenos Aires Declaration on Human Rights 2018](#)
- [ICOMOS Climate and Ecological Emergency Resolution GA20/15](#)
- [ICOMOS Future of Our Past](#)
- [The research commissioned for the Indigenous Heritage WG](#)
- [Heritage and the Sustainable Development Goals: Policy Guidance for Heritage and Development Actors](#)
- [UN Special Report on Report on climate change, culture and cultural rights](#)
- [Mālama Honua – to care for our island Earth. A Statement of Commitments from the Nature-Culture Journey Participants at the IUCN World Conservation 2016.](#)
- [Yatra aur Tammanah: Our purposeful Journey](#)

Le symposium examinera, explorera et réfléchira aux moyens de mettre en œuvre ces documents d'orientation dans le cadre du travail mondial de reconnaissance, d'atténuation et d'adaptation à l'urgence climatique.

## Thèmes

1. Exploration de la relation interconnectée entre les personnes, le lieu, le patrimoine et la durabilité. Cela pourrait inclure des pratiques de conservation et des stratégies innovantes qui respectent et préservent cette relation dynamique compte tenu de l'urgence climatique actuelle ;
2. Des études de cas qui permettent de comparer et de partager les stratégies d'intégration des valeurs interconnectées dans l'évaluation, la gestion et la revitalisation du patrimoine vivant ;
3. Des études qui prennent en compte les rôles et les actions des communautés, des groupes et des individus, ainsi que leur expérience de la préservation de leur patrimoine vivant, à la fois comme moyen d'atténuer le changement climatique mais aussi en réponse au changement climatique, par le biais de leurs moyens de subsistance, de leurs politiques de conservation et de développement, de la bonne gouvernance et de l'application d'outils utiles ;



4. Des méthodes et des outils efficaces pour l'identification, la documentation et l'interprétation du patrimoine vivant dans son sens le plus large, qui développent et soutiennent des politiques appropriées à tous les niveaux administratifs, et pour sensibiliser tous les acteurs à sa valeur ;
5. Le travail de collaboration de l'ICOMOS, de l'ICCROM et de l'UICN, ainsi que d'autres organisations nationales et internationales qui identifient les moyens d'entreprendre des actions plus larges au nom de la richesse globale du patrimoine vivant - en mettant l'accent sur les approches centrées sur les personnes ;
6. Des pratiques transformatrices qui abordent les questions de développement durable du patrimoine vivant et soutiennent le développement social inclusif et la résilience environnementale des communautés urbaines et rurales.

## Esquema del Simposio Científico

El Patrimonio vivo proporciona a las personas su sentido de identidad y se está regenerando continuamente en respuesta al entorno. Sin embargo, vivimos en un tiempo de rápidos cambios en el entorno, acelerados por la actual crisis climática. Nuestras respuestas a esta crisis tienen el potencial tanto para reforzar nuestro patrimonio vivo como para destruirlo. Con esto en la mente, te invitamos a explorar las siguientes preguntas:

- ¿Cómo está cambiando la emergencia climática al patrimonio vivo en tu región?
- ¿Cómo puede el patrimonio vivo, la conexión de personas con sitios, cultura y naturaleza, contribuir a enfocar los desafíos del cambio climático, sostenibilidad y desarrollo de las comunidades?
- ¿Pueden las respuestas regionales y locales a los riesgos que planea el cambio climático a las vidas y al patrimonio cultural, convertirse en bazas para acciones climáticas y resiliencia?
- En nuestra práctica en conservación del patrimonio, podemos desarrollar respuestas a los impactos del cambio climático que refuercen las conexiones de las personas con el patrimonio; contribuyendo al bienestar y a reforzar la resiliencia.
- ¿Qué cambios se están produciendo, o son necesarios, en políticas relacionadas con el patrimonio, a nivel local, regional, nacional o internacional, para activar al patrimonio como herramienta a la hora de desarrollar respuestas efectivas a la emergencia climática?

En esta Década de Acción para el desarrollo Sostenible de Naciones Unidas, ICOMOS abraza un doble enfoque al cambio climático que responde tanto a los riesgos que plantea el cambio climático a la cultura y al patrimonio, así como defiende el patrimonio en todas sus formas y manifestaciones, como una fuente de resiliencia y un activo para la acción climática.

El Patrimonio Vivo incluye actividades humanas, representaciones, expresiones, conocimiento, habilidades, que continúa con cambios a lo largo del tiempo. Los valores de semejantes expresiones de cultura viva, están relacionadas con identidad, memoria y conmemoración, creencia y simbolismo, naturaleza y entorno. Semejante patrimonio intangible es promulgado, renovado y transmitido entre las comunidades, en respuesta a su entorno, su interacción con la naturaleza y su historia.

La resolución 20GA/19 de ICOMOS, en Enfoques Centrados en Personas, las conexiones de personas con patrimonio y sitios; diálogo intercultural y entendimiento, sostenibilidad y bienestar al enfocar políticas patrimoniales y práctica local, nacional e internacional.

ICOMOS está comprometida a honrar los derechos de las comunidades del patrimonio e individuales, teniendo en consideración a las generaciones pasadas y futuras, a reconocer su papel en desarrollar e implementar estrategias para la resiliencia en un mundo en cambio rápido e inestable, y asistir a las autoridades a empoderar a los ciudadanos para mantener y desarrollar sus valores y sustento de manera dignificada responsable y sostenible.

ICOMOS trabaja para crear sinergias de manera sostenible entre la conservación y gestión del patrimonio con las diversas preocupaciones culturales, medioambientales y socioeconómicas de las personas y las comunidades, a través de construir alianzas con sectores relevantes, tales como los servicios sociales y de salud; construcción de la paz y resolución de conflictos; industrial culturales y creativas; conservación natural y de la biodiversidad; turismo; desarrollo y planificación urbana y territorial; infraestructuras y suministro de energía.

Este es el primer Simposio Científico de la serie correspondiente al Plan Científico Trienal (PCT) 2021-24 reinicio Cambio Climático enfocado en las reuniones propuestas de ICOMOS y Simposios Científicos enfocados en cómo afecta el cambio climático a los sitios patrimoniales.

Para el Simposio Científico de 2021, te pedimos que veas de qué manera estas consideraciones interrelacionadas juegan en el contexto del patrimonio vivo y el cambio climático incluyendo cómo afectan a las comunidades del patrimonio, así como a comprender, asesorar y gestionar sitios directamente o tangiblemente asociados con



tradiciones vivas, ideas, creencias, y/o trabajos artísticos y literarios.

El Simposio se desarrollará al mismo tiempo que la Conferencia sobre Cambio Climático de Naciones Unidas (COP26) subrayando las relaciones entre el Patrimonio Vivo y la necesidad de acciones urgentes para responder a la emergencia climática global. También reforzará la resolución de la Asamblea General de ICOMOS 20GA/15, acerca de la Emergencia Climática y Ecológica, que llama a todos los actores relevantes a buscar salvaguarda de todos los tipos de patrimonio, desde impactos adversos del clima, implementación de respuestas a desastres, entregar desarrollo sostenible resiliente al clima; y reconocer equidad y justicia como dimensiones fundamentales de la acción climática.

El objetivo consiste en ampliar el debate más allá del impacto de desastres climáticos, para incluir cambios en cómo las personas valorizan y celebran el Patrimonio Vivo para la resiliencia climática, y para la mitigación del efecto invernadero. Se buscan perspectivas y experiencias locales para mostrar una diversidad de enfoques, y expresiones que conducen la acción climática.

El Simposio Científico 2021 con el tema Patrimonio Vivo, se centrará en los siguientes Documentos de ICOMOS:

- Triennial Scientific Plan (TSP) 2021-24 Climate Change Reboot GA20/13
- ICOMOS People Centred Approaches Resolution GA20/19
- ICOMOS Buenos Aires Declaration on Human Rights 2018
- ICOMOS Climate and Ecological Emergency Resolution GA20/15
- ICOMOS Future of Our Pasts
- The research commissioned for the Indigenous Heritage WG
- Heritage and the Sustainable Development Goals: Policy Guidance for Heritage and Development Actors
- UN Special Report on Report on climate change, culture and cultural rights
- Mālama Honua – to care for our island Earth. A Statement of Commitments from the Nature-Culture Journey Participants at the IUCN World Conservation 2016.
- Yatra aur Tammanah: Our purposeful Journey

En el simposio, se investigará, explorará y reflexionará acerca de las maneras en las que dichos documentos guía pueden ser implementados en el trabajo global de reconocer, mitigar y adaptarse a la emergencia climática.

## Themes

1. INTERCONEXIONES. Exploración de la relación interconectada entre personas, sitio, patrimonio y sostenibilidad. Esto debería incluir prácticas de conservación y estrategias innovativas que respeten y preserven esta relación dinámica a la vista de la actual emergencia climática;
2. EJEMPLOS. Casos que sirvan para marcar y compartir estrategias para la integración de valores interconectados en evaluación, gestión, y revitalización del patrimonio vivo;
3. COMUNIDADES. Estudios que consideren los roles y acciones de las comunidades, grupos e individuales, y su experiencia en sostener su patrimonio vivo tanto para mitigar el cambio climático, como en respuesta al cambio climático, a través de sus medios de vida, políticas de conservación y desarrollo, buena gobernanza y aplicación de herramientas de utilidad;
4. METODOLOGÍAS. Métodos y herramientas de éxito para la identificación, documentación e implementación de patrimonio vivo en su sentido más amplio, que desarrollen y apoyen políticas apropiadas en todos los niveles administrativos, y para concienciar a todos los actores acerca de su valor;
5. ALIANZAS. Trabajo colaborativo de ICOMOS, ICCROM e IUCN, así como otras organizaciones que identifican maneras de proponer acciones más amplias en nombre de la riqueza global del patrimonio vivo – con un énfasis en Enfoques Centrados en las Personas;
6. SOSTENIBILIDAD. Prácticas transformativas que abordan cuestiones relativas al desarrollo sostenible y resiliencia mediambiental para comunidades rurales y urbanas.



## Keynote Speakers



**Bente Mathisen**

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Bente Mathisen is a Norwegian chartered architect MNAL who works as a cultural heritage advisor at Statsbygg, Norway's Public Construction Department, Culture and Ministry affairs. She has been director and deputy director for the Heritage Management Office of the World Heritage (WH) City of Bergen Norway, Director for the Management Office of Cidade Velha Republic of Cape Verde, and an executive partner at the Architect group CUBUS, Bergen Norway. She is a board member of Foundation Bryggen, World Heritage site.

She coordinated for 10 years the Eastern African City-to-City network between the WH cities of Bergen, Lamu, Zanzibar and Ilha. She was the project leader of a restoration and capacity building project for the WH cities of Bergen, Norway, and Ilha, Mozambique. She coordinated the intangible heritage cooperation Timor Leste - Norway, empowering women of Timor Leste from 2001 till 2008.

She has been a Board member of ICOMOS Norway and is currently the focal point of the Our Common Dignity Initiative- Rights Based Approaches working group.



**Ananya Bhattacharya**

ananya@banglanatak.com

Ananya Bhattacharya is a social entrepreneur with 30+ years of global work experience. She is co-founder and director of banglanatak dot com, a social enterprise working for inclusive and sustainable development using culture based approaches since 2000.

She specialises in culture, gender and sustainability and has worked with diverse communities for safeguarding INTANGIBLE CH, development of creative enterprise and cultural tourism. Her papers and articles have been published in journals, books and conference proceedings. A recent contribution is in Routledge Research in Architectural Conservation and Historic Preservation: Heritage Conservation in Postcolonial India, Approaches and Challenges. Ananya actively works for developing global and regional CSO networks working on culture and development. Ananya is a Board member of ICOMOS India, a Bureau member of the ISC on Cultural Tourism (ICTC) and a member of the ISC on ICH (ICICH).

Ananya Bhattacharya is delivering the keynote address on Living Heritage, to the opening of this first online ICOMOS scientific symposium Living Heritage and Climate Change. Her presentation is titled as "Living Heritage and Climate Change: Interconnections & Possibilities".



**Will Megarry**

W.Megarry@qub.ac.uk

Will Megarry is an archaeologist, geographical information systems (GIS) and heritage management specialist with over 15 years commercial and academic experience. He has a particular interest (and has published widely on) in the application and transferability of geospatial technologies to archaeology and cultural heritage site management and protection. His career has included time in commercial GIS and heritage management consultancy and he has worked at World Heritage Sites and other cultural heritage sites

around the world including Petra, Machu Picchu and the Brú na Bóinne. He is a member of ICOMOS Ireland and an Expert Member of ICOMOS-ICAHM.

He is Senior Lecturer in Geographical Information Science, teaching GIS and remote sensing, with a particular focus on their use as decision support tools for policy and management decision making. He is also an active field archaeologist with an ongoing project looking at Neolithic stone tool production in the Shetland Islands, UK, funded by the Society of Antiquaries of Scotland. When not not researching prehistory, he is interested in the more recent archaeologies of emigrant communities and is PI on the Hidden Histories Project, exploring Ulster heritage in Ontario, Canada. More recently, his research has been exploring the intersection between climate change and cultural heritage. He is a Bureau Member of the ICOMOS Climate Change and Cultural Heritage Working Group and Principal Investigator on the AHRC-DCMS funded Values-based Climate Change Risk Assessment: Piloting the Climate Vulnerability Index for Cultural Heritage in Africa project, which is providing foundational training in climate vulnerability assessment to heritage professionals in Africa. He also coordinated the Heritage on the Edge Project, a collaboration between ICOMOS, CyArk and Google Arts and Culture.

Will Megarry is delivering the keynote address on Living Heritage, to the opening of this first online ICOMOS scientific symposium Living Heritage and Climate Change. His presentation is titled as “Living Heritage in a Changing Climate: Challenges, Solutions and Opportunities”.

**Introduction and Keynotes addresses**

 [Click here to watch the video](#) 

**News around the world**

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9 November 2021

Tuesday

11:30–13:00 CET

Parallel Sessions 1A

**Paper Presentations**

## **Sustainability and Methodology**

**Chair: Susan McIntyre-Tamwoy**

Koorosh Attarian, Linda Shetabi, Behnaz Safar Ali Najjar

“Impact of climate change on sustainable underground living heritage”

Athanasios Votsis, Irina Pavlova, Milla Mikkola, Fabrice Renaud

“The role of natural and mixed cultural-natural heritage in increasing the resilience of socio-ecological systems to climate change impacts”

Ivana KaturiĆ, Mario Gregar, Katarina Lukić

“Approach to the preparedness and risk management for the UNESCO World Heritage Property ‘Old City of Dubrovnik’”

Yvon Velot

“Partenariat université-entreprise pour la protection du patrimoine vivant ”

## **Impact of Climate Change on Sustainable Underground Living Heritage**

**Koorosh Attarian \*, Linda Shetabi, Behnaz Safar Ali Najar**



Climate change and contemporary lifestyle choices are important factors in the deterioration of built heritage. The design and setting of certain historic buildings and vernacular architecture in Dezfūl, Iran, can offer climate change mitigation and adaptation strategies for water use and indoor climate regulation. Climate change has had two major impacts on the underground living heritage of Dezfūl, a) reduction in precipitation and b) increase in temperature. This has resulted in decreased humidity and lower water levels in canals conducting water to the city and agricultural land, as well as disrupting historic water flows, making historic access to cold water difficult for families. To protect this unique living heritage several solutions have been implemented, including social activities aimed at conserving historic public water supply systems, and the conservation and rehabilitation of prestigious historic houses and underground living spaces, led by cultural heritage organizations, homeowners and private funders.

### ***Impact du changement climatique sur le patrimoine vivant souterrain durable***

Le changement climatique et les choix de mode de vie contemporains sont des facteurs importants de la détérioration du patrimoine bâti. La conception et le cadre de certains bâtiments historiques et de l'architecture vernaculaire à Dezfūl, en Iran, peuvent offrir une atténuation du changement climatique et les stratégies d'adaptation pour l'utilisation de l'eau et la régulation du climat intérieur. Le changement climatique a eu deux impacts majeurs sur le patrimoine vivant souterrain de Dezfūl, a) réduction des précipitations et b) augmentation de la température. Cela a entraîné une diminution de l'humidité et une baisse des niveaux d'eau dans les canaux conduisant l'eau vers la ville et des terres agricoles, ainsi que de perturber les débits d'eau historiques, rendant difficile l'accès historique à l'eau froide pour les familles. Pour protéger ce patrimoine vivant unique plusieurs solutions ont été mises en œuvre, y compris les activités sociales visant à conserver les systèmes publics historiques d'approvisionnement en eau, et la conservation et la réhabilitation de demeures historiques prestigieuses et d'espaces de vie souterrains, dirigée par des organismes du patrimoine culturel, des propriétaires et des bailleurs de fonds privés.

