

# **Measuring Heritage Loss and Damage from Climate Change for Effective Policy Reporting**

Thursday 30 March 2023



# Measuring Heritage Loss and Damage from Climate Change for Effective Policy Reporting



## Welcome Note

Welcome to the 'Measuring Heritage Loss and Damage from Climate Change for Effective Policy Reporting' Conference. Our conference is part of the [British Academy Conferences](#) series that are designed to bring together scholars from around the world to present, discuss and consolidate new research in the humanities and social sciences. These landmark occasions offer students, scholars and specialists a chance to expand their networks and learn about the latest developments in their field.

Significant changes in the political landscape have emerged in the past few years, in light of increasing recognition of the impacts of climate change, which are shaping the sectors that we research and work in. Despite the growing realisation that heritage losses to climate change will be significant in coming decades, current global policy agendas rarely include heritage in their assessments. Heritage, for example, is hardly mentioned in the UN's Sustainable Development Goals, or in its 2019 Sustainable Development Report, *The Future is Now: Science for Achieving Sustainable Development*. Nor is it routinely included in the IPCC's assessment reports or special reports. The International Co-Sponsored Meeting on Culture, Heritage and Climate Change marked a sea change in these approaches by concluding that heritage should be mainstreamed into all seven of the IPCC's sectoral chapters – namely, terrestrial and freshwater ecosystems; oceans and coastal ecosystems; water; food and fibre; cities and settlements; health and wellbeing; economics, poverty and livelihoods – reflecting the critical importance of heritage across all fields of human experience.

As such, we are excited to host this timely conference with the aim to explore how to effectively measure the human cost of loss and damage to coastal heritage as sea-level rise accelerates in the coming decades due to climate change. The objective is to better align humanities-social science heritage scholarship with science-based climate change scholarship so that heritage can be better integrated into climate change policy assessments. There is increasing recognition that archaeology and heritage have more to offer climate change policy than has been considered to date. However, due to disciplinary differences in methodologies and how data and evidence are expressed and communicated, heritage is not routinely or evenly incorporated in climate change assessment reports. This conference will address this issue, by bringing together a transdisciplinary team of scholars and policy experts in the fields of heritage and climate change to explore what is meant by 'the human cost' and how it can be measured.

Over the next two days, we hope to build on these important developments and showcase the vital importance of research in the arts, social sciences and humanities in assessing climate change impacts.

We hope that you find inspiration and insight from the various presentations and discussions the event stimulates.

Joanne Clarke  
Johanna Forster  
Anne Haour  
Hana Morel

# Conference Programme



## Thursday 30 March 2023, The Enterprise Centre, UEA

- 10-10.20am **Chair's Opening Remarks**  
Joanne Clarke, *University of East Anglia*  
Konstantinos Chalvatzis, *Climate UEA*
- 10.20-11.50am **Session 1: Exploring the nature of the human cost of heritage loss: what is value and what is valued**  
Chair: Anne Haour, *University of East Anglia*  
Kwasi Appeaning Addo, *University of Ghana*  
Christa Brunnschweiler, *University of East Anglia*  
Cornelius Holtorf, *UNESCO Chair of Heritage Futures*  
Sophie Day, *University of East Anglia*
- 11.50am-12.15pm Break
- 12.15-1.45pm **Session 2: Heritage and Climate Change: Perspectives from the ICSM CHC**  
Chair: Hana Morel, *MOLA/ ICOMOS*  
Ben Orlove, *Columbia University*  
Hannah Fluck, *Climate Heritage Network*  
Salma Sabour, *Southampton University*  
Joanne Clarke, *University of East Anglia*
- 1.45—2.45pm Networking Lunch
- 2.45-4.15pm **Session 3: Aligning humanities approaches to the human cost of heritage loss with climate science research**  
Chair: Joanne Clarke, *University of East Anglia*  
Anne Haour, *University of East Anglia*  
Veronica Sekules, *Groundwork Gallery*  
Nick Brooks, *Garama 3C Ltd*  
Johanna Forster, *University of East Anglia*
- 4.15—4.30pm Break
- 4.30-6.00pm **Session 4: The human cost of heritage loss "valued" along the East Anglian and Ghanaian coastlines**  
Chair: Johanna Forster, *University of East Anglia*  
Victoria Aryee, *University of Ghana*  
Henry Wellington, *University of Ghana/UNESCO*  
Jayne Ivimey, *Norfolk artist*  
Andrew Hutcheson, *UEA / Norfolk and Norwich Archaeological Society*  
Sarah Wade & Pandora Syperek, *UEA & Loughborough University London*

# Convenors



## Joanne Clarke

Professor, School of Art, Media and American Studies  
*University of East Anglia*

Joanne Clarke is an archaeologist with a background in people-climate relationships both in the past and in the present. She has directed archaeological field projects in Gaza, Cyprus and Western Sahara. The regions Joanne has worked in are today 'conflict zones' with UN peace-keeping forces maintaining borders. This structures the research she undertakes in terms of her commitment to collaboration, equity and equality. Joanne was a contributing author to the Africa Chapter of the IPCC AR6 WGII. In 2019 she was a leading researcher on the British Council and Newton Fund funded project, Water Resources: management and sustainability in Jordan from pre-history to the future and in 2016 was a co-investigator on a Global Challenges Research funded grant Foundations for Climate Resilient and Sustainable Growing Settlements. Joanne has published extensively on the archaeology of the Near East and Western Sahara, on societal responses to climate change in the past and on climate change impacts on heritage in Africa.

 @J\_T\_Clarke



## Johanna Forster

Associate Pro Vice Chancellor Civic  
Associate Professor, Environment and International Development  
*University of East Anglia*

Johanna is an environmental social scientist, with expertise in interdisciplinary, policy-relevant research that cross-cuts contemporary environment and development issues around marine and coastal resource management and governance, climate change adaptation, natural hazards and risk. She specialises in understanding multi-level perceptions, knowledge and incentives and the associated implications for sustainability, environmental decision-making and governance.

