

# WATER HERITAGE IN ASIAN CITIES

International Symposium

Co-hosted by:

**Shanghai Academy of Social Sciences  
Urban Knowledge Network Asia, International Institute for Asian Studies, Leiden  
University  
Center for Global Asia, New York University Shanghai  
Department of Cultural Heritage and Museology, Fudan University**

**Shanghai Academy of Social Sciences  
7-622 Huaihai Zhong Lu (Huaihai Road Middle)  
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## Concept Note

Most cities in Asia are coastal delta cities or cities along major river systems or water bodies. Water has for centuries been the lifeblood of cities across Asia, present in their myths, cultures, societies and religious practices, and as a means of transportation and the backbone of local politics and economies. But current policy discourses on water in cities—in Asia and worldwide—tend to treat water narrowly as a threat and as an element to engineer against and overcome (in the case of floods) or (in the case of scarcity) as a resource to be better managed and regulated.

What is missing in this rather unidimensional and technocratic approach to water is an appreciation of the multiple engagements between human beings and water, in historical context. This requires an understanding of, among others:

- Water's place as a vital part of socio-ecological *systems*;
- The reciprocal relationship between water and cities, where both have shaped each other since time immemorial;
- The reexamination of the concepts of “landscapes” and “waterscapes” to account for the many in-between spaces that are gradations of land and water rather than fully one or the other (Mathur and da Cunha, 2009)<sup>1</sup>;
- The many temporal dimensions of water, as an element and source of constant flux; and
- The role of rivers and other water bodies as boundaries, as connectors and dividers (Schönach, 2017)<sup>2</sup>, as sites of coming together or contestation, as sites of memories or mental boundaries, between rich and poor, between ethnicities and nations, the sacred and the profane.

This international symposium seeks to contribute to the building of a broader, multi-disciplinary understanding of the role and functions of water in cities in Asia. It considers

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<sup>1</sup> Mathur, A. and Da Cunha, D., 2009. SOAK: Mumbai in an Estuary. Rupa & Company.

<sup>2</sup> Schönach, P., 2017. River histories: a thematic review. *Water History*, 9 (3), pp. 233-257.

water—and human engagement with it throughout history—as part of an important heritage of urban life. This heritage is worth examining in detail for its own sake, to help valorize it. But it can also serve to inform water policies in contemporary cities, by enriching concepts such as “resilience” and “adaptation”. If water is part of a socio-ecological system, its challenges and opportunities must be addressed in a multi-disciplinary fashion, connected to social, economic, political as well as ecological considerations.

The symposium is a collaboration between four institutions: Shanghai Academy of Social Sciences; the Urban Knowledge Network Asia of the International Institute for Asian Studies, Leiden University; the Center for Global Asia of New York University Shanghai; and Fudan University’s Department of Cultural Heritage and Museology. The event features four panels, each of which examines a different dimension of urban water heritage in Asia, in relation to ancient as well as contemporary cities. Each panel is organized by one of the organizing institutions.

Panel 1 of [NYU Shanghai/Center for Global Asia](#) features multi-disciplinary scholarly work on urban water infrastructure in the region to the east of the Tai Lake. Through in-depth case studies about different aspects of the relationship between water and the city, this panel takes stock of existing analyses on the importance of urban water infrastructure in shaping the region’s past, present, and future. Together, the presentations on this panel aim to create synergy in interdisciplinary research on water in this region.

Panel 2 of [Fudan University/Department of Cultural Heritage and Museology](#) explores the diversities of water-based cultural heritage in Asian cities, with a focus of the unique histories and values of these sites in China. The histories of specific heritage sites will be examined, whose values do not only include historic, aesthetic and scientific ones, but also the social benefits in present time, such as pedagogy and local development.

Panel 3 of [IIAS/Urban Knowledge Network Asia](#) examines the linked histories of landscapes and waterscapes in several cities across Asia, especially in terms of their non-modern pasts. The panel will focus on the ‘drying out’ and modernization of urban spaces in the Asian context and the varied implications such policies have had on surrounding settlements, wetlands and coastal zones. The growing vulnerability to intense urban flooding, especially in recent decades (Bangkok [2011]; Mumbai [2005]; Jakarta [2013]; Dhaka [1988]), furthermore, urges us to reconsider the complicated relationships between land and flows in the epoch of the Anthropocene.

Panel 4 of [Shanghai Academy of Social Sciences \(SASS\)](#) centers on waterfront redevelopment as a functional transformation of the city and its relationship with rivers and water bodies. With the evolution of key urban functions, the relationship between cities and their water bodies is also transforming. As the general trend of urban transformations involves a shift away from a singular focus on economic and transportation functions to a more broad-based focus on improvements in quality of life, waterfront redevelopment is becoming the key to the successful transformation of cities and urban water bodies. In this shift, it is not as simple as redeveloping ports and manufacturing sites into green spaces, open spaces, and places for culture or leisure activities—the heritage and cultural identity of the waterfront itself should also be acknowledged. This panel will examine particularly Shanghai’s relationship to the Suzhou Creek and the Huangpu River, in the context of the planning of a massive 140 km long waterfront in the city.

## Symposium Program

<i>Day 1: Thursday, 29 November 2018</i>		
9:30 – 12:00	<p>Excursion 1 to Suzhou Creek</p> <p><u>Meeting place (9:30):</u></p> <p>Entrance of Mengqianguan Suzhouhe Exhibition Center (梦清馆苏州河展示中心), 130 Yichang Rd, Putuo Qu, Shanghai Shi (上海市普陀区宜昌路 130 号)</p> <p><u>Transportation to SASS (11:30):</u></p> <p>Bus transportation departs from Suzhou river park to SASS</p>	
12:00 – 13:00	Buffet lunch	SASS Faculty Club
13:00 – 13:30	Registration	SASS Conference Hall
13:30 – 14:00	Opening and welcoming remarks by the organizers	SASS Conference Hall
14:00 – 14:45	<p>First keynote speech</p> <p><b>Dr. Maria Montoya, Dean, NYU Shanghai</b></p>	SASS Conference Hall
14:45 – 15:00	Tea/coffee and snacks	SASS Conference Hall
15:00 – 17:00	<p><b>Panel 1: Urban Water Infrastructure</b></p> <p><u>Chair: Dr. Weilin Pan (NYUSH)</u></p> <p><u>Discussant: Dr. Maria Montoya (NYUSH)</u></p> <p><b>Presenter 1.1: Yifei Li</b></p> <p>(Un?)charted waters: hydraulic infrastructure in Zaanheh and Shanghai</p> <p><b>Presenter 1.2: Christian Nolf</b></p> <p>A consolidated archipelago: outlining the role of water engineering in the urbanization of the Yangtze River Delta</p> <p><b>Presenter 1.3: Chao Li</b></p> <p>How much information is required to constrain estimates of precipitation extremes at impact relevant scales?</p>	SASS Conference Hall
18:00	Dinner for symposium presenters and organizers	Restaurant Shanghai Connor