### ***Impacto del cambio climático en el patrimonio vivo subterráneo sostenible***

El cambio climático y las opciones de estilo de vida contemporáneo son factores importantes en el deterioro del patrimonio construido. El diseño y el entorno de ciertos edificios históricos y arquitectura vernácula en Dezfūl, Irán, pueden ofrecer estrategias de mitigación y adaptación al cambio climático para el uso del agua y la regulación del clima interior. El cambio climático ha tenido dos impactos importantes en el patrimonio vivo subterráneo de Dezfūl, a) reducción de la precipitación y b) aumento de la temperatura. Esto ha provocado una disminución de la humedad y niveles más bajos de agua en los canales que conducen el agua a la ciudad y a las tierras agrícolas además de interrumpir los flujos de agua históricos, lo que dificulta el acceso histórico al agua fría para las familias. Para proteger este patrimonio vivo único se han implementado varias soluciones, incluidas las actividades sociales destinadas a conservar los sistemas públicos de suministro de agua históricos, y la conservación y rehabilitación de prestigiosas casas históricas y espacios habitables subterráneos, liderado por organizaciones de patrimonio cultural, propietarios de viviendas y financiadores privados.

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## The Role of Natural and Mixed Cultural-Natural Heritage in Increasing the Resilience of Socio-Ecological Systems to Climate Change Impacts

Athanasios Votsis \*, Irina Pavlova, Milla Mikkola, Fabrice Renaud



Agendas to reduce the risks associated with climate change and increase resilience to impacts have become rather inclusive in the types of social effects that they consider, also acknowledging their embeddedness in socioecological networks, geographies, and scales. Heritage, as many other semantically rich social and cultural notions, is both under-represented and under-specified in climate change policy assessments. It is therefore important, beyond merely recognising the importance of heritage, to keep sketching out how this importance looks like in practice and how it can connect to policy assessment. In this paper and accompanying talk, we overview our ongoing research work to clarify two complementary aspects: the benefits of heritage within the exposure and vulnerability structure of seven living socioecological systems; and the monetary added value of UNESCO inscription in eurozone's regional economies.

### ***Le rôle du patrimoine culturel et naturel naturel et mixte dans l'augmentation de la résilience des systèmes socio-écologiques aux impacts du changement climatique***

Les programmes visant à réduire les risques associés au changement climatique et à accroître la résilience aux impacts sont devenus plutôt inclusifs dans les types d'effets sociaux qu'ils prennent en compte, reconnaissant également leur ancrage dans les réseaux socio-écologiques, les géographies et les échelles. Le patrimoine, comme de nombreuses autres notions sociales et culturelles sémantiquement riches, est à la fois sous-représenté et sous-spécifié dans les évaluations des politiques sur le changement climatique. Il est donc important, au-delà de la simple reconnaissance de l'importance du patrimoine, pour continuer à esquisser à quoi ressemble cette importance dans la pratique et comment elle peut être liée à l'évaluation des politiques. Dans cet article et l'exposé qui l'accompagne, nous passons en revue nos travaux de recherche en cours pour clarifier deux aspects complémentaires : les avantages du patrimoine dans la structure d'exposition et de vulnérabilité de sept systèmes socio-écologiques vivants ; et la valeur ajoutée monétaire de l'inscription de l'UNESCO dans les économies régionales de la zone euro.

### ***El papel del patrimonio natural y cultural-natural mixto en el aumento de la resiliencia de los sistemas socioecológicos a los impactos del cambio climático***

Las agendas para reducir los riesgos asociados con el cambio climático y aumentar la resiliencia a los impactos se han vuelto bastante inclusivas en los tipos de efectos sociales que consideran, reconociendo también su arraigo en redes, geografías y escalas socioecológicas. El patrimonio, como muchas otras nociones sociales y culturales semánticamente ricas, está subrepresentada y subespecificado en las evaluaciones de políticas de cambio climático. Por tanto, es importante, más allá del simple reconocimiento de la importancia del patrimonio, seguir esbozando cómo se ve esta importancia en la práctica y cómo se puede conectar con la evaluación de políticas. En este documento y la charla que lo acompaña, revisamos nuestro trabajo de investigación en curso para aclarar dos aspectos complementarios: los beneficios del patrimonio dentro de la estructura de exposición y vulnerabilidad de siete sistemas socioecológicos vivos; y el valor añadido monetario de la inscripción de la UNESCO en las economías regionales de la eurozona.

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## **Approach to the Preparedness and Risk Management for the UNESCO World Heritage Property 'Old City of Dubrovnik'**

**Ivana KaturiĆ, Mario Gregar \*, Katarina Lukić**



The City of Dubrovnik is the first city in Croatia to prepare a UNESCO World Heritage Management Plan aimed at its protected historic city core, i.e., the Old City of Dubrovnik. Besides being a World Heritage Property (WHP), Dubrovnik's historic core is also a home for more than 1500 residents, making it a 'living city'. One of the important issues emphasised by the Management Plan is natural and anthropogenic risks for both cultural heritage and 'living city'. This work aims to present a means of developing a methodology and various aspects to be considered in elaborating the preparedness and risk management for the UNESCO WHP in Dubrovnik as a necessary part of implementing the *Management Plan for UNESCO WHP 'Old City of Dubrovnik'*. In the developing process, a participatory approach is highlighted as an essential methodological tool for involving local communities in co-creating content and raising awareness of the importance of living heritage and the anthropogenic effects on climate change.

### ***Approche de la préparation et de la gestion des risques pour le bien du patrimoine mondial de l'UNESCO 'Vieille ville de Dubrovnik'***

La ville de Dubrovnik est la première ville de Croatie à préparer un plan de gestion du patrimoine mondial de l'UNESCO visant son cœur historique protégé, c'est-à-dire la vieille ville de Dubrovnik. En plus d'être un bien du patrimoine mondial (WHP), le cœur historique de Dubrovnik abrite également plus de 1500 habitants, ce qui en fait une « ville vivante ». L'une des questions importantes soulignées par le plan de gestion est les risques naturels et anthropiques pour le patrimoine culturel et la « ville vivante ». Ce travail vise à présenter un moyen de développer une méthodologie et divers aspects à prendre en compte dans l'élaboration de la préparation et de la gestion des risques pour le WHP de l'UNESCO à Dubrovnik en tant que partie nécessaire de la mise en œuvre du plan de gestion du WHP de l'UNESCO « Vieille ville de Dubrovnik ». Dans le processus de développement, une approche participative est mise en évidence comme un outil méthodologique essentiel pour impliquer les communautés locales dans la co-création de contenu et la sensibilisation à l'importance du patrimoine vivant et les effets anthropiques sur le changement climatique.

### ***Enfoque de la preparación y la gestión de riesgos para la propiedad del patrimonio mundial de la UNESCO 'Ciudad vieja de Dubrovnik'***

La ciudad de Dubrovnik es la primera ciudad de Croacia en preparar un Plan de Gestión del Patrimonio Mundial de la UNESCO dirigido a su núcleo histórico protegido, es decir, la Ciudad Vieja de Dubrovnik. Además de ser Patrimonio de la Humanidad (WHP), el centro histórico de Dubrovnik también alberga a más de 1500 residentes, lo que la convierte en una "ciudad viva". Una de las cuestiones importantes que destaca el Plan de Gestión son los riesgos naturales y antropogénicos tanto para el patrimonio cultural como para la "ciudad viva". Este trabajo tiene como objetivo presentar un medio para desarrollar una metodología y varios aspectos a ser considerados en la elaboración de la preparación y la gestión de riesgos para la WHP de la UNESCO en Dubrovnik como parte necesaria de la implementación del Plan de Gestión de la PTH de la UNESCO "Ciudad Vieja de Dubrovnik". En el proceso de desarrollo, se destaca un enfoque participativo como una herramienta metodológica esencial para involucrar a las comunidades locales en la co-creación de contenido y concienciar sobre la importancia del patrimonio vivo y los efectos antropogénicos sobre el cambio climático.

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## Partenariat université-entreprise pour la protection du patrimoine vivant

Yvon Velot\*



A travers un exemple concret de partenariat université-entreprise qui s'est traduit par la création en Chine fin 2020 d'un centre de recherche international sur le patrimoine vivant, l'art et la culture, notre exposé vise montrer l'intérêt d'un tel concept pour développer de manière durable des projets de protection du patrimoine vivant et du patrimoine naturel et de sa biodiversité, en vertu de la responsabilité sociétale des entreprises, notamment en matière d'éducation et de recherche.

Si aujourd'hui toutes les couches de la société sont impactées par le changement climatique, elles ne le sont pas toutes avec la même intensité, ni avec la même sensibilité. En favorisant les travaux de recherche sur l'impact du changement climatique sur le patrimoine vivant et son environnement proche avec la richesse de sa biodiversité, ce centre de recherche université entreprise sur le patrimoine vivant, l'art et la culture constitue une plateforme originale pour sensibiliser davantage les étudiants, leurs professeurs et les populations concernées, mais aussi le grand public, à l'impact du changement climatique sur le patrimoine vivant et le patrimoine naturel et sa biodiversité. Cette action de sensibilisation peut se traduire de multiples façons à travers la publication de travaux de recherche, des actions de protection et valorisation du patrimoine vivant, l'organisation de conférences et de colloques locaux et internationaux, d'expositions, de festivals.

Comme ce centre de recherche n'a que quelques mois d'existence, il n'est pas encore en mesure de présenter un bilan chargé de très nombreuses actions, mais quelques événements déjà réalisés et des projets en cours ou à venir peuvent en illustrer l'intérêt. Une action concrète consiste en un cycle de conférences destiné à sensibiliser les étudiants de l'Université des Arts du Yunnan à des sujets comme la relation entre protection du patrimoine vivant et protection de la nature ou bien encore la diffusion de l'art moderne dans les territoires ruraux et de sa possible interaction avec la nature dans le cadre de parcours d'exposition dans des forêts ou des jardins botaniques. En matière de projet en cours, et à titre d'exemple, ce centre présentera une exposition sur l'histoire des botanistes français en Chine dans le cadre de la prochaine COP 15 sur la biodiversité qui se tiendra à Kunming en Chine en octobre 2021. Un tel projet fait appel à de multiples compétences, d'une part historiques pour rédiger des notices sur les botanistes les plus remarquables (entre le 18<sup>e</sup> siècle et le 20<sup>e</sup> siècle, plus de 250 botanistes français ont été répertoriés), et d'autre part artistiques pour concevoir les visuels et autres vidéos de l'exposition. Cette partie « conception » constitue un excellent moyen de sensibilisation des professeurs et étudiants de l'Université des Arts du Yunnan à l'évolution de la biodiversité. Quant à la partie « exposition » à proprement parler, elle permettra cette sensibilisation auprès du grand public, d'autant que cette exposition devrait circuler en Chine et en France.

Ce modèle de centre de recherche international a également vocation à développer des partenariats avec des institutions locales et étrangères pour renforcer son expertise sur la préservation et la valorisation du patrimoine vivant et le développement d'un tourisme culturel et patrimonial durable et écologique.

### *University-business partnership for the protection of living heritage*

Through a concrete example of university-business partnership which resulted in the creation in China at the end of 2020 of an international research centre on living heritage, art and culture, our presentation aims to show the interest of such a concept to develop projects to protect living heritage and natural heritage and its biodiversity in a sustainable manner by virtue of corporate social responsibility, particularly in education and research.

If today all layers of society are impacted by climate change, they are not all affected with the same intensity, nor with the same sensitivity. By promoting research on the impact of climate change on living heritage and its close environment with the richness of its biodiversity, this university-based research centre on living heritage, art and culture constitutes an original platform to increase awareness among students, their teachers and the populations con-

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cerned, but also the general public, to the impact of climate change on living heritage and the natural heritage and its biodiversity. This awareness-raising action can be translated in many ways through the publication of research work, actions to protect and promote living heritage, the organization of local and international conferences and symposia, exhibitions, festivals.

As this research centre is only a few months old, it is not yet in a position to present a report loaded with a large number of actions, but some events already carried out and current or future projects may illustrate the interest. Concrete action consists of a series of conferences intended to raise awareness intended to educate Yunnan University of the Arts students on topics such as the relationship between protection of living heritage and protection of nature or even the dissemination of modern art in rural areas and its possible interaction with nature through exhibition routes in forests or botanical gardens. In terms of the current project, and by way of example, this centre will present an exhibition on the history of French botanists in China as part of the upcoming COP 15 on biodiversity to be held in Kunming, China in October 2021. Such a project calls for multiple skills, on the one hand historical to write notes on the most remarkable botanists (between the 18th century and the 20th century, more than 250 French botanists were listed), and on the other hand artistic to design the visuals and other videos for the exhibition. This "design" part is an excellent way to educate professors and students of Yunnan University of the Arts to the evolution of biodiversity. As for the "exhibition" part, strictly speaking, it will allow this awareness among the general public, especially since this exhibition is expected to circulate in China and France.

This model of an international research centre also aims to develop partnerships with local and foreign institutions to strengthen its expertise in the preservation and enhancement of living heritage and the development of sustainable and ecological cultural and heritage tourism.

### ***Asociación universidad-empresa para la protección del patrimonio vivo***

A través de un ejemplo concreto de asociación universidad-empresa que resultó en la creación en China a fines de 2020 de un centro de investigación internacional sobre patrimonio vivo, arte y cultura, nuestra presentación tiene como objetivo mostrar el interés de tal concepto para el desarrollo sostenible de proyectos de protección del patrimonio vivo y natural y su biodiversidad, en virtud de la responsabilidad social de las empresas, especialmente en materia de educación e investigación.

Si bien hoy en día todos los estratos de la sociedad se ven afectados por el cambio climático, no todos se ven afectados con la misma intensidad ni con la misma sensibilidad. Al promover la investigación sobre el impacto del cambio climático en el patrimonio vivo y su entorno cercano con la riqueza de su biodiversidad, este centro de investigación universitario sobre patrimonio vivo, arte y cultura constituye una plataforma original para sensibilizar a los estudiantes, sus profesores y el poblaciones interesadas, pero también el público en general, por el impacto del cambio climático en el patrimonio vivo y el patrimonio natural y su biodiversidad. Esta acción de sensibilización puede traducirse de muchas formas mediante la publicación de trabajos de investigación, acciones para proteger y promover el patrimonio vivo, la organización de congresos y simposios locales e internacionales, exposiciones, festivales.

Como este centro de investigación tiene solo unos meses de vida, aún no está en condiciones de presentar un informe cargado de un gran número de acciones, pero algunos eventos ya realizados y proyectos actuales o futuros pueden ilustrar el interés. La acción concreta consiste en una serie de conferencias destinadas a concienciar a los estudiantes de la Universidad de las Artes de Yunnan sobre temas como la relación entre la protección del patrimonio vivo y la protección de la naturaleza o incluso la difusión del arte moderno en las zonas rurales y su posible interacción. con la naturaleza a través de rutas expositivas en bosques o jardines botánicos.