Johanna has applied her research focus and made contributions to international and UK-based research on governance of coastal and marine resources and food security, and cultural and historical influences on contemporary hazards, risk and exposure. More recently, she has expanded focus to non-monetary economic methodologies for marine ecosystem services, such as cultural heritage and intangible plural values. Her work combines ecological, social and economic perspectives, quantitative and qualitative approaches, and she has undertaken extensive field-based research in the Caribbean and Pacific regions, and the UK.

Johanna is Associate Pro-Vice Chancellor for UEA-Civic, a university wide strategy and programme of activities to build new, and stronger relationships between UEA and regional partners in East Anglia. She has a long-term interest in public engagement in environmental change, as well as working at the science-policy interface, as evidenced by work with Cefas and CCSUS, and as Marine Knowledge Exchange Network (MKEN) Director of Social-Ecological Interactions; and as Co-Lead for the Building Resilience theme for the Tyndall Centre for Climate Change Research.

 @forster\_johanna

# Convenors



## Anne Haour

Professor, Arts and Archaeology of Africa; Director, Centre for African Art and Archaeology; Sainsbury Research Unit for the Arts of Africa, Oceania and the Americas  
*University of East Anglia*

Anne Haour is Professor of in the Arts & Archaeology of Africa at the University of East Anglia. She has led research projects across parts of West Africa and the Indian Ocean, most especially in Benin and the Maldives, concerned with the archaeological heritage of these areas. Learning from collaborators and communities as she goes along, her work has increasingly taken a turn into questions of intangible heritage, sense of place, and climate change. Recent work, funded by Global Challenges Research Fund income, has focused on coastlines at risk. Collaboration with long-standing colleagues at Université d'Abomey-Calavi and NGOs in Benin developed questions around natural and cultural heritage and their preservation and presentation, at a time when the Benin government is investing hugely in tourism underpinned by heritage and new museums, and massive works relating to shoreline changes are underway. In the Maldives, she collaborates with researchers, youth groups, island councils and government ministries to highlight the role of heritage in developing sustainable tourism resources.

Anne is a Fellow of the British Academy, recognising her distinction in the humanities and social sciences, and of the Society of Antiquaries. She is the author of eight academic books and 65+ book chapters and articles, and more widely she has communicated to a range of non-academic audiences, including schoolchildren, members of government, policy-makers, communities, scout groups, diplomats, and the media on questions such as identity and religion, heritage loss and environmental degradation, the heritage and archaeology of the Indian ocean, social inclusion and diversity, and resource conflict in semi-arid Africa.

 @CFAAA4



## Hana Morel

Sustainability and Advocacy Lead/ICSM CHC Scientific Coordinator  
*MOLA/ ICOMOS*

Hana Morel is Scientific Coordinator of the International Co-Sponsored Meeting on Culture, Heritage and Climate Change at ICOMOS, and the Sustainability and Advocacy Lead for MOLA. Previously, she worked as Sustainability Manager for the Coastal and Intertidal Zone Archaeological Network, CITIZAN; Senior Policy Advisor (Climate Change) at Historic England (2020-21), and postdoctoral Research Associate for the AHRC Heritage Priority Area (2017-2020). She developed the one-year follow on funding project, Opening New Pathways to Impact across Heritage Research, Policy and Practice, which built on her work in the AHRC Heritage Priority Area to transform and increase understanding of policies' impact on the heritage sector. Hana was awarded her PhD from University College London in 2016 where she explored the development of planning policy and archaeology in global cities and its impact on archaeology and heritage practice. Previous roles include work as researcher of international and domestic policy for Bournemouth University's Pro-Vice Chancellor (Global Engagement); archaeologist, researcher and lead for community engagement at Izmit's Nicomedia Project, Turkey; project manager of the NYC Heritage Project supported by the Landmark Preservation Commission, New York; and editor-in-chief of the journal Papers from the Institute of Archaeology.

Hana's areas of interest include urban archaeology, planning, and exploring the role of heritage critically alongside international agendas and its contribution towards addressing global challenges (with particular focus on climate action). She also sits on various heritage and archaeology groups such as the All Party Parliamentary Archaeology Group (UK), The Archaeology Forum, and RESCUE: The British Archaeology Trust, among others.

 @hanamorel

## Welcome Note



### **Konstantinos Chalvatzis**

Professor of Sustainable Energy Business  
*ClimateUEA*

Konstantinos is Academic Director of ClimateUEA at the Vice Chancellor's Office, Associate Dean for Innovation at the Social Sciences Faculty and Professor of Sustainable Energy Business at Norwich Business School.

Through his academic leadership roles he strives to make UEA's research more impactful to external partners and to foster links with funders, industry, policy makers and civil society. Konstantinos aspires to create a virtuous circle where in-depth relationships with high profile stakeholders help us improve research outputs, impact and overall research and innovation environment. His personal research focuses on energy sector innovation (Net Zero and rapid decarbonisation pathways) and Corporate Sustainability. Konstantinos' research has been generously funded by the EU, UK Government, industry and corporate investors with approximately 27m euros.

He has held or still hold visiting appointments with the ESCP (FR), the School of Economics, Management and Statistics at the University of Bologna (IT) and the Department of Geographical Sciences at the University of Maryland, College Park (US).

Konstantinos has long project management experience in energy infrastructure projects. In tandem to that he has been actively involved in conflict resolution management in energy projects. Main regions he has been active in include the Balkans, Eastern Europe, Caucasus and Northern Africa.

Konstantinos' industrial engagement covers consulting and industry funded research with world leading organisations such as the OECD, Vattenfall UK, FIAMM, SMA, Systems Sunlight, HEDNO, Schleswig-Holstein Netz, SAFT, OpenEnergi, AEG, Wipro and Younicos. He also collaborates with and advise civil society organisations such WWF and BananaLink.

Konstantinos enjoys working with the media and over the years has had several media collaborations (The Sunday Times, Bloomberg, Washington Post, NBC, CNN, BBC, BBC World Service, The Business Times, Chinadialogue, The Guardian, ITV, The Telegraph).