<b>Day 2: Friday, 30 November 2018</b>		
9:00 – 9:45	Second keynote speech <b>Prof. Han Meijer (Technical University Delft, the Netherlands)</b> Forty years of experience with waterfront regeneration	SASS Conference Hall
9:45 – 10:00	Tea/coffee and snacks	SASS Conference Hall
10:00 – 12:00	<p><b>Panel 2: Diversities of water-based cultural heritage</b></p> <p><u>Chair: Dr. Xiaomei Zhao (Fudan University, Department of Cultural Heritage and Museology)</u></p> <p><u>Discussant: Dr. Simone Ricca (WHITRAP)</u></p> <p><b>Presenter 2.1: Emma Natalya Stein</b> Where the rivers flow: art and landscape in Indonesia</p> <p><b>Presenter 2.2: Ding Shi</b> Diaoyucheng site in Hechuan, Chongqing: interpretation of the hill fort defences in Southwest China from the view of waterways system</p> <p><b>Presenter 2.3: Mengyuan Zhou</b> Gate, river and ritual: the collective memory of Wu Zixu in Suzhou</p> <p><b>Presenter 2.4: Songfeng Chu and Yifei Wang</b> Escape, survival, glorious humanity: recognition of cultural heritage value on Tilanqiao Jewish refugees' ghetto</p>	SASS Conference Hall
12:00 – 13:00	Buffet lunch	SASS Faculty Club
13:00 – 15:00	<p><b>Panel 3: Linked histories of landscapes and waterscapes</b></p> <p><u>Chair: Dr. Paul Rabé (IIAS/UKNA)</u></p> <p><u>Discussant: Dr. Philippe Peycam (IIAS)</u></p> <p><b>Presenter 3.1: Debjani Bhattacharyya</b> Almanac of a tidal basin: how not to see water-land relations</p> <p><b>Presenter 3.2: Rohan D'Souza</b> Anthropocene rain and soaked concrete: can policy-making rescue the 'flooded Asian city'?</p>	SASS Conference Hall

	<p><b>Presenter 3.3: Maurits Ertsen</b></p> <p>Water in a changing city: Surabaya's water heritage issues</p> <p><b>Presenter 3.4: Harry den Hartog</b></p> <p>Shanghai's new water towns: the changing relationship between city and water as expressed in some recent new towns</p>	
15:00 – 15:30	Tea/coffee and snacks	SASS Conference Hall
15:30 – 17:30	<p><b>Panel 4: Waterfront Redevelopment and Urban Transformation</b></p> <p><u>Chair: Dr. Qiyu Tu (SASS)</u></p> <p><u>Discussant: Prof. Han Meijer (TU-Delft)</u></p> <p><b>Presenter 4.1: Qiyu Tu</b></p> <p>Shanghai 2035 master plan</p> <p><b>Presenter 4.2: Dongfan Xi</b></p> <p>Striving for a world-class waterfront area in the Excellent Global City</p> <p><b>Presenter 4.3: Ning Su</b></p> <p>Big Event and Shanghai waterfront regeneration: the experiences of post-Expo 2010 riverbank redevelopment</p>	SASS Conference Hall
17:30 – 18:00	Closing remarks by symposium organizers	SASS Conference Hall
18:00	Dinner	SASS Faculty Club

<b>Day 3: Saturday, 1 December 2018</b>		
9:00	<p>Excursion 2 to Huangpu riverbank and boat cruise, with the support of the Shanghai Maritime Safety Administration of PRC</p> <p><u>Departure from Royal Court Hotel (SASS campus) at 9:00</u></p>	
12:00 – 13:00	Buffet lunch	SASS Faculty Club
Afternoon	<p>UKNA informal roundtable discussion on collaboration opportunities (optional: open to interested participants)</p> <p>Book presentation by Kaiyi Zhu, PhD candidate, TU-Delft: <i>“Adaptive Strategies for Water Heritage: Past, Present and Future”</i>, edited by Prof. Carola Hein, TU-Delft (Springer, 2019).</p>	SASS conference room 345

## Abstracts and Bios of Panel Presenters

### Panel 1: Urban Water Infrastructure

<b>Presentation 1.1:</b>	<b>(Un?)charted waters: hydraulic infrastructure in Zaanheh and Shanghai</b>
Presenter:	Yifei Li

**Abstract.** Zaanheh (an alternative Romanization of Shanghai based on its pronunciation in the local Wu dialect) is defined as the ensemble of social life in present-day Shanghai before the dawn of the late modern period. As such, Zaanheh represents a historical counterfactual to Shanghai: it is a counterfactual, because its key tenets run contrary to that of the present-day factual Shanghai. Zaanheh is more importantly a historical counterfactual, because it envelops a set of historically verifiable cultural practices, social relations, political institutions, ecological landscapes, and moral sentiments. Illustrated with examples from seemingly discrete episodes about hydraulic infrastructures in the region, the current article juxtaposes Zaanheh and Shanghai, and examines the *longue durée* through which native ways of water stewardship in Zaanheh were challenged and ultimately conquered by modern means of water management in Shanghai. This investigation contextualizes the rise of modernity in the complex sets of historical struggles about water and the city, and seeks to inspire alternative imaginations about the future of urban hydraulics.