En cuanto al proyecto actual, y a modo de ejemplo, este centro presentará una exposición sobre la historia de los botánicos franceses en China como parte de la próxima COP 15 sobre biodiversidad que se celebrará en Kunming, China en octubre de 2021. Tal proyecto requiere múltiples habilidades, por un lado histórico para escribir notas sobre los botánicos más notables (entre el siglo XVIII y el siglo XX, se enumeraron más de 250 botánicos franceses), y por otro lado artístico para diseñar las imágenes. y otros videos de la exposición. Esta parte de "diseño" es una excelente manera de educar a profesores y estudiantes de la Universidad de las Artes de Yunnan sobre la evolución de la biodiversidad. En cuanto a la parte de "exposición", estrictamente hablando, permitirá esta concienciación entre el público en general, sobre todo porque se espera que esta exposición circule en China y Francia. Este modelo de centro de investigación internacional también tiene como objetivo desarrollar asociaciones con instituciones locales y extranjeras para fortalecer su experiencia en la preservación y mejora del patrimonio vivo y el desarrollo del





9 November 2021

Tuesday

13:15 - 14:45 CET

Parallel Sessions 2A

**Paper Presentations**

## **Communities and Miscellaneous Case Studies**

**Chair: Yolo Lucio**

Bély Hermann Abdoul-Karim Niangao

“Les pratiques culturelles dans les paysages ruraux comme exemples de conservation des écosystèmes au Burkina Faso”

Nigel Walter

“English parish churches and sustainability”

Karl Kupka

“Neighbourhood housing and adaptation as sustainable assets in heritage cities”

Abderrahim Kassou

“Figuig, ou de l’immatériel dans le patrimoine matériel”

## Les pratiques culturelles dans les paysages ruraux comme exemples de conservation des écosystèmes au Burkina Faso

Bély Hermann Abdoul-Karim Niangao \*



L'importance de la préservation de l'environnement physique dans la lutte contre les variations et le changement climatiques n'est plus à prouver. On reconnaît que l'homme est un être de culture qui a soumis la nature et l'environnement autour de lui à un processus brutal et accéléré de transformation et dont il reçoit comme par un effet de boomerang les conséquences de ses propres turpitudes. Mais la culture, surtout dans sa dimension immatérielle, impose pour son expression et sa pratique quelques exigences à l'homme, l'obligeant ainsi à un respect vis-à-vis de son environnement et de l'univers. C'est en cela que la relation entre pratiques culturelles, notamment culturelles et préservation de l'environnement nous paraît une union nécessaire qui peut contribuer à une meilleure protection des écosystèmes, pour un meilleur équilibre de l'environnement. A l'occasion de cette présentation, nous montrerons qu'à travers les pratiques culturelles dans certains lieux sacrés, des communautés avaient mis en place un système endogène qui visait une protection indirecte des ressources de la nature. Comment ces pratiques culturelles agissent sur l'environnement et vice-versa ? Comment se manifestent ces interactions dans un contexte de plus en plus menacé ? Nous illustrerons notre propos avec des exemples.

### *Worship practices in rural landscapes as examples of ecosystem conservation in Burkina Faso*

The importance of preserving the physical environment in combating climate variation and change is no longer proven. We recognize that man is a cultural being who has subjugated nature and the environment around him to a brutal and accelerated process of transformation and from which he receives, as if by a boomerang effect, the consequences of his own turpitudes. But culture, especially in its intangible dimension, imposes some requirements on humans for its expression and practice, thus forcing him to respect his environment and the universe. This is where the relationship between cultural practices, in particular for worship and preservation of the environment seems to us to be a necessary union which can contribute to better protection of ecosystems, for a better environmental balance. On the occasion of this presentation, we will show that through worship practices in certain sacred places, communities had set up an endogenous system which aimed at indirect protection of natural resources. How do these worship practices affect the environment and vice versa? We will illustrate our point with examples.

### *Prácticas de adoración en paisajes rurales como ejemplos de conservación de ecosistemas en Burkina Faso*

La importancia de preservar el medio ambiente físico para combatir la variación y el cambio climático ya no está probada. Reconocemos que el hombre es un ser cultural que ha subyugado la naturaleza y el entorno que lo rodea a un brutal y acelerado proceso de transformación y del que recibe, como por efecto boomerang, las consecuencias de sus propias villanías. Pero la cultura, especialmente en su dimensión intangible, impone al hombre unos requisitos para su expresión y práctica, lo que le obliga a respetar su entorno y el universo. Aquí es donde la relación entre prácticas culturales, en particular, el culto y la preservación del medio ambiente nos parece una unión necesaria que puede contribuir a una mejor protección de los ecosistemas, para un mejor equilibrio ambiental. Con motivo de esta presentación, mostraremos que a través de las prácticas de culto en ciertos lugares sagrados, las comunidades habían establecido un sistema endógeno que tenía como objetivo la protección indirecta de los recursos naturales. ¿Cómo afectan estas prácticas de adoración al medio ambiente y viceversa? Nous illustrerons notre propos avec des exemples.

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## English Parish Churches and Sustainability

Nigel Walter \*



England's 16,000 parish churches represent an outstanding body of living heritage. Typically, they have experienced multiple episodes of change, which has both enabled them to survive and has given them their outstanding character. Growing awareness of the climate crisis – and the Church of England's own recognition of this crisis – is leading to further change including, for example, the upgrading of fabric and the installation of photovoltaic panels, where appropriate. This paper describes two aspects of the Church's response, a 'Practical Path to Net Zero Carbon' document aimed at parish communities, and a set of Best Practice guidance for architects and surveyors. Responding to the climate crisis will necessarily result in change to these buildings. The paper argues that such change need not be seen as a threat, but rather anticipated as normal to the life of living heritage. But in order for these changes to be successfully integrated, they must be made in continuity with the tradition which formed these buildings, being framed as a theological question, as a 'mark of mission'. Such change should strengthen the connections of people with heritage places, to the benefit of both.

### *Églises paroissiales anglaises et durabilité*

Les 16 000 églises paroissiales d'Angleterre représentent un patrimoine vivant exceptionnel. En règle générale, ils ont connu plusieurs épisodes de changement, ce qui leur a à la fois permis de survivre et leur a donné leur caractère hors du commun. Prise de conscience croissante de la crise climatique – et la propre reconnaissance par l'Église d'Angleterre de cette crise – conduit à d'autres changements, y compris, par exemple, la mise à niveau du tissu et l'installation de panneaux photovoltaïques, le cas échéant. Cet article décrit deux aspects de la réponse de l'Église, un document « Chemin pratique vers un bilan carbone net » destiné aux communautés paroissiales, et un ensemble de conseils sur les meilleures pratiques pour les architectes et les géomètres. Répondre à la crise climatique entraînera nécessairement une modification de ces bâtiments. Le document soutient qu'un tel changement ne doit pas être considéré comme une menace, mais plutôt anticipée comme normale à la vie du patrimoine vivant. Mais pour que ces changements soient intégrés avec succès, ils doivent être réalisés dans la continuité de la tradition qui a formé ces bâtiments, étant formulée comme une question théologique, comme une « marque de mission ». Un tel changement devrait renforcer les liens des personnes avec les lieux patrimoniaux, au profit des deux.

### *Iglesias parroquiales inglesas y sostenibilidad*

Las 16.000 parroquias de Inglaterra representan un patrimonio vivo excepcional. Por lo general, han experimentado múltiples episodios de cambio, lo que les ha permitido sobrevivir y les ha dado su carácter sobresaliente. Creciente conciencia sobre la crisis climática - y el propio reconocimiento de la Iglesia de Inglaterra de esta crisis - está dando lugar a más cambios que incluyen, por ejemplo, el acondicionamiento de tejidos y la instalación de paneles fotovoltaicos, en su caso. Este documento describe dos aspectos de la respuesta de la Iglesia, un documento "Camino práctico hacia el carbono neto cero" dirigido a las comunidades parroquiales, y un conjunto de guías de mejores prácticas para arquitectos y topógrafos. Responder a la crisis climática necesariamente resultará en cambios en estos edificios. El documento argumenta que tal cambio no necesita ser visto como una amenaza, pero más bien anticipada como normal a la vida del patrimonio vivo. Pero para que estos cambios se integren con éxito, deben realizarse en continuidad con la tradición que formó estos edificios, siendo enmarcado como una cuestión teológica, como una "marca de misión". Dicho cambio debería fortalecer las conexiones de las personas con los

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## Neighbourhood Housing and Adaptation as sustainable assets in Heritage Cities

Karl Kupka \*

### 1/. Different approaches to Urban Renewal

The decades between 1968 and 2021 started with a crisis of old city centres, followed by a gradual recovery of the building stock. Recovery was driven by civil interest in Heritage and subsidised by public and private investment. Many old districts were saved by restoration and/or reconstructed. But the pace and methodology of Urban Renewal was quite different in various countries:

- In Southern Europe, governments were strict in maintaining the urban lay out, building density and even the original aspect of the buildings.
- In the North, the interventions were more radical: new lay out, higher density and modern architecture.

The effects of both methods of Renewal can be illustrated by confronting the housing capacity in World Heritage city centres like Venice and Amsterdam: Where housing diminishes in Venice, other touristic and cultural functions (hotels/B&B, second homes, museums etc.) take its place. - and many properties remain vacant. Anyhow, this is also true in Florence, Rome and other Italian Heritage cities. The difference with Holland comes from the densification policy in Northern Europe (Amsterdam, Rotterdam or Dublin) where many former docklands and brownfields have been replaced by residential districts.

### 2/. More space for (rising) rivers with more respect for heritage

An eternal threat for the Dutch society and (living) heritage is the rise of sea level and the rising affluence of the main rivers (Rhine, Meuse) in the Delta provinces - worsened by the Climate Change. Twenty years after the start of the Delta Works coast defence, inland waterboards started to reconstruct, shorten and heighten the main river dikes. In some locations great parts of villages were removed. E.g. in Brakel: over 1.000 houses - partly listed monuments - were destroyed. After years of strong citizen's protest, the State Water ministry elaborated an alternative approach. The rivers were enlarged on empty spots (outer marches, meadows, old river arms) and much of the ancient landscape and villages have been saved. This "Ruimte voor de rivier" approach has been realised from 2006 until 2019 for € 2,3 billion.

### 3/. Climate Adaptation on neighbourhood scale

Where it comes to climate adaptation in cities - and heritage districts in particular - political and community intentions for the environment have only started to be translated in the realisation of projects. On a small scale the transformation of stone covered public space or private lots into water permeable green, has started by municipalities, but it has also started from citizens' initiative. More comprehensive measures apply practices from neighbourhood renewal, like changing heating infrastructure from methane to hydrogen or electricity (climate mitigation). This can be combined with the reconstruction of streets augmenting green and water surfaces (adaptation), an approach under realisation in some central districts of Amsterdam and Rotterdam.

### *L'habitat de proximité et l'adaptation en tant qu'atouts durables dans les villes patrimoniales*

#### Les 1. Différentes approches de la rénovation urbaine

Entre 1968 et 2021, il y a eu une crise des centres-villes anciens, suivie d'une récupération progressive du parc immobilier. La reprise a été stimulée par l'intérêt civil pour le patrimoine et subventionnée par des investissements publics et privés. De nombreux quartiers anciens ont été sauvés par la restauration et/ou la reconstruction. Mais le rythme et la méthodologie de la rénovation urbaine étaient très différents selon les pays:

- Dans le sud de l'Europe, les gouvernements étaient stricts quant au maintien de l'agencement urbain, de la densité de construction et même de l'aspect original des bâtiments.

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- Dans le Nord, les interventions étaient plus radicales : nouveau tracé, densité plus élevée et architecture moderne.

Les effets de ces deux méthodes de rénovation peuvent être illustrés en confrontant la capacité de logement dans les centres-villes du patrimoine mondial comme Venise et Amsterdam : Lorsque le logement diminue à Venise, d'autres fonctions touristiques et culturelles (hôtels/B&B, résidences secondaires, musées, etc.) prennent sa place. - et de nombreuses propriétés restent vacantes. De toute façon, cela est également vrai à Florence, à Rome et dans d'autres villes du patrimoine italien. La différence avec la Hollande vient de la politique de densification en Europe du Nord (Amsterdam, Rotterdam ou Dublin) où de nombreux anciens docks et friches industrielles ont été remplacés par des quartiers résidentiels.

### 2. Plus d'espace pour les rivières (en crue) avec plus de respect pour le patrimoine

L'élévation du niveau de la mer et l'affluence croissante des principaux fleuves (Rhin, Meuse) dans les provinces du delta, aggravées par le changement climatique, constituent une menace éternelle pour la société et le patrimoine (vivant) néerlandais. Vingt ans après le début des travaux de défense côtière de Delta Works, les commissions fluviales ont commencé à reconstruire, raccourcir et rehausser les principales digues fluviales. Dans certains endroits, de grandes parties de villages ont été supprimées. Par exemple, à Brakel, plus de 1 000 maisons - en partie classées monuments historiques - ont été détruites. Après des années de fortes protestations de la part des citoyens, le ministère de l'eau a élaboré une approche alternative. Les rivières ont été élargies sur des endroits vides (marches extérieures, prairies, anciens bras de rivière) et une grande partie du paysage et des villages anciens ont été sauvés. Cette approche "Ruimte voor de rivier" a été réalisée de 2006 à 2019 pour un montant de 2,3 milliards d'euros.

### 3. L'adaptation au climat à l'échelle des quartiers

En ce qui concerne l'adaptation au climat dans les villes - et dans les quartiers patrimoniaux en particulier - les intentions politiques et communautaires en matière d'environnement commencent seulement à se traduire par la réalisation de projets. À petite échelle, la transformation d'espaces publics couverts de pierres ou de terrains privés en espaces verts perméables à l'eau a été lancée par les municipalités, mais aussi par des initiatives citoyennes. Des mesures plus globales appliquent des pratiques issues de la rénovation des quartiers, comme le remplacement des infrastructures de chauffage au méthane par de l'hydrogène ou de l'électricité (atténuation du changement climatique). Ces mesures peuvent être combinées à la reconstruction des rues en augmentant les surfaces vertes et aquatiques (adaptation), une approche en cours de réalisation dans certains quartiers centraux d'Amsterdam et de Rotterdam.

## ***La vivienda de barrio y la adaptación como activos sostenibles en las Ciudades Patrimonio***

### 1. Diferentes enfoques de la renovación urbana

Las décadas comprendidas entre 1968 y 2021 comenzaron con una crisis de los centros urbanos antiguos, seguida de una recuperación gradual del parque inmobiliario. La recuperación fue impulsada por el interés civil por el Patrimonio y subvencionada por la inversión pública y privada. Muchos barrios antiguos se salvaron mediante la restauración y/o la reconstrucción. Pero el ritmo y la metodología de la Renovación Urbana fueron muy diferentes en los distintos países:

- En el sur de Europa, los gobiernos fueron muy estrictos a la hora de mantener el trazado urbano, la densidad de construcción e incluso el aspecto original de los edificios.
- En el Norte, las intervenciones fueron más radicales: nuevo trazado, mayor densidad y arquitectura moderna.

Los efectos de ambos métodos de renovación pueden ilustrarse confrontando la capacidad de alojamiento en los centros de ciudades del Patrimonio Mundial como Venecia y Ámsterdam: donde las viviendas disminuyen en Venecia, otras funciones turísticas y culturales (hoteles/B&B, segundas residencias, museos, etc.) ocupan su lugar. - y muchos inmuebles permanecen vacíos. De todos modos, esto también es cierto en Florencia, Roma y otras ciudades del patrimonio italiano. La diferencia con Holanda proviene de la política de densificación en el norte de Europa (Ámsterdam, Rotterdam o Dublín), donde muchos antiguos muelles y terrenos baldíos han sido sustituidos por barrios residenciales.

## 2. Más espacio para los ríos (crecientes) con más respeto al patrimonio

Una amenaza eterna para la sociedad y el patrimonio (vivo) holandés es la subida del nivel del mar y el aumento de la afluencia de los principales ríos (Rin, Mosa) en las provincias del Delta, agravado por el cambio climático. Veinte años después del inicio de la defensa de la costa de las obras del Delta, los diques interiores empezaron a reconstruir, acortar y elevar los principales diques fluviales. En algunos lugares se eliminaron grandes partes de los pueblos. Por ejemplo, en Brakel: se destruyeron más de 1.000 casas, en parte monumentos catalogados. Después de años de fuertes protestas ciudadanas, el Ministerio de Aguas del Estado elaboró un enfoque alternativo. Se ampliaron los ríos en lugares vacíos (marchas exteriores, praderas, antiguos brazos del río) y se ha salvado gran parte del paisaje y los pueblos antiguos. Este enfoque "Ruimte voor de rivier" se ha realizado desde 2006 hasta 2019 por un importe de 2.300 millones de euros.