 [@KJChalvatzis](#)  
[@ClimateUEA](#)

# Session 1: Exploring the nature of the human cost of heritage loss: what is value and what is valued

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**Chaired by:** Anne Haour, *University of East Anglia*



## **Kwasi Appeaning Addo**

Director, Institute of Environmental and Sanitation Studies (IESS)  
*University of Ghana*

Kwasi Appeaning Addo is a coastal processes specialist and the Director of the Institute for Environment and Sanitation Studies (IESS), University of Ghana. His research has focused on nearshore coastal processes, shoreline dynamics, and coastal erosion complex interactions; shorelines and river systems linkages; new approaches (drone and video) in coastal systems monitoring; sea-level rise and subsidence interrelationships; nature-based solution; integrated and sustainable green ports concepts; and in recent times sargassum pathways. Through his research, he has emerged as one of the leading coastal geomorphologists in Africa today. His contribution to the field of coastal processes and shoreline dynamics has provided an understanding of the coastal systems in Ghana and the Bight of Benin. Kwasi is a member of the Group of Experts of the High-Level Panel for Sustainable Ocean Economy, a member of Group of Experts for the third cycle of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment of the UN Ocean Affairs and the Law of the Sea, Associate Member of the UNESCO Land Subsidence International Initiative, member of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), member of the Coastal Changes Monitoring Working Group, Coordinator of the West Africa regional hub of the African Research Universities Alliance (ARUA): Climate and Development (ARUA CD), and Technical advisor to the Scientific Committee of the West African Coast Observation Mission. He is a strong advocate for nature-based solutions in the coastal zones.

 [@AddoAppeaning](#)  
[@UnivofGh](#)



## **Christa Brunnschweiler**

Associate Professor in Economics  
*University of East Anglia*

Christa is an Associate Professor in Economics at the School of Economics at UEA. Her research interests are in applied economics. She has mainly explored topics in economic growth and development, particularly in resource economics and conflict studies. A current focus of Christa's research lies in understanding how we can change attitudes and behaviour for better natural resource management using behavioural economics. Examples are artisanal gold mining in Ghana, petroleum revenue use in Ghana and Indonesia, and coastal ecosystem management in the UK. Most of her research is the result of collaborative efforts with co-authors from different disciplines and backgrounds, and from numerous countries in five continents. In her research, she uses secondary data, as well as primary data gathered through surveys, field experiments, and lab experiments. Christa is also fascinated by economic history and how it helps us understand present-day economic and political activities, and she loves delving into old books and archives.

Christa studied political science, economics and Russian literature at the University of Zurich, Switzerland. After spending two years working first for a bank in Zurich and then an audit and consulting firm in Moscow, she returned to academia and got a PhD in economics from the University of Zurich while working as a doctoral researcher at ETH Zurich. She stayed on at ETH as a postdoc and then a Lecturer until 2012, with research visits to the University of Oxford and Wageningen University. Christa then moved to NTNU in Trondheim, Norway, where she was a Research Associate Professor for three years, before coming to UEA in 2015.

## *What should we save, what can we lose? An interdisciplinary approach for coastal transition and adaptation planning*

Coastal erosion, sea level rise and flooding are major challenges for local communities and policymakers around the world. Not only buildings and other physical infrastructure are at risk, but also areas of ecological and cultural significance. What sites should be saved, which defences should be invested in, and how best to make this decision? There are existing modelling tools to simulate the evolution of coastal areas under different climate and coastal defence scenarios, with varying degrees of localised accuracy depending on the country. There are also studies that use non-monetary valuation methods to estimate the value of coastal sites that do not have a ready market value; again, the number and quality of these studies varies greatly across countries, and the focus is often on ecosystem services. However, there has so far been little attempt to bring together the natural science modelling with valuations from social sciences and the preferences of local stakeholders over a range of sites with both monetary and non-monetary value. I outline an interdisciplinary approach that uses behavioural science to complement methods from other disciplines and provide policy-relevant solutions. Behavioural science insights can help gather and analyse information on stakeholder preferences, which can be integrated into the scientific modelling and serve as a decision-making tool for policymakers. I will briefly describe plans for a pilot study area in North Norfolk, where we seek to co-develop coastal transition options together with local stakeholders.



### **Sophie Day**

Senior Research Associate

*Tyndall Centre, University of East Anglia – on secondment to North Norfolk District Council (part of Coastal Partnership East)*

Sophie's expertise is in advancing the practice of adaptive coastal governance: how do we go about collectively, and adaptively managing the interplay of environmental, technical, policy, social, and economic challenges for a more resilient future? She is currently seconded to North Norfolk District Council to support the development of their Coastal Transition Accelerator Programme, which runs to 2027. Over nearly two decades her work has focussed on applying rigorous academic methods and expertise to the challenge of negotiating rapid coastal erosion in place and practice at national to local scales. She is firmly embedded within the practitioner and policy network in this field, where momentum and learning around actually 'doing' coastal adaptation is high and evolving fast. Her interdisciplinary training and perspective mean that she has a very broad strategic and contextual understanding of the environmental and socio-economic challenges facing the changing East coast of England, and elsewhere in the UK and abroad.

### *Recognising heritage loss in rapidly eroding coastal places*

Recognising heritage loss in rapidly eroding coastal places is not a simple aspiration. The east coast of England has long been soft, dynamic and naturally retreating and the footprints of many coastal towns now lie beneath the sea. What remains of these places in archives, local memory, art and other places and forms are an important part of our regional and local coastal identities. Contemporary coastal management in places like Norfolk is challenging as it must increasingly balance real-time demands (around coastal defence maintenance, for example) with planning for ongoing and future change - making sustainable plans for the rapid and accelerating coastal erosion that some places face. Part of this challenge lies within the realm of heritage, which we know will be lost. We are in a process of transition – not only on the ground but in the governance context around how we facilitate, manage and fund this process. Accordingly, the time is ripe for asking questions and having conversations at many levels to consciously recognise heritage loss in rapidly eroding places: What is important locally, regionally and nationally? What constitutes heritage in coastal places? What could possibly be moved and how could this be done and financed? How can we record what is to be lost for future generations to appreciate? As a broad community of practice our aspiration is to capture what is important and work together to prepare constructively for the inevitable changes we face on the coast. The more voices heard, insights collated and conversations had the richer our plans for dealing with change can be.