**Bio.** Dr. Yifei Li is Assistant Professor of Environmental Studies at NYU Shanghai and Global Network Assistant Professor at NYU. His research examines environmental governance in China, focusing on questions of bureaucracy, urban sustainability, and disaster resilience. He has received research support from the United States National Science Foundation, the University of Chicago Center in Beijing, the China Times Cultural Foundation, and the Shanghai Municipal Government, among other extramural sources. His recent work appears in *Current Sociology*, *Environmental Sociology*, *Journal of Environmental Management*, and other academic outlets. He received his Ph.D. in Sociology from the University of Wisconsin-Madison.

<b>Presentation 1.2:</b>	<b>A consolidated archipelago: outlining the role of water engineering in the urbanization of the Yangtze River Delta</b>
Presenter:	Christian Nolf

**Abstract.** Home to more than 60 million inhabitants, the Taihu Basin in the Yangtze River Delta is one of the most densely populated areas in the world. While it today appears as a cohesive piece of continent, this territory however staged in the past ambiguous relationships between water and terra firma, as expressed in ancient maps representing the delta as an archipelago of islets. Based on cartographic archives at the regional scale and in the area of Suzhou, this research reconstructs historically the consolidation of the delta. In five successive steps, it identifies how water engineering works have conditioned the creation of land and development of cities: 1. adaptation to the natural dynamics of the delta; 2. the impact of the Grand Canal and the construction of polders; 3. the coastal seawall; 4. the rationalisation of the rural landscape from the 1920s; and 5. the comprehensive water management plans and intense urbanization since the 1980s. Reading the Yangtze River Delta from a water engineering perspective not only helps to recognize the historical and cultural value of infrastructural heritage such as sluices, locks, polders, embankments and towpaths. More fundamentally, by revealing the amphibious

essence of the delta, this analysis also provides inspiring insights on possible ways to adapt to the consequences of climate change.

**Bio.** Dr. Christian Nolf is Associate Professor in the Department of Urban Planning and Design at Xi'An Jiatong Liverpool University (XJTLU), where he co-founded and directs the Master of Urban Design. His research focuses on the dynamic interplay of urban development, infrastructures and landscape in transforming territories, and has received support from the Jiangsu Province and National Science Foundation of China. Holding a Ph.D. in Urbanism from KU Leuven (Belgium), he has been a visiting professor at Zhejiang University (2018- ongoing), a lecturer in Architecture at Antwerp University (Belgium) (2013-14), and a teaching assistant in the European Master of Urbanism (KU Leuven, IUA Venezia, TU Delft, and UPC Barcelona) (2010-14).

<b>Presentation 1.3:</b>	<b>How much information is required to constrain estimates of precipitation extremes at impact relevant scales?</b>
Presenter:	Chao Li

**Abstract.** An integral component of building and bridge construction codes, which set standards for infrastructure design, is guidance on the expected magnitude of local precipitation extremes. Estimates of such expected precipitation extremes have historically been produced assuming a stationary climate. There is, however, an accumulating body of evidence indicating that the hydrological cycle is changing in response to anthropogenic global warming. A major challenge the engineering community is facing is, therefore, the need to reliably project future design values for extreme precipitation. The presentation will explore how much information is needed to constrain the response of impact-relevant extreme precipitation to global warming, and are typical instrumental records sufficient to estimate the response that can provide reliable guidance for future adaptation planning?

**Bio.** Dr. Chao Li is a professor at the School of Geography Science, East China Normal University. His expertise is in the analysis of observed and modeled weather and climate extremes (extreme precipitation, heatwaves, droughts, floods) in a changing climate. His recent work focuses on improving and developing methodologies to answer questions of “whether and to what extent human influence has had detectable impacts on weather and climate extremes”, “how these weather and climate extremes may change in the future”, as well as questions related to climate change risk assessment.

### ***Panel 2: Diversities of Water-Based Cultural Heritage***

<b>Presentation 2.1:</b>	<b>Where the rivers flow: art and landscape in Indonesia</b>
Presenter:	Emma Natalya Stein

**Abstract.** Art in Indonesia is not typically found in a museum. Throughout the archipelago, pre-modern shrines are cut into rock faces, built on the banks of thunderous, rushing rivers, or carefully aligned with volcanic mountains. Sacred structures are positioned as organic parts of the tropical environment. Immersive and multisensory, they reveal a seamless connection between art and place. While the larger monuments suggest patronage by elites, constellations of minor shrines likely functioned as hermitages and places of worship for ascetics and local communities. Mapping these monuments reveals a dense network of sacred sites built up along



rivers, lakes, and other bodies of water. Beginning from the waterfront shrines in the jungles of Indonesia, this paper considers the close relationship between sacred art and landscape. Serving both practical and spiritual functions, water was central to Hindu-Buddhist ritual practice. Bali’s shrines each had an associated bathing place, where water flowed into a sacred pool. Access to water seems to have played a crucial role in selecting sites for temple construction. The paper further explores strategies for reinvesting objects in museum collections with a sense of their intended contexts. Individual objects reveal aspects of the environments in which they were produced. In turn, even a basic understanding of Asian landscapes can transform an audience’s encounter with an object that at first may be wholly unfamiliar. Within the galleries, an engagement with environmental factors, such as geology and climate, can invigorate museum collections and help them continue to grow creatively and in ways not limited to acquisitions.

**Bio.** Emma Natalya Stein is Curatorial Fellow for Southeast Asian Art at the Freer|Sackler, the Smithsonian’s museums of Asian Art, in Washington, DC. She is a specialist of sculpture and sacred architecture of South and Southeast Asia, with a primary interest in the ways in which art and landscape intersect. Emma completed her PhD in the History of Art at Yale in 2017, and she has conducted fieldwork in Cambodia, Indonesia, Thailand, India, Sri Lanka, and Myanmar. She has worked on exhibitions and publications at the Yale University Art Gallery, the Rubin Museum, and the Freer|Sackler, and she has lectured and taught at institutions in India, Indonesia, and the USA.

<b>Presentation 2.2:</b>	<b>Diaoyucheng site in Hechuan, Chongqing: interpretation of the hill fort defences in Southwest China from the view of waterways system</b>
Presenter:	Ding Shi

**Abstract.** In the 13th century, the Southern Song Dynasty had built a series of hill fortresses, which were based on the waterways and their surrounding hill ranges in the southern-west area of China—Sichuan and Chongqing—in order to defend against the Mongols. The system was one which could defend against the best-trained cavalries in the world. As the most solid hill fort in this system, the resistance in Diaoyucheng Site lasted 36 years before occupation. That indicates the oriental wisdom “the integrity of man and nature” when sitting hill forts. This research aims at interpreting the defense’s system and waterways from the view of the waterways system through exploring the Diaoyucheng Site. This study also includes the values and significances of the military sites and the methods of protection and utilization.