## 3. Adaptación al clima a escala de barrio

En lo que respecta a la adaptación al clima en las ciudades -y en los distritos patrimoniales en particular- las intenciones políticas y comunitarias para el medio ambiente sólo han empezado a traducirse en la realización de proyectos. A pequeña escala, la transformación de espacios públicos cubiertos de piedra o de solares privados en zonas verdes permeables al agua ha sido iniciada por los municipios, pero también ha partido de la iniciativa de los ciudadanos. Las medidas más amplias aplican prácticas de renovación de barrios, como el cambio de la infraestructura de calefacción de metano a hidrógeno o electricidad (mitigación del clima). Esto puede combinarse con la reconstrucción de calles aumentando las superficies verdes y de agua (adaptación), un enfoque que se está llevando a cabo en algunos distritos centrales de Ámsterdam y Rotterdam.

## **Figuig, ou de l'immatériel dans le patrimoine matériel**

**Abderrahim Kassou \***



En tant qu'architecte intéressé par le patrimoine bâti depuis plusieurs années, il me semblait à l'occasion de ce symposium intéressant de porter un regard sur la dimension immatériel du patrimoine oasien, en prenant comme exemple l'oasis de Figuig connue notamment pour ses ksours en terre, ainsi que pour son système de canaux d'irrigation. Figuig fait d'ailleurs partie des sites sur la liste indicative du Maroc du patrimoine mondial. Lors de cette présentation, il est proposé de s'arrêter sur quelques dimensions transversales qui couvrent à la fois le patrimoine matériel et immatériel, et qui subissent une évolution forte du fait des changements climatiques dans la région. En effet, là comme ailleurs la question sociale est fondamentale pour saisir les enjeux liés au patrimoine. Alors que d'autres tissus historiques au Maroc souffrent d'une surdensification, à Figuig c'est plutôt une dédensification asséchante qui est constatée. En effet, la population globale, stable autour de 13000 habitants depuis des décennies, régresse, avec en plus un déséquilibre entre population active et population inactive. L'attachement identitaire de ceux qui ont migré ne se traduit pas par un entretien ou une remise en état du bâti traditionnel par la réfection de l'ancienne demeure familiale, ou l'entretien de la parcelle agricole traditionnelle, mais plutôt dans la construction d'édifices neufs, tout en se prévalant de manière contradictoire d'un attachement profond au terroir. Lors de cette communication, il sera question de s'interroger sur les savoirs et savoirs faire liés à deux dimensions importantes du patrimoine de Figuig : la construction traditionnelle, et la gestion de l'eau. Ces deux éléments s'adossent sur des compétences communautaires importantes, éléments centraux du patrimoine immatériel local, et qui subissent de plein fouet les changements climatiques. Cette dimension immatérielle du patrimoine est non suffisamment étudiée en tant que telle mais réduite au rôle de métiers traditionnels alors qu'elle représente beaucoup plus que ça. Ainsi, à travers cet exercice, il sera question de montrer comment les savoirs faire liés à la gestion de l'eau, ainsi qu'à l'acte de bâtir, évoluent pour s'adapter, ouvrant de nouvelles pistes pour le patrimoine oasien contrebalançant le patrimoine physique qui lui se dégrade.

### ***Figuig, or the intangible in the tangible heritage***

As an architect interested in the built heritage for several years, it seemed to me during this interesting symposium to take a look at the intangible dimension of oasis heritage, taking as an example the oasis of Figuig known in particular for its earthen ksours, as well as for its irrigation flue system. Figuig is also one of the sites on Morocco's World Heritage Tentative List. During this presentation, it is proposed to focus on a few cross-cutting dimensions that cover both tangible and intangible heritage, and which are undergoing a strong evolution due to climate change in the region. Indeed, here as elsewhere, the social question is fundamental in order to understand the issues linked to heritage. While other historic fabrics in Morocco suffer from over-densification, in Figuig it is rather a drying de-densification that is observed. Indeed, the overall population, stable around 13,000 inhabitants for decades, is declining, with in addition an imbalance between the working population and the inactive population. The attachment to identity of those who have migrated does not translate into maintenance or restoration of traditional buildings by repairing the old family home, or the maintenance of the traditional agricultural plot, but rather in the construction of new buildings, while availing itself in a contradictory way of a deep attachment to the land. During this communication, it will be a question of questioning the knowledge and know-how linked to two important dimensions of Figuig's heritage: traditional construction, and water management. These two elements are based on important community competences, central elements of the local intangible heritage, and which are severely affected by climate change. This intangible dimension of heritage is not sufficiently studied as such but reduced to the role of traditional trades when it represents much more than that. Thus, through this exercise, it will be a question of

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showing how the know-how related to water management, as well as the act of building, evolve to adapt, opening up new avenues for oasis heritage offsetting the deteriorating physical heritage.

### ***Figuig, o lo intangible en el patrimonio tangible***

Como arquitecto interesado en el patrimonio construido desde hace varios años, durante este interesante simposio me pareció echar un vistazo a la dimensión intangible del patrimonio de los oasis, tomando como ejemplo el oasis de Figuig conocido en particular por sus ksours de tierra, así como por su sistema de humos de riego. Figuig es también uno de los sitios en la Lista Indicativa del Patrimonio Mundial de Marruecos. Durante esta presentación, se propone centrarse en algunas dimensiones transversales que abarcan tanto el patrimonio material como el inmaterial, y que están experimentando una fuerte evolución debido al cambio climático en la región. De hecho, aquí como en otros lugares, la cuestión social es fundamental para comprender las cuestiones vinculadas al patrimonio. Mientras que otros tejidos históricos en Marruecos sufren de sobredensificación, en Figuig se observa más bien una desdensificación por desecación. De hecho, la población general, estable alrededor de 13.000 habitantes durante décadas, está disminuyendo, además de un desequilibrio entre la población activa y la inactiva. El apego de identidad de quienes han migrado no se traduce en una entrevista o restauración de edificios tradicionales mediante la reparación de la antigua casa familiar, o el mantenimiento de la parcela agrícola tradicional, sino en la construcción de nuevos edificios, aprovechando de forma contradictoria un profundo apego al terruño. Durante esta comunicación, se tratará de cuestionar los conocimientos y el saber hacer vinculados a dos dimensiones importantes del patrimonio de Figuig: construcción tradicional y gestión del agua. Estos dos elementos se basan en importantes competencias comunitarias, elementos centrales del patrimonio inmaterial local y que se ven gravemente afectados por el cambio climático. Esta dimensión inmaterial del patrimonio no está suficientemente estudiada como tal, pero reducido al papel de los oficios tradicionales cuando representa mucho más que eso. Así, a través de este ejercicio, será cuestión de mostrar cómo el know-how relacionado con la gestión del agua, así como el acto de construir, evolucionar para adaptarse, abriendo nuevas vías para el patrimonio de los oasis que compensan el deterioro del patrimonio físico.





9 November 2021

Tuesday

23:30 - 01:00 CET

Parallel Sessions 3A

**Paper Presentations**

## **Interconnections, Methodologies and Case Studies**

**Chair: Graciela Mota**

Fernando Roberto Chiapa Sánchez

“El paisaje de Chinampas de la Ciudad de México ante el cambio climático”

Carmen Daly Schelbert, Cecilia Calderón Puente

“Cultural routes as an instrument of resilience”

Silvia Arroyo Duarte

“Traditional Urbanism and Architecture of the Azuero Region in Panama: an Example of Sustainability and Living Heritage”

Maria Elena Sanchez Roldan

“Pachuca and Real del Monte Mining District, Hidalgo Mexico”

## El paisaje de Chinampas de la Ciudad de México ante el cambio climático

Fernando Roberto Chiapa Sánchez \*



Esta participación pretende exponer de manera general algunos de los efectos del cambio climático en las chinampas de la Ciudad de México, bien inscrito en la Lista del Patrimonio Mundial de la UNESCO en 1987, en conjunto con el Centro Histórico de la Ciudad de México. Las chinampas, al ser islotes de cultivo rodeados por canales necesariamente navegables, dependen del equilibrio entre el nivel de agua de la red canalera y las condiciones de las superficies de cultivo. En este sentido, la pérdida (parcial o total) de los canales, vinculada a las alteraciones relacionadas con la cantidad y calidad de agua, constituyen elementos de crucial importancia para la conservación del sistema de chinampas. Uno de los principales efectos del cambio climático, se refiere a las implicaciones que genera el aumento de la temperatura en la dinámica hidrológica del sistema chinampero, fundamentalmente en la disminución gradual de los niveles de agua de la red de canales, componente imprescindible para la producción y distribución de cultivos. Otro efecto es el relacionado con los eventos meteorológicos extremos como las inundaciones periódicas que cubren anualmente cientos de chinampas, situación que origina la pérdida de una cantidad importante de cultivos de hortalizas y flores, impactando directamente en la economía de los agricultores locales.

### *Mexico City's Chinampas Landscape in the Face of Climate Change*

This participation aims to present in a general way some of the effects of climate change in the chinampas of Mexico City, well inscribed on the UNESCO World Heritage List in 1987, in conjunction with the Historic Centre of Mexico City. The chinampas, being cultivated islets surrounded by necessarily navigable channels, depend on the balance between the water level of the canal network and the conditions of the cultivation surfaces. In this sense, the loss (partial or total) of the channels, linked to alterations related to the quantity and quality of water, constitute elements of crucial importance for the conservation of the chinampas system. One of the main effects of climate change refers to the implications generated by the increase in temperature in the hydrological dynamics of the chinampero system, fundamentally in the gradual decrease of the water levels of the canal network, an essential component for production. and crop distribution. Another effect is related to extreme meteorological events such as periodic floods that annually cover hundreds of chinampas, a situation that causes the loss of a significant amount of vegetable and flower crops, directly impacting the economy of local farmers.

### *Le paysage des Chinampas de Mexico face au changement climatique*

Cette participation vise à présenter de manière générale certains des effets du changement climatique dans les chinampas de Mexico, bien inscrit sur la Liste du patrimoine mondial de l'UNESCO en 1987, en collaboration avec le Centre historique de Mexico. Les chinampas, étant des îlots cultivés entourés de canaux nécessairement navigables, elles dépendent de l'équilibre entre le niveau d'eau du réseau de canaux et les conditions des surfaces de culture. En ce sens, la perte (partielle ou totale) des canaux, liée aux altérations liées à la quantité et à la qualité de l'eau, constituent des éléments d'une importance cruciale pour la conservation du système des chinampas. L'un des principaux effets du changement climatique, fait référence aux implications générées par l'augmentation de la température dans la dynamique hydrologique du système chinampero, fondamentalement dans la baisse progressive des niveaux d'eau du réseau de canaux, composant essentiel pour la production et la distribution des

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## Cultural Routes as an Instrument for Resilience

**Carmen Daly Schelbert, Cecilia Calderón Puente \***



In 2021 we can assure that the climate crisis and the consequences of the pandemic have accelerated the deterioration of some World Heritage Sites. Cultural Itineraries have been especially affected, they occupy a large territory, and it isn't easy to monitor them entirely and comprehensively. Cultural Routes represent the interactive, dynamic, and evolutionary processes of human relations on a global scale. Their territorial transcendence has allowed cultural links between peoples, countries, regions, and continents. The exchange of ideas, goods, and beliefs over the centuries has generated an important physical and territorial cohesion. Although they are currently in a situation of vulnerability, they can also offer information and knowledge to contribute to Climate Change RESILIENCE. The universal scope of Cultural Itineraries allows us to articulate cohesive responses and can become a fundamental asset for climate action. We will present a set of strategies and actions oriented to deal with uncertainty and lack of information in the face of the changes occurring on our planet. It is a proposal to the Vice-Presidency of the Americas for the Triennial Plan of the Scientific Committee of Cultural Itineraries. We will implement 3 Projects: training, Introduction to Risk Management, and case studies, where we will analyze some examples of "Traditional Ecological Knowledge".

### *Les itinéraires culturels comme instrument de résilience*

En 2021, nous pouvons assurer que la crise climatique et les conséquences de la pandémie ont accéléré la détérioration de certains sites du patrimoine mondial. Les itinéraires culturels ont été particulièrement touchés, ils occupent un vaste territoire, et il n'est pas facile de les surveiller entièrement et globalement. Les itinéraires culturels représentent les processus interactifs, dynamiques et évolutifs des relations humaines à l'échelle mondiale. Leur transcendance territoriale a permis des liens culturels entre les peuples, les pays, les régions et les continents. L'échange d'idées, de biens et de croyances au fil des siècles a généré une importante cohésion physique et territoriale. Bien qu'ils soient actuellement en situation de vulnérabilité, ils peuvent également offrir des informations et des connaissances pour contribuer à la RÉSILIENCE au changement climatique. La portée universelle des itinéraires culturels nous permet d'articuler des réponses cohérentes et peut devenir un atout fondamental pour l'action climatique. Nous présenterons un ensemble de stratégies et d'actions orientées pour faire face à l'incertitude et le manque d'information face aux changements qui se produisent sur notre planète. Il s'agit d'une proposition à la Vice-présidence des Amériques pour le Plan triennal du Comité scientifique des itinéraires culturels. Nous mettrons en œuvre 3 Projets : formation, Introduction à la gestion des risques, et des études de cas, où nous analyserons quelques exemples de « savoirs écologiques traditionnels ».

### *Itinerarios Culturales como Instrumento para la Resiliencia*

En el 2021 podemos asegurar que la crisis climática y las consecuencias de la pandemia han acelerado el deterioro de algunos Sitios Patrimonio de la Humanidad. Los Itinerarios Culturales, han sido especialmente afectados, ellos ocupan un amplio territorio y es muy difícil monitorearlos de manera completa e integral. Los Itinerarios Culturales representan los procesos interactivos, dinámicos, y evolutivos de las relaciones humanas a escala global. Su trascendencia territorial ha permitido la vinculación cultural entre pueblos, países, regiones y continentes. El intercambio de ideas, mercancías y creencias a través de los siglos ha generado una importante cohesión física y territorial. Si bien en este momento están en situación de vulnerabilidad, también pueden ofrecer información y conocimiento para contribuir con la RESILIENCIA ante el Cambio Climático. El alcance universal de los Itinerarios Culturales nos permite articular respuestas cohesionadas pudiendo convertirse en un activo fundamental para la acción climática. Presentaremos un conjunto de estrategias y acciones orientadas a lidiar frente a la incertidumbre y la falta de información frente a los cambios que están ocurriendo en nuestro planeta. Esta es la propuesta de la Vice

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## **Traditional Urbanism and Architecture of the Azuero Region in Panama: an Example of Sustainability and Living Heritage**

**Silvia Arroyo Duarte \***



This paper proposal arises as part of a research on traditional urbanism and architecture in Panama, which seeks to highlight its values through an updated study. The work carried out includes documentary research – both graphic and written – (focused on historical documentation) and field research (visits, interviews, observation, and data collection in the Azuero region). ICOMOS published in 2019 the document “The future of our pasts” that encourages the use of traditional knowledge, techniques, construction methods and materials, land use, among others, because of its adaptability and resilience. In the case of Panama, some of these traditional settlement patterns are found in the Azuero region. These villages were distributed in the lowlands of the Panamanian Pacific over indigenous settlements. When the Spaniards arrived, they adapted these settlements to colonial urbanism using the new conditions of the landscape and developed traditional urbanism. The traditional architecture of these towns is the construction technology called quinchá: a system to build walls from a structure of wooden rods or strips placed horizontally on a frame and plastered with mud on both sides through a cooperative process. The wooden structure that supports the construction and its roof is similar to colonial churches. This paper proposal will enhance the characteristics of the traditional urbanism and architecture of the Azuero region in Panama, such as the tangible and intangible aspects, the different influences, the transmission of know-how or savoir-faire, the portals, the ventilated spaces, the natural construction materials, among others. This case study will be presented as an example of living heritage and sustainability, to have it as reference to solve current problems, with the potential to mobilize the 5Ps (people, planet, prosperity, peace, and partnerships) and, hence, to fulfil some of the Sustainable Development Goals.