## Cornelius Holtorf

UNESCO Chair on Heritage Futures  
Linnaeus University, Sweden

Cornelius Holtorf is Professor of Archaeology and holds a UNESCO Chair on Heritage Futures at Linnaeus University in Kalmar, Sweden. He is also directing the Graduate School in Contract Archaeology (GRASCA) at his university. In his research, he is particularly interested in heritage futures, heritage theory, and contemporary archaeology, with numerous international publications in these areas. He currently advises ICCROM on its Pilot Foresight Study, is a member of the international Expert Group on Awareness Presentation of the Nuclear Energy Agency at the OECD, and is associated with the UNESCO Global Futures Literacy Network. In recent years, he participated in MONDIACULT 2022 in Mexico-City, The UNESCO World Conference on Cultural Policies and Sustainable Development, among many other international meetings. He has co-edited collections of papers on *The Archaeology of Time Travel* (with B. Petersson, 2017), *Cultural Heritage, Ethics and Contemporary Migrations* (with A. Pantazatos and G. Scarre, 2018), *Authenticity and Reconstruction* (for *International Journal of Cultural Property*, 2020), and *Cultural Heritage and the Future* (with A. Högberg, 2021). He has also co-authored the picture book *Wow! The Future is Calling!* (with P. Frid, 2021, available free at <https://issuu.com/lnu12/docs/wow>).

*From Gauging Losses of Remains of the Past to Offering Solutions for Wellbeing in the Future: The potential of heritage in the age of climate change.*

 @UnescoChairLNU

*Photo Credit: Johannes Rydström*

## Session 2: Heritage and Climate Change: Perspectives from the ICSM CHC

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**Chaired by: Hana Morel, *MOLA/ ICOMOS***



### **Ben Orlove**

School of International and Public Affairs  
*Columbia University, New York, NY USA*

Ben Orlove, an anthropologist, has conducted field work in the Peruvian Andes for many years and also carried out long-term research in East Africa, the Italian Alps, and the western United States, as well as briefer field projects in the Himalayas and Aboriginal Australia. His early work focused on agriculture, fisheries and rangelands. More recently he has studied climate change and glacier retreat, with an emphasis on water, natural hazards and the loss of iconic landscapes. He has written extensively on Indigenous knowledge, adaptation to climate change, and climate decision-making. In addition to his numerous academic articles and books, his publications include a memoir. He has been a Lead Author on two reports of the Intergovernmental Panel on Climate Change. He is a Fellow of the American Association for the Advancement of Science, and the recipient of a Presidential Award from the American Anthropological Association for his work on climate change.

Orlove taught for many years at the University of California, Davis. At Columbia University, where he is a Professor in the School of International and Public Affairs, he also teaches in the Master's Program in Climate and Society, for which he serves as Co-Director. He is a Senior Research Scientist at the International Research Institute for Climate and Society.

*The valuation and measurement of heritage as seen through a lens of diverse knowledge systems*

The discussions of heritage and climate change at present include a variety of perspectives, some of which emphasise the potentially significant contributions of measurements of value of heritage on models and projections of climate change impacts on heritage and on the development of policy instruments and responses to these impacts. These discussions intersect with other discussions about the importance of recognizing and incorporating diverse knowledge systems, including Indigenous knowledge and local knowledge as well as scientific knowledge. Both Indigenous knowledge and local knowledge often highlight characteristics of heritage which make it difficult to establish metrics which can be used to assess the value of elements of heritage (whether tangible or intangible heritage). These characteristics include: (1) the complementarity or non-substitutability of different elements of heritage, emphasising the unique contributions of each element to an overall whole of heritage; (2) the irreplaceability of elements of heritage; (3) the nature of heritage as a right rather than a resource; (4) the nature of heritage as a responsibility (an obligation of care) rather than a resource. These characteristics are also present, to varying extents, in what could be termed cosmopolitan or scientific approaches to heritage. These points are illustrated through two specific cases: World War I battlefield objects in a German-speaking community in the Italian Alps and local heritage festivals in a small town in the North Cascades mountain range in Washington State, US.

 @glacierhub



## Hannah Fluck

Vice Chair (European and the Commonwealth of Independent States)  
*Climate Heritage Network*

Hannah is an archaeologist and heritage professional who has worked on climate change and heritage for the past 8 years whilst Head of Environmental Strategy at Historic England and through her role as founding member, on the steering committee and as vice-chair for the Climate Heritage Network. She was contributing author to the third UK Climate Change Risk Assessment, a nominated UK reviewer of the IPCC Climate Change and Land report, and presented on climate change risk and heritage at the G20 Cultural Ministerial Conference in 2021. She has coordinated, chaired and presented at events at COPs 25,26 and 27 and was an invited expert participant in the IPCC/ICOMOS/UNESCO Cosponsored Meeting on Culture, Heritage and Climate. Within the UK Hannah has advised government on the inclusion of heritage in the Climate Change Risk Assessment, and National Adaptation Programme as well as ensuring recognition of heritage within the England Peat Action Plan. Hannah has also contributed to research developing novel approaches to managing loss as Co-Investigator on the 'Landscape Futures and the Challenge of Change' AHRC funded research project led by Prof Caitlin DeSilvey. As a heritage practitioner with expertise in policy and practice Hannah's primary interests are around the practical role heritage can play in responding to the climate crisis, and helping people take positive action for a more sustainable future.



## Salma Sabour

Postdoctoral Research Fellow, Networking Coordinator, *Preserving Legacies: A Future for Our Past*  
*University of Southampton*

Salma is a Postdoctoral Researcher based at the School of Ocean and Earth Science at the University of Southampton. Her current project involves developing socio-economic and cultural impact assessments on the Vietnam coast to better evaluate how compound flooding from sea-level rise, tropical cyclones, and other extreme events affect the livelihoods of coastal communities, including their assets and values.