**Bio.** Ding Shi has a Master’s degree in Landscapes from the College of Architecture and Urban Planning, Tongji University, and a Doctorate of Engineering from the Department of Urban Engineering, University of Tokyo. He is a lecturer in the Department of Cultural Heritage and Museology at Fudan University. His research interests are conservation, and the development and utilization of cultural landscapes. His affiliations include the Architectural Society of China; the International Federation of Landscape Architects (IFLA-Japan); the Japanese Institution of Landscape Architecture; and the City Planning Institute of Japan.



<b>Presentation 2.3:</b>	<b>Gate, river and ritual: the collective memory of Wu Zixu in Suzhou</b>
Presenter:	Mengyuan Zhou

**Abstract.** The essay deals with (1) the intangible narratives about Chancellor Wu Zixu, the First City Planner of Suzhou, and (2) the tangible urban heritage related to the historic figure. It highlights the continuities of material and immaterial culture about Chancellor Wu's tale, people and urban water environment, and their development over time. It argues that some of the City Gates (Gate of Pan and Gate of Xu) that survived the civil construction during 1950s have been identified as historic monuments, playing a vital role in connecting the past of the city to the present life. With focus on the special occasion of Dragon Boat Festival in Suzhou, it proposes that social groups use material heritage as meaningful place to perform festival ritual. The organization of collective memory – through ritual and festival practices – reinforces social bonds and local identity.

**Bio.** Mengyuan Zhou is an Assistant Lecturer in the School of Arts, Soochow University, and a PhD Candidate in the Department of Cultural Heritage and Museology, Fudan University. She holds a Master's degree in Art History and Museum Curating from the University of Sussex, UK. She has acted as research fellow/curator for exhibitions at the Victoria and Albert Museum, China Art Museum and Casa Botines.

<b>Presentation 2.4:</b>	<b>Escape, survival, glorious humanity: recognition of cultural heritage value on Tilanqiao Jewish refugees' ghetto</b>
Presenter:	Songfeng Chu and Yifei Wang

**Abstract.** Tilanqiao area is one of 12 historical and cultural areas designated by Shanghai municipal government. Between 1933 and 1941, more than 20,000 Jewish refugees escaped from Europe to Shanghai. This paper mainly focuses on recognition of Tilanqiao Jewish Refugees' Ghetto, as a cultural heritage, by analyzing documents and memoirs, and field works in this area. It is analyzing on three stages of entering Shanghai, establishment and management of isolated zone, and survival in Shanghai. This paper demonstrates that Tilanqiao Jewish refugees' ghetto represents glorious humanity; on the contrary, Auschwitz Birkenau represents the evil side of humanity. It bears irrefutable evidence of reappearing real history, is the best explanation of Shanghai urban's spirits for a new era, has significant social value and cultural value.

**Bios.** Songfeng Chu is a PhD candidate in the Collage of Architecture and Urban Planning, Tongji University. Main research areas are the conservation of cultural heritage and historic urban and rural planning. Yifei Wang has a Master's degree in Cultural Heritage from the Faculty of Arts of Deakin University (2018). Her training is in world heritage, cultural landscapes, intangible heritage and museum studies. Her Bachelor's degree was in Chinese literature (2014) and she has another Master's degree in Chinese literature and philology (文學文獻學) (2018). Presently, she is a Ph.D candidate in the Department of Cultural Heritage and Museology at Fudan University. Her research concerns world heritage in China and international heritage practices. Her interests are in cultural landscapes, rural heritage and heritage interpretation.

### *Panel 3: Linked Histories of Landscapes and Waterscapes*

<b>Presentation 3.1:</b>	<b>Almanac of a tidal basin: how not to see water-land relations</b>
Presenter:	Debjani Bhattacharyya

**Abstract.** In my talk, I will make a case for moving away from the cartographic-mindedness through which we view land-water, city-river and delta-settlement relations by proposing a new kind of visual literacy through a study of the swamps of Calcutta. Maps have for long organized how we read and plan are cities. However, for tidal landscapes like Calcutta whose riverfronts, wetlands, ponds and swamps are shaped by the ebb and flow of river, coastlines are daily violated by the movements of land and water. In some places what is land, or what is water is indistinguishable. I argue that maps and modern cadastral representations of spaces in tidal and riverfront cities freeze fluid and moving spaces in time. I propose almanac forms of viewing spaces, since almanacs, unlike cartography, are receptive to temporality in space and its tidal and cosmological dimensions. Maps of the city are mere entries into debates and points of reference that planners, engineers and property lawyers always found limiting, yet worked with. Almanacs push us beyond singular histories of Calcutta to see other inhabitations, meaning-making practices and unrealized multitudes knotted together in the movements of lands, water, fish and the people who lived with and worked on them. Almanacs record the flux of seasons and the cosmological movements of time through space. As an analytic they operate by illuminating two lines of spatial thinking: a tidal temporality and a cosmological spatiality. An attunement to tidal temporality requires us to rethink strict boundaries between land and water that are central to property laws, planning and policy understanding around cities. I conclude by showing a shift in our visual practices surrounding land-water relations should be the starting point of securing the future of coastal cities in a world of rising waters.

**Bio.** Debjani Bhattacharyya is Assistant Professor of History at the Department of History, Department of Global Studies and Modern Languages, at Drexel University, USA. Her current research addresses two broad questions: how environment and ecological formations shaped law and economy from the eighteenth century onwards; and how the contingencies through which legal and economic imaginaries developed and globalized across the world in turn reshaped colonial environments. She is interested in tracing how the specific geography of the colony, its rivers, seas, swamps, deltas and seasons, which were different from the temperate climate of Europe, shaped the legal and economic technologies during the period of European expansion and came to occupy the position of universal knowledge and science. She explores these themes from a South Asian perspective, especially by focusing on the Bay of Bengal delta, one of the active deltas connecting India and Bangladesh.