### ***Urbanisme et Architecture Traditionnels de la Région d'Azuero au Panama : un Exemple de Durabilité et de Patrimoine Vivant***

Cette proposition de papier s'inscrit dans le cadre d'une recherche sur l'urbanisme et l'architecture traditionnelles au Panama, qui cherche à mettre en évidence ses valeurs à travers une étude actualisée. Le travail réalisé comprend des recherches documentaires – à la fois graphiques et écrites – (axé sur la documentation historique) et la recherche sur le terrain (visites, entretiens, observation et collecte de données dans la région d'Azuero). L'ICOMOS a publié en 2019 le document « L'avenir de nos passés » qui encourage l'utilisation des connaissances, des techniques, des méthodes de construction et des matériaux, l'utilisation des terres, entre autres, en raison de son adaptabilité et de sa résilience. Dans le cas du Panama, certains de ces modèles de peuplement traditionnels se trouvent dans la région d'Azuero. Ces villages étaient répartis dans les basses terres du Pacifique panaméen sur des colonies indigènes. Lorsque les Espagnols sont arrivés, ils ont adapté ces établissements à l'urbanisme colonial en utilisant les nouvelles conditions du paysage et développé l'urbanisme traditionnel. L'architecture traditionnelle de ces villes est la technologie de construction appelée quinchá : un système pour construire des murs à partir d'une structure de tiges ou de bandes de bois placées horizontalement sur un cadre et enduit de boue des deux côtés grâce à un processus coopératif. La structure en bois qui supporte la construction et sa toiture s'apparente aux églises coloniales. Cette proposition de papier mettra en valeur les caractéristiques de l'urbanisme et de l'architecture traditionnels de la région d'Azuero au Panama, tels que les aspects tangibles et intangibles, les différentes influences, la transmission de savoir-faire, les portails, les espaces ventilés, les matériaux de construction naturels, entre autres. Cette étude de cas sera présentée comme un exemple de patrimoine vivant et de durabilité,

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pour l'avoir comme référence pour résoudre les problèmes actuels, avec le potentiel de mobiliser les 5P (les personnes, la planète, la prospérité, la paix et les partenariats) et, par conséquent, d'atteindre certains des objectifs de développement durable. Cette proposition de papier mettra en valeur les caractéristiques de l'urbanisme et de l'architecture traditionnels de la région d'Azuero au Panama, tels que les aspects tangibles et intangibles, les différentes influences, la transmission de savoir-faire, les portails, les espaces ventilés, les matériaux de construction naturels, entre autres. Cette étude de cas sera présentée comme un exemple de patrimoine vivant et de durabilité, pour l'avoir comme référence pour résoudre les problèmes actuels, avec le potentiel de mobiliser les 5P (les personnes, la planète, la prospérité, la paix et les partenariats) et, par conséquent, d'atteindre certains des objectifs de développement durable.

### ***Urbanismo Tradicional y Urbanismo y Arquitectura Tradicionales de la Región de Azuero en Panamá: un Ejemplo de Sustentabilidad y Patrimonio Vivo***

La propuesta de este trabajo surge como parte de una investigación sobre urbanismo y arquitectura tradicional en Panamá, que busca resaltar sus valores a través de un estudio actualizado. El trabajo realizado incluye la investigación documental – tanto gráfica como escrita – (centrado en documentación histórica) e investigación de campo (visitas, entrevistas, observación y recolección de datos en la región de Azuero). ICOMOS publicó en 2019 el documento “El futuro de nuestros pasados” que fomenta el uso de conocimientos tradicionales, técnicas, métodos y materiales de construcción, uso de la tierra, entre otros, debido a su adaptabilidad y resistencia. En el caso de Panamá, algunos de estos patrones tradicionales de asentamiento se encuentran en la región de Azuero. Estos poblados se distribuyeron en las tierras bajas del Pacífico panameño sobre asentamientos indígenas. Cuando llegaron los españoles, adaptaron estos asentamientos al urbanismo colonial utilizando las nuevas condiciones del paisaje y desarrollaron el urbanismo tradicional. La arquitectura tradicional de estos pueblos es la tecnología de construcción llamada quincha: un sistema para construir muros a partir de una estructura de varillas o listones de madera colocados horizontalmente sobre un marco y enlucido con barro por ambos lados mediante un proceso cooperativo. La estructura de madera que soporta la construcción y su techo es similar a las iglesias coloniales. Esta propuesta de trabajo mejorará las características del urbanismo y la arquitectura tradicionales de la región de Azuero en Panamá, como los aspectos tangibles e intangibles, las diferentes influencias, la transmisión de saber-como o savoir-faire, los portales, los espacios ventilados, los materiales naturales de construcción, entre otros. Este caso de estudio se presentará como un ejemplo de patrimonio vivo y sustentabilidad, para tenerlo como referencia para resolver problemas actuales, con el potencial de movilizar las 5P (personas, planeta, prosperidad, paz y asociaciones) y, por tanto, cumplir algunos de los Objetivos de Desarrollo Sostenible.

## Pachuca and Real del Monte Mining District, Hidalgo Mexico

**Maria Elena Sanchez Roldan \***



The first step for the preservation of the Industrial Heritage in the Pachuca and Real del Monte Mining District, Hidalgo, Mexico; it is the knowledge and appreciation that the population that inhabits it has of it; including researchers, governments, investors, entrepreneurs, industrial workers, and society. Therefore, it is especially important that the individuals to be preserved (Monuments, Properties, Works of Art, Protected Natural Areas, Parks and Trees, etc.) are clearly recognized, preferably because they have been comprehensively cataloged and referred to in Formal Landscape Units. and Heritage; in which they coexist, where it is possible to detect the threats, they face in the face of imminent climate change. It should be noted that to the physical effects that deteriorate the patrimonial assets, the underdeveloped legislation for their protection and safeguarding is added, which is necessary to deepen, specifically in the areas of their care and maintenance of both real estate and nature, as well as its rehabilitation and restoration in the event of having already suffered damage, to guarantee its conservation over time. Recommendations for preservation must be translated into short-term action to obtain meaningful results. However, for this to happen, the organizations formed by the same society must be the tireless promoters, ensuring the permanent realization of the necessary actions. The methodology allows analyzing proposals for economic reactivation that at the same time allow entrepreneurs and investors to find the incentives to achieve it, for which it is essential not to lose sight of the greater objective, which is the preservation of living heritage.

### *District minier de Pachuca et Real delà Monte, Hidalgo Mexique*

La première étape pour la préservation du patrimoine industriel dans le district minier de Pachuca et Real delà Monte, Hidalgo, Mexique. C'est la connaissance et l'appréciation que la population qui l'habite en a ; y compris les chercheurs, les gouvernements, les investisseurs, les entrepreneurs, les travailleurs industriels et la société dans son ensemble. Par conséquent, il est particulièrement important que les individus à préserver (monuments, propriétés, œuvres d'art, espaces naturels protégés, parcs et arbres, etc.) .et Patrimoine ; dans lequel ils coexistent, où il est possible de détecter les menaces auxquelles ils sont confrontés face au changement climatique imminent. Il convient de noter qu'aux effets physiques qui détériorent les biens patrimoniaux, s'ajoute la législation sous-développée pour leur protection et leur sauvegarde, qu'il est nécessaire d'approfondir, notamment dans les domaines de leur soin et de l'entretien des biens immobiliers et de la nature, ainsi que sa réhabilitation et sa restauration en cas d'avoir déjà subi des dommages, pour garantir sa conservation dans le temps. Les recommandations pour la préservation doivent être traduites en actions à court terme pour obtenir des résultats significatifs. Cependant, pour que cela se produise, les organisations formées par la même société doivent être les promoteurs infatigables, assurant la réalisation permanente des actions nécessaires. La méthodologie permet d'analyser des propositions de réactivation économique qui permettent à la fois aux entrepreneurs et aux investisseurs de trouver les incitations pour y parvenir, pour lesquelles il est essentiel de ne pas perdre de vue l'objectif plus grand, qui est la préservation du patrimoine vivant.

### *Distrito Minero Pachuca y Real del Monte, Hidalgo México*

El primer paso para la preservación del Patrimonio Industrial en el Distrito Minero Pachuca y Real del Monte, Hidalgo, México. Es el conocimiento y aprecio que tiene de él la población que lo habita; incluidos investigadores, gobiernos, inversionista, empresarios, trabajadores de la industria y la sociedad en su conjunto. Por tanto, es especialmente importante que los individuos a preservar (Monumentos, Inmuebles, Obras de Arte, Áreas Naturales Protegidas, Parques y Árboles, etc.) sean claramente reconocidos, preferiblemente por haber sido catalogados de forma integral y referidos en Unidades Formales de Paisaje y Patrimonio; en el que conviven, donde es posible detectar las amenazas que enfrentan ante el inminente cambio climático. Cabe señalar que a los efectos físicos que deterioran los bienes patrimoniales, se suma la legislación poco desarrollada para su protección y resguardo, la cual

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9 November 2021

Tuesday

## Knowledge Cafés

“Panorama Nature-Culture: Sharing Successful Approaches For The Management And Governance Of Heritage Places”

Moderator: Maya Ishizawa

Contact: Nicole Franceschini [nicole.franceschini.work@gmail.com]

“Living Vernacular Built Heritage and Climate Change ”

Moderator: Hossam Mahdy

Contact: Hossam Mahdy [hossammahdy1960@yahoo.co.uk]

“Living Climate Change driving Heritage to the Abyss: Reflections on the State of Cultural and Natural Assets in Central America ”

Moderator: Ana E. Hasemann

Contact: Gloria Lara-Pinto [larapinto2003@yahoo.com]



9 November 2021

Tuesday

11:30 - 13:00 CET

Session 1

## Knowledge Café

### Panorama Nature-Culture: Sharing Successful Approaches For The Management And Governance Of Heritage Places



#### Convenors

- Maureen Thibault, ICOMOS International Secretariat
- Tim Badman, IUCN
- Eugene Jo, ICCROM
- Maya Ishizawa, World Heritage Leadership
- Nicole Franceschini, World Heritage Leadership

This Knowledge Café aims at presenting the work of the Nature-Culture Thematic Community of PANORAMA Solutions for a Healthy Planet and at discussing the importance of experience sharing and peer-learning. PANORAMA is an online-based platform that aims to document and promote examples of inspiring, replicable solutions across a range of different conservation topics, enabling cross-sectoral learning. The Nature-Culture Thematic Community is a joint initiative by ICOMOS, IUCN, and ICCROM which focuses on showcasing case studies 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-centered approaches which highlight the relationship of natural and cultural diversity strengthening heritage networks and community of practice by providing a source of exchange between World Heritage properties, heritage places, institutions and practitioners.

This knowledge café will gather the focal points from ICOMOS and its working groups, the ICCROM and IUCN World Heritage Leadership programme, and PANORAMA authors, called solution providers, who will talk about their case studies from diverse institutional and professional perspectives.

#### Knowledge Café Method

The Knowledge Café is convened by the three partners involved in the creation and coordination of the PANORAMA Nature-Culture Thematic Community - ICOMOS, IUCN and ICCROM. As recommended by the organisers, the Knowledge Café will involve several speaker-provocateurs who will collectively set the scene and inspire the 15 participants of the Knowledge Café through very short 3 min talks. Participants will then take part in the session by discussing specific key points and questions around a given set of questions. The Knowledge Café will operate in English.

Participants will be invited by the convener to represent various ICOMOS ISCs and WGs. Among these, invites will be sent to:

- *Representative from the ICOMOS Advisory Committee*
- *Representative of the Rural Landscapes WG*
- *Representative of the ICOMOS OCD-RBA WG*
- *Representative of the ICOMOS SDGs Working Group*
- *Representative of the ICOMOS Climate Change Working group*
- *Representative of the ICOMOS ISCCL*
- *Representative of the ICOMOS ICAHM*





## **Programme of the Knowledge Café**

Moderator: Maya Ishizawa

Introduction to the Knowledge Café | 5 mins introduction  
*Member of the ICOMOS Board*

Speaker-provocateurs | 3 min talks [15 minutes]

The discussion will focus on the importance of sharing successful experiences and case studies, thinking of how the PANORAMA Nature-Culture Thematic Community be used to mainstream success.

- *Maureen Thibault, ICOMOS Secretariat*
- *Eugene Jo, ICCROM*
- *Steve Brown, convener of the Nature-Culture Dialogue of ICOMOS ISCCL*
- *1 Solution providers from the PANORAMA Nature-Culture Thematic Community*
- *Tim Badman, Director of the IUCN World Heritage programme*

Questions by participants | 5 mins

Moderated dialogue | 30 mins

Wrap up and future steps | 5 mins

Note-taking: Nicole Franceschini

## **Anticipated outcomes**

- Discuss the importance of experience sharing and peer-learning in heritage
- Introduce the PANORAMA Nature-Culture Thematic Community and discuss how PANORAMA can support ICOMOS in sharing successful experiences, projects and approaches implemented at heritage places

## **Anticipated output**

The session will produced a final report/article that will be submitted for consideration to be included in the e-publication of full proceedings of the 2021 symposium.



9 November 2021

Tuesday

13:15 - 14:45 CET

Session 2

## Knowledge Café

### Living Vernacular Built Heritage and Climate Change



#### Introduction

The vernacular built heritage is a living heritage that connects people with their environment and manifests their traditional wisdom in adapting to climatic and other environmental conditions. Traditional communities understood and observed sustainability well before the notion was highlighted and the term was coined in recent times. Professionals of heritage conservation and sustainable development could learn lessons on sustainability and mitigating the impact of climate change from vernacular heritage. On the other hand, professionals could assist local communities in sustaining livelihood for the future and mitigating climate change by introducing innovative methods and tools that enhance the efficiency of age old vernacular built environment.

#### Proposal

A knowledge cafe on the topic of “living vernacular built heritage and climate change” by CIAV members.

The duration of the knowledge cafe is one hour.

Five CIAV members will open the discussions with a very short 3 minutes presentation each.

Ten more CIAV members will join the discussion.

The presentations and discussions will address the following issues:

- Understanding the vernacular built heritage as an expression and manifestation of interconnections between people, nature, culture and sustainable heritage;
- Lessons on sustainability and mitigating climate change that are learnt from the vernacular built heritage;
- Methodologies for the sustainable conservation and management of vernacular heritage with a focus on the role of the local communities in mitigating the impact of climate change; and
- Case studies of vernacular built heritage with a focus on examples strategies, methodologies and approaches – both traditional and innovative - for sustaining the living heritage and mitigating climate change.

#### Participants are all CIAV members.

##### Provocateurs:

Gisle Jakhelin  
Hamdy El Setouhi  
Ege Yildirim  
Kat Vlahos  
Naima Benkari  
Shao Yong

##### Discussants:

Ahmed Fouzan  
Amanda Rivera  
Berenice Aguilar  
Cheima Azil  
Hala Aslan  
Samir Abdulac  
Suheyra Koc  
Wesley Brian Wilson

Rapporteur: Ivan Enev

Moderator: Hossam Mahdy



9 November 2021

Tuesday

23:30 - 01:00 CET

Session 3

## Knowledge Café

### Climate Change driving Heritage to the Abyss: Reflections on the State of Cultural and Natural Assets in Central America



**Convenor:** ICOMOS Honduras

Ana E. Hasemann, Gloria Lara Pinto, Carmen Julia Fajardo, Silvia González, Gloria Grimaldi, Fernando Díaz, Daniela Navarrete, Eva Martínez, Javier Mejuto

#### Abstract

How to create awareness that the critical situation in which cultural heritage –material and immaterial—finds itself began before the pandemic? How to enhance the collective approaches required to face such crises beyond the current pandemic? At the beginning of the discussion of the impacts of climate change on cultural heritage, public institutions centered still their attention on built heritage, which several decades later has matured into a focus on its significance and their interconnections with nature and place. The challenges are great and diverse: the lack of adequate budgets for the implementation of nation-state agendas with political support; the complex relationship between tourism and heritage; the worrisome increase in public-private partnerships at the expense of local communities and state-level institutional, governance, and scientific knowledge; contradictions between development initiatives and sustainability. Nonetheless, today, as always, the active and resolute participation of an informed citizenry is decisively critical; it can and does make a difference.