Salma is also the Networking Coordinator of the National Geographic project *Preserving Legacies: A Future for our Past*, which envisions a world where we celebrate our diverse cultural heritage and safeguard every site against current and future climate impacts. The project aims to empower every community with the scientific knowledge and technical training to achieve appropriate place and people-based climate adaptation plans by developing a series of virtual training on climate literacy, adaptation approaches, and community-led values-mapping techniques model a program that allows heritage sites to visualise future climate impacts and create a plan to sustainably manage those changes.

Salma holds a double diploma in physical and environmental engineering from the University of Liege in Belgium and Ecole Centrale Paris in France. Her thesis assessed the thermal and ecological impacts due to the sampling and rejection of power plants' cooling water into rivers. After working as a project engineer in waste and coastal management and other environmental issues in Morocco and Nigeria, she finalised a PhD at the University of Southampton, where she assessed the risk, vulnerability and resilience of coastal Natural World Heritage sites to present and future shoreline change through the integration of quantitative and qualitative data analysis approaches including statistical assessments, GIS, interviews and focus group discussions. She is passionate about assessing and exploring society's responses and adaptation to climate change challenges through resilience, transition and transformation. She is also interested in the cross-cultural study of how people perceive and manipulate their environments, the dynamics and relationships between community-based approaches and management decisions and their use in local, national, regional and international policies.

Salma's experience in the industry and academia has provided her with communication experience and has instilled in her a duty to inform and raise awareness about urgent topics such as climate change. Salma is passionate about collective political actions and how they shaped the story of postcolonial societies, woman empowerment, queer and LGBT+Q movement, the fight against corrupt governments, and towards climate change resilience. Salma spends a lot of her free time in climate and environmental protests, growing food, lost in forests and nature, dipping in waters and playing the saxophone with her brass band.

 @salmasabour



## Joanne Clarke

Professor, School of Art, Media and American Studies  
*University of East Anglia*

Joanne Clarke is an archaeologist with a background in people-climate relationships both in the past and in the present. She has directed archaeological field projects in Gaza, Cyprus and Western Sahara. The regions Joanne has worked in are today 'conflict zones' with UN peace-keeping forces maintaining borders. This structures the research she undertakes in terms of her commitment to collaboration, equity and equality. Joanne was a contributing author to the Africa Chapter of the IPCC AR6 WGII. In 2019 she was a leading researcher on the British Council and Newton Fund funded project, *Water Resources: management and sustainability in Jordan from pre-history to the future* and in 2016 was a co-investigator on a Global Challenges Research funded grant *Foundations for Climate Resilient and Sustainable Growing Settlements*. Joanne has published extensively on the archaeology of the Near East and Western Sahara, on societal responses to climate change in the past and on climate change impacts on heritage in Africa.

### *Cultural heritage and the IPCC's Concept of 'Risk'*

The concept of 'risk' underpins IPCC reports. Its principles are that risk is determined by, 1) type of hazard, 2) level of exposure, 3) degree of vulnerability and 4) response capability. These have been improved by recent understandings of how risk 'cascades' across all four determinants, leading to a complex interplay of drivers and responses. This new way of conceptualising risk will likely underpin future IPCC assessments. The question is, can climate change impacts on heritage be measured using the IPCC's concept of risk and is it desirable to do so? Currently heritage (as opposed to Indigenous knowledge) is largely absent from IPCC reports, therefore incorporating heritage, especially into sectoral chapters is desirable. Whether it is possible using existing IPCC reporting structures, needs close scrutiny.

 @J\_T\_Clarke

## Session 3: Aligning humanities approaches to the human cost of heritage loss with climate science research

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Chaired by: **Joanne Clarke, *University of East Anglia***



### **Nick Brooks**

Director  
*Garama 3C Ltd*

Nick is the Director of Garama 3C Ltd ([www.garama.co.uk](http://www.garama.co.uk)), a small consultancy firm specialising in climate change and development, established in 2012. Before setting up Garama he worked in academia (from 1999 to 2005), and then as an independent climate change consultant for clients including UNDP, the World Bank, DFID, the African Development Bank and other bodies.

Today, as Director of Garama, Nick's work focuses on the transformations that are necessary to address climate change, principally through actions to support adaptation and build resilience, but he has also worked on drivers of the social transformations required to deliver deep and rapid decarbonisation. He has a particular interest in 'transformational adaptation' and how we increase adaptation ambition as we move towards 2030, the deadline for achieving the SDGs and the time around which we are likely to breach the 1.5°C temperature threshold set by the Paris Agreement.

Nick's consultancy work also encompasses climate change integration/mainstreaming, the planning, design, implementation and assessment of adaptation and resilience actions/interventions, wider MEL of adaptation and resilience, capacity building and training. He has designed and delivered numerous professional development courses, including Garama's regular courses on adaptation mainstreaming and MEL, and tailored versions of these courses for specific clients. He works extensively with donors and recipients of ODA, research organisations, private sector implementers of development initiatives, and other international bodies. In addition to Nick's consultancy work, he also conducts research into past climatic changes, their impacts on human societies, and what these can tell us about adaptation to severe and abrupt climatic and environmental change. This work involves collaboration with colleagues from a wide range of fields, including paleoclimatology, geomorphology, archaeology and anthropology. Since 2002 he has been Co-Director of the Western Sahara Project, under which geoarchaeological fieldwork is conducted in the disputed, non-self governing territory of Western Sahara. Previously he participated in similar work in southwestern Libya, on the Fezzan Project.