<b>Presentation 3.2:</b>	<b>Anthropocene rain and soaked concrete: can policy-making rescue the ‘flooded Asian city’?</b>
Presenter:	Rohan D’Souza

**Abstract.** ‘Floods’ continue to invoke a striking conceptual pause in modern disaster research. In contrast to the simple nineteenth century civil engineering belief that floods are about raging rivers and channel overflow, recent studies suggest otherwise – flooding is but one element in a fluvial-complex involving erosion, deposition, drainage and biological connectivity between an array of organisms. Floods, consequently, are the unravelling of a dynamic biological pulse that potentially energizes a flood plain rather than wrecking it with destructive flows. This sharp reconceptualization of the idea of the flood, however, has occurred

alongside a steady reworking of the notion of the ‘natural disaster’ itself. Simply stated, in a slew of disciplines (environmental history, critical geography and environmental anthropology) the natural disaster event is no longer held to be entirely a force of Nature. Instead, the natural disaster event is implicated, embedded, entangled and defined by cultural landscapes. Given the above, what sense should one make of the recent spurt in catastrophic urban flooding in several Asian cities, notable examples being: Mumbai (2005, 2017), Chennai (2015), Bangkok (2011), Hanoi (2008), Manila (2009) and Jakarta (2007)? While notions such as ‘living with floods’, ‘floods-as-process’ and ‘flood management’ help us unsettle the previous belief in flood control, the Asian city today is confronting a new reality – sudden intense downpours occurring in shorter bands of time, suggesting thereby that a different climatic normal is steadying itself. Can the past, in such a rapidly changing climate scenario, have lessons for the future? The emergence of this Anthropocene rain, I argue, urges us, in particular, to reconsider the arts of urban policy-making for Asian cities. If urban flooding is the new normal can policy-making become the most critical domain for forging meaningful resilience and adaptation strategies?

**Bio.** Rohan D’Souza is Associate Professor at the Graduate School of Asian and African Area Studies, Kyoto University, Japan. His PhD was awarded from the Centre for Historical Studies (Jawaharlal Nehru University). He was elected General Secretary of the Jawaharlal Nehru University Student’s Union (1989-90) on the political platform of the All India Student’s Federation. He has held postdoctoral fellowships at the Agrarian Studies Program (Yale University) and at the University of California (Berkeley), besides having had visiting fellowships at the Centre for the Advanced Study of India (University of Pennsylvania) and at the Resources Management Asia-Pacific (Australian National University). He holds honorary affiliation as Senior Research Associate at the Centre for World Environmental History (University of Sussex) and was the Short Term Chair at the University of Tokyo (Japan) as Visiting Professor of Contemporary Indian Studies. He is the author of *Drowned and Dammed: Colonial Capitalism and Flood control in Eastern India* (2006) and the joint editor of *The British Empire and the Natural World: Environmental Encounters in South Asia* (2011). He has also edited the *Environment, Technology and Development: Critical and Subversive essays* (2012) for the Economic and Political Weekly Series. His research interests and publications cover themes in environmental history, political ecology, sustainable development and modern technology.

<b>Presentation 3.3:</b>	<b>Water in a changing city: Surabaya’s water heritage issues</b>
Presenter:	Maurits Ertsen

**Abstract.** This paper addresses the water challenges of Surabaya (Indonesia) in terms of an urban system transforming from an historical shape with goals and functionalities attached to it – in terms of water quality and quantity – into a newer version with increased stress between goals, shape and functionalities. The Surabaya River, a branch of the Brantas River, provides the backbone of the water system in the Surabaya area. As the rivers caused flooding in the area, in 1856 the Dutch constructed the Wonokromo Canal to discharge floodwater straight to the sea, with the Jagir Dam built to manage the system. The largest part of the colonial Surabaya water system, however, consisted of canals originally designed for irrigation purposes. Being one of the major cities on Java, Indonesia, Surabaya has grown within a century from a city of tens of thousands of people in the colonial era to a mega-urban region with a population of about 2,500,000 people. In this rapid urbanization, rice fields are converted into housing areas. Irrigation channels from the colonial period are to function as drainage channels. New areas, often developed by private initiatives, do have the necessary modern drainage infrastructure. They are often not connected to the main water system, however, as the division between responsibilities for the two levels (both in financial and maintenance terms) have not been

defined. Many urban areas, especially those of the poor, still lack proper drainage facilities. Nowadays, the Surabaya river basin is densely populated, with over 1,300 persons per square meter and a total population of over 16 million. The population has more than doubled in the last 50 years. While industrial employment is on the increase, most households still depend on small scale agriculture and fishing (shrimp farming) for their daily food and income. Those households most vulnerable to polluted water depend directly on water for their consumption and daily economic activities (fishing and small-scale agriculture). Frequent and massive fish kills – due to chemical spills by industry and domestic sewage depriving oxygen from the water – deprive these households from a good catch and hence threaten their income and diet diversity. The increase of polluted groundwater and other water sources such as lakes and ponds provides an additional challenge.

**Bio.** Maurits Ertsen is associate professor within the Water Resources Management group of Delft University of Technology, the Netherlands. Maurits studies water history in a broad perspective. He currently works on projects on irrigation from two perspectives: how do irrigation practices emerge from the many short-term actions of human agents, and how do farmers respond to irrigation planning from a central state. For his work on human agency in ancient irrigation, he is collaborating with archaeologists in order to increase our understanding of human-environmental interactions. Focus is developing an agent-based modeling methodology to study such interactions in detail, with special focus on the Hohokam in the USA and ancient Mesopotamia. His other main project is colonial irrigation in the 19<sup>th</sup> and 20<sup>th</sup> centuries. In his recent book on the Gezira Irrigation Scheme in Sudan in the 20<sup>th</sup> century, he discusses how this enormous Scheme needs to be understood as resulting from continuous, almost daily, interactions between all different kinds of interested parties. His Gezira work builds on his earlier study of colonial irrigation, which had a focus on Indonesia, but already explored colonial Africa as well. Maurits is one of two main editors of Water History, the official journal of the IWHA.