#### Knowledge Cafe Method:

Each participant will be provided ahead of time a set of predetermined discussion questions, that will suggest and guide the content, tone and intent for a collective critical reflection. This Knowledge Café will be structured to include two provocateurs among the participants, and a moderator to manage the discussion. The moderator will simultaneously fulfill the role of rapporteur, who will present a brief review of the discussion and the cross-cutting themes. This activity will be in Spanish.

This is an interdisciplinary activity, which will include the participation of ten (10) professionals with applied and field work experience in Honduras and Central America. The anticipated participants are all members of the ICOMOS Honduras Chapter. They include:

- Anthropologist Ana E. Hasemann, M.A. (moderator-rapporteur)
- Anthropologist Gloria Lara Pinto, PhD. (participant- provocateur)
- Archaeologist Carmen Julia Fajardo, M.A. (participant-provocateur)
- Anthropologist Silvia González, M.A. (participant)
- Architect Gloria Grimaldi, M.A. (participant)
- Architect Fernando Díaz, PhD. (participant)
- Historian Daniela Navarrete, PhD. (participant)
- Archaeologist Eva Martínez, PhD. (participant)
- Archaeologist Javier Mejuto, PhD. (participant)



### **Purpose and Anticipated Outcomes:**

According to Paul Crutzen (2000), we have been living a new period, what he calls the Anthropocene, during which the worldwide impact of human activity over terrestrial and aquatic ecosystems is more evident than ever. In a short time, throughout the span of the last 10000 years, the crisis humanity has provoked, now leads to its most significant challenge: global warming and anthropogenic climate change. In this context of rapid changes, accelerated by the actual climate and ecological crises, it seems a pressing matter to identify and critically discuss what have been the effects of this crisis on our heritage, on the connections between local populations and their heritage, to recognize and reflect upon the diverse expressions of in/tangible heritage –focusing on and referring to long-term processes, the *longue dureé* (Braudel, 2007)– and the inescapable interconnections between nature and culture.

Having this in mind, among some of topics we expect will be discussed in this Knowledge Café concern:

- How can scientific research on/of natural and cultural heritage sites and assets contribute ways to address the impacts of climate change on communities, ecosystems, and non-human organisms?
- What have been some local-regional responses to mitigation response and disaster preparedness in heritage sites? And how can these become the basis for environmental management and resilience for rural and urban communities at large? (vice versa)
- What changes and trends are taking place in policies related to natural resources and climate change? And how are these policies including or affecting natural and cultural heritage sites and assets?
- How can natural and cultural assets (including, but not exclusive to assets with heritage status) serve as tools for environmental resilience?

Among the purposes and outcomes of this Knowledge Café, are: (1) to engage in an issue of current relevance worldwide with a focused lens on Central America; (2) to make our ICOMOS Honduras Chapter more active and visible in the events proposed by ICOMOS International; (3) to make activities such as this one accessible to a Spanish-speaking public that is interested in the topic, particularly students from the diverse higher-education institutions where the participants are faculty; (4) to drive conversations about heritage to emphasize on nature-culture intersections ; (5) to emphasize on climate change from a perspective focused on processes, context and history, inspired in the concept of *longue dureé*.



10 November 2021

Wednesday

## Workshops

“Heritage Education and Capacity Building for Climate Action”

Moderators: Deniz Ikiz Kaya, Irene Curulli, Paloma Guzman

Contact: Deniz Ikiz Kaya [d.ikiz.kaya@tue.nl]

“Polycentric and participatory governance in cultural tourism for community resilience”

Moderator: Ananya Bhattacharya

Contact: Ananya Bhattacharya [ananya@banglanatak.com]

“Communities Address Climate Change in Mountainous Regions”

Moderator: Kai Weise

Contact: Kai Weise [kai.weise@yahoo.com]

“Workshop on Living Heritage and Climate Change”

Moderator: Mauro García Santa Cruz

Contact: Mauro García Santa Cruz [mgarciasc@gmail.com]

“The City of Knowledge - Wisdom Promoting Resilient Laboratories in World Heritage Sites”

Moderator: Graciela A. Mota Botell

Contact: Graciela A. Mota Botell [gmotab@gmail.com]



10 November 2021

Wednesday

10:15 - 11:45 CET

Session 4

## Workshop

### Heritage Education and Capacity Building for Climate Action



**Convenors:** Deniz Ikiz Kaya, Irene Curulli, Paloma Guzman

The joint efforts of multilateral heritage institutions, i.e. ICOMOS, IUCN, ICCROM and UNESCO support the role of cultural heritage in sustainable development and climate action. Such efforts create an opportunity to foster enhanced, strategic, and sustained approaches supporting transformational change. Enabling local and national stakeholders to build knowledge and technical capacities is fundamental to mitigate risks and adapt living cultural heritage to climate change. Only recently, there have been initiatives for national and regional educational and training programs to support capacity building on climate action, such as the e-CREHA Erasmus+ project (education for Climate Resilient European Heritage Architecture) or ICOMOS Argentina's Climate Change and Risks for Cultural Heritage course. These individual efforts have been ad hoc, project-based or short-termed, and fragmented. This workshop session aims to bring together heritage professionals, relevant international, national, and supranational bodies, scholars, initiatives, and funding entities working towards heritage education and capacity building for climate change mitigation and adaptation. This session intends to establish a network of capacity builders and educators to share experiences, knowledge and identify gaps and needs in education and training for heritage practitioners to respond to the climate emergency. The session will also contribute to foster regional and international cooperation, increase synergies and collaboration among existing bodies and activities, share tools, and methodologies, and collect best practices and lessons learned. In this way, the session will help establishing partnerships, and will create a road map for an integrated and responsive capacity building system through climate heritage education, public awareness, participation, and access to information.

#### **Purpose of the workshop:**

Articles 11, 12 and 13 of the Paris Agreement highlight the importance of capacity building in the transition towards a low-emission pathway and coping with the impacts of climate change. While the role that cultural heritage plays in this transition for climate action has been newly recognized at national and supranational policy making, there is still a gap that exists between policy, practice and local capacity building for heritage-oriented climate change mitigation and adaptation. There is thus an increasing need and demand for network building and knowledge sharing on this topic.

This workshop targets varied actors involved in heritage education and capacity building for climate action aiming to create dialogue, communication and networking, and to foster sharing of knowledge, experiences and practices, as well as innovative methods and tools in the spirit of collaboration. It intends to bring together a broad range of actors involved in heritage education and capacity building, involving heritage professionals, administrators, policy makers, experts, academia, institutions, and non-governmental organizations. Given different local circumstances and priorities, the existing education, training and capacity building efforts have been so far fragmented, project-oriented and work-in-progress constantly evolving to address the emerging needs and challenges of local and regional contexts. This workshop will highlight the importance of effective and inclusive partnerships, coherent policies and



strategies, and coordinated actions among these actors, as well as cross-cutting issues, innovation in proposed approaches and methodologies, and an iterative and dynamic process of mutual learning.

### **Workshop structure and content:**

The workshop will be conducted online in English. The workshop will begin with a short introduction of the topic, the state-of-the-art on existing heritage education and training activities fostering climate action, and the workshop structure. Then, the participants will join one of the three breakout rooms that focus on the following three themes: knowledge topics/skills, partnerships, and methods/tools. In the breakout rooms, the participants will discuss these themes further in depth, concentrating on the questions articulated below. At the end of the breakout sessions, the participants will gather again in the main discussion room to share the outputs and exchange experiences and knowledge.

The breakout discussion will focus on the following themes and questions:

### **Breakout Room 1: Theme – Knowledge topics and skills**

Moderator / reporter – Irene Curulli

Both cultural heritage and climate change themes are interdisciplinary in nature. Thus, a variety of multidisciplinary topics derived from environmental sciences, engineering, humanities, and social sciences fall under the thematic focus and content of the climate change focused heritage education and training activities, which include: measuring and assessing climate change impacts and vulnerabilities, dealing with heritage damage and loss associated with these impacts, climate heritage mitigation strategies and planning, heritage conservation and adaptation, resilience building, climate heritage policy, governance and action, and raising awareness and strengthening capacity to bolster climate action through cultural heritage.

The discussion within this breakout session can concentrate on the following questions:

- What are the knowledge areas and cross-cutting issues that are and/or should be covered in the heritage education and training activities for climate action?
- What kind of skills are required to put this knowledge into right context?
- Are the needs of recipients addressed when education and training programmes are project-specific and/or output-driven?

### **Breakout Room 2: Theme – Partnerships**

Moderator / reporter – Paloma Guzman

Building alliances and fostering partnerships among a wide variety of actors involving governments, academia, international organizations, non-governmental agencies, private sector, local communities, and policy makers are highly important in capacity building. Climate-focused heritage education and training activities for climate action require an inclusive, collaborative, and interdisciplinary approach that bring together different disciplines, priorities, and perspectives.

The following questions can be discussed during this breakout session:

- Which actors are currently involved in climate-focused heritage education, training, and capacity building and what roles do they play?
- How diverse and inclusive are the existing education and capacity-building programmes and activities?
- How can more participatory, representative, and inclusive means of capacity building can be enhanced and ensured that mainstream human rights, indigenous voices, and gender and youth perspectives?
- What are the challenges / barriers to interdisciplinary and multifaceted collaboration and how to cope with them?



### **Breakout Room 3: Theme – Methods and tools**

Moderator / reporter – Deniz Ikiz Kaya

Ranging from awareness-raising to educational programmes, there are a broad array of approaches, methodologies and tools employed by different actors of capacity building that are tailored to the needs of different audiences. Innovation and digitalisation plays a vital role in these activities as they foster and scale up capacity building efforts.

The following questions will be addressed in this breakout session:

- What are the existing learning approaches, methods and tools used in education and capacity building activities on climate change mitigation and adaptation of cultural heritage?
- How can innovation and digitalisation be further implemented to foster and scale up heritage education and capacity building efforts?
- What kind of financing instruments are there and can be employed to support such activities?
- How can online communication platforms and social media be harnessed to broaden the outreach of these education and training activities?

### **Anticipated outputs:**

This workshop will contribute to fostering and scaling up of local, national, and supranational heritage education, training, and capacity building for climate action through the assessment of the state-of-the-art, identification of gaps and needs, and sharing of experiences and good practices, knowledge, methods and tools among heritage professionals, educators, and policy makers. It intends to provide the workshop participants with knowledge and instruments to transfer the lessons learned, and methods and tools discussed at the workshop into their local and regional contexts and efforts. In addition, this workshop will also contribute to fostering regional and international cooperation, establishment of partnerships, increasing synergies and collaboration among existing bodies and activities.





10 November 2021

Wednesday

12:00 - 13:30 CET

Session 5

## Workshop

### Polycentric and participatory governance in cultural tourism for community resilience



**Convenors:** Ananya Bhattacharya, Cecilie Smith-Christensen, Sofia Fonseca, Shem Wambugu Maingi, Celia Martínez Yáñez, Rouran Zhang

ICOMOS calls for people-centered approaches to cultural heritage taking cultural, environmental and socio-economic concerns into account when local, national and international heritage policies and practices are developed (Resolution 20GA/19). To address challenges in safeguarding and conservation of cultural heritage in the face of climate change, there is a need to build adaptive capacity and resilience within communities anticipating future disruptions. The workshop will consider how community and stakeholder inclusion in the governance of cultural heritage and tourism could strengthen resilience and adaptive capacities. In contrast to centralized governance where stakeholder involvement may be limited, polycentric or decentralized governance implies a more radical inclusion. As a central aspect in a commons-oriented approach to management of shared resources (Ostrom), it sets out a complex form of governance with multiple centres of semi-autonomous decision makers in cooperative and competitive relationships, resorting to conflict resolution mechanisms when necessary. The heritage domain can offer many examples of participatory and polycentric governance set out through customary practices and living traditions, as well as more contemporary and innovative approaches. Deliberate designs for self-organisation, such as charters, help bring diversity into shared purpose and values as peers align and groups self-constitute in efforts to deal with challenges.

#### ***Gouvernance polycentrique et participative dans le tourisme culturel pour la résilience des communautés***

L'ICOMOS appelle à des approches du patrimoine culturel centrées sur les personnes, en tenant compte des préoccupations culturelles, environnementales et socio-économiques lors de l'élaboration de politiques et de pratiques patrimoniales locales, nationales et internationales (Résolution 20GA/19). Pour relever les défis de la sauvegarde et de la conservation du patrimoine culturel face au changement climatique, il est nécessaire de renforcer les capacités d'adaptation et la résilience au sein des communautés en anticipant les perturbations futures. L'atelier examinera comment l'inclusion des collectivités locales, des populations et des parties prenantes dans la gouvernance du patrimoine culturel et du tourisme pourrait renforcer la résilience et les capacités d'adaptation. Contrairement à la gouvernance centralisée, où l'implication des parties prenantes peut être limitée, la gouvernance polycentrique ou décentralisée implique une implication plus radicale. En tant qu'aspect central d'une approche de la gestion des ressources partagées orientée vers les intérêts communs (Ostrom), il définit une forme complexe de gouvernance avec de multiples centres de décideurs semi-autonomes, dans des relations coopératives et compétitives, recourant à des mécanismes de résolution de conflits lorsque cela est nécessaire. Le domaine du patrimoine peut offrir de nombreux exemples de gouvernance participative et polycentrique déclinée à travers des pratiques coutumières et des traditions vivantes, ainsi que des approches plus contemporaines et innovantes. Les chartes contribuent à apporter de la diversité aux valeurs et objectifs partagés à mesure que les groupes s'auto-construisent dans leurs efforts pour relever des défis complexes.



### ***Gobernanza policéntrica y participativa en el turismo cultural para la resiliencia de las comunidades***

ICOMOS promueve enfoques patrimoniales centrados en las personas afrontando las implicaciones culturales, ambientales y socioeconómicas de las políticas y prácticas patrimoniales a nivel local, nacional e internacional (Resolución 20GA/19). El desafío de salvaguardar el patrimonio cultural frente al cambio climático incluye la necesidad de adaptación y resiliencia de las comunidades anticipando interrupciones futuras. El taller considerará cómo podría la inclusión de las comunidades y los actores clave en la gobernanza del patrimonio cultural y el turismo fortalecer la resiliencia y capacidad de adaptación. Frente a la gobernanza centralizada, donde la participación es limitada, la gobernanza policéntrica o descentralizada implica una inclusión más radical. Como clave de un enfoque de gestión de recursos de propiedad común (Ostrom), establece formas más complejas de gobernanza con múltiples focos de actores semiautónomos que mantienen relaciones cooperativas y competitivas y recurren a la resolución de conflictos cuando es necesario. El ámbito patrimonial ofrece tanto ejemplos de gobernanza participativa y policéntrica mediante prácticas consuetudinarias y tradiciones vivas, como enfoques contemporáneos e innovadores. Diseños específicos para la autoorganización, tales como las cartas, ayudan a diversificar los valores y objetivos compartidos a medida que los pares se alinean y los grupos se autoconstituyen para enfrentar desafíos complejos.

#### **Workshop method:**

Language - English

Moderator - Ananya Bhattacharya

Duration 1.5 hours

Breakout rooms - None

The workshop specifically focuses on potentials and challenges to participatory and polycentric (decentralized and/or distributed) governance in cultural tourism for community resilience, with a specific attention to the draft ICOMOS International Cultural Tourism Charter 2021: Reinforcing cultural heritage protection and community resilience through responsible and sustainable tourism management.

Established as well as emerging practices and methodologies, set out through customs and living traditions, or enabled through human centric technology and innovative networks embedded in cultural practices around the world will be presented. Questions posted by the presenters will bring forward a discussion on how the heritage domain can enhance adaptive and transformative capacities and contribute towards a new development paradigm. Ensuing discourse will analyse implications on public governance, democratic participation and decision making for sustainable and responsible tourism.

Ananya Bhattacharya, Co founder of [www.banglanatak.com](http://www.banglanatak.com) at India and specialising in culture and development will be the moderator of the workshop. Annaya will introduce the workshop purpose and briefly explain the underlying concepts of polycentric governance as a commons-oriented approach, and how it differs from hierarchical and centralised governance by providing a broader spectre of community members and stakeholders a say and role in the stewardship of shared resources and the future of their communities. (10 minutes).