 [@garama3CLtd](https://twitter.com/garama3CLtd)



### **Anne Haour**

Professor, Arts and Archaeology of Africa; Director, Centre for African Art and Archaeology; Sainsbury Research Unit for the Arts of Africa, Oceania and the Americas  
*University of East Anglia*

Anne Haour is Professor of in the Arts & Archaeology of Africa at the University of East Anglia. She has led research projects across parts of West Africa and the Indian Ocean, most especially in Benin and the Maldives, concerned with the archaeological heritage of these areas. Learning from collaborators and communities as she goes along, her work has increasingly taken a turn into questions of intangible heritage, sense of place, and climate change. Recent work, funded by Global Challenges Research Fund income, has focused on coastlines at risk. Collaboration with long-standing colleagues at Université d'Abomey-Calavi and NGOs in Benin developed questions around natural and cultural heritage and their preservation and presentation, at a time when the Benin government is investing hugely in tourism underpinned by heritage and new museums, and massive works relating to shoreline changes are underway. In the Maldives, she collaborates with researchers, youth groups, island councils and government ministries to highlight the role of heritage in developing sustainable tourism resources.

Anne is a Fellow of the British Academy, recognising her distinction in the humanities and social sciences, and of the Society of Antiquaries. She is the author of eight academic books and 65+ book chapters and articles, and more widely she has communicated to a range of non-academic audiences, including schoolchildren, members of government, policy-makers, communities, scout groups, diplomats, and the media on questions such as identity and religion, heritage loss and environmental degradation, the heritage and archaeology of the Indian ocean, social inclusion and diversity, and resource conflict in semi-arid Africa.

*Why space and place matter: two archaeological examples*

Among the non-material impacts of climate change that have often been poorly recognised is the importance of place. Archaeologists have shown that people's profound and deeply ingrained relations with spaces and places can continue over long time periods; examples from Maldives and Benin illustrate this.

 @CFAAA4



## Veronica Sekules

Director  
*GroundWork Gallery, King's Lynn*

Veronica Sekules has a background working in environmentalism and art galleries and has a doctorate in art-history. She was employed for over 30 years as curator and then head of education and deputy director at the Sainsbury Centre, University of East Anglia. She has worked freelance in education and heritage and has been a consultant with many national and international projects in these fields. She is a published author in art history, cookery and education. Since 2016, she founded and runs GroundWork.

Veronica shall discuss some of the cultural issues we need to tackle in terms of both addressing the value of heritage and considering the human cost of heritage loss. It means raising greater awareness of problems and solutions. GroundWork aims, through exhibitions and residency programmes, to do this by opening up new ways of thinking through art. The constant conundrum is how to consider the environment more deeply. push the boundaries of our understanding, and lead to action.

 @groundworkgallery



## Johanna Forster

Associate Pro Vice Chancellor Civic  
Associate Professor, Environment and International Development  
*University of East Anglia*

Johanna is an environmental social scientist, with expertise in interdisciplinary, policy-relevant research that cross-cuts contemporary environment and development issues around marine and coastal resource management and governance, climate change adaptation, natural hazards and risk. She specialises in understanding multi-level perceptions, knowledge and incentives and the associated implications for sustainability, environmental decision-making and governance.

Johanna has applied her research focus and made contributions to international and UK-based research on governance of coastal and marine resources and food security, and cultural and historical influences on contemporary hazards, risk and exposure. More recently, she has expanded focus to non-monetary economic methodologies for marine ecosystem services, such as cultural heritage and intangible plural values. Her work combines ecological, social and economic perspectives, quantitative and qualitative approaches, and she has undertaken extensive field-based research in the Caribbean and Pacific regions, and the UK.

Johanna is Associate Pro-Vice Chancellor for UEA-Civic, a university-wide strategy and programme of activities to build new, and stronger relationships between UEA and regional partners in East Anglia. She has a long-term interest in public engagement in environmental change, as well as working at the science-policy interface, as evidenced by work with Cefas and CCSUS, and as Marine Knowledge Exchange Network (MKEN) Director of Social-Ecological Interactions; and as Co-Lead for the Building Resilience theme for the Tyndall Centre for Climate Change Research.

*Dimensions of wellbeing: why subjective and relational factors matter in loss and recovery?*

Climate change is increasing the severity of extreme weather events, and the impacts will be felt significantly for coastal communities. In the aftermath of a major disaster, such as a hurricane, government interventions typically prioritise material assets, such as infrastructure, through rebuilding roads, reviving economic sectors, and providing financial compensation. This is driven by a focus on macro-level quantitative indicators rather than place-based, multidimensional subjective and relational factors that are closer to the lived experiences of individuals and their communities. Using a multi-dimensional wellbeing framework, this research explores the social factors and personal relationships that matter for individuals and communities to recover from disasters and prepare to build back better. Focusing on the case of Dominica in the Caribbean, in the aftermath of Hurricane Maria in 2017, this research provides empirical evidence that recovery initiatives that concentrate solely on material well-being (the resources and assets people have - such as employment and finances), can undermine agency in the capacity of a community to recover and build resilience to future risk.

 @forster\_johanna

## Session 4: The human cost of heritage loss "valued" along the East Anglian and Ghanaian coastlines

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Chaired by: **Johanna Forster, *University of East Anglia***



### **Victoria Adinorkuor Aryee**

Asst. Lecturer of Archaeology, PhD Candidate, Andrew W. Mellon (ENDOTH) Fellow  
*University of Ghana*

Victoria is a trained Archaeologist, Assistant Lecturer of archaeology and heritage studies, Performing artist, and an Art and Cultural Heritage enthusiast. She is presently a PhD candidate at the University of Ghana's Department of Archaeology and Heritage Studies. Her PhD research work is focused on the coastal town of Jamestown Accra. In this community, she interrogates the heritisation of 'Fishing' and the nexus between urban planning, development projects, and community heritage in culturally, economically, and politically contested environments.

As an archaeologist, Victoria's primary goal is to bring to the fore the contribution of Ghana and West Africa to human development as we now know it. She is fervent about encouraging the application of heritage discourse, archaeological studies, performing arts, filmmaking, and tourism as tools for socio-economics development. Her teaching interests fall largely within historical and prehistoric archaeological content and data management. This dovetails into community archaeology and sustainable heritage management. Victoria's filmmaking interests are evidenced in the ongoing LSW-Liberating Stories of Women documentary filmmaking project in the communities of Jamestown, Chokor and Nima.