<b>Presentation 3.4:</b>	<b>Shanghai's new water towns: the changing relationship between city and water as expressed in some recent new towns</b>
Presenter:	Harry den Hartog

**Abstract.** Shanghai is strategically located around the estuary of the Yangtze Delta Metropolitan Region, on fertile but also vulnerable lands. Its natural capital is increasingly under pressure of urbanization but even more influenced by its watery context with issues as flood risk, subsidence and environmental concerns. The role and experience of water in the direct controlled municipality of Shanghai has changed drastically during last two decades. For centuries water was the main mean for transporting goods to and from surrounding cities and countryside. Nowadays a new generation of new town settlements focus on new target groups, especially rich and elderly in search for leisure luxury, exploiting existing natural and landscape values. This research will assess how the promises and ambitions behind these recent new towns are translated into realities on the ground by examining three new town developments near Shanghai and their relation towards the water. By mobilizing insights from the academic field of sustainability transitions, this research will explain how the original plans derailed and why until now there has been limited success in living up to the promises of sustainability and the creation of attractive new water environments. Additionally, the so-called layers approach will be used to visualize the complexity of different spatial claims and interest. This approach has proved to be useful as a tool for classification, to be able to distinguish priorities and responsibilities for policy choices. Based on this, some recommendations will be made to steer the spatial development into a more resilient direction and hopefully mitigate the collateral damage for nature and society caused by current spatial planning and design practices.

**Bio.** Harry den Hartog is an urban designer and researcher. After working for more than ten years for several Dutch urban planning and architecture firms he founded his own Studio Urban Language ([www.urbanlanguage.org](http://www.urbanlanguage.org)) in 2004, first in Rotterdam and since 2008 in Shanghai. He gives advice regarding urban design issues and is frequently asked as participant or organizer in debates and exhibits by various organizations in Europe and in Asia. He has produced two books, one of them: 'Shanghai New Towns - Searching for community and identity in a sprawling metropolis (2010, 010 Publishers). In mid 2012, he became a faculty member at Tongji University in Shanghai, where he lectures on urban design and housing.

#### **Panel 4: Waterfront Redevelopment and Urban Transformation**

<b>Presentation 4.1:</b>	<b>The Shanghai 2035 master plan</b>
Presenter:	Qiyu Tu

**Abstract:** “Shanghai 2035” is the first master plan for the megacity in this millennium. In this plan, Shanghai sets up her new vision as an Excellent Global City, and a scientific innovation center has been identified as one of its new key functions. This master plan for the first time allocates spaces of innovation city-wide. There are spaces of knowledge innovation, of industry-based innovation and embedded innovation spaces in business districts. All these classification and allocation efforts are to ensure that innovation activities are welcomed all over the city. Besides introducing innovation space plans, this presentation will discuss the new logic of innovation space planning, which includes the methods of zoning and mixed-uses, public space as the new generation icon for innovative communities, and the priority of new infrastructure etc.

**Bio:** Professor Qiyu Tu is Deputy Director of Institute of Urban and Demographic Studies and Chief Scientist of Center for City Innovation Strategy, Shanghai Academy of Social Sciences. Dr. Tu serves as the Board Member in the Planning Committee of Shanghai Municipality as well as in the Advisory Board of 13th Five Year Plan (2016-2020) of Beijing Municipality. Since 2014, He has been appointed as one of the 4 Core Experts in charge of drafting Shanghai Master Plan (2016-2035). He was also Official Advisor to the Shanghai World Expo 2010. His international academic records include Marie Curie Fellow, Fulbright Scholar and Harvard-Yenching Fellow. Prof. Tu’s research interests include urban strategic planning, regional innovation system and world city studies. He is the author of 10 books and more than 50 papers. Since 2012, he publishes the Blue Book of World Cities annually. He was the First-class Prize Winner of Shanghai Social Sciences Fund in 2000 and the Joint Winner of the First-class Prize for Decision-making Consultation from Shanghai Municipal Government in 2005, and has also been awarded the Excellent Service Prize as Returning Talents from Overseas. Dr. Tu joined the Academy in 1992 and has served in several research and administrative positions, including Assistant President of the Academy. Since 2007, East China Normal University and the Academy have jointly appointed him Professor of urban studies. Prof. Tu’s visiting research records includes Yenching Institute of Harvard University, Fondation Nationale des Sciences Politiques, British Academy, Hamburg Institute for Economic Research (HWWA), East Asia Institute of National University of Singapore and International Institute of Asian Studies at Leiden. Dr. Tu holds a PhD degree in Economics from the Graduate School of Shanghai Academy of Social Sciences, and a BS degree in Geography from East China Normal University.



<b>Presentation 4.2:</b>	<b>Striving for a world-class waterfront area in the Excellent Global City</b>
Presenter:	Dongfan Xi

**Abstract:** The Huangpu and Suzhou Rivers are the two rivers representing the image of Shanghai and carrying the spirit of the city. The development and construction of the waterfront are closely related to the development process of the city. “Shanghai 2035” put forward a vision of “Striving for the Excellent Global City”. The Huangpu and Suzhou Rivers should have world-class waterfronts that match this goal. For this purpose, the planning, construction and management of these waterfronts should be coordinated to a higher standard. Focusing on the overall improvement of function, space, culture, ecology and landscape, this paper puts forward the development strategy and construction activities along the two rivers.

**Bio:** Dongfan Xi is the chief engineer of No. 2 Urban Planning Department at the Shanghai Urban Planning and Design Research Institute. He has been engaged in the planning and design of urban culture and historical protection, waterfront regeneration, public space and environment for a long time. He has participated in the planning of key areas and projects in Shanghai, such as the World Expo, Huangpu River and Suzhou River, and is also one of the main compilers of Shanghai Master Plan (2017-2035). He has received more than 30 awards for planning and design. In 2016, he was selected among the top ten youth planners in Shanghai.

<b>Presentation 4.3:</b>	<b>Big Event and Shanghai Waterfront regeneration: the experiences of post-Expo 2010 riverbank redevelopment</b>
Presenters:	Ning Su

**Abstract:** Big Event-led regeneration has become part of a deliberate urban policy strategy to position host cities on the world agenda. The legacy and influence of mega-events on host cities’ redevelopment, especially for the waterfront area renewal, need to be further researched. This paper will focus on how Shanghai’s Huangpu Riverbank Redevelopment Project used the World Expo 2010 as a catalyst to regenerate large industrial sites along the Huangpu riverbank. The questions discussed in this paper are: 1) What strategies have been explored to transform the expo sites from temporary event sites to urban districts? 2) To what extent has the expo event facilitated redevelopment of the Huangpu Riverbank? 3) What strategies should be explored to improve current development?