Dr. Celia Martínez Yáñez, Tenured Professor at the Art History Department of the University of Granada will present how the ICOMOS International Cultural Tourism Charter introduces these concepts in its principles promoting responsible cultural heritage tourism management and a new paradigm for climate action and adaptation. These are the conditions and challenges for tourism to become a key source of heritage preservation, awareness and enjoyment and of social and community wellbeing and resilience". (7 minutes)

This will be followed by four presentations and discussion (15 minutes each) reiterating the objectives and principles outlined in the charter on reinforcing participatory and/or polycentric governance in the stewardship of cultural and natural heritage commons used in tourism for advancements of the SDG targets, climate action and adaptation.

Cecilie Smith-Christensen, expert advisor to the UNESCO World Heritage Sustainable Tourism Programme, founder



of World Heritage Catalysis ([www.whcatalysis.org](http://www.whcatalysis.org)) and PhD researcher at University of Cumbria, UK, will present on "Enhancing resilience and adaptive capacity through visitor management". Climate change is expected to increasingly disrupt tourism and tourism dependent communities. People and communities living in and around World Heritage need enhanced resilience and adaptive capacity. How can World Heritage be relevant and site management contribute? She will share how the UNESCO World Heritage Visitor Management Assessment and Strategy Tool (VMAST), through an anticipatory, open and inclusive visitor management strategy development process, can contribute a distributed, collaborative and adaptive governance approach.

Dr. Shem Wambugu Maingi, Lecturer, from Kenyatta University, will share "Models of Governance in Kenya: Tourism, Climate Change and Communities resilience." Governing tourism, heritage and ecosystems services in Kenya has traversed different phases in a journey towards sustainable tourism development and community resilience. He will discuss the methodological approach of polycentric and participatory governance of tourism resources in Kenyan context that promote community resilience towards climate change.

Dr. Rouran Zhang, associate professor from Shenzhen University and Vice president of ICOMOS ICTC, will speak on "Indigenous Views on Climate Changes and the Value of Cultural Landscape: Case Study on Cultural Landscape of Honghe Hani Rice Terraces". He will explore indigenous people's perceptions on the culture-nature integrated values of Hani Rice Terraces and their views for tourism development. It also explores how traditional management methods can be most effectively supported and maintained within the framework of the World Heritage Program from the perspectives of indigenous people and the approach contributes to climate change resilience.

Sofia Fonseca, Portuguese archaeologist and founder of 'Teiduma, Consultancy on Heritage and Culture' ([www.teiduma.com](http://www.teiduma.com)), will explore "How traditional community knowledge and practices can help tackle climate change: the case for the Mediterranean Diet in Reducing Food Waste, on the tourism food industry in the Algarve (Portugal)". In 2011 the UN Food and Agriculture Organization (FAO) estimated that one-third of all the food produced in the world, the equivalent to 1.3 billion tons, was going to waste and the estimate increased to 2.5 billion tons in 2021, implying 40% of the total food produced in the world (WWF, 2021). The environmental, social, and economic impact of these numbers is appalling. If we consider that food is culture how can we, through culture, help to tackle food waste? Sofia will discuss a practical approach to enhance climate mitigation by using a polycentric approach to implement the principles of the Mediterranean Diet to tackle food waste. She will share insight about the tourism food industry in the Algarve, the different actors, actions, and strategies that can be implemented to reduce food waste.

The discussions will aim at developing understanding on the aforementioned concepts, how do they differ, how are they currently applied and how could they in future be applied, aiming for inclusive heritage governance and improved adaptive capacity? Participants will explore possible practical implications to current and future stakeholders in cultural tourism.

In the concluding discussion, the moderator will invite questions from participants and finally summarise the observations. (13 minutes)

The workshop will be in English and there will not be any breakout room. Emerging Professionals Working Group members will participate as rapporteur and session manager.

The anticipated output of the workshop for the e-publication of full proceedings of the 2021 Symposium will include reflections on how community and stakeholder inclusion in the governance of cultural heritage and tourism, and with a specific consideration of polycentric governance, could strengthen resilience and adaptive capacities in face of climate change.



10 November 2021

Wednesday

22:15 - 23:45 CET

Session 5A

## Workshop

### Communities Address Climate Change in Mountainous Regions



The mountainous areas are particularly prone to climate change. The communities in such areas are usually marginalized, and in many cases their culture and way of life are threatened. The workshop will explore means of identifying and addressing the needs of such communities through comparative analysis of cases in Asia and Africa.

The points of discussion and the anticipated outcome of the workshop will be:

1. What are the three main concerns for protecting the heritage of the communities in mountainous regions?
2. How are the communities in mountainous regions protecting their heritage, or how have they not been able to?
3. What needs to be done at a global level to support the mountainous communities protect their heritage?
4. The overall workshop will be moderated in English, however, discussions in certain breakout groups will be in French.

12:00 – 12:10 Introduction to impact of climate change on mountainous regions  
TBD or Kai Weise

12:10 – 12:55 BREAKOUT GROUPS  
15 minutes to discuss each of the questions above

**Group 1** Case of Nepal (Anie Joshi) and Case of Morocco (Khalid El Harrouni) [in French]  
[Watch the video here](#)

**Group 2** Case of India (Tara Sharma) and Case of Ethiopia (Matiyas B Fantaye)  
[Watch the video here](#)

**Group 3** Case of Pakistan (Zahra Hussain) and Case of Kenya (David Okelo)  
[Watch the video here](#)

12:55 – 13:15 SUMMARY OF EACH GROUP  
Each group gets 5 minutes to present summary – a sentence of two to each of the three questions.

12:55 – 13:00 Summary of outcome Group 1

13:00 – 13:05 Summary of outcome Group 2

13:10 – 13:15 Summary of outcome Group 3

13:15 – 13:25 General discussions / suggestions / final points

13:25 – 13:30 Closing remarks and way forward



10 November 2021

Wednesday

22:15 - 23:45 CET

Session 6

**Workshop**

## **Workshop on Living Heritage and Climate Change**



**Convenors:** Mauro García Santa Cruz, Jimena García Santa Cruz, Guillermo R. García, Pedro Delheye, Gabriela Santibañez

Since the middle of the 20th century, changes in the atmosphere and ocean have been observed due to increased concentrations of greenhouse gases. Climate-related risks depend on the magnitude and pace of warming, geographical location, and levels of development and vulnerability, as well as on the adaptation and mitigation options that are implemented. Mitigating climate change requires reducing GHG emissions and implementing adaptation measures. In this sense, there are strategies related to the protection, restoration and conservation of heritage that can contribute to the objectives proposed in the Paris Agreement and in the 2030 Agenda. The experience we share aims to set a precedent for commitment in training and practice in the face of the impacts of climate change. Enabling the identification of risks to cultural heritage, considering risks of natural origin, anthropic origin or associated with climate change. Through the analysis of cases and the exchange of experiences in Latin America and the Caribbean, both in Spanish and Portuguese, the objective of the Workshop is to formulate measures based on heritage, aimed at reducing risks through the implementation of climate change adaptation and mitigation strategies in our region.

### ***Taller sobre Patrimonio Vivo y Cambio Climático***

Desde mediados del siglo XX se observan cambios en la atmósfera y el océano debido al aumento de las concentraciones de GEI. Los riesgos relacionados con el clima dependen de la magnitud y el ritmo del calentamiento, la ubicación geográfica y los niveles de desarrollo y vulnerabilidad, así como de las opciones de adaptación y mitigación que se implementen. Para mitigar el cambio climático es necesario reducir las emisiones de GEI e implementar medidas de adaptación. En ese sentido, existen estrategias relacionadas con la protección, restauración y conservación del patrimonio que pueden contribuir con los objetivos propuestos en el Acuerdo de París y en la Agenda 2030. La experiencia que compartimos pretende sentar un precedente de compromiso en la formación y práctica frente a los impactos del cambio climático. Posibilitando la determinación de riesgos para el patrimonio cultural, considerando riesgos de origen natural, antrópico o asociados al cambio climático. A través del análisis de casos y el intercambio de experiencias en América Latina y Caribe, tanto en idioma español como portugués, el objetivo del Taller es formular medidas basadas en el patrimonio, tendientes a reducir los riesgos a partir de la implementación de estrategias de adaptación y mitigación frente al cambio climático en nuestra región.

#### **Metodología del Taller:**

El Taller sobre Patrimonio Vivo y Cambio Climático se realizará de forma virtual en idioma español y portugués. Consistirá en una introducción al escenario actual que plantea la emergencia climática y ecológica, la presentación de estrategias de adaptación y mitigación, un análisis de casos y el



intercambio de experiencias en América Latina y Caribe. El objetivo del Taller es que los participantes puedan formular medidas basadas en el patrimonio, tendientes a reducir los riesgos a partir de la implementación de estrategias de adaptación y mitigación frente al cambio climático en nuestra región. El Taller pretende sentar un precedente de compromiso en la formación y práctica regional frente a los impactos del cambio climático. A partir de un trabajo colaborativo, se espera que los participantes puedan identificar los riesgos de origen natural, antrópico o asociados al cambio climático a los que se encuentra expuesto su patrimonio. Al mismo tiempo, se espera que propongan estrategias de adaptación y mitigación que permitan reducir la magnitud de los riesgos identificados.

### **Fundamentación:**

El Sexto Informe de Evaluación del Grupo Intergubernamental de Expertos sobre el Cambio Climático indica que, debido a la influencia humana, se han producido cambios rápidos y generalizados en la atmósfera, el océano, la criosfera y la biosfera. La temperatura global de la superficie seguirá aumentando hasta al menos mediados de siglo XXI en todos los escenarios de emisiones considerados. El calentamiento global de 1,5°C y 2°C se superará durante el siglo XXI a menos que se produzcan reducciones profundas en el dióxido de carbono (CO<sub>2</sub>) y otras emisiones de gases de efecto invernadero en las próximas décadas. Muchos cambios en el sistema climático se incrementan en relación directa con el aumento del calentamiento global. Estos cambios incluyen aumentos en la frecuencia e intensidad de las temperaturas extremas, olas de calor marinas y fuertes precipitaciones, sequías agrícolas y ecológicas en algunas regiones y la proporción de ciclones tropicales intensos, así como reducciones en el hielo marino del Ártico, la capa de nieve y el permafrost. Desde una perspectiva de las ciencias físicas, limitar el calentamiento global inducido por el hombre a un nivel específico requiere limitar las emisiones acumuladas de CO<sub>2</sub>, alcanzando al menos cero emisiones netas de CO<sub>2</sub>, junto con fuertes reducciones en otras emisiones de gases de efecto invernadero (IPCC, 2021).

En Julio de 2019 ICOMOS publica el informe "El Futuro de Nuestros Pasados: Participación del Patrimonio Cultural en la Acción Climática", con el propósito de aumentar el compromiso del patrimonio cultural en la acción climática. El informe analiza las intersecciones entre patrimonio cultural, cambio climático y desarrollo sostenible, correlaciona las competencias del patrimonio con las prioridades de acción climática, estudia medidas de adaptación y mitigación, analiza pérdidas y daños generados por el cambio climático. El informe concluye que un mejor entendimiento en la forma en que el cambio climático afecta al patrimonio cultural aumentaría la efectividad de las acciones de adaptación necesarias y permitiría generar herramientas de resiliencia para las comunidades (ICOMOS, 2019).

En diciembre de 2020, durante el quinto aniversario del Acuerdo Climático de París, la 20a Asamblea General del ICOMOS aprueba la Declaración de Emergencia Climática y Ecológica. La declaración reconoció que el mundo no está cumpliendo los objetivos de París y que ya se están sintiendo los impactos adversos sobre el patrimonio cultural. Exige una acción colectiva urgente para salvaguardar el patrimonio del cambio climático a través de un enfoque de precaución que sigue vías para limitar el calentamiento global a 1,5 °C. La declaración también reconoce el inmenso potencial del patrimonio cultural para permitir una acción climática inclusiva, transformadora y justa. Pide a la comunidad que trabaje para aprovechar este potencial y salvaguardar el patrimonio de los impactos climáticos adversos, lograr un desarrollo sostenible resiliente al clima y reconocer la equidad y la justicia como dimensiones fundamentales de la acción climática (ICOMOS, 2020).

### **Antecedentes:**

Este Taller sobre Patrimonio Vivo y Cambio Climático tiene como antecedente las experiencias realizadas en el marco de las ediciones 2020 y 2021 del Curso virtual sobre Cambio climático y evaluación de riesgo para el patrimonio cultural. Estos cursos virtuales se realizaron a partir del trabajo colaborativo de ICOMOS Argentina, la Iniciativa Patrimonio y Cambio Climático y la Fundación Ciudad de La Plata. Contaron con la participación de profesores de ICOMOS Argentina y profesores invitados de ICOMOS Japón, Irlanda, Estados Unidos, México y Nueva Zelanda. Participaron de estos cursos virtuales profesionales que residen en Alemania, Argentina, Australia, Barbados, Bolivia, Brasil, Canadá, Chile, Colombia, Costa Rica, Estados Unidos, Filipinas, Grecia, Honduras, Inglaterra, Irlanda, México, Perú, Portugal, Suecia y Turquía (FOPS, 2020; García Santa Cruz et al., 2021).

## Referencias:

- Carrión Gútiérrez, Alejandro (coord.). (2015). Plan Nacional de Emergencias y Gestión de Riesgos en Patrimonio Cultural. Madrid: Secretaría General Técnica, Ministerio de Educación, Cultura y Deporte. Recuperado de [https://www.libreria.culturaydeporte.gob.es/libro/plan-nacional-de-emergencias-y-gestion-de-riesgos-en-patrimonio-cultural\\_3255/](https://www.libreria.culturaydeporte.gob.es/libro/plan-nacional-de-emergencias-y-gestion-de-riesgos-en-patrimonio-cultural_3255/)
- Foro Patrimonio Sustentable - FOPS (2020). Adaptación y Mitigación basadas en el patrimonio | Tráiler del documental [Video]. Recuperado de <https://youtu.be/xTrLEgcdn7c>
- Foro Patrimonio Sustentable - FOPS (2020). Adaptación y Mitigación basadas en el patrimonio | Parte 1: Emergencia climática global [Video]. Recuperado <https://youtu.be/DaHbD4Km-NU>
- Foro Patrimonio Sustentable - FOPS (2020). Adaptación y Mitigación basadas en el patrimonio | Parte 2: Adaptación y mitigación [Video]. Recuperado de [https://youtu.be/cEKIUGOzW\\_o](https://youtu.be/cEKIUGOzW_o)
- García Santa Cruz, M. G.; García Santa Cruz, M. J.; García, G. R. (2021). Cambio climático y evaluación de riesgo para el patrimonio cultural. En revista PH 104, octubre 2021, Sección Debate: Patrimonio cultural y cambio climático. Recuperado de <https://doi.org/10.33349/2021.104.4988>
- García Santa Cruz, M. G.; García Santa Cruz, M. J.; García, G. R. (2020). A conservação do patrimônio cultural e natural como estratégia de mitigação das mudanças climáticas. Revista Fórum Patrimônio: Ambiente Construído E Patrimônio Sustentável, v. 11 n. 1 (2020). Recuperado de <https://periodicos.ufmg.br/index.php/forumpatrimo/article/view/34036>
- ICOMOS (2019). The Future of Our Pasts: Engaging Cultural Heritage in Climate Action. Recuperado de <https://indd.adobe.com/view/a9a551e3-3b23-4127-99fd-a7a80d91a29e>
- ICOMOS (2020). Resolution 20GA/15 - Cultural Heritage and the Climate Emergency. Recuperado de <https://www.icomos.org/en/focus/climate-change/85740-icomos-declares-a-climate-emergency>
- IPCC (2021). Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J. B. R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou (eds.)]. Cambridge University Press. Recuperado de <https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/>



10 November 2021

Wednesday

00:00 - 01:30 CET

Session 7

## Workshop

### The City of Knowledge - Wisdom Promoting Resilient Laboratories in World Heritage Sites



**Convenors:** Graciela A. Mota Botello, Olimpia Niglio, Angela Rojas, Francisco Vélez Pliego

The Panel “The City of Knowledge-Wisdom. Promoting Resilient Laboratories in World Heritage Sites” aims to analyze the strategic role that the Universities, union, professional and collegiate organizations must play as public promoters of better resilient and innovation practices in heritage sites.