Victoria is a member of the West African Archaeological Association- WAAA (2017 Colloquium organising team member), the Ghana Studies Association (2022 Tamale conference planning committee member), the Society of Africanist Archaeologists-SAFA (African students' representative from 2014—2016), the Pan-African Archaeological Association, and the Roverman Productions theatre company. She is an Honorary Award recipient, given in recognition of the community and youth development work done during my tenure as a trustee for the Head of State award scheme/Duke of Edinburgh International award.

Victoria currently works with the Department of Archaeology and Heritage Studies at the University of Ghana.



### **Henry Nii-Adziri Wellington**

Fellow, *Ghana Academy of Arts and Sciences*; Associate, *UNESCO, Accra Office*; Heritage Expert, *Ghana Heritage Committee*

Henry Nii-Adziri Wellington was born on 1<sup>st</sup> December, 1942 to parents, whose hometown was Osu, a coastal town next to the Christiansborg, Osu/Accra, Capital of Ghana.

After his basic education at the Presbyterian Schools at Osu, he gained admission to the Kwame Nkrumah University of Science and Technology, Kumasi, after his Secondary Education in 1962.

At the KNUST, he studied Architecture and obtained both the B.Sc and M.Sc Degrees after which he proceeded to the R.W.T.H. in Aachen, and the Carolo Wilhelmina T.U. in Braunschweig in Germany, and obtained Dipl Ing. (Urban Design and Architecture) and Dr Ing (Development Planning and Architecture) in 1972 and 1981 respectively.

Starting his teaching career at the KNUST, Kumasi in 1972, he became engaged with teaching and researching in Architecture, Urban Design and Settlements Studies as a Lecturer, Senior Lecturer and a tenured Professor, ending his 32 years of service as a Scholar and University Administrator in the office of the Vice Chancellor. He researched and produced over 100 peer reviewed articles, journal publications and professional reports.



He was thereafter assigned a Post-Retirement Contract to help the Department of Archaeology and Heritage Studies, UG, establish Graduate Programmes in Museum and Heritage Studies, from 2008 to 2018. His scholarship and research have focused on Heritage Conservation and Indigenous Knowledge Systems from which he has published two epic books (first and second editions) – “*Stones Tell Stories at Osu : Memories of a Host Community of the Trans-Atlantic Slave Trade*” (2011/2017) for which he has been recognized as a Heritage Expert, working under the auspices of the Ghana Heritage Committee/UNESCO.

Professor Wellington, since 2013, has been a Fellow of the Ghana Academy of Arts and Sciences where he leads issues on Heritage. His third book, a novel, is about to be published in April, 2023.

### *Priming and Priming Climate Science Research with Indigenous Knowledge for Value*

In retrospect, as an Octogenarian Heritage Scholar and Heritage Architect, to knowledge and experience of my ancestral home region on the south-eastern coastal geographic space of Ghana, I recollect the beach front of the Atlantic Ocean as a childhood recreational space, as a Primary/Middle Schools’ “Classroom” for Nature Study and as a Resource Base for school handicraft activities.

I can remember the lagoons and mangroves (Nyadzi, etc), I can remember the coastal flora such as the sisal hemp (Tankpei); I can remember the coastal fauna such as the marine turtles (Hala), and the cetacea whales (Bonsu) which stranded now and then, in the shallow sandy waters of the sea.

I can remember the stories told by our grandparents at home, of the pains and pinches of slavery, the trauma of slave trading, colonial domination and oppression associated with the monstrous European Fortifications (now credited with the status of ‘Outstanding Universal Value’ a la UNESCO) dotted along the rocky shoreline from Accra to Keta.

All these that constitute and define our Intangible Heritage as enshrined in Ga-Adangme word-usage, proverbs, and cultural practices and so on, have vanished or are rapidly vanishing away or will eventually vanish as forecasted by my Octogenarian intellect and soul.

This sacred and sacrosanct Intangible Heritage is being vandalised, eroded and threatened by rising sea-levels and other hazards of Climate Change, added to futuristic anthropogenic development projects.

How can I, a sensitised Heritage Scholar and Heritage Architect prime and primp Climate Science Research with Indigenous Knowledge for value to mitigate, control and deconstruct the dynamics of destruction of the Intangible Heritage of the coastal communities?

I will call upon the Local Custodians of Indigenous Knowledge, Creative Writers, Cultural Visionaries to join me as an Advocate, and be with the Climate Scientists at the table to debate, discuss and decide the Research Agenda and Action Plan to bring value to Policy and Power.



## **Jayne Ivimey**

Artist

*Jayne Ivimey*

An East Anglian by birth, the Norfolk and Suffolk coast is deeply engrained in Jayne's work. She has returned to the subject repeatedly over many years, in a quest to understand its geology, its ecosystems and its morphology. The works have slowly left the landscape behind as it becomes more vital to address the pressures on our wildlife and coast. Seven years in New Zealand working in bird conservation alerted her to the global problems in the bird world and this increasing awareness feeds her new work.

Now, through her great great great grandfather who painted the Norfolk coast in the 1800s she has embarked on a visual study with a coastal scientist using the shoreline Management Plan 'Sub cell 3B' ( Sheringham - Lowestoft), to expose the changes and how it can be used for future understanding of our eroding coast.

Jayne studied art history at the Sorbonne, then fine art at Wimbledon School of Art, a masters at NUCA (Norwich) and a teaching Diploma at Leicester University. Her website is [www.jayneivimey.com](http://www.jayneivimey.com)

### *How to remember: an artist's view*

Loss and memorial form a central part of my art. As an artist it is critical for me to bear witness to our changing lives and environment. How does one do that? It is not for me to campaign about the issues of loss whether that is associated with climate change or disease, but rather to engage the audience in a conversation and as Gloucester said in King Lear ‘to see it feelingly’. I shall explore this in my talk by briefly sharing with you three aspects of loss that I have born witness to over the last ten years. Each of these involves a different medium: charcoal, clay and film. Through charcoal I explored the loss of loved ones that so many of us experienced during Covid; how does one deal with such loss? In the second I wanted to explore the loss of biodiversity though using the Red List of birds, by modelling and creating a memorial to the seventy species undergoing serious decline. Finally, I wanted to explore how I witnessed coastal erosion, the changing environment and the loss of homes on the east coast of Norfolk over several years using both charcoal and film. It is this issue that I have returned to again recently and through place-based investigation and deep mapping have investigated how looking into the history of places can illuminate how we should adapt to environmental change.