**Bio:** Dr. Ning Su is Vice Director and Associate Professor of the IPE research center in the Shanghai Academy of Social Sciences (SASS), the leading think tank in China. He was a post-doctoral researcher in theoretical economics from 2006-2008, with a major in urban economy, at the Institute of World Economy, SASS. Based on his long-time research achievement focused on global city theory and comparative studies on international metropolis, Dr. Su was invited as expert to engage the strategy planning by many municipal governments of Chinese leading mega-cities such as Beijing, Shanghai and Qingdao. He has participated in the drawing up of Shanghai’s 12th five-year strategic plan, Shanghai’s 2050 long-term strategic vision plan, Beijing’s 2030 long-term vision plan, and Qingdao’s international metropolis plan. With his experiences in urban research, he was nominated as expert for the thematic development of Shanghai Expo 2010 and post-expo development for the Expo site. From 2006-2013, he was invited successively by the French government, Australian government and EU 7th Framework Program as visiting scholar to pursue urban sustainable development research programs at Lyon 2nd University, New South Wales University and Leiden University.

## Bios of the Keynote Speakers

### *First Keynote (29 November 2018)*

Dr. Maria Montoya is the Dean of Arts and Sciences and Global Network Associate Professor at NYU Shanghai and also an Associate Professor of History at NYU. She holds a PhD, MA, and BA from Yale University. Dean Montoya's research interests are in the history of the American West, as well as in environmental, labor, and Latina/o history. Montoya is the lead author of the forthcoming US history textbook *Global Americans*. She is also the author of numerous articles, as well as *Translating Property: The Maxwell Land Grant and the Problem of Land in the American West*. For more information, please visit [her NYU Department of History page](#).

### *Second Keynote (30 November 2018)*

Prof. dr.ir. V.J. (Han) Meyer is Professor of Urban Design at Delft University of Technology. His focus in research and teaching is on the fundamentals of urbanism and on 'Delta Urbanism', which pays special attention to the search of a new balance between urbanization processes and climate change in vulnerable deltaic territories. He combines academic research into urban development in deltaic regions with practical implementation. He was advisor of the Dutch National Delta Program (2010-2015), the Greater New Orleans Urban Water Plan (2011-2013), the Lisbon Climate Change Research Program of the University of Lisbon (2010-2013) and the Urban Water Strategy Workshop of the City of Kaohsiung (Taiwan 2012) and involved in projects in Houston, Buenos Aires and Guangzhou. He was research-leader of the interdisciplinary research project 'Integrated Design and Planning in the Delta' (2012 - 2015), funded by NWO and is currently Principal Investigator in the program 'Cities of Making', funded by the JPI-UE (Joint Program Initiative Urban Europe). He published many articles and books on 'Delta Urbanism'. Recent books are 'Urbanizing Deltas in Transition' (co-edited with Steffen Nijhuis Amsterdam Techne Press, 2014) and 'The State of the Delta. Engineering, urban development and nation building in the Netherlands' (Van Tilt 2017). A forthcoming book-publication is 'Urbanism - fundamentals and perspectives' (Van Tilt 2019).



## Bios of the Chairpersons and Discussants

### *Panel 1: Urban Water Infrastructure*

**Chair.** Dr. Weilin Pan is Adjunct Postdoctoral Fellow of Global Asia at NYU Shanghai and also an Assistant Professor at the Institute of China Studies of the Shanghai Academy of Social Sciences. Her research interests include material culture of modern China, China in modern English literature as well as overseas China Studies. She is currently working on waste recovery and recycling in Socialist China. She is the editor of *Material Culture in Modern China* (Shanghai Rare Book Press, 2015). Her new book *Un/Making the Hell Money: A History of Tinfoil in Southeastern China* has just been published by the Shanghai Academy of Social Sciences Press. She earned her doctoral degree in History from Fudan University.

**Discussant.** Dr. Maria Montoya is the Dean of Arts and Sciences and Global Network Associate Professor at NYU Shanghai and also an Associate Professor of History at NYU. She holds a PhD, MA, and BA from Yale University. Dean Montoya's research interests are in the history of the American West, as well as in environmental, labor, and Latina/o history. Montoya is the lead author of the forthcoming US history textbook *Global Americans*. She is also the author of numerous articles, as well as *Translating Property: The Maxwell Land Grant and the Problem of Land in the American West*. For more information, please visit [her NYU Department of History page](#).

### *Panel 2: Diversities of Water-Based Cultural Heritage*

**Chair.** Dr. Xiaomei Zhao is a lecturer in the Department of Cultural Heritage and Museology, Fudan University, Shanghai. She has a Bachelor of History in archaeology from Peking University (2006) and a PhD in Engineering on architectural history and theory from Tsinghua University (2012). She was a visiting fellow at ICCROM in Rome, Italy (2010), and at the International Institute for Asian Studies, Leiden University, the Netherlands (2015). She has also worked as a part-time researcher at Shanghai Academy of Social Sciences. Her research interest includes vernacular architecture, critical heritage studies and conservation of built heritage. She has research funding from the National Natural Science Foundation of China for research on "How Interactions Among and Within the Ethnic Groups Shape and Influence the Characterization of Social Relations of Settlements along the Gui River in Nanling Ethnic Corridor". Her publications include a monograph (*Cultural Interpretations of Space in Living Rural Settlement in China: A case study of Dong villages in southeastern Guizhou*, based on her PhD dissertation), an edited book (*Core value of rural heritage: A case study of Loushang Village in Guizhou*, collaborating with Du, Xiaofan), a translation (Osvald Sirén's *The Walls and Gates of Peking*), as well as more than 30 papers and articles on architectural history and heritage studies.