The main issues of these knowledge’s cities, where many research projects realize every day, allow us to understand the value of the “genius loci” and of its cultural components: community’s development, climatic challenges, People-Centred approaches to Cultural Heritage, interdisciplinary dialogue, and combined knowledges. But the management of the local cultural heritage needs a dialogue stronger between academy and community because the cultural heritage is not an elite’s product but is the result of the actions of the community. The same community is cultural heritage. Therefore “The City of Knowledge-Wisdom” exists because there is a local community and a local cultural heritage, and now we must reflect on this local value.

The main goal of the “City of Knowledge-Wisdom” is the local cultural heritage which strengthens the bond of people with places, culture, and nature. All this derives from the search for innovation connected to specific conservation challenges, as well as the recovery of representations, collective memory, expressions, knowledge, skills, which are important to know in order to pass them on to future generations. This is crucial in a historical era where changes are very fast.

The community plays an important role because it represents the generating root of heritage, and the orientation by the local people is useful to promote sustainable local management processes. Without the local community we cannot know and appreciate the collective memory, the history, the local needs, and above all nobody has the right to be able to manage a local heritage excluding those who generated and inherited it. The dialogue between academy and local community will be an important opportunity to reestablish a correct and synergistic balance for the sustainability of the local cultural heritage and for its transmission to future generations. The root of the knowledge is the local people and the “City of Knowledge-Wisdom” is the result of this important intercultural and “intersocial” dialogue.

The main languages of the section are English and Spanish. It’s important to generate a correct dialogue between colleagues from different continents.

The session will last 1h and 30 minutes.

Main coordinator of the session: Graciela Mota, Mexico.

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9-10 November 2021

Tuesday - Wednesday

Available on Miro Board

[https://miro.com/app/board/o9J\\_lw8pNPc=?invite\\_link\\_id=868057992218](https://miro.com/app/board/o9J_lw8pNPc=?invite_link_id=868057992218)

## Poster Presentation

Norma Elizabeth Levrand, María Valeria Berros

“Innovative Legal Strategies to Protect Wetlands and Their Living Heritage in Argentina”

Ivan Anthony S. Henares, Jose Gabriel Mejia, Jonathon Day

“Indigenous Communities, Wetlands, and Climate Change: Sustainable Cultural Tourism and Management at the Agusan Marsh”

Cecilie Smith-Christensen

“Building Community Resilience Through Visitor Management & Monetary Innovation”

Leanna Wigboldus

“The Contributions of Biocultural Practices and Traditional Knowledges to Continuing Landscapes: A Holistic Approach to Sustainability and Management of World Heritage Sites”

Laura Pecchioli

“Disaster Mitigation in Southeast Asia: Sustainability of Indonesian Wooden Culture Towards Damage Risk Reduction”

Jeremy Brett, Shelby Hebert

“Live to Build A Better World: Science Fiction as a Tool for Finding Hope and Enduring Connection in the Face of Climate Change”

John Brown

“Uncovering the layers of Te Wānanga”

Passent Nossair

“Oasis of Hope”

Alishah Ali

“Heritage Management of Residential Built Heritage of Shahjahanabad, Delhi, India: A Study of the Transformation of the Urban Heritage Landscape”



## **Innovative Legal Strategies to Protect Wetlands and Their Living Heritage in Argentina**

**Norma Elizabeth Levrاند \*, María Valeria Berros**

Argentina is a country rich in biological diversity and contains six wetland regions. Many of them have great cultural value associated with religious, historical and archaeological aspects. The Plata Basin, for example, is shared with 4 countries (Bolivia, Brazil, Paraguay and Uruguay) and more than 80% of the Argentine population is settled there. In its extension there are World Heritage sites, and also elements of living heritage that are interconnected with the territory of the wetland.

Although Argentina has legal norms for environmental protection such as the National Constitution of 1994 and the so-called General Law of the Environment of 2002, and ratified the Convention Relative to Wetlands of International Importance, especially as Habitat for Aquatic Birds in 1991, there are no specific provisions for the protection of wetlands at the internal level. However, for some years, a group of mobilized organizations and citizens have been promoting the need for the approval of a national law on minimum standards for the Wetlands Protection that determines a common floor of preservation that can be supplemented by the provinces. In 2020, 15 draft proposals were presented and, in most of them, the interrelation between wetlands and society is considered. The Covid-19 pandemic, the strong impact of a series of uncontrolled fires of great magnitude in the Paraná Delta, that is part of the Plata Basin, and the lower water levels of the Paraná river whose causes are debated between natural ones and those enforced to human infrastructure works (such as hydroelectric dams).

In this poster we try to show the lines of continuity in the draft proposals presented between climate change, protection of the environment and protection of cultural heritage around a particular ecosystem such as wetlands.

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## **Indigenous Communities, Wetlands, and Climate Change: Sustainable Cultural Tourism and Management at the Agusan Marsh**

**Ivan Anthony S. Henares \*, Jose Gabriel Mejia, Jonathon Day**

The Agusan Marsh in Agusan del Sur is the largest inland wetland in the Philippines. Agusan is one of the few cultural landscapes that has great potential to be the frontier of community-based wetland and indigenous tourism for people to appreciate and understand the synergy between wetlands and people better.

Climate change and prolonged droughts have continuously altered the marsh. The COVID-19 pandemic added further strain as the demand for palm oil and rice have significantly increased during the pandemic. Peatlands are drained, burned, and converted into agricultural lands. Timber-poachers are taking advantage of the lockdowns and travel restrictions to cut down endangered and endemic trees. The situation has also made monitoring more difficult and even dangerous. An environmental officer was murdered by timber-poachers in November 2020.

Given the strong intersectionality between nature and people, it is important to understand the full extent of how the community, and grassroots and government organizations dedicated to the conservation and protection of Agusan Marsh have been impacted by climate change, as well as COVID-19. At the same time, the indigenous ecotourism program can support sustainable and just economic recovery in an area such as the Agusan Marsh with high biodiversity and cultural heritage resources.

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## **Building Community Resilience Through Visitor Management & Monetary Innovation**

**Cecilie Smith-Christensen \***

World Heritage sites are among the most visited places and attractions in the world. Many communities living in and around World Heritage sites have become dependent on tourism generated revenues. Climate change is threatening natural and cultural heritage alongside livelihoods. Covid demonstrated that disruptions in tourism can deprive communities of income, liquidity, and sustainability. Innovative and integrated approaches that respond to this vulnerability enhancing resilience, adaptive and transformative capacities are needed. The poster presents the World Heritage Exchange Trading System (WHETS) - an emergent innovative platform cooperative including a marketplace and time-based medium of exchange (~~W~~) facilitating collaborative exchanges among World Heritage stakeholders and within communities hosting World Heritage. It elaborates how WHETS, integrated into efforts to develop and implement visitor management strategies applying the UNESCO World Heritage Visitor Management Assessment & Strategy Tool (VMAST), could enhance heritage protection, increase community resilience, and improve visitor experiences.

For more information visit World Heritage Catalysis [www.whcatalysis.org](http://www.whcatalysis.org) and WHETS [www.whets.club](http://www.whets.club)

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## **The Contributions of Biocultural Practices and Traditional Knowledges to Continuing Landscapes: A Holistic Approach to Sustainability and Management of World Heritage Sites**

**Leanna Wigboldus \***

This project considers and analyses the integration of biocultural practices and traditional knowledge at select World Heritage continuing cultural landscapes, and how these can contribute to landscape continuity and sustainability. The interconnectedness and relationships of natural, cultural, and social values, as identified in sub-theme #1, will be explored in relation to conservation practices and dynamic management structures at various case study sites. As agricultural and pastoral landscapes are crucial to food security and sustainability, the past, present, and future interconnections between people and their landscapes are essential topics for consideration. The knowledges and practices associated with these landscapes contribute to future understandings and adaptations which support continuity and resilience, particularly in relation to climate change.

Based on literature analysis, case studies and stakeholder interviews, select agro-pastoral sites provide examples of successful local and traditional strategies for agro-pastoral landscape management. The case study in the English Lake District provides an example of an area where living heritage practices and resulting landscape have been sustained through generations of ongoing agro-pastoral management. Additional case studies in the Agricultural Landscape of Southern Öland and the Hortobágy National Park – the Puszta offer further examples of adaptations and living heritage approaches which can contribute to sustainable practices to meet the future challenges of climate change. The results of this project will provide a framework for agro-pastoral landscape analysis which can be used to consider how traditional approaches towards site management can be implemented at other World Heritage Sites on a larger scale.

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## **Disaster Mitigation in Southeast Asia: Sustainability of Indonesian Wooden Culture Towards Damage Risk Reduction**

**Laura Pecchioli \***

The experiences learned from the previous disaster should help revise existing risk management systems and foresee measures for a long-term sustainable recovery process, keeping into account that the communities can have a different perception of the risk. Starting from existing resilience plans and risk governance in place should be integrated with DRR strategies. In this context, heritage plays a crucial role in fostering resilience by reducing vulnerabilities and providing precious assets for the sustainable social and economic development of an affected region during its recovery phase by attracting investment, creating employment, or providing renewable natural resources. Developing countries are those most vulnerable and compromised by natural disasters, therefore development cooperation has become a primary application of disaster risk management. This contribute focuses on different topics in Indonesia for a disaster mitigation, connected to climate change, to the central role of the communities, on vernacular building construction evaluation, recovery - sustainability and on building resilience. On several occasions during the past twenty years, Indonesia has made global headlines due to devastating natural disasters. Immovable assets located in coastal areas are particularly vulnerable to climate change impacts. Furthermore, some of the vulnerabilities may be specific to some monuments and housings due to the materials used in their construction or architectural design. Significant case studies will show seismic vulnerability, timber mechanical properties, structural performances and repair- strengthening methods.

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## **Live to Build A Better World: Science Fiction as a Tool for Finding Hope and Enduring Connection in the Face of Climate Change**

**Jeremy Brett \*, Shelby Hebert**

A living part of our shared cultural heritage lies in literature, which is a monument to human creativity, imagination, and curiosity about the world in which we live. As natural storytellers, human beings have always shared narratives to raise consciousness, stir consciences, seek answers, and inspire hope. The last, hope, is more important than ever, as we stand in the face of the existential threat represented by anthropogenic climate change. We know objectively that the decades to come are going to require major reshiftings in the ways in which we interact with our natural, built, and historical environments. And we also know objectively that we have the scientific and technological capacities to solve or ameliorate many of these crises.

But human beings are subjective creatures, and our emotions often outrun our rational minds. For many of us, the climate crisis is so overwhelming and all-encompassing that we despair to imagine a positive outcome. We consider doom the inevitable outcome. In psychological circumstances such as these, it is easy to lose hope and to give up. But fiction – in this case, science fiction – has the capacity to inspire optimism, determination, resilience, and enduring human connection amongst ourselves. Without these factors, we cannot hope to succeed in a concerted effort to protect our various environments. At Texas A&M University, we have instituted an exhibit that explores the imaginative range of the science fiction genre in describing the human reaction to drastic environmental change. Although many of the stories therein are ones of despair and savagery and dystopia, we sought to balance those stories with ones that we need right now. Stories of hope, of rebirth over destruction, of scientific achievement over disaster. In this presentation we use our exhibit as a case study in how fiction serves as a useful tool in staving off existential despair and turning their imaginations and intellects towards solving the vast problems presented by climate change.

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## Uncovering the Layers of Te Wānanga

John Brown\*

### Te Wānanga

The name Te Wānanga was provided by mana whenua as part of the design partnership between Auckland Council, Auckland Transport and mana whenua. It conveys aspirations for a place for residents and visitors of all ages to come together, enjoy, share and learn. In the words of mana whenua: 'It's a place of learning, bringing together elements like Para Kore (resource optimisation), raranga (weaving) and whakairo (carving). It is also a learning place for sea ecology.' The space takes its organic shape from the sandstone headlands of the Waitematā Harbour. Native pōhutukawa trees, sea rongoa (medicine) species and harakeke (flax) establish links to the urban ngahere (forest). Lines of kūtai (mussels) provide habitat and food for sea life and improving water quality, a living example of the importance we place on caring for the mauri (essence) and mana (standing / respect) of the harbour, Te Waitematā.

### Mahi toi

The design includes artist work from Reuben Kirkwood (Ngai Tai ki Tāmaki) who has engraved a unique expression of Te Wairere into the timber handrails, in a contemporary rendering of a traditional manaia form. Tessa Harris (Ngai Tai ki Tāmaki) has woven the handrails with natural fibre in a design unique to Te Wānanga. The binding design is an expression of toki (adze) and reflects waka which were traditionally crafted by toki. Both artists worked with Isthmus who designed Te Wānanga in partnership with mana whenua.

### Reinforcing the historic harbour edge

The harbour area is designated as a historic heritage area of national importance by Heritage New Zealand, and contains a number of historic heritage buildings, which needed to be integrated into the design and also protected during construction activities. In particular, a WWI Memorial Beacon erected in 1915 has returned to a central position in Quay Street, next to Te Wānanga, and the old stone seawall and stairway has been seismically upgraded – the 100 year old tidal gauge may be used as part of the Auckland 'King Tides Project' where local communities are encouraged to capture tidal range measurement data to monitor climate change.

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## Oasis of Hope

**Passent Nossair \***

Environment and climate change have an intertwined correlation. The climate change and the challenges we are facing due to it, usually put us in the state of desperateness, struggle, looking for solutions with quick positive impact. We tend to look for and import solutions from all over the globe, although it's right in front of us, solutions come from within ! .When Hope spring up at the sight of an oasis in midst of dry rough sand dunes, or when guided by twinkling stars in a dark night sky. Full of hope and supported by guidance,! I shall be exhibiting 3 initiatives from Egypt that show the impact of heritage preservation and how it could score more than one target at a time, sometimes without having it set from the beginning.

3 vivid examples of collaborative efforts between the initiators and their fellow partners.

The 1<sup>st</sup> was initiated by an individual founder who had an idea with no proof of its validity, till he explored with a rural community the wide range of possibilities and the clear proofs to an idea evolved to be a theory. Such a unique sustainable approach withstanding the wind of social, environmental and economical change.

2<sup>nd</sup> initiative orchestrated by participatory conservation initiative that aims to establish modalities of citizen participation in heritage conservation. Along with various stack holders. Turning a direct threat in to a valuable resource, saving the heritage and helping the environment.

And finally the 3<sup>rd</sup> rural community members taking the lead, approached an investor, and an executing company to facilitate their comeback to their origin. Changing the sad face of desertion to a wide smile of opportunities, resurrecting their lost traditional homes, reconnecting with their roots, tapping in to their own art of living, Making a living by saving the environment.

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## **Heritage Management of Residential Built Heritage of Shahjahanabad, Delhi, India: A Study of the Transformation of the Urban Heritage Landscape**

**Alishah Ali \***

Culture is the most powerful tool for the management of Urban Historic cities and of human development. Shahjahanabad (Old Delhi), India is a 16th-century living heritage city and is dotted with tangible antiques of marvellous aesthetics procuring their cultural value from the intangible heritage traditions practiced by the local communities. The most endangered heritage edifices are the mansions of Old Delhi, often a smaller model of the king's palace, in its gradation from public to private spaces, interiors, and lifestyle. The virtues of mansions in terms of use of space, elements of design, and response to climate are vital sources to trace the process of urbanization, history, and culture of Delhi. The melange of residential built heritage dates from various phases, before & after the founding of Shahjahanabad till the 20<sup>th</sup> century.

The paper focuses on the transformation of the Urban Historic Landscape of Shahjahanabad and the continuous thriving heritage character of the city. The research primarily evaluates the developments that emerged and cause threats to the Cultural Landscape of Old Delhi and the unsustainable development increasing climate change effects. The aim of the paper is to understand the failure of the past development plans of the government and the attitude of the stakeholders of these heritage properties. The paper explores the tangible and intangible cultural practices, historical significance, and the current status of the heritage in the area of study. Based on the interactions with the local community and fieldwork, an attempt is made to strategize the heritage management of the area and to manage the developments in a sustainable manner through community participation.

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