## Andrew Hutcheson

Research Fellow, Archaeological Society President  
*Sainsbury Institute for the Study of Japanese Arts and Culture, UEA; Norfolk and Norwich Archaeological Society*

Andy Hutcheson is an archaeologist specialising in the role of institutions in developing complexity, and in cultural heritage. He received his Ph.D. from the University of East Anglia in 2011 and has worked as a professional archaeologist since 1984, first as a field archaeologist and latterly as a cultural heritage advisor. Andy is the principal investigator on the Later Prehistoric Norfolk Project, a Co-Investigator on Nara to Norwich: arrivals and beliefs at the extremities of the Silk Roads and is developing a project comparing the Yayoi Period in Japan with Iron Age Britain through the lens of the Axial Age.

### *Loss of heritage in Norfolk – climate and response: as case study*

The value of archaeological heritage on the Norfolk Coast has yet to be understood but we are facing significant losses through rising temperatures, flooding, and increased erosion. How do we attempt to place a social value on this heritage while at the same time firefighting the losses? Our understanding of the region's archaeological heritage is well developed compared to many locations globally, but we are still only beginning to see its relevance to communities. The Later Prehistoric Norfolk Project is involving different communities in the exploration of prehistoric monuments damaged through agriculture. Many of these monuments are associated with river systems that themselves will be altered through the climate changing. Looking at the map of projected flooding by 2050 there are significant parts of Eastern England that will be underwater. We therefore urgently need a way of valuing archaeological landscapes so that decisions can be made about loss and our response to it.

 @ARJHutcheson



## Dr Sarah Wade

Lecturer in Museum Studies  
*University of East Anglia*

Dr Sarah Wade is an art historian and Lecturer in Museum Studies at University of East Anglia where she teaches on modules spanning museum studies, curatorial studies, cultural heritage and art history. Her research focuses on human-animal relations in contemporary art, curatorial practice and exhibitions, with a focus on ecological concerns. Sarah has published on wildlife conservation, ocean ecology and extinction in artistic and curatorial practice across interdisciplinary journals, edited volumes and artist monographs. She is co-founder of the Curating the Sea research project, which resulted in a special issue of *Journal of Curatorial Studies* (2020) and is co-editor of *Oceans: Documents of Contemporary Art* (Whitechapel Gallery/MIT Press, 2023), both with Pandora Syperek. Over the years Sarah has worked with various museums, arts and heritage organisations in research, curatorial, editorial and project management capacities and continues to collaborate with museum colleagues on research projects.

### *Curating the Sea: Oceanic Exhibition Making as a Critical and Creative Practice in the Face of Climate Change*

Too often, art and exhibitions have been treated as messengers: exhibitions positioned as vehicles for communicating climate change, rather than generative and meaningful forms in their own right, and art instrumentalised as science's handmaiden, thereby maintaining an obsolete 'two cultures' model, while activism is often represented rather than mobilised. This is especially true within natural history and scientific display, which is regularly positioned as imparting authoritative 'truth', while artworks in these contexts are frequently presented as interpretation. Yet, as scholars of the Anthropocene recognise, the natural-cultural devastation of the earth is as much an aesthetic as a geological event, meaning that artistic and curatorial research into its causes and effects need to be taken as seriously as scientific data. Just as hope does not mean blind optimism, change-making does not necessarily entail a solutions-based approach, but can function as an intervention to open up possibilities for futures that are as uncertain as the present. Curatorial practice has a significant role to play here.

The ongoing research project *Curating the Sea* explores this field of practice in relation to the recent proliferation of oceanic exhibition making. It demonstrates how curating, as a spatial and material practice that can mediate between different disciplines across the arts and sciences, is uniquely placed to bring various oceanic fragments together from different eras and locations in new and unexpected ways. As such, curating the sea offers generative ways for thinking through current and future threats facing the oceans and ocean life and their genealogies. These practices mobilise the oceanic not only as a theme, but also as a method. In this presentation, we introduce a series of examples of oceanic curating to make a case for the unique and essential role exhibitions play in addressing ecological crisis through their affective, multimodal and polyvocal potential.

 @curatingthesea



## Dr Pandora Syperek

Leverhulme Early Career Fellow; Visiting Fellow

*Institute for Design Innovation, Loughborough University London; V&A Research Institute*

Pandora is a Leverhulme Early Career Fellow at the Institute for Design Innovation, Loughborough University London, and Visiting Fellow at the V&A Research Institute. Her research examines the intersections of science, gender and the nonhuman within modern and contemporary art and cultures of display. She is co-editor of *Oceans: Documents of Contemporary Art* (Whitechapel Gallery/MIT Press, 2023) and a special issue of the *Journal of Curatorial Studies* on 'Curating the Sea' (2020), both with Sarah Wade. She has published numerous book chapters and journal articles, including on 'Hope' the Natural History Museum's blue whale skeleton, Victorian insect culture and the Blaschka glass models of marine invertebrates. Her entry on 'Animal Studies' for the *Johns Hopkins Guide to Cultural and Critical Theory* is forthcoming. Pandora was Research Associate on the AHRC-funded research project Counter-Framing Design from 2020-2021, Postdoctoral Fellow at the Paul Mellon Centre for Studies in British Art from 2016-2017, and she holds a PhD in the History of Art from University College London. Previously she worked as programme coordinator and curatorial assistant at the Banff Centre for the Arts, Canada. She has taught on modern and contemporary art, design and curatorial studies at Loughborough University, Sotheby's Institute of Art, UCL and York University, Toronto.

*Curating the Sea: Oceanic Exhibition Making as a Critical and Creative Practice in the Face of Climate Change*

For abstract, see above.

 @syperek  
 @curatingthesea