**Discussant.** Simone Ricca is a heritage architect specialized in the conservation and management of historic sites and cities. He has obtained a PhD in politics, and his research focuses on the link between politics and heritage in the Middle East and in the UNESCO World Heritage List context. Simone Ricca lived and worked as a conservation architect in the Middle East for many years before moving to Paris where, in 2008, he established a private consultancy company (RC Heritage). In his professional activity as international consultant, he worked for international organizations (UNESCO, ICCROM, Aga Khan Trust for Culture, World Bank, etc.), for national governments and local administrations, for non-governmental organizations and academic institutions developing nomination files and management plans for world heritage sites in the Middle East and Asia, and architectural, archaeological and urban conservation

plans. Since October 2017, Simone Ricca is the Vice-Director of WHITRAP Shanghai, the World Heritage Institute for Research and Training in the Asia and the Pacific Region under the Auspices of UNESCO. Dr. Ricca has published a book on the reconstruction of the Jewish Quarter of Jerusalem and articles focusing on the link between architectural conservation, urban planning, national identity, political ideologies and cultural heritage revitalization strategies.

### ***Panel 3: Linked Histories of Landscapes and Waterscapes***

**Chair.** Paul Rabé is academic coordinator of the cities cluster at the International Institute for Asian Studies (IIAS) in Leiden, the Netherlands, which includes two networks of urban scholars: the Urban Knowledge Network Asia (UKNA) and the Southeast Asia Neighborhoods Network (SEANNET). In addition, Paul is Senior Land Expert at the Institute for Housing and Urban Development Studies (IHS) of Erasmus University Rotterdam, where he heads the Urban Land Governance team. He is a political scientist by training, with a doctorate in policy, planning and development from the University of Southern California's Sol Price School of Public Policy (2009). Paul's motivation is to bridge the divide between academia and practice when it comes to our approaches to cities. His engagement is in both worlds: he has over 20 years of experience in advisory work and capacity building as well as research and teaching on urban policy topics. His research and professional interests focus on urban land governance and access to land for social, economic and environmental uses. His current focus is on the intersection of land policy and the management of water resources in urban and peri-urban areas.

**Discussant.** Philippe Peycam is the director of the International Institute of Asian Studies, Leiden, the Netherlands. He is a trained historian whose recent book traces the origins of a Vietnamese public culture of contestation during the colonial occupation, [\*The Birth of Vietnamese Political Journalism: Saigon 1916-30\*](#), was recently published by Columbia University Press (May, 2012). For 10 years, Dr Peycam worked as founding director of the [Center for Khmer Studies](#), an academic and capacity building organization in Cambodia, a hybrid transnational institutional model which is both Cambodian and American (a member of the Council of American Overseas Research Centers network). This double trajectory stems from an early interest in phenomena such as colonialism and modes of resistance to it; the creative role of the city as a privileged environment for new forms of social and cultural interactions, and, ultimately, consciousness; the importance of cultural forms and representations from material and immaterial heritages to institutional knowledge production, and the challenge of building cross-cultural, transnational institutional bridges out of these contexts. He sees these intellectual interests as having implications for concrete development policies in today's postcolonial societies. From 2010-2011, he was a United States Institute of Peace's Jennings Randolph Fellow. Since 2009, he is a Visiting Research Fellow at the [Institute of Southeast Asian Studies](#) in Singapore.

### ***Panel 4: Waterfront Redevelopment and Urban Transformation***

**Chair.** Professor Qiyu Tu is Deputy Director of Institute of Urban and Demographic Studies and Chief Scientist of Center for City Innovation Strategy, Shanghai Academy of Social Sciences. Dr. Tu serves as the Board Member in the Planning Committee of Shanghai Municipality as well as in the Advisory Board of 13th Five Year Plan (2016-2020) of Beijing Municipality. Since 2014, He has been appointed as one of the 4 Core Experts in charge of drafting Shanghai Master Plan (2016-2035). He was also Official Advisor to the Shanghai World Expo 2010. His international academic records include Marie Curie Fellow, Fulbright Scholar and Harvard-Yenching Fellow.

Prof. Tu's research interests include urban strategic planning, regional innovation system and world city studies. He is the author of 10 books and more than 50 papers. Since 2012, he publishes the Blue Book of World Cities annually. He was the First-class Prize Winner of Shanghai Social Sciences Fund in 2000 and the Joint Winner of the First-class Prize for Decision-making Consultation from Shanghai Municipal Government in 2005, and has also been awarded the Excellent Service Prize as Returning Talents from Overseas. Dr. Tu joined the Academy in 1992 and has served in several research and administrative positions, including Assistant President of the Academy. Since 2007, East China Normal University and the Academy have jointly appointed him Professor of urban studies. Prof. Tu's visiting research records includes Yenching Institute of Harvard University, Fondation Nationale des Sciences Politiques, British Academy, Hamburg Institute for Economic Research (HWWA), East Asia Institute of National University of Singapore and International Institute of Asian Studies at Leiden. Dr. Tu holds a PhD degree in Economics from the Graduate School of Shanghai Academy of Social Sciences, and a BS degree in Geography from East China Normal University.

**Discussant.** Prof. dr.ir. V.J. (Han) Meyer is Professor of Urban Design at Delft University of Technology. His focus in research and teaching is on the fundamentals of urbanism and on 'Delta Urbanism', which pays special attention to the search of a new balance between urbanization processes and climate change in vulnerable deltaic territories. He combines academic research into urban development in deltaic regions with practical implementation. He was advisor of the Dutch National Delta Program (2010-2015), the Greater New Orleans Urban Water Plan (2011-2013), the Lisbon Climate Change Research Program of the University of Lisbon (2010-2013) and the Urban Water Strategy Workshop of the City of Kaohsiung (Taiwan 2012) and involved in projects in Houston, Buenos Aires and Guangzhou. He was research-leader of the interdisciplinary research project 'Integrated Design and Planning in the Delta' (2012 - 2015), funded by NWO and is currently Principal Investigator in the program 'Cities of Making', funded by the JPI-UE (Joint Program Initiative Urban Europe). He published many articles and books on 'Delta Urbanism'. Recent books are 'Urbanizing Deltas in Transition' (co-edited with Steffen Nijhuis Amsterdam Techne Press, 2014) and 'The State of the Delta. Engineering, urban development and nation building in the Netherlands' (Van Tilt 2017). A forthcoming book-publication is 'Urbanism - fundamentals and perspectives' (Van Tilt 2